

Alternative arrangements for residential aged care staffing responsibilities Final Report

November 2023

Rob Gordon

Carol Loggie

Conrad Kobel

Anita Westera

Dave Fildes

Karen Larsen-Truong

Pam Grootemaat

Suggested citation:

Gordon R, Loggie C, Kobel C, Westera A, Fildes D, Larsen-Truong K, Grootemaat P (2023). *Alternative arrangements for residential aged care staffing responsibilities: Final Report*. Centre for Health Service Development, University of Wollongong.

Table of Contents

Acknowledgements	i
Abbreviations used in this report	ii
Executive Summary	1
Key findings.....	1
Alternative 24/7 RN arrangements	1
Recommendations: Alternative 24/7 RN arrangements	3
Alternative skills mix arrangements	3
Recommendations: Skills mix arrangements	4
Summary.....	4
1 Introduction and background.....	5
1.1 Project objectives	5
1.2 Project scope	6
1.3 Research questions and guiding principles	7
1.4 Project governance.....	8
2 Methods	9
2.1 Literature review	9
2.2 Environmental scan	9
2.3 Stakeholder consultations	11
2.4 Review of 24/7 RN responsibility exemption applications.....	11
3 Results – Literature review.....	12
3.1 Search strategy	12
3.2 Findings.....	13
3.3 Findings – Royal Commission Research Papers.....	17
4 Results – Environmental scan.....	20
4.1 Analysis of the Australian residential aged care sector	20
4.2 International evidence – findings	26
4.3 Nurses and care workers - scope of practice overview.....	29
4.4 Aged Care Quality and Safety Commission Regulatory Bulletin	30
5 Results – Stakeholder consultations.....	32
5.1 Alternative 24/7 RN arrangements	32
5.2 Alternative skills mix arrangements	40
6 Results – Review of exemption applications and current practice	43
6.1 Overview of exemption applications.....	43

6.2	Overview of Commission’s Response	45
6.3	Summary.....	48
7	Alternative arrangements to 24/7 RN staffing responsibility	50
7.1	Logic Model	50
7.2	Foundational elements of alternative arrangements	52
7.3	Key principles underpinning alternative arrangements.....	53
7.4	Recommended alternative arrangements	55
7.5	Recommendations: Alternative 24/7 RN arrangements.....	58
8	Alternative arrangements for skills mix responsibility	59
8.1	AN-ACC funding arrangements for specialised aged care services	59
8.2	Resident profile and care models in specialised aged care.....	60
8.3	Summary of findings.....	60
8.4	Recommendations: Skills mix responsibilities for specialised aged care services	61
9	Evaluation framework	62
9.1	Monitoring and Evaluation Framework (MEF)	62
9.2	Evaluation questions	62
	References.....	68
	Appendix 1: Recommendation 86: Minimum staff time standard for residential care	73
	Appendix 2: Care minutes and 24/7 registered nurse responsibilities	74
	Appendix 3: Expert Reference Group membership	76
	Appendix 4: Expert Reference Group Terms of Reference	78
	Appendix 5: Completed stakeholder consultations	80
	Appendix 6: Academic literature review	82
	Appendix 7: Scope of practice and competencies overview – RNs, ENs PCWs/AINs.....	140
	Appendix 8: Activity-based funding.....	145
	Appendix 9: Draft Provider Reporting Template.....	146

List of Tables

Table 1	Project scope by category	7
Table 2	Guiding principles for the development of alternative arrangements	7
Table 3	Search terms used for the evidence review	12
Table 4	Summary of staffing standards and training requirements by country	17
Table 5	24/7 RN responsibility, by location (July 2023)	25
Table 6	24/7 RN on-site requirement in the United States	27
Table 7	Stakeholder consultation questions	32

Table 8	Alternative Arrangements - Monitoring and Evaluation Framework.....	63
Table 9	Search terms used for the evidence review	82
Table 10	Overview of the roles of PCWs/AINs, ENs and RNs.....	140

List of Figures

Figure 1	Distribution of RACFs across Australia	20
Figure 2	Distribution of EN and RN FTEs in residential aged care, by location (2022).....	22
Figure 3	Distribution of EN and RN FTEs in residential aged care, by location and jurisdiction (2022).....	23
Figure 4	Trend of EN:RN ratio (FTE) in residential aged care, by location (2013 to 2022)	23
Figure 5	Trend of EN:RN ratio (FTE) in residential aged care, by jurisdiction (2013 to 2022)	24
Figure 6	Alternative Arrangements: Logic Model	51
Figure 7	Flowchart for paper inclusion/exclusion	84

Acknowledgements

We would like to thank the many stakeholders who contributed to the project for their time and valuable insights. We gratefully acknowledge the members of the Expert Reference Group for their guidance throughout this project and the large number of stakeholders, including aged care providers, peak organisations, and health services who provided crucial input through their participation in the consultation process.

We would also like to acknowledge the valuable expertise generously provided by Melanie Wroth, Gai-Maree Cain and Louise Kennewell from the Aged Care Quality and Safety Commission; Julie Reeves from the Australian Nursing and Midwifery Federation; Tanya Vogt from the Australian Health Practitioner Regulation Agency; Laura Bryce and Bronwyn Arthur from the Palliative Aged Care Outcomes Program, University of Wollongong; Liz Thomas, Alison Spice and Rachel Bilboe from the University of Wollongong College; and Genevieve Donnelly and the team at the Independent Health and Aged Care Pricing Authority.

Finally, our sincere thanks are extended to Mark Richardson, Penny Philbrick, Julie Harvey, Fiona Brooke and the team in the Residential Care Funding Reform Branch of the Australian Government Department of Health and Aged Care. Their ongoing commitment and support throughout this project has been greatly appreciated.

Abbreviations used in this report

Ahpra	Australian Health Practitioner Regulation Agency
AIN	Assistant in nursing
AN-ACC	Australian National Aged Care Classification
CHSD	Centre for Health Service Development
ED	Emergency Department
EN	Enrolled nurse
ERG	Expert Reference Group
FTE	Full-time equivalent
GP	General Practitioner
MEF	Monitoring and Evaluation Framework
MM	Modified Monash
MMM	Modified Monash Model
MPS	Multi-Purpose Service
NP	Nurse Practitioner
PCW	Personal care worker
RACF	Residential aged care facility
RN	Registered nurse
the Commission	The Aged Care Quality and Safety Commission
the Department	The Australian Government Department of Health and Aged Care
the Royal Commission	The Royal Commission into Aged Care Quality and Safety
24/7	Twenty-four hours/seven days per week

Executive Summary

This is the final report of the 'Alternative Arrangements for Residential Aged Care Staffing Responsibilities' project. The aim of this report is to support implementation of the Australian Government's new requirements regarding staffing responsibilities in Australian residential aged care facilities (RACFs).

This project had two major objectives:

- Part 1: Identify and recommend evidence-based alternative clinical arrangements for RACFs unable to provide twenty-four hours/seven days per week (24/7) on-site and on duty registered nurse (RN) care; and
- Part 2: Identify and recommend alternative skills mix and/or 24/7 RN arrangements for specialised RACFs and RACFs co-located with a health service.

The project was completed between March 2023 and September 2023 by the Centre for Health Service Development (CHSD), University of Wollongong on behalf of the Australian Government Department of Health and Aged Care (the Department).

A significant volume of information was collected to inform the project. This includes publicly available aged care sector data, documentation provided by both the Department and the Aged Care Quality and Safety Commission (the Commission) and documentation provided by industry stakeholders. In addition, the project collected data through a widespread industry stakeholder consultation process and a comprehensive literature review and environmental scan.

Key findings

The research has highlighted the variability of contexts in which residential aged care facilities (RACFs) operate and the diversity of strategies that have been implemented over time to ensure that:

- residents receive safe, quality care, and
- staff are afforded a safe and supported workplace.

At a broad level, the data analyses and evidence review conducted for this project indicate that many RACFs struggle to attract and retain a sustainable and appropriate staffing profile. Continued investment in such activities will not, on its own, change this situation. At the same time, the evidence review and stakeholder consultations conducted during the project have found considerable scope and appetite to build on the existing residential aged care workforce using a mix of strategies including structured staff development opportunities and changes in operational processes.

It is important to recognise that identifying appropriate alternative arrangements is a complicated task without a simple solution. The project has aimed to identify alternative arrangements that are safe, practical and suitable for implementation across the very wide and varied environments in which RACFs operate.

In practice, this means that a 'one size fits all' model will not work. Instead, a range of strategies are required to address the circumstances that arise in different locations and contexts. Further, a combination of strategies is likely to be required for individual RACFs to mitigate the risks related to not having an RN on-site and on duty.

Alternative 24/7 RN arrangements

The objective of the 24/7 RN staffing arrangements project is to ensure that people living in RACFs have access to safe, quality care at all times, irrespective of where they live or what their needs may be.

A logic model (presented in Section 7) has been developed to describe the objectives of the alternative arrangements and outline the proposed processes, impacts and outcomes associated with their implementation.

It is our view that, for RACFs unable to meet the current staffing responsibilities, the five 'foundational elements' and four 'key principles' listed below will provide a basis to underpin the provision of any alternative arrangements. A detailed outline of each is provided in Section 7.

Foundational Elements of Alternative Arrangements

- Residents receive safe, quality care at all times regardless of the geographic and contextual factors that may impact on a provider's ability to meet staffing responsibilities;
- All aged care staff work within their professional and individual scope of practice. This includes any relevant legal requirements and expectations of registration bodies (registered professions only), education, individual skills and competencies, job role/ position descriptions, and other relevant policies and regulations;
- Staff rights to safe and appropriate workloads are met regardless of context, to ensure staff health and well-being are maintained and resident care is not compromised. This also supports the attraction and retention of staff;
- Partnerships with local health services are optimised to ensure that the often complex and chronic health needs of residents are met;
- Arrangements must be fit for purpose in the local context and able to be effectively and efficiently operationalised.

Key Principles of Alternative Arrangements

- Protocols / procedures and a robust clinical governance framework are required to provide safe, quality care, facilitate monitoring and review of residents, and support staff and external clinical supports to work collaboratively to address emerging clinical concerns;
- Recognise the crucial clinical role of enrolled nurses (ENs) in residential aged care. This should occur within the context of recognising that ENs are required to be supervised (directly or indirectly) by an RN at all times;
- Transition to 24/7 RN coverage throughout the approved exemption period by building workforce capacity. This should involve strategies such as structured staff development opportunities and changes in operational processes to enable staff to work at the top of their scope of practice;
- Embrace opportunities to utilise virtual care services such as telehealth and videoconference that can provide staff with advice and support when an RN is not available on-site and on duty.

When these foundational elements and key principles have been established by an RACF, it is reasonable to consider implementing one or more of three categories of alternative arrangements when 24/7 RN coverage is not possible:

- On-call with capacity to attend on-site;
- Virtual services;
- Off-site healthcare and emergency services.

A detailed overview of each type of alternative arrangement is provided in Section 7.4.

A monitoring and evaluation framework has been developed to enable monitoring and analysis of the ongoing effectiveness and outcomes of the alternative arrangements that have been implemented, and to develop an evidence base for ongoing policy development and planning.

Recommendations: Alternative 24/7 RN arrangements

The following recommendations are provided in relation to alternative 24/7 RN arrangements.

Recommendation 1.1

The Department tests the Foundational Elements and Key Principles to be used to underpin appropriate alternative arrangements.

Recommendation 1.2

The recommended Monitoring and Evaluation Framework be tested and refined to underpin a process of monitoring and evaluating agreed alternative arrangements implemented in rural and remote locations.

Recommendation 1.3

Communication and collaboration between the governance bodies and residential aged care providers in rural and remote areas is facilitated, to promote information sharing and support the planning and implementation of strategies to transition to 24/7 RN staffing.

Recommendation 1.4

Targeted strategies for increasing and supporting the RN workforce in residential aged care in rural and remote areas are further developed, in consultation with providers and other key stakeholders. The RN workforce shortages in RACFs should be considered in the context of the shortages also being experienced in healthcare and disability sectors.

Alternative skills mix arrangements

The second objective of this project was to provide advice to the Department on whether alternative arrangements for skills mix and/or 24/7 RN responsibilities should be considered for specialised residential aged care services, i.e., specialised homeless and Aboriginal and Torres Strait Islander residential aged care services. The project has considered differences in the care needs of residents and the associated care models that operate within this small group of specialised aged care services. Information collected through the literature review, the environment scan, and extensive stakeholder consultations has been synthesised and a set of recommendations is presented.

It is clear that the care needs of many residents in specialised homeless and Aboriginal and Torres Strait Islander RACFs differs from non-specialised RACFs. This is self-evident from the fact that additional subsidies are already allocated under the Australian National Aged Care Classification (AN-ACC) base care tariff. It has also been confirmed through the data collection activities conducted for this project.

The primary issue being considered is whether changes should be made to the skills mix for the care minutes responsibility that was introduced on 1 October 2023 (or the 24/7 RN responsibility introduced on 1 July 2023). If such changes are not appropriate, are there alternative (new or existing) mechanisms that are more suitable to address this issue?

The academic literature offered little insight specifically related to skills mix requirements for specialised RACFs for homeless or Aboriginal and Torres Strait Islander residents or those with a low acuity resident cohort. It did suggest that differing staff structures and care models may be required that are responsive to the needs and differences in these populations.

There are clear differences in views across the sector regarding whether changes to the skills mix responsibility is required. While there is agreement that the needs of residents in specialised homeless RACFs differs from other RACFs, there is no consensus on the best approach to dealing with these differences in the context of skills mix and minimum care minutes responsibilities.

Having considered all of the available evidence, the project team has concluded that the variability in both models of care and resident care needs between and within specialised RACFs means that it is very difficult to

predict the potential impact of any changes to the skills mix (or 24/7 RN) responsibility. On this basis, it is proposed that no changes be introduced to the skills mix responsibility in the short term. The issue should be closely monitored moving forward.

In this context, we recommend that the Department consider conducting a study across a sample of specialised RACFs for homeless or Aboriginal and Torres Strait Islander residents. The primary aim of the study would be to review current models of care for this group of homes and develop a more sophisticated understanding of differences in staffing and other resource requirements. The study would inform ongoing policy development processes in this area.

Recommendations: Skills mix arrangements

Recommendation 2.1

No changes should be made to the skills mix responsibility that was introduced on 1 October 2023 for specialised homeless or Aboriginal and Torres Strait Islander services or 'low acuity' RACFs. No changes should be made to the associated 24/7 RN responsibility that was introduced on 1 July 2023.

Recommendation 2.2

Conduct a one-off study across a sample of specialised RACFs for homeless or Aboriginal and Torres Strait Islander residents to review current models of care and differences in staffing and other resource requirements.

Recommendation 2.3

Care outcomes across specialised RACFs should be carefully monitored and evaluated to further inform the appropriateness of the skills mix arrangements and 24/7 RN responsibilities.

Recommendation 2.4

There should be support for the Aboriginal and Torres Strait Islander Health Workforce to increase the number of qualified practitioners and health workers and further develop and establish employment opportunities in residential aged care.

Recommendation 2.5

Any future changes to the direct care minute targets or skills mix responsibilities for specialised RACFs need to be considered in the context of the AN-ACC funding model and the appropriateness of the models of care that are in place.

Summary

In summary, we note that Australia is not alone in struggling to ensure that residents of RACFs have access to staffing arrangements that meet their needs, regardless of contextual and geographical circumstances. From our international review, we found that Denmark, Sweden and Germany had the highest performing long-term care systems. There was, however, no consistency in terms of staffing levels or skills mix across these countries. A key lesson from the international evidence is that having a workforce that can cross the boundaries between hospital care and aged care supports the sustainability of those services; there is no reason to suspect this would not also be the case in Australia. Being able to work across settings would not only ensure familiarity between health and aged care services with each other's policies and processes, it would also support continuity of care for residents as their clinical needs progressed. Moreover, it is likely to provide opportunities for staff development and career articulation for staff within their local region. There is clearly merit in exploring policy options to strengthen the interface between health and aged care, particularly for those living in regional, rural and remote areas of the country.

1 Introduction and background

This is the final report of the 'Alternative Arrangements for Residential Aged Care Staffing Responsibilities' project. The project has been undertaken by the Centre for Health Service Development (CHSD), University of Wollongong on behalf of the Australian Government Department of Health and Aged Care (the Department). The aim of this report is to support the implementation of the Australian Government's new requirements regarding staffing responsibilities in Australian residential aged care facilities (RACFs).

The policy context underpinning this project arises from the Royal Commission into Aged Care Quality and Safety (the Royal Commission) and the Government's response to its recommendations. The final report of the Royal Commission recommended the progressive introduction of minimum staff time and skills mix requirements across the Australian residential aged care sector (Recommendation 86, refer Appendix 1). In recognition of the diversity of population groups being supported and workforce challenges experienced within the sector, the Royal Commission also recommended that these requirements be introduced in a staggered manner and provide for a series of exemptions in terms of the registered nurse (RN) requirement and staff mix (Royal Commission into Aged Care Quality and Safety 2021).

The Australian Government responded to the Royal Commission's recommendations with a series of reforms that are currently being implemented across the sector. This includes the introduction of legislation requiring RACFs to have an RN on-site and on duty 24 hours a day, 7 days a week from 1 July 2023.¹ In addition, mandatory direct care time responsibilities per resident per day (casemix adjusted) have been implemented from 1 October 2023. These responsibilities include 200 direct care minutes (on average) per resident per day to be provided of which 40 minutes (on average) is required to be provided by an RN. Additional information on these responsibilities for aged care services is provided at

¹ This responsibility applies to AN-ACC funded services and also National Aboriginal and Torres Strait Islander Flexible Aged Care Program (NATSIFACP) services, but not Multi-Purpose Services (MPS).

Appendix 2.

In recognition of the fact that RACFs in rural and remote areas in particular may have difficulty recruiting and retaining qualified nursing staff, an exemption process has been established regarding the twenty-four hours/seven days per week (24/7) RN responsibility. RACFs with 30 beds or less located in areas defined by the Modified Monash Model (MMM) as categories Modified Monash (MM) 5 to MM 7 (i.e. small rural towns, remote and very remote communities), can apply for an exemption for the period 1 July 2023 to 30 June 2024. Exemptions will be approved in cases where the Department determines that the RACF has appropriate alternative clinical care arrangements in place when an RN is not available on-site and on duty.

1.1 Project objectives

The primary objective of this project is to undertake research on behalf of the Department to inform policy decisions on how to provide clinically appropriate care alternatives within the current environment of workforce constraints. The project comprises two parts:

- Part 1: Identify and recommend evidence-based alternative clinical arrangements for RACFs that are unable to meet the 24/7 RN responsibility that ensures they are delivering safe and quality clinical care when an RN is not onsite that are implementable by RACFs and able to be monitored by the Department; and
- Part 2: Investigate and provide advice to the Department on whether exemptions to the skills mix responsibilities in any specialised and co-located RACFs are appropriate and, if so, develop exemption frameworks. This should include (but need not be limited to) consideration of specialised homeless and specialised Aboriginal and Torres Strait Islander RACFs and RACFs with low acuity residents (based on Australian National Aged Care Classification (AN-ACC) classifications).

The following questions have been specified to underpin the development of alternative arrangements for RACFs unable to meet the 24/7 RN responsibility:

- What are clinically appropriate and safe alternatives to an on-site RN? Examples may include on-call arrangements, telehealth arrangements/virtual environments that are complemented by an on-site EN. A decision-making framework (or matrix of options) will be developed comprising contextual factors (RACF size, location), staffing availability (RN hours that can be delivered), resident profiles (acuity, care needs) and available on-call clinical support (RN, General Practitioner) that could be called on within a reasonable timeframe, etc. The framework will be underpinned by evidence of why and/or under what circumstances the alternatives identified are clinically appropriate.
- What minimum requirements/benchmarks/limitations should be placed on these sites, for example: timeframes regarding access to off-site clinical advice, and hands-on alternative clinical care (within the RACF, transfers to hospital); acuity levels of residents (as measured by AN-ACC). Potential unintended consequences for residents should be included.

For Part 2, the following questions have been specified to assess whether exemptions to the skills mix responsibilities in specialised aged care services are appropriate:

- Should the exemption apply to the 24/7 RN responsibility or skills mix responsibility or both; and in what circumstances (all aged care services within the specialist type, resident acuity);
- What are the appropriate clinical models for workers (RNs, ENs, PCWs);
- What administrative arrangements, including development of application process, assessment criteria and review processes, should be in place.

It is noted that while there are two distinct parts to this project, there is considerable overlap between the stakeholders and the issues being considered. In this context, our approach has been to combine key project processes and activities where possible and tailor these to address the specific issues relevant to each component of the project.

The specified timeframe for the conduct of the project was February 2023 to September 2023.

1.2 Project scope

The scope of the project was specified in the Request for Quotation from the Department and aligns with the objectives outlined above.

For Part 1, the project has focussed on RACFs eligible to apply for an exemption to the 24/7 RN responsibility. The Department identified 126 RACFs that are currently eligible to apply for an exemption from the 24/7 RN responsibility. These are RACFs with 30 beds or less in areas defined as MMM categories MM 5 to MM 7 (small rural towns, remote and very remote communities) that have appropriate clinical care arrangements in place when an RN is not available on-site. It is recognised that some RACFs outside of this cohort are also unlikely to be able to meet the 24/7 RN responsibility due to current workforce constraints.

For Part 2, the Department is seeking advice on whether exemptions to the skills mix responsibilities in any specialised services are appropriate. This includes specialised homeless and specialised Aboriginal and Torres Strait Islander RACFs and RACFs with low acuity residents based on their AN-ACC profile. In addition, Part 2 requires consideration of whether it is clinically appropriate for RACFs co-located with a health service to be granted exemptions from the 24/7 RN responsibility under certain circumstances.

Table 1 summarises the scope of the project by RACF type. This table highlights that for RACFs in rural and remote areas with RN workforce shortage and RACFs co-located with a health service, alternative arrangements for the 24/7 RN responsibility are being investigated. For the remaining three categories, alternatives to the skills mix and the 24/7 RN responsibility are in scope for the project.

Table 1 Project scope by category

Category	Alternative 24/7 RN arrangements	Alternative skills mix arrangements
RACFs in rural and remote areas with RN workforce shortage	✓	×
RACFs co-located with a health service	✓	×
RACFs with low acuity residents	✓	✓
Specialised Aboriginal and Torres Strait Islanders RACFs	✓	✓
Specialised homeless RACFs	✓	✓

1.3 Research questions and guiding principles

Four key research questions were developed at the outset of the project to underpin the data collection and analysis processes:

1. What are the 'alternative arrangement' **options**?
2. What is the **evidence** to support the safety and clinical appropriateness of alternative arrangement options?
3. What should **implementation** look like?
4. What **reporting** requirements should be in place to support ongoing **monitoring** and **review** of the impacts and outcomes of RACFs using alternative arrangements?

A set of guiding principles were developed to underpin the development of alternative arrangements (Table 2). The principles initially drew on information that was gathered in the early scoping work for the project and were refined in consultation with the project Expert Reference Group.

Table 2 Guiding principles for the development of alternative arrangements

Principle	Description
Responsive and flexible	Arrangements can be implemented to suit the individual and changing circumstances of residential aged care facilities, including the local context and the care needs of the resident cohort.
Equitable	Quality care that is safe and appropriate for all care needs is available to aged care residents, regardless of occurrences of RN workforce shortages.
Simplicity and efficiency	The alternative arrangements should not be overly burdensome to organise, implement and administer and should be accessible to the staff.
Transparency and accountability	Reporting, monitoring and review is facilitated through explicit descriptions of the alternative arrangements which are readily understandable for all stakeholders.
Promoting sustainability	The ongoing viability of the services and the workforce providing care to residents is considered, both within and external to the residential aged care sector, and the overarching priority is to achieve and sustain 24/7 RN staffing.
Practice within scope and competence	All staff work in a safe environment within the relevant federal, jurisdictional and local legislation, regulations, standards and policies, and within their level of education and competence. The nursing workforce is supported and enabled to work to their full scope of practice.

1.4 Project governance

An Expert Reference Group (ERG) was established in May 2023 in consultation with the Department. Membership comprised key experts who were able to contribute to the project, including individuals with expertise in issues faced by rural and remote service providers, specialised RACFs and RACFs that are co-located with health services. The role of the ERG was to provide advice to support the project team to address the key research questions. The membership and Terms of Reference of the ERG are provided at Appendix 3 and Appendix 4.

The project was approved by the University of Wollongong Health and Medical Human Research Ethics Committee (Reference: 2023/123).

2 Methods

A mixed methods approach was applied to ensure that the wide range of available quantitative and qualitative data were able to be effectively incorporated into the project findings. In developing the project methodology, a key aim was to ensure that results are able to be easily understood and implemented by the sector and monitored by the Department and the Commission. In this context, a set of research questions and guiding principles were developed to ensure the project addressed its objectives and remained within scope.

A significant volume of information was collected and analysed during the project. This included publicly available aged care data, documentation provided by both the Department and the Aged Care Quality and Safety Commission (the Commission), and documentation provided by industry stakeholders. In addition, the project collected data through a widespread industry stakeholder consultation process, and a comprehensive literature review and environmental scan.

A brief summary of each data source and the method applied to its inclusion in the project is provided in Sections 2.1 to 2.4.

2.1 Literature review

A rapid review of the peer reviewed literature was conducted to ensure that the project was underpinned by a strong evidence base. The review focussed primarily on studies relating to alternative clinical support and/or staffing models. The aim of the literature review was to identify current trends and practices associated with clinical arrangements in RACFs where 24/7 RN arrangements are not in place.

The literature review focussed on studies in Australia and other English-speaking countries including the United Kingdom, Ireland, the United States of America, Canada and New Zealand. These countries were selected as their experiences in residential aged care accommodation are more likely to be applicable to the Australian context. However, where relevant articles were identified from other countries, they were also included.

A review of research commissioned by the Royal Commission was also undertaken in recognition of the significant body of relevant research completed as part of its work between 2018 and 2021. Following an initial review, three papers were identified as being particularly relevant and were therefore reviewed in detail.

2.2 Environmental scan

An environmental scan was conducted that included an analysis of aged care sector workforce and service level data, a review of Australian and international practice literature related to staffing models, and a review of websites of relevant government departments, non-government organisations and peak bodies. The international website searches were limited to countries that have similar social and health care contexts to Australia to allow for comparability. The regulations in Australian jurisdictions which are known to have staffing standards for public sector residential aged care services were also reviewed.

A summary of the methods used in each component of the environmental scan is provided below.

2.2.1 Profile of the Australian residential aged care sector

A range of quantitative data were analysed to assess the potential impact of the alternative arrangements. The Department provided routinely reported characteristic data which was analysed along with publicly available datasets of aged care services and hospitals to provide an indication of the number of RACFs impacted (Australian Institute of Health and Welfare 2023; Department of Health and Aged Care 2022).

Nursing workforce data was sourced from the Health Workforce Data Tool, which provides access to the National Health Workforce Dataset.² The dataset contains annual registration data collected by Australian Health Practitioner Regulation Agency (Ahpra) and the national registration boards, coupled with voluntarily provided workforce survey data. The dataset contains demographic and employment details of registered health professionals. The analysis presented in this report includes registered nurses and midwives with the job area 'aged care' and the job setting 'residential health care facility'. Numbers are presented as full-time equivalents (FTEs). RNs are all categories of registered nurses (with or without other registration of enrolled nursing or midwifery). ENs are all persons with an EN registration and no RN registration.

Extracts of direct care minutes data were also made available for this project. Residential aged care providers are required to report regularly (monthly and quarterly) their resident, workforce and financial data so that the Department can monitor provider performance against the direct care minutes and 24/7 RN responsibilities as well as other staffing data.³ Analysis of the direct care minutes data was performed at the service level and analysis of the 24/7 RN responsibility at the individual aged care facility level (as provided by the Department).

For the purposes of this project, a RACF is a building or complex of buildings, inclusive of their immediate surrounds, used for the purpose of delivering residential aged care by an approved provider. Where two or more residential aged care services belong to the same approved provider and are co-located at a single address, or across neighbouring addresses that effectively form a single location, they may form a single RACF for the purposes of the 24/7 RN responsibility. In assessing whether co-located services form a single RACF, the Department also takes into consideration other features that indicate they operate as a single RACF, such as:

- a single governance or management structure across the services;
- common policies, procedures, systems and processes;
- shared clinical and care staff across the services;
- easily accessible, common resources such as dining and/or recreational areas.

The analysis combines Q3 2022/23 direct care minutes staff reporting with direct care minutes targets calculated for Q4 2022/23. These are the most comparable because Q4 targets are based on the casemix-adjusted resident profile in Q3 (see

² <https://hwd.health.gov.au/datatool/>

³ <https://www.health.gov.au/our-work/care-minutes-registered-nurses-aged-care/care-minutes#care-minutes-reporting>

Appendix 2: Care minutes and 24/7 registered nurse responsibilities). Services were excluded from direct care minutes analysis if there was any of the following missing:

- Base care tariff
- Q4 direct care minutes targets
- Zero occupied bed days
- Workforce reporting deemed not reasonable by the Department.

The 24/7 RN responsibility data relates to July 2023, the first month of mandated responsibility and reporting.

2.2.2 International review of RN staffing models

A search was undertaken to identify countries that may have 24/7 RN requirements. The search included the grey literature, either by accessing websites of organisations such as government, statutory bodies or peak bodies (e.g. midwife and nursing associations). Google searches and snowball searching techniques (e.g. Reference list searching) were also used to gain information about long term care nursing regulations.

2.2.3 Nurses and care workers – scope of practice

The scope of practice and associated competencies of RNs, ENs and PCWs were reviewed as they relate to residential aged care to ensure that the findings and recommendations arising from this project comply with all relevant legal requirements.

The review included aged care specific guidelines and state level medicines legislation requirements for the administration of medications. For registered professions (RN, EN, Nurse Practitioner (NP) and Aboriginal and Torres Strait Islander Health Practitioner), the review included the regulations regarding registration, standards of practice, and various practice guidelines. A particular focus was identifying the requirements regarding the administration of medications and other clinical care tasks in the absence of an on-site and on duty RN.

2.2.4 Aged Care Quality and Safety Commission Regulatory Bulletin

In April 2023, the Commission issued a Regulatory Bulletin that provides information to the sector on the new responsibilities to provide 24/7 RN coverage and minimum care minutes (Aged Care Quality and Safety Commission 2023). The Regulatory Bulletin also provides information on how the Commission will regulate these responsibilities.

The Regulatory Bulletin was reviewed to ensure that the approaches to alternative arrangements recommended in this report are consistent with the approach that will be adopted by the Department and the Commission. The Regulatory Bulletin also provided important insights in guiding the development of the proposed Monitoring and Evaluation Framework presented in Section 10 of this report.

2.3 Stakeholder consultations

The stakeholder consultation process was conducted during July and August 2023 and comprised 26 semi-structured interviews. Stakeholders included a mix of clinical, provider, staff and consumer representatives with expertise in rural and remote care provision. A list of the participating stakeholders is provided at Appendix 5.

The interviews were guided by questions sent to participants prior to the meeting. The consultations were semi-structured, open-ended and conversational in tone to allow for discussion on other issues that emerged. The interviews generally took about 60 minutes to complete. All interviews were recorded with the permission of the participants. The audio files were then confidentially transcribed and uploaded into NVivo software to facilitate data management and analysis.

2.4 Review of 24/7 RN responsibility exemption applications

As discussed previously, RACFs with 30 beds or less in areas defined as MM 5 to 7 that have appropriate alternative clinical care arrangements in place when an RN is not available on-site, are eligible to apply for an exemption from the 24/7 RN responsibility for up to a 12-month period, ending on 30 June 2024. The Australian Government identified 126 RACFs that were eligible to apply for an exemption from the 24/7 RN responsibility.

The Department provided 48 completed exemption application forms together with the responses from the Commission. These documents were uploaded into a spreadsheet and organised into key words, concepts, and themes. This information provided useful insights into the skills mix of the RACFs, their existing alternative clinical arrangements, and the steps taken to ensure the clinical care needs of residents will be met during the period for which the exemption is in force.

3 Results – Literature review

This Section presents summary results of a rapid review of the peer reviewed literature. Detailed results of the review are presented in Appendix 6. The literature review focussed primarily on studies relating to alternative clinical support and/or staffing models. The aim was to identify current trends and practices associated with clinical arrangements in RACFs where 24/7 RN arrangements are not in place.

The literature review focussed on studies in Australia and other English-speaking countries including the United Kingdom, Ireland, the United States of America, Canada and New Zealand. These countries were selected as their experiences in residential aged care accommodation are more likely to be applicable to the Australian context. However, where relevant articles were identified from other countries, they were also included.

3.1 Search strategy

The search strategy was developed with assistance from a university research librarian. Databases interrogated for the review included CINAHL, PsycINFO, Medline and Scopus. The electronic search of CINAHL, PsycINFO and Medline was carried out using EBSCOhost, an online database. Scopus was searched via the University of Wollongong's library database.

Eligibility criteria included peer-reviewed literature published from the year 2000 to present in English language. Search terms comprised three levels of search terms including 1) terms related to setting (e.g. nursing home, aged care facility); 2) terms related to care providers (e.g. nurses, aged care staff); 3) terms that define interventions and intervention participants (e.g. telemedicine, Multi-Purpose Service, inreach or outreach, homeless, Aboriginal and Torres Strait Islander, low acuity). The search focused on Australian literature but included articles from the USA, Canada, Europe and New Zealand where relevant. Relevant articles were included if there was a focus on nursing staff outcomes as a result of alternative staffing arrangements and/or care models. Table 3 shows the search terms used in the literature review.

Table 3 Search terms used for the evidence review

	Search terms
^1	Nursing home OR long-term care OR residential aged care OR skilled nursing facility OR aged care facility OR aged care home
^2	Nurs* OR staff* OR night shift OR workforce shortage
3	AND Alternative arrangement OR Alternative work arrangement OR Alternative model of care OR Alternative clinical care arrangement OR Care substitution OR clinical arrangements OR exemption OR waiver
3a	AND Digital health OR telemedicine OR telenursing
3b	AND “Multi purpose service” OR MPS OR “colocated” or “co-located”
3c	AND “decision support”
3d	AND “collaborative care” AND “model”
3e	AND Inreach OR outreach

	Search terms
3f	AND Homeless OR “social* disadvantage” OR “financial* disadvantage” OR “indigent population” OR “transient population” OR transiency
3g	Indigenous OR Aboriginal OR “Torres Strait Islander” OR “First Nations” OR “native American” OR Maori
3h	“low acuity” OR “low care”

^ Search terms ‘1 AND 2’ are constant and combined with ‘3a to 3h’.

3.2 Findings

The literature search identified a total of 3,104 documents. Of these, 2,861 papers were excluded as not being relevant to the question or were duplicates. A total of 153 full text papers were reviewed, of which 58 papers were included in the findings.

3.2.1 Telehealth and telemedicine

Telemedicine describes occasions where a physician or health professional assesses and prescribes treatment via the use of telephone or videoconference services. Telehealth offers flexibility of time, location, and improved healthcare efficiency (Dai 2023). Telehealth may also provide a potential mechanism to reduce inequalities in healthcare by delivering knowledge, resources and skills to support staff in rural communities where they do not have ready access to clinical expertise. Various studies have shown that telehealth can improve access to expert clinicians (Sunner et al. 2023), including access in rural areas that may experience shortages and lack of services (Dai 2023; Gayot et al. 2022; May et al. 2021). However, it does not fully replace the need for face-to face presence in the RACF (Sunner et al. 2023).

Studies have found that unnecessary transfers to emergency departments and hospital admissions can be reduced through the use of telehealth (Sunner et al. 2023), especially where there is full engagement with telehealth by staff and providers (Valk-Draad & Bohnet-Joschko 2022). The addition of video health has shown promise in reducing hospital transfer (Hullick et al. 2022; Hullick et al. 2016) while nurse-led telehealth services have also proved effective (Conway et al. 2015; Donnelly & Finch 2017). However, Grant et al. (2020) found only mixed results regarding its usefulness in hospital avoidance.

Telehealth has also provided the opportunity for increased staff support, a second opinion and professional development when interacting with a more skilled colleague (Sunner et al. 2023). Limitations in the uptake of telehealth may be due to mixed staff engagement, lack of training and that it does not replace in-person assessment (Dai 2023; Sunner et al. 2023).

3.2.2 Support from Nurse Practitioners (NPs)

The potential role of NPs in an Australian context was first explored in the early 1990s in NSW. This early work led to the appointment of the first NP in 2001 working as a Remote Generalist in Wanaaring in remote north-west NSW (Masso & Thompson 2014). Since then the numbers of NPs has risen sharply in Australia. According to the Nursing and Midwifery Board there are currently 2,656 NPs operating in Australia (Nursing and Midwifery Board of Australia 2023).

One of the reasons for creating the role of the NP assumes that they will improve access to health services, particularly in areas where there is a shortage of providers or geographical isolation (Masso & Thompson 2014). The Australian Government has recently released the Nurse Practitioner Workforce Plan to provide a clear vision on how to better facilitate NPs to deliver health care, and to address barriers that have prevented

them from being used to their full potential (Australian Government Department of Health and Aged Care 2023).

NPs may work in private practice, from within RACFs, community-based organisations or within hospital-based outreach or multidisciplinary teams (Dwyer et al. 2017). While there may be scope for NPs to have a role in aged care, it appears they are not currently being utilised in many RACFs (Collins et al. 2020; Craswell et al. 2023).

There is evidence that NPs can improve quality of care in RACFs and better maintain resident quality of life (Arendts et al. 2018). NP after-hours on-call services have also shown excellent results in rural areas in Victoria (Jennings et al. 2021) and Queensland (Dwyer et al. 2017). Barriers to the effectiveness of NPs may be the need for integrated practice management software and acceptance by existing staff. There are also financial inhibitors due to the low rates of financial reimbursement available for NPs through Medicare (Ervin et al. 2019). Enablers may include collaboration, enhanced assessment and surveillance of residents and improved communication (Craswell et al. 2023).

3.2.3 Support from general practitioners (GPs)

A range of general practice models of care where a GP may support residents in aged care were identified by Reed (2015):

- The continuity model – A resident continues to see their regular GP after transfer to a RACF
- RAC panel model – The GP sees all residents in a RACF for their practice
- GPs with a special interest in aged care – GPs committed to providing aged care services
- Longitudinal general practice team model – GPs delegate tasks to a general practice nurse
- RACF-based models of care – RACFs employ a GP to monitor residents and review clinical services.

While GPs may be difficult to recruit to RACFs, they may be able to reduce unplanned hospital admissions and address under-reporting of adverse events (Haines et al. 2020). The development of partnerships with GPs may also include advocacy and peer support and encourage regular visits to RACFs (Lloyd et al. 2017). Regular onsite visits to RACFs by physicians can reduce hospitalisations, particularly where this involves a nurse/physician team that provides assessment, medication review and staff support (Graverholt et al. 2014).

3.2.4 Support from outreach services

Outreach services are team-based services that may provide a range of services to RACFs, including telephone support, assessment and treatment services as well as other consultation and coordination services. A review by Grant et al. (2020) found growing evidence that outreach services can reduce transfer of residents to the ED. Outreach services identified were either geriatrician led or were RN or NP led.

Geriatrician led outreach services may reduce hospital admissions over time but a limitation is that they may be unavailable outside certain hours, such as business hours, and may not respond to overnight or emergency situations (Amadoru et al. 2018; Chan et al. 2018; Dai et al. 2021). Udesen et al. (2023) described a hospital-based mobile service of ED consultants who perform on-call on-site evaluation, emergency care and treatment in RACFs. Preliminary results showed that seven out of eight residents remained in the RACF after assessment and treatment by the ED consultant.

Nurse practitioner led services also showed promising results with regard to reducing hospital admissions (El-Masri et al. 2015; Fan et al. 2016). Nurse outreach services were offered in conjunction with a telephone triage service (Donnelly & Finch 2017) or could be employed by a hospital but work out of the RACF (El-Masri et al. 2015). Nurse led outreach services may be more flexible in providing services when they are needed (Donnelly & Finch 2017; El-Masri et al. 2015).

Outreach services may also be valuable in improving the capacity of RACFs to provide more effective care for residents, thus reducing the likelihood of unexpected events occurring for nursing and care staff to manage.

3.2.5 Other support mechanisms

Slaugh et al. (2018) found that consistent staffing for RACFs could be achieved through a restricted on-call pool of staff, reducing staffing costs and improving care. This model reduced reliance on agency staff and employed a higher number of regularly assigned part-time staff (Slaugh et al. 2018). This was reflected in the evaluation by Smith et al. (2010) of an Aboriginal aged care service that also successfully employed a large body of local part-time staff with knowledge of the local situation.

Several other noteworthy points emerged from the literature:

- Simply increasing staffing levels in RACFs may not necessarily ensure the more complex needs of aged care residents are addressed (Wagg et al. 2023).
- The implementation of team-based quality improvement interventions have been shown to reduce resident dependency and improve staff practice (Wagg et al. 2023).
- An advanced practice model of care may allow the creation of new roles and enable RNs to take on a proactive leadership approach to care and case management (Venturato & Drew 2010).

3.2.6 Specialised services

Specialised aged care services provide residential aged care for groups including Aboriginal and Torres Strait Islander peoples and people affected by homelessness. These services may have different skill mixes tailored to the needs and differences of these populations. Alternative arrangements may be required to better serve these populations.

Homeless services

The literature search identified relatively few articles relating to specialised homeless services. Research has indicated that staff working in residential aged care with people who are affected by homelessness require a unique set of skills and training to deliver services to this unique population. This is due to the complex needs of this population, including issues surrounding substance use, challenging behaviour, lack of social support and potential cognitive impairments (Rowlands et al, 2020). Rowlands and colleagues (2020) developed a preferred model of residential aged care for people facing homelessness, that recommended a consistent trauma-informed approach to care be taken by staff.

Indigenous services

The literature on staffing models for indigenous services was sparse and often related to identifying the problem or need rather than staffing models appropriate for aged care. Brooke (2011) reviewed the needs of Aboriginal and Torres Strait Islander residents in Australian RACFs. They found that cultural safety is paramount through the maintenance of culturally competent staff as well as a collaborative and individual approach. In a study by (Sivertsen et al. 2020) it was found there were few staff to support the spiritual well-being of Aboriginal residents in residential aged care. Smith et al. (2010) evaluated an Aboriginal aged care program in central Australia and found that the success of the program relied on local control of the program and the employment of local staff. The preferences of indigenous residents in aged care are more likely to be observed where the composition of the staff reflects the indigenous make-up of its residents (Keelan et al. 2021). Leadership style that is compassionate, empowering, collegial and supportive was important for the development of indigenous long-term care models, while high staff turnover undermines staff leadership (Cloutier et al. 2016).

The success of aged care for indigenous residents is dependent on a number of factors, including a collaborative, individual approach that emphasises the development of relationships. Staffing aspects that contribute to sustainability of Aboriginal and Torres Strait Islander aged care services include the employment of local Aboriginal and Torres Strait Islander staff who can take ownership of the service, use of a leadership model that is aligned to serving the community and allowing and enabling the development of capacity over time rather than 'quick fix' attempts.

Low acuity

The distinction between low care and high care residents in aged care was removed in Australia in 2014. Research prior to this date was reviewed to identify instances where the policy change to 'ageing in place' may be relevant to the current project. Richardson and Bartlett (2009) observed changes in RACFs after the introduction of ageing in place reforms, with aged care homes providing more higher acuity care while lower acuity care was taken up more by community care.

3.2.7 Multi-Purpose Services

Multi-Purpose Services (MPSs) operated by state and territory governments are currently exempt from 24/7 RN responsibility. There may be some lessons from the success of MPSs that can inform aged care delivery more broadly. A report by the Centre for Health Economics reviewed the policy and program responses that have been implemented to face challenges faced by MPS models delivering aged care (Centre for Health Economics Research and Evaluation 2019).

It was concluded that the model is appropriate for delivering integrated health and aged care services, allowing for flexibility in meeting individual needs for rural and remote communities, which has been found in previous reviews on the model (Anderson & Malone 2014). However, a number of key barriers were identified in terms of the program's overall effectiveness, including appropriateness for a number of populations (people with behavioural/psychological/dementia related problems and culturally appropriate care for Aboriginal and Torres Strait Islander people).

The fact that MPS models have not adopted all aged care reforms (including the 24/7 RN responsibility) was also highlighted as a barrier to the model's overall effectiveness (Centre for Health Economics Research and Evaluation 2019). Some services report having very little access to medical staffing, often relying on on-call support or arrangements with local GPs. In some cases, a local GP was not available for up to two weeks, if at all with some even "refusing" to provide services. In this case a hospital medical officer would provide acute and ongoing care to MPS residents.

3.2.8 Discussion and conclusion

This review focussed on literature related to staffing alternatives for the 24/7 RN responsibility for Australian RACFs. In particular, the review focussed on RACFs in rural or remote areas, as well as specialised RACFs and those with a low acuity resident cohort. The use of telehealth has been promoted as a way to improve access to physician and nursing care and/or advice. Telehealth is a valuable tool for improving access to professional health care and supporting RACF staff in decision making. However, challenges exist with telehealth including technology complications, computer literacy and competencies of patients and difficulties in performing physical examinations and communication with patients who have complex needs (cognitive, hearing or visual impairments).

In-reach and outreach services were identified as being valuable in improving access to care and reducing avoidable hospitalisations. However, the availability of these services at certain times (such as overnight) may be an issue. Best outcomes are more likely to be achieved where staff such as GPs, consultants and nurse practitioners are a regular presence in the RACF rather than providing services on an on-call basis.

There was a paucity of research into residential aged care for specialised groups including Aboriginal and Torres Strait Islander peoples and people affected by homelessness. The research identified the need for different staff structures and care models that are responsive to the unique differences of these populations.

MPSs appear to be an effective model in areas where the local population does not support separate services, such as in rural and remote areas. However, attracting staff and supporting them with professional development is an ongoing issue. In addition, consistent staffing may be achieved in a local area by employing and training a larger pool of local part-time staff. The Draft National Care and Support Economy Strategy (Australian Government 2023) suggests the more efficient use of caring and support workers across sectors as

potential staffing solutions. This is due to similarities in qualifications and knowledge level among these workforces, which could be utilised across multiple sectors.

3.3 Findings – Royal Commission Research Papers

A review of research commissioned by the Royal Commission was undertaken in recognition of the significant body of relevant research completed as part of its work between 2018 and 2021. Following an initial review, three papers were identified as being particularly relevant and were therefore reviewed in detail.

3.3.1 Research Paper 2 – Review of International Systems of Long-term Care of Older People

This review of international approaches to the provision of long-term care aims to provide learnings for the aged care system in Australia and to situate the Australian aged care system within the appropriate global context (Dyer S et al. 2020).

The authors' view was that Denmark, Sweden and Germany had the highest performing long-term care systems. These countries had differing standards for staff requirements and staff training. Neither Denmark nor Sweden had mandated staffing ratios or appropriate staff levels. Sweden did not have mandated training requirements whereas Denmark and Germany did. Germany has training requirements for all staff and standards on minimum staff to resident ratios and appropriate levels of staffing. Countries with mandated staffing requirements and training included United States, Japan, Republic of Korea and Canada.

A summary of the report in relation to staffing standards and training requirements is provided in Table 4.

Table 4 Summary of staffing standards and training requirements by country

Country	Staffing Standard*	Staff Training Standard**
Canada	Appropriate	RNs
Ontario	Appropriate	Other workers differ by province
Alberta		
Denmark	Not specified	RNs, ENs
England	Not specified	RNs, ENs
Germany	Appropriate and minimum	All staff
Japan	Minimum	RNs, ENs, PCWs
Republic of Korea	Minimum	RNs, ENs, PCWs
The Netherlands	Not specified	Not mandated
New Zealand	Appropriate and minimum	Not specified
Poland	Not specified	Not specified
Russia	Not specified	Not specified
Singapore	Appropriate and minimum	Not specified
Sweden	Not specified	Not mandated

Country	Staffing Standard*	Staff Training Standard**
Switzerland	Not mandated	RNs and Nursing Aides
United States	Appropriate and minimum	RNs, ENs, Varies by state
Vietnam	Minimum	Not specified
Other countries (Indonesia, Central and South America, Sub Saharan Africa)	Limited availability of aged care	Limited availability of aged care

*Expressed as 'minimum' levels of staff-to-resident ratios or 'appropriate' levels of staffing.

**Expressed as requirements for RN, EN and PCW or not mandated/voluntary or not specified in the report.

3.3.2 Research Paper 3 – Review of Innovative Models of Aged Care

The 'Review of Innovative Models of Aged Care' report provides a review of international models of aged care and identifies key innovative models of care from Australia and around the world (Dyer et al. 2019). These may include improving skills mix of staff or include external support for care.

Several innovative models allow flexibility in staffing, including 'workforce optimisation' models that upskill non-clinical or less qualified staff to take on a range of roles. A 'teaching nursing home' model works like a teaching hospital, providing ongoing education to the existing workforce as well as students.

Innovative models of culturally appropriate care for diverse populations include a RACF operated by an Aboriginal Community Controlled Health Organisation, and ethno-specific or multi-cultural care services with cross-culturally trained staff and appropriate food, pastoral care, and multilingual support and activities for people from culturally and linguistically diverse backgrounds. Services for the homeless use a holistic approach which includes recreational activities and multidisciplinary care. Additional options may come from the ability to use communication technology to connect to additional health care options and empower residents and staff to make health care decisions.

3.3.3 Research Paper 7 – Models of Integrated Care, Health and Housing

The report 'Models of Integrated Care, Health and Housing' is a literature review that provides an overview and analysis of integrated models of care for older people (Gilbert et al. 2020). The most relevant aspects of this review regarding staffing models for aged care were Multi-Purpose Services (MPSs) and RACFs co-located with hospitals, Aboriginal and Torres Strait Islander care models and GP led models.

The report found that integrated workforces work well in regional and remote areas. MPSs provide flexibility in staffing by allowing health professionals and those trained in aspects of aged care to work across traditional boundaries. Working in complement with GPs was also more effective than GP led models. Aboriginal communities that embed cultural care into their services, and aged care services with links to a range of external services were found to be effective.

Multi-Purpose Services

MPSs in rural and remote areas allow nurses to work across the boundaries of aged care, acute care and community care. Where aged care and hospital services are co-located, MPS nursing staff must be multi-skilled to work across both acute/emergency care and aged care. This results in a higher proportion of nurses who are trained with a broader and richer skill set that can work across care boundaries. Evidence suggests the MPS model is successful at addressing acute and aged care needs in regional and remote communities. A

key lesson from these programs is that having a workforce that can cross the boundaries between hospital care and aged care supports the sustainability of those services.

Aboriginal and Torres Strait Islander services

The Tharawal Aboriginal Corporation Aboriginal Medical Service in Western Sydney employs a large workforce in recognition that regular meaningful employment promotes well-being of staff and this has an enormous ripple effect on the rest of the community. Booroongen Djungan, located in Kempsey, is a Registered Training Organisation and employs a largely Aboriginal workforce, which empowers Aboriginal communities to provide “care our way”. In remote Western Australia, the Ngaanyatjarra Health Service and Tjanpi Desert Weavers have collaborated to link women with primary, allied and mental health services and visiting specialists in two remote community settings. Each of these examples highlight how barriers between clinical care, aged care and social support can be broken down to optimise opportunities for care and connection and support care provision for aged care recipients.

GP based or GP complement models

Integrated models of care centred on GPs may be appropriate for people living in aged care. An advantage is that residents often have good relationships with GPs that go with them into aged care. Problems with GP led models can be the focus on medical issues and the exclusion of the expertise of other aged care professionals. Aged care precincts may be an alternative for more populous areas in which retirement living and residential aged care are provided on the same site. These involve collaborations between aged care services and other services such as community RACFs, allied health and GPs. Aged care staff and other allied and health professionals may be employed on-site and trained by the provider but are also open to the general public, allowing for holistic 24-hour care for residents. The authors concluded that models where GPs work as a complement to aged care were more effective rather than GP centred models.

4 Results – Environmental scan

The results of the environmental scan provided in this section include:

- Findings from analysis of data on the residential aged care sector by distribution
- Workforce and service level data
- A review of Australian and international grey literature regarding nursing staffing models
- Findings on the roles of nurses and PCWs
- Information provided to the sector by the Commission on 24/7 RN and care minutes responsibilities.

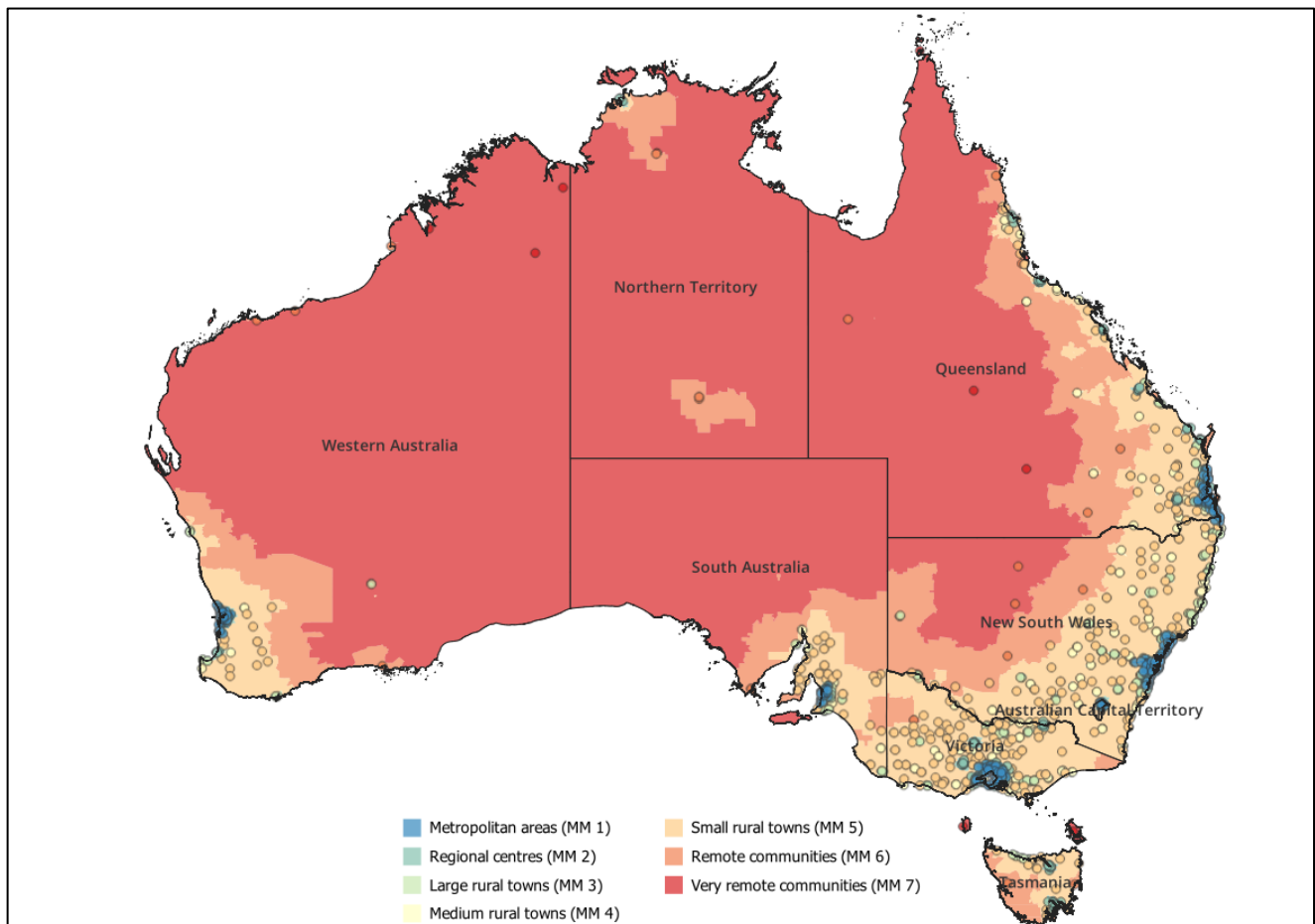
4.1 Analysis of the Australian residential aged care sector

4.1.1 Distribution of RACFs by remoteness and population size

Nationally, there are around 2,650 RACFs with around 222,000 residential beds. Their distribution extends from highly urbanised, metropolitan areas to very remote locations (Department of Health and Aged Care 2022). Most RACFs, approximately 62% (70% of residential places), are in metropolitan areas (MM 1), followed by small rural towns (MM 5) with 13% of RACFs (6% of residential places).

Figure 1 shows the location of RACFs in Australia. The colours represent the geographical classification according to the Modified Monash Model ranging from blue (metropolitan areas, MM 1) to red (very remote communities, MM 7).

Figure 1 Distribution of RACFs across Australia



4.1.2 Specialised aged care services

Under the AN-ACC funding model, there are two types of services that are eligible to be approved for specialised status: Aboriginal and Torres Strait Islander residential aged care services located in a remote or very remote location, and homeless residential aged care services (see Appendix 8: Activity-based funding). There are specific eligibility criteria for each category and providers that apply for specialised status must provide evidence that they meet the eligibility requirements. Specialised status applies for up to three years for approved applications, with providers required to ensure they continue to monitor their ongoing eligibility.

Specialised residential aged care services receive additional funding through the base care tariff component of the AN-ACC to subsidise the additional care costs, including providing for the additional care needs of their residents by a range of relevant health professional staff.

Specialised homeless status

To be granted specialised homeless status, services must be providing, or planning to provide, specialised homeless programs, by staff with experience or the capacity to provide such programs. Additionally, at least half of the resident cohort must have complex behavioural needs and social disadvantage associated with a background of homelessness. The service can be located anywhere in Australia.

Based on the AN-ACC base care tariff data, there are currently 44 specialised homeless RACFs.

Specialised Aboriginal and Torres Strait Islander status

To be granted specialised Aboriginal and Torres Strait Islander status, services must be located in a remote or very remote location (MM 6 or 7), and be providing, or planning to provide, Aboriginal and Torres Strait Islander specialised programs, by staff with experience or the capacity to provide such programs. Additionally, at least half of the resident cohort must be Aboriginal and Torres Strait Islander persons.

Based on AN-ACC base care tariff data, there are currently 11 specialised Aboriginal and Torres Strait Islander RACFs in Australia.

4.1.3 The nursing workforce in residential aged care

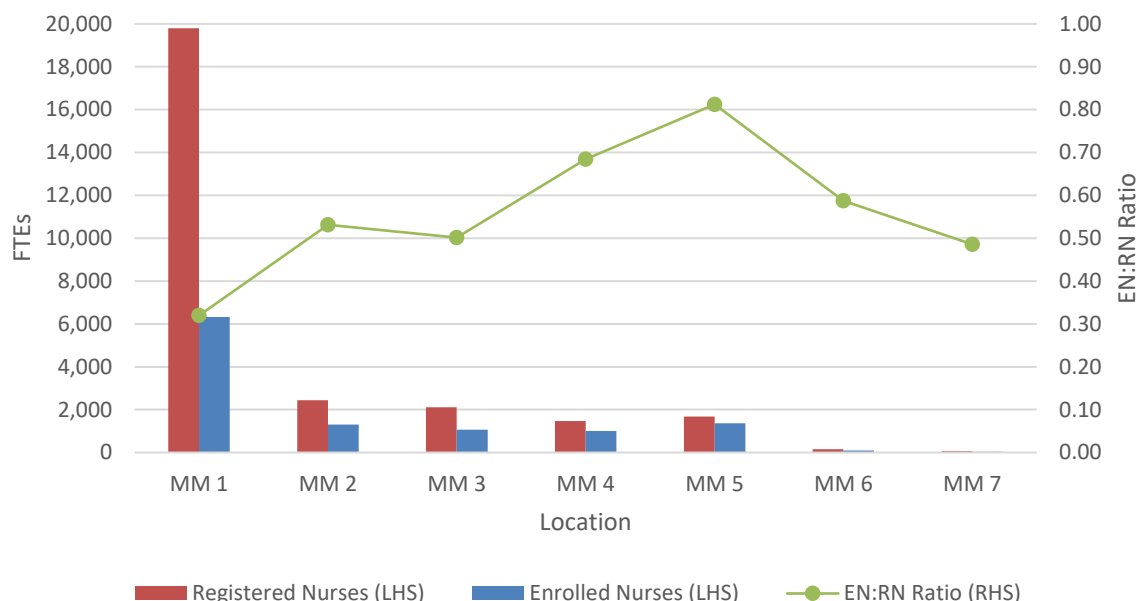
The Health Workforce Data Tool provides access to the National Health Workforce Dataset (NHWDS)⁴, which contains annual registration data collected by Ahpra and the national registration boards, coupled with voluntarily provided workforce survey data. The analysis presented here provides a national snapshot and trend, stratified by location defined by the MMM or states and territories, of RNs and ENs with the job area 'aged care' and the job setting 'residential health care facility'.

In 2022, there were 11,185 ENs and 27,727 RNs (FTE) working in residential aged care. This implies a ratio of approximately 0.4 ENs for every RN nationally. The distribution of ENs and RNs is not uniform across locations. Metropolitan areas have the highest concentration of RNs and ENs, while remote areas have the lowest (see Figure 2). Across jurisdictions, the highest number of RNs is in New South Wales, Victoria and Queensland, while EN numbers are highest in Victoria, Queensland and South Australia. The lowest numbers of ENs and RNs are in the Northern Territory and Australian Capital Territory.

When comparing ENs to RNs, ENs are relatively less available in metropolitan areas (MM 1), with a ratio of 0.32 ENs for every RN (or one EN per three RNs). In contrast, outside of metropolitan areas, the ratio of ENs to RNs is generally higher, at least one EN for every two RNs. The highest ratios of ENs compared to RNs is found in medium and small rural towns (MM 4 and 5), with ratios of 0.68 and 0.81 respectively. It should be noted that the FTE numbers of ENs and RNs in remote and very remote communities (MM 6 and 7) are small.

⁴ <https://hwd.health.gov.au/datatool/>

Figure 2 Distribution of EN and RN FTEs in residential aged care, by location (2022)



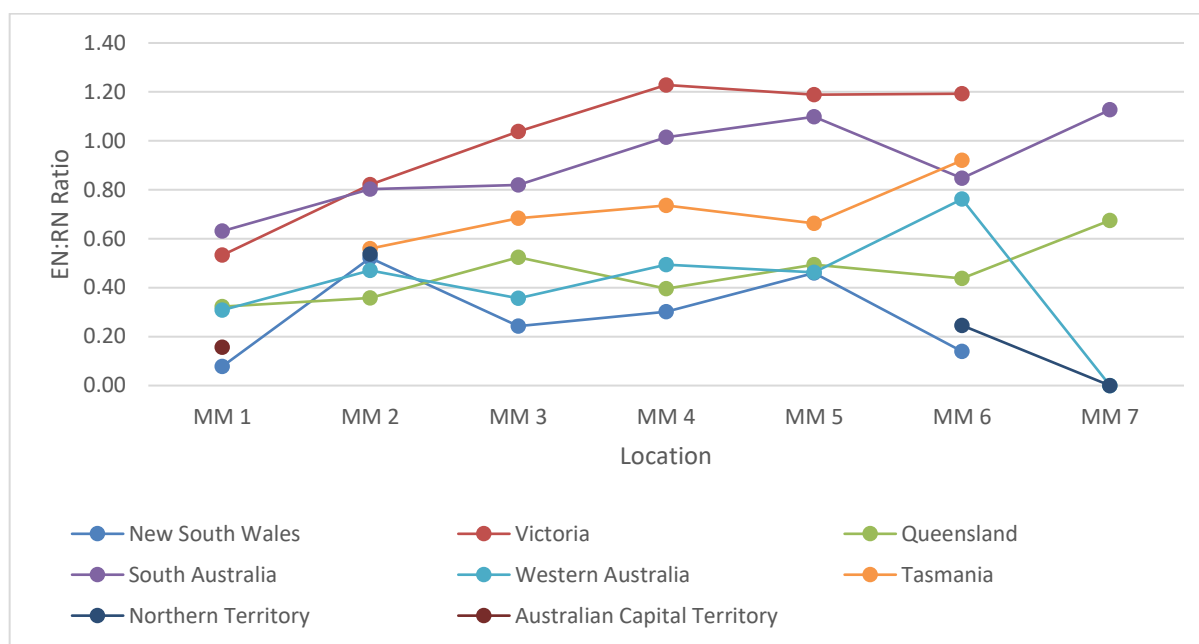
The EN to RN ratio also differs substantially across states and territories, ranging from 0.14 in New South Wales and 0.16 in the Australian Capital Territory to 0.69 in Victoria and 0.71 in South Australia. Figure 3 shows that in all jurisdictions (except Northern Territory) the observation holds true that the ratio of ENs to RNs is generally higher in regional, rural and remote areas compared to metropolitan areas.

For example, in New South Wales the EN to RN ratio ranges from 0.08 in metropolitan areas (MM 1), to 0.14 in remote communities (MM 6), 0.46 and in small rural towns (MM 5) and 0.52 in regional centres (MM 2).

In Victoria, the EN to RN ratio is lowest in metropolitan areas (MM 1) with 0.53 and highest in medium and small rural towns and remote communities (MM 4 – 6) with 1.19 to 1.23.

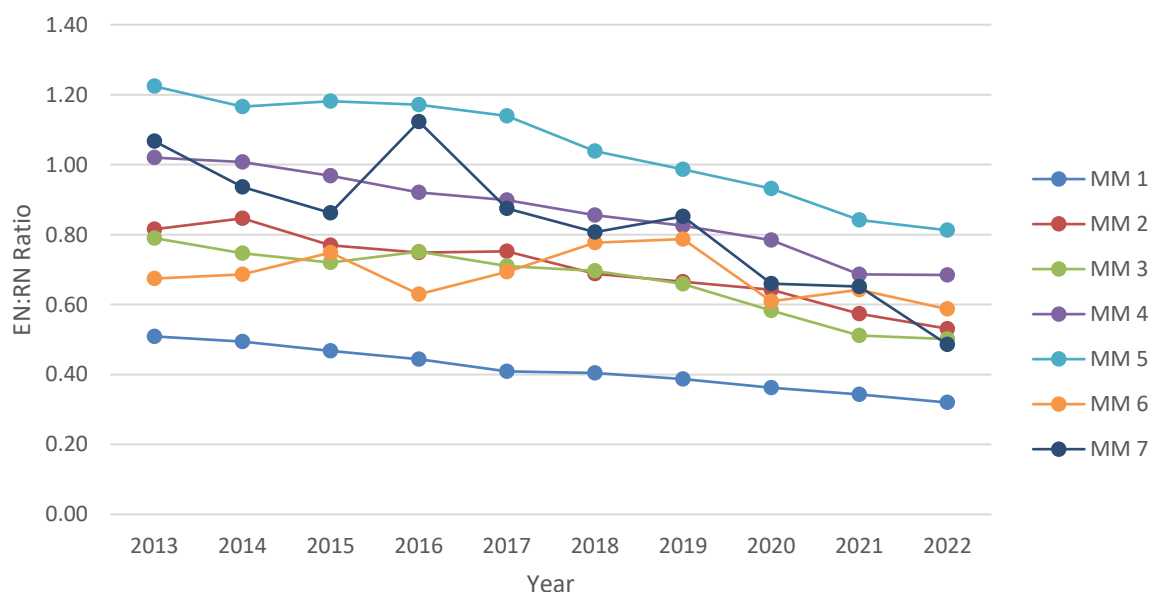
Similarly in South Australia, where metropolitan areas (MM 1) have the highest ratio across all jurisdictions with 0.63 and small rural towns (MM 5) and very remote communities (MM 7) have a EN to RN ratio of 1.10 and 1.13. However, in regional centres (MM 2) of the Northern Territory the EN to RN ratio is 0.54 while in remote and very remote communities (MM 6 and 7) It is 0.25 and 0. It should be noted again that the FTE numbers in these remote and very remote communities (MM 6 and 7) are very small.

Figure 3 Distribution of EN and RN FTEs in residential aged care, by location and jurisdiction (2022)



When looking at the national trend of ENs and RNs by FTE, between 2013 and 2022, the ratio of ENs to RNs was 0.64 in 2013 and decreased to 0.40 in 2022 (see Figure 4). This represents a decrease of 37% over this period. This decreasing trend in the EN to RN ratio was observed consistently across all locations. In most of these areas, the reduction in the EN to RN ratio was approximately one-third. The trend was less pronounced in remote communities (MM 6), with a reduction of 13%, and more pronounced in very remote communities (MM 7), 54%. However, this trend in MM 6 and MM 7 might be influenced by the small number of ENs and RNs present in those locations.

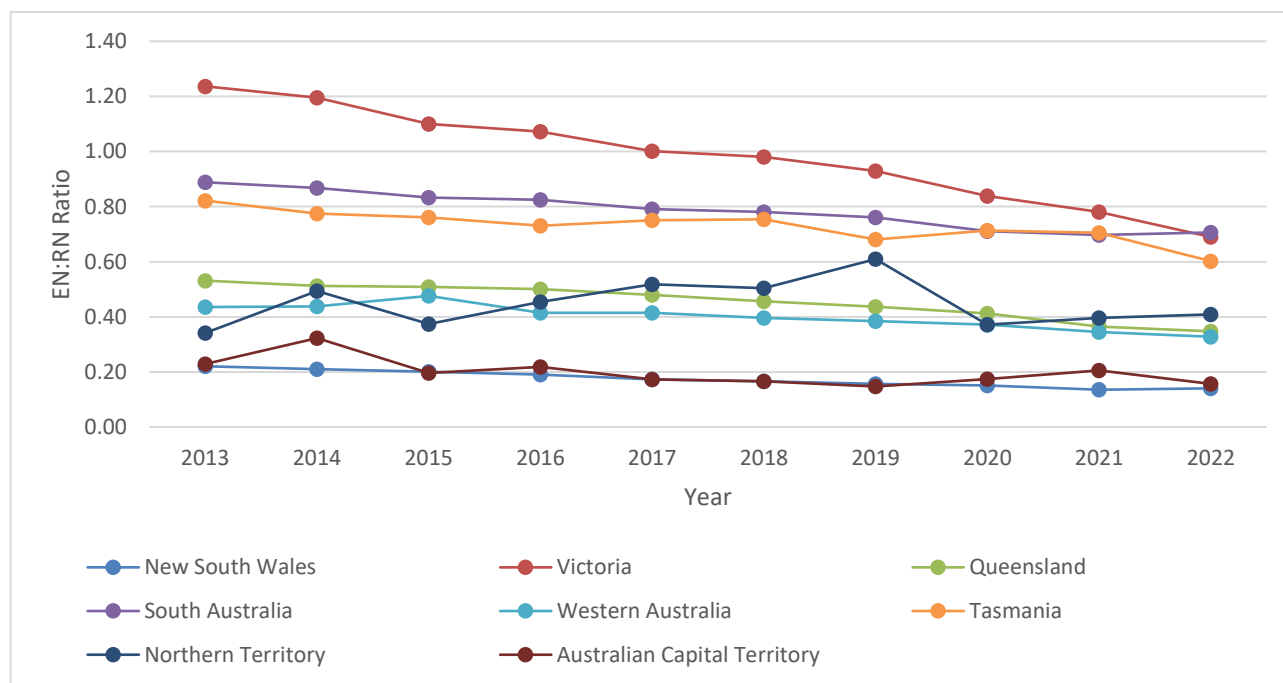
Figure 4 Trend of EN:RN ratio (FTE) in residential aged care, by location (2013 to 2022)



Similar trends can be observed at jurisdictional level when looking at the EN to RN ratio (see Figure 5). In 2013, the ratio ranged from 0.22 and 0.23 in New South Wales and the Australian Capital Territory. Until 2022

all states and territories (except Northern Territory) experienced a decrease ranging from 20% reduction in South Australia to 44% reduction in Victoria. In the Northern Territory, the EN to RN ratio increased from 0.34 in 2013 to 0.41 in 2022. During this time the EN to RN ratio had peaked at 0.61 in 2019.

Figure 5 Trend of EN:RN ratio (FTE) in residential aged care, by jurisdiction (2013 to 2022)



4.1.4 Direct care minutes responsibility results (Q3 2022/23)

For the 2,556 RACFs for which complete direct care staffing data was available (Q3 2022/23 reporting period), the average target was set at 40 minutes of RN time for Q4 2022/23 (case-mix adjusted from Q3 reported data), which was almost the same across all locations. On average, services provided 39 minutes⁵ of RN care in Q3 2022/23, with large variability across services (as indicated by a large standard deviation). Services in locations classified as metropolitan areas to medium rural towns (MM 1 to MM 4) provided slightly lower RN care, ranging from 36 to 38 minutes, with considerable standard deviation, with only between two-thirds and three-quarters of those services actually meeting their RN minutes targets. This proportion increases to 74% to 82% if the services that fall short by not more than 10% are also counted.

The results for small rural towns (MM 5), remote and very remote communities (MM 6 and 7) are interesting in that the average RN times are exceeding the targets, but the proportion of services actually meeting their care minutes target is much lower, at roughly half. This effect warrants further monitoring, but it is worth noting again that the number of services in remote and very remote communities (MM 6 and 7) is very low and the standard deviation is high, implying high variability across services, with some far exceeding their target.

Nationally, ENs provide 19 direct care minutes with large variability. It is lowest in metropolitan areas (MM 1) and large rural towns (MM 3), 13% and 18% respectively. In locations classified as medium rural towns (MM 4) up to very remote communities (MM 7) ENs provide at least 31 minutes and up to 43 minutes suggesting

⁵ The purpose of analysis here was to compare services. Therefore, the ratio of RN minutes per occupied bed days was calculated first for each service and then averaged across services. This methodology and the results differ from the way RN minutes per occupied bed day are reported elsewhere.

that the size of the EN workforce is comparable to the RN workforce. In addition to geographic location, EN availability also differs across other factors such as jurisdiction and provider type.

4.1.5 24/7 RN responsibility results (July 2023)

Complete data for RN coverage in residential aged care was available for 2,481 RACFs across Australia for July 2023 (the first mandatory reporting month). Of those, 83% met the 24/7 RN responsibility, 13% did not meet the responsibility and 4% did not report (see Table 5). The percentage of RACFs meeting the 24/7 responsibility was highest in metropolitan areas (MM 1), averaging around 89%, and then decreases with increasing remoteness, being the lowest in very remote communities (MM 7), at 57%. It should be noted that the proportion of RACFs that did not report was substantially higher in regional centres (MM 2) and remote and very remote communities (MM 6 and 7).

RACFs reported the average shortfall hours, i.e., the hours without an RN on-site and on duty. Nationally, the average was 3.3 hours, with the lowest being 1.3 hours in remote communities (MM 6) and the highest being 6.1 hours in small rural towns (MM 5).

Table 5 24/7 RN responsibility, by location (July 2023)

Location	RACFs	Target met, RACFs (%)	Target not met, RACFs (%)	Average shortfall, hours mean (Standard Deviation)	Not reported, RACFs (%)
Metropolitan areas (MM 1)	1,625	88.6	8.2	2.1 (4.2)	3.1
Regional centres (MM 2)	204	77.9	11.8	2.8 (4.7)	10.3
Large rural towns (MM 3)	221	75.1	21.3	3.1 (4.6)	3.6
Medium rural towns (MM 4)	179	69.3	25.7	3.2 (4.1)	5.0
Small rural towns (MM 5)	229	64.2	32.3	6.1 (5.6)	3.5
Remote communities (MM 6)	16	62.5	25.0	1.3 (1.3)	12.5
Very remote communities (MM 7)	7	57.1	28.6	3.5 (3.4)	14.3
Total	2,481	82.6	13.3	3.3 (4.8)	4.0

Note: The results presented above differ slightly from those published in the July 24/7 RN dashboard by the Department of Health and Aged Care because the data was extracted at a later date and included facilities with an exemption.

4.2 International evidence – findings

Research was undertaken for countries that may also have 24/7 RN requirements for long-term aged care. A range of countries from North America, Europe, Asia and Oceania were reviewed for either 24/7 RN requirements or alternatives to a 24-hour RN presence. The search included the grey literature, either by accessing websites of organisations such as government, statutory bodies or peak bodies (e.g. midwife and nursing associations). Google searches and snowball searching techniques (e.g. reference list searching) were also used to gain information about countries' long term care nursing regulations. The results of our review are included below.

United States of America

In the US, staffing in skilled nursing facilities is regulated at the federal level by the Center for Medicare and Medicaid Services. In September 23, a proposed rule for minimum staffing standards for long-term care facilities was issued by the Center for Medicare and Medicaid Services. There are three core staffing proposals, including: a requirement to have an RN onsite 24 hours a day, seven days a week; minimum nurse staffing standards of 0.55 hours per resident day for RNs and 2.45 hours per resident per day for nurse aides; and enhanced facility assessment requirements. A staggered implementation approach has been proposed along with possible hardship exemptions for some facilities, and a public consultation process is currently underway. In conjunction with the proposed new requirements, a national campaign has been announced to support staffing in nursing homes.

Currently, the Code of Federal Regulations for long term care facilities requires that:

"The facility must have sufficient nursing staff with the appropriate competencies and skills sets to provide nursing and related services to assure resident safety and attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident, as determined by resident assessments and individual plans of care and considering the number, acuity and diagnoses of the facility's resident population in accordance with the facility assessment".⁶

Sufficient staffing includes designating a licensed nurse as a charge nurse 24/7 and an RN for a least eight hours every day. States are able to waive the nursing requirements where a facility is unable to meet them if a number of waiver conditions are met. These include:

- Being able to demonstrate that diligent efforts have been undertaken to recruit appropriate personnel.
- An RN or physician is obligated to respond immediately to telephone calls from the facility.

States may have other waiver requirements in addition to the Code of Federal Regulations. These can include:

- The RN on-call needs to be able to get to the nursing home within 30 minutes.
- The RN is replaced by a licensed nurse if there is at least one full-time RN.
- Having only low acuity residents.
- Nursing homes co-located with a health service can 'share' the RN during evening and night shifts.

In addition, US States may require staffing levels above the national minimum. Table 6 provides an overview of the 24/7 RN requirement by state. In total, there are 13 US States with a 24/7 RN on-site requirement for all or some of the nursing homes.

⁶ <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-483/subpart-B/section-483.35>

Table 6 24/7 RN on-site requirement in the United States

24/7 RN on-site requirement	Number of US States
All facilities	6
60+ bed facilities	1
61+ bed facilities	2
90+ bed facilities	1
100+ bed facilities	2
150+ bed facilities	1

Canada

In Canada, six provinces require all aged care homes to have an RN on duty 24/7. Alberta requires an RN to be on-call 24/7, and two provinces that require an RN to be on duty 24/7 make exceptions for aged care homes with less than 30 beds. British Columbia is the only province that does not require an RN on duty 24/7 (Bryan et al. 2010).

New Zealand

The Health and Disability (Services) ACT 2001 currently guides minimum standards for quality of care. Cookson (2017) recommended a minimum staffing level ranging between 4.5 and 4.8 hours per resident per day for aged care in New Zealand. Cookson (2017) notes that in New Zealand, staffing ratios are voluntary. Previous recommendations from the Ministry of Health handbook were as follows:

- Rest-home level care - 1.7 hours of caregiver time and 0.3 hours of RN time per day
- Dementia patients - two hours of caregiver and 0.5 hours of RN time per day
- Hospital residents - 2.4 hours of caregiver and one hour of RN time, with a nurse to be on duty 24/7

These recommendations were withdrawn⁷, and currently, the New Zealand Health and Disability Services Standards guidance on Workforce and Structure (Ministry of Health 2023), state that:

- Service providers' documented rationale for providing culturally and **clinically safe** services and its implementation (Criteria 2.3.1) that demonstrate methodology used, how short falls and adjustments of staff to acuity are managed, link to the quality and risk management framework and meets contract requirements.
- a clear and documented escalation pathway for health care and support workers in situations where no registered nurse is on duty (Criteria 2.4.2).

United Kingdom

The Care Quality Commission, the independent regulator of health and social care in England, does not specify exactly how many care staff per resident are required in residential homes in the UK. Their guidance simply says:

⁷ <https://www.standards.govt.nz/shop/snz-hb-81632005/>

“Providers must deploy sufficient numbers of suitably qualified, competent, skilled and experienced staff to make sure that they can meet people’s care and treatment needs.” (Department of Health Social Services and Public Safety 2022)

There are currently no specific laws/regulations related to safe staffing levels in residential aged care homes in the UK. However, in care homes that are registered as nursing homes, at least one RN will be on-site 24 hours a day to provide care and supervise the care and support delivered by other members of staff (Department of Health Social Services and Public Safety 2022).

The UK has two different levels of care⁸:

- A residential care home must have a 24/7 on duty team of level 2 or 3 qualified care assistants (with a ratio of care assistants per resident). A residential care home must be run by someone with Registered Managers Award or equivalent. They are able to cater for some medical needs with visiting health professionals for ad hoc medical needs.
- Nursing care homes provide what residential care homes provide but with the addition of RNs on hand 24 hours a day. They provide specialist medical care 24/7 and they can call a GP or other medical support. RNs are on duty 24/7 and supported by GPs, pharmacists and specialist medical teams.

Northern Ireland

In Northern Ireland, the government has outlined care standards for nursing homes (Department of Health Social Services and Public Safety 2022). Standard 41 on Staffing states that the number and ratio of staff on duty at all times meet the care needs of residents. Among the criteria for implementation includes:

Criteria 2: The registered manager ensures that at all times suitably qualified, competent and experienced staff are working at the nursing home in such numbers as are appropriate for the health and welfare of the patients.

Criteria 7: There is a competent and capable nurse in charge of the home at all times who has the knowledge, skills and experience necessary to care for the residents for which the home is registered. In addition, a record must be kept of the home’s calculation to determine staffing requirements. Assessment of resident dependency levels informs the staffing requirements.

Germany

In Germany, long-term care for the aged is governed by the Social Code Book Part XI. Long-term Care Insurance was strengthened during 2015-2017 by two Acts (Federal Ministry of Health 2016). A new system to assess need for long-term care was introduced, involving the degree of self-reliance restrictions. The three levels of care were replaced by 5 new care degrees. A study by Gruber et al. (2021) of the German long-term care workforce found that nursing interventions in home and community care were highly heterogeneous making it difficult to measure staffing levels and that staffing levels were dependent on reimbursement policies and the services to be delivered. It was noted that while services are meant to be provided on the basis of what clients required, the reality is that many provide services on the basis of how many staff they have to deliver services. Providers therefore recruit as many staff as they can and adjust their client base accordingly.

Other Europe

Danish long-term care is geared towards providing aged care in the home, with care in nursing homes available for those with high levels of dependency (The Weekly Source 2023). There are no mandated staffing levels or ratios for nursing homes (Dyer S et al. 2020).

⁸ <https://www.bristolcarehomes.co.uk/residential-care-nursing-care/>

Similarly, in the Netherlands the majority of aged care is provided in the community. To qualify for institutional care, an individual must require 24-hour supervision. Access to residential care for those needing 24/7 supervision depends on an assessment by the Centre for Needs Assessment (McVay 2023a). In 2016, the Netherlands parliament developed a quality framework for nursing homes that stipulates that “a registered nurse and a physician should be available within 30 minutes”. The framework was to deliver all its reforms by the end of 2018 (Kroneman et al. 2016).

Sweden’s responsibility for care rests at three levels:

- The national government is responsible for policy, legislation, supervision and financial control
- At a regional level, councils are responsible for health and medical care
- Municipalities are responsible for social service and housing needs of the elderly, including nursing care and quality control.

Around 60% of RNs and care workers work in care homes; on average, there are 0.4 RNs and three care workers for each ten residents (Szebehely 2020).

In Switzerland, there is no national long-term care system with long-term care organised at the Canton (local) level. The Federal Office of Public Health is currently developing a long-term care strategy that may propose legislation to address current and future challenges in long-term care (McVay 2023b). Institutional (residential) long-term care is provided by medical nursing homes or nursing departments of old-age or disability homes. Switzerland also has what are called Spitex services, which may provide services in either the person’s home or in long-term care institutions (De Pietro et al. 2015). While all Spitex services provide care, not all Spitex services provide nursing care.⁹ Spitex services can be provided by for-profit or not-for-profit organisations or by individual health care workers (Sturney 2020).

Asia

Japan and Korea have regulated systems of long-term/aged care and insurance systems. In Japan, staff-to-resident ratios are mandated at 1:3 but there is no regulation around the mix of staff qualifications or whether an RN must be on site 24/7 (Dyer S et al. 2020). Likewise, in Korea, there are mandated staff to resident ratios: one nurse to every 25 residents and one care worker to every 2.3 residents (The Legislative Council Secretariat 2023) but no mandate for a 24/7 RN.

4.3 Nurses and care workers - scope of practice overview

This Section provides an overview of key differences in scope of practice and competencies between RNs, ENs and PCWs/AINs relevant to residential aged care. Additional details regarding the scope of practice and competencies of each group are provided at Appendix 7.

There are substantial differences in the scope of practice and competencies of RNs, ENs and PCWs/AINs that reflect differences in corresponding levels of qualification. RNs have completed a three-year Bachelor of Nursing, ENs have completed a minimum of 18 months Diploma of Nursing and PCWs may hold a Certificate III or Certificate IV. RNs and ENs are regulated by and registered with Nursing and Midwifery Board of Australia, supported by Ahpra.

RNs have a broad scope of practice. The following activities are typically undertaken by RNs:

- RNs are responsible for the management and administration of medications, including Schedule 8 medications.
- RNs conduct comprehensive clinical assessments of residents to evaluate their health status, identify potential health issues, and develop appropriate care plans.

⁹ <https://quitt.ch/en/spitex-what-private-service-providers-offer/>

- RNs develop and coordinate care plans for residents, taking into account their individual needs, health goals, and preferences.
- RNs are educated to perform complex nursing procedures and treatments, e.g. wound care, intravenous therapy, catheterization, tracheostomy care, nasogastric tube management.
- RNs typically assume leadership roles in residential aged care settings, providing supervision, guidance, and support to ENs and PCWs.

ENs provide delegated care and work under the direct or indirect supervision of RNs and have a reduced scope of practice when compared to RNs. ENs, but not PCWs, can undertake the following activities.

- ENs can administer medications within their authorised scope of practice (there are a small number of ENs that do not have the foundational education to administer medications and have a notation on their registration reflecting this).
- ENs can perform clinical procedures within their underpinning education, training and competence authorised scope of practice, e.g. wound dressing, catheter care, administration of simple treatments or therapies, monitoring vital signs, and assisting with basic clinical assessments.
- ENs are responsible for accurate and timely documentation of clinical observations, assessments, and interventions.
- ENs are responsible for monitoring residents' health status and promptly reporting any significant changes or concerns to the RN.
- ENs play a role in developing and implementing care plans together with RNs.

PCWs and AINs typically perform the following activities:

- Assisting with activities of daily living such as bathing, dressing, toileting and mobility.
- Supporting residents with personal hygiene, including oral care, hair care, and skin care.
- Providing assistance with meals, including serving and feeding.
- Offering emotional support and companionship to residents.
- Monitoring residents' condition and reporting any changes to the nursing staff.

4.4 Aged Care Quality and Safety Commission Regulatory Bulletin

The Commission has recently issued a Regulatory Bulletin to the sector to provide information on the regulation of workforce-related responsibilities including the 24/7 RN and care minutes responsibilities and how these will be regulated (Aged Care Quality and Safety Commission 2023). Additionally, a webinar hosted by the Commission on 18 April 2023 included a presentation on alternative clinical care arrangements by Dr Melanie Wroth, Chief Clinical Advisor at the Commission.¹⁰

The presentation highlighted that the focus of having alternative arrangements in place was to ensure that the clinical care needs of residents are met at all times. It was noted that there would most likely be a range of strategies required to manage any risks associated with not having an RN on-site, and that these would vary depending on the context of the individual RACF. RACF characteristics such as location, layout, staff profile, local support, and the clinical care needs of the residents should all be considered, and any available opportunities should be maximised wherever possible.

Other characteristics of successful models included:

- the alternative arrangements are part of the clinical governance framework, are very explicit and in a usable form that is accessible and understood by staff

¹⁰ Webinar recording is available at <https://www.youtube.com/watch?v=5JkrxxlbwEg>

- knowledge of the level of experience of the staff at the RACF, including ENs
- any arrangements that are in place with local health providers are explicit
- a comprehensive understanding of the current and anticipated clinical care needs of the residents, including specialist clinical needs such as indwelling catheters and administration of opiates
- appropriate access to clinical documentation where support is provided by someone who is unfamiliar with the resident and/or is off-site
- use of telehealth considers any potential challenges that may arise with the use of this technology
- consideration for the wellbeing of staff as well as the residents
- off-site prescribing arrangements are in place
- there is a process of ongoing review and updating of policies and procedures to account for any changes in circumstances.

Some examples were provided of alternative arrangements that are currently in place, which included on-call advisory and attendance support, upskilling of staff, workforce scheduling, arrangements with co-located healthcare services, and use of telehealth.

5 Results – Stakeholder consultations

As outlined in Section 2.3, consultations were conducted with a range of stakeholders between July and August 2023. A total of 70 stakeholders participated in the 26 consultations that were completed. Participants included aged care providers located in rural and remote areas and providers of specialised services, and stakeholders with expertise in rural and remote care provision and specialised services from a range of organisations representing health services, workforce, providers and consumers (see Appendix 5). The interviews were transcribed and analysed.

The consultations were designed to build the understanding of current practice and inform the identification and development of appropriate alternative staffing models and were based around the set of questions shown in Table 7. The questions were provided to participants in advance of the scheduled interview, along with a consultation paper. The interviews were semi-structured, with participants encouraged to share their experiences and views in relation to the research questions.

Table 7 Stakeholder consultation questions

Alternative 24/7 RN arrangements	
1.	What are your views on the range of alternative arrangements to meet the new 24/7 RN responsibilities?
2.	In your view, are the proposed alternative arrangements practical for facilities to implement?
3.	Do you have any suggestions that may assist facilities to meet the new 24/7 RN responsibilities?
4.	For those facilities unable to provide 24/7 RN support, what reporting responsibilities should be in place to support ongoing monitoring and review of the impacts and outcomes of facilities using alternative arrangements?
Alternative skills mix arrangements	
5.	What are your views on the recommendation for alternative 24/7 RN and/or skills mix arrangements to providing clinically appropriate and safe care in specialised facilities?
6.	Do you have any suggestions regarding the skills mix responsibilities for specialised and co-located facilities?
7.	What reporting responsibilities do you think should be in place to support ongoing monitoring and review of the impacts and outcomes of facilities using alternative skills mix arrangements?
Concluding question	
8.	Are there any other ideas for new and innovative alternative arrangements that haven't been considered or other issues that you would like to discuss?

This section presents a summary of the results and a narrative overview of the findings from the interviews. Quotes from participants have been selectively used to illustrate substantive points.

5.1 Alternative 24/7 RN arrangements

The RN workforce shortage is being experienced across rural and remote locations with many challenges being faced in recruiting and retaining sufficient RNs to meet the 24/7 responsibilities. There is evidence of a

strong commitment to continue working towards achieving the responsibility, with a raft of strategies in place and in development.

We certainly have more RNs here because of the regulation and we're trying to meet it, but we're a long way off having 24/7. A long way. We reckon we'd need another five or six nurses to be realistic and to be able to cover holidays. And it's really, really difficult to imagine being able to do that in the foreseeable future.

There were some key issues that were consistently highlighted in the discussions around alternative arrangements. These included the diversity of the local contexts, each having a unique range of available resources and challenges, and the need to develop and implement the combination of alternative arrangements locally to suit the local environment. Well-established relationships within the local community and other clinical care supports, such as the local health district and providers of virtual clinical care services, are critical to accessing and operationalising appropriate alternative arrangements. A lack of access to local clinical services in rural and remote areas and workforce shortages are challenges that RACFs in many of these locations have always needed to deal with, and many alternative arrangements that are in place are longstanding.

We've all had plenty of practice in just ensuring that our residents get the best care and these arrangements that we've put in place just further that we're not trying to reinvent the wheel. These are just common-sense things. That they work in a lot of situations.

The importance of familiarity with the cohort of residents was emphasised, along with the skills level and experience of the care staff. Understanding the resident care needs, having access to clinical documentation and care plans, and the capacity to appropriately communicate with clinicians remotely, were highlighted as critical factors in alternative 24/7 RN arrangements.

There are workforce issues around the risk of fatigue for staff in rural and remote locations, with some staff working long shifts, being on-call, and undertaking both management and nursing shifts. There are also financial viability risks for some providers that are spending large amounts of money that are required to source and staff with RNs, including a range of costs related to employing agency staff and international RNs, and paying rates that are competitive with other RN employment opportunities.

5.1.1 On-call clinical arrangements

There were many types of arrangements for on-call clinical care reported by participants. These comprised arrangements where a clinician had the capacity to come on-site and also where the support was provided remotely, with a range of communication technology and digital information platforms being utilised. These on-call arrangements also varied from having access to staff who worked at the RACFs through to remote services provided internally by larger organisations, or by external providers, such as government funded programs or private contractors.

Staff RN on-call with capacity to attend on-site

The arrangement where an RN from staff is available on-call was often presented as the first go-to alternative clinical care option for when there is no RN on site-and on duty. In many cases this is the site manager, who in some situations has sole responsibility for fulfilling the on-call role as they are the only RN on staff. In some RACFs, the on-call role is shared between two or more RNs and may be rotated with an on-call roster, although the RN manager may still be the initial contact. Processes around the on-call arrangement were generally described as the team leader on the shift (most often being the night shift) contacting the RN, who would then determine whether it was appropriate to manage the situation over the phone or attendance on-site was required. There is a preference for this arrangement as the staff RN has familiarity with the residents and an understanding of the skills and experience of the staff and the local context, as well as having the capacity to attend on-site if needed. This supports the RN in delegating instructions to the staff while off-site and maintains continuity of care for the residents.

There were a number of issues raised in relation to this arrangement. Concerns were raised around staff well-being and work health and safety, due to the burden of being on-call in addition to also working full-time shifts. In some cases, these could be long shifts due to a lack of nursing staff, and also a reluctance to take leave with no one to fill the gap. In turn, this could pose a risk to the safety and quality of the care. The commitment to the care of the residents often felt by staff working in rural and remote area was frequently highlighted, including in situations where there might not be any other local clinical supports to call on.

The RNs in those towns actually feel very responsible to be responsive. Some of these people are working long hours and there's no relief. ...they can come in because it's a small country town and coming in is not that hard.

Related to this is a potential risk that staff might feel reluctant to call on the RN in some circumstances, such as where they had just completed a shift or where there was not a culture that supported the on-call arrangement. As noted by one participant, 'if we burn people out, we don't have them at all'. It was highlighted that staff, including ENs and PCWs, needed to be trained and supported in the on-call arrangement, and it needed to be documented as part of the clinical governance policies and procedures. Some providers noted that the on-call responsibilities are part of the formal RN employment agreement, but concerns were raised by some stakeholders that this might not always be the case, and the on-call arrangements could be more of an expectation of the RN role that was not formally recognised.

Another consideration of the RN on-call locally is the proximity and time required to be able to attend on-site where required. In some cases, the RN was described as being walking distance from the RACF, but there were concerns raised around delays that meant that the staff at the RACF would need to deal with the situation for an extended period, which would not be appropriate in emergency situations. Also, there would be scenarios where the RN was not able to attend on-site or was on leave. Participants consistently spoke of the necessity to have back up arrangements in place in addition to the staff RN on-call arrangement.

Local health services

There was a broad range of views and experiences related to the use of local health services. In many cases, these arrangements are part of the normal escalation protocols for higher level clinical care for residents where they were available in the local community, but are also used by some RACFs as an alternative arrangement when there is no RN coverage at the RACF. One participant noted the need to have connections into some of the local health infrastructure 'because that's the only way we're going to do it'.

Good relationships. And that's been important. And it is important in all small communities to have relationships with the community.

So it is really, really hard for these sites but there are local arrangements in place. And they're very resourceful, a lot of these smaller places.

While there were reports of strong and supportive relationships with local health services to provide advice to staff and clinical care to residents, there were also many concerns expressed about reliance on this as an alternative arrangement. In particular, it was noted that workforce shortages were also being experienced in health services in rural and remote areas, and so there was an issue with 'overburdening the already stretched health workforce', with reported reliance on staff working long shifts and agency staff, and an unavailability of some health service providers, such as GPs. Related to these workforce issues is the unreliability of support being available when required, and also the unfamiliarity of the clinician at the local health service with the residents and the staff at the RACF. This potentially compromises the safety and quality of the care provided to residents and compliance with the registration requirements of the clinician. However, there were reports of enabling on-call clinicians to access resident care plans, clinical documentation, and medication charts through shared access to software systems. This enhanced continuity of care, including the capability in some instances to make updates to the documentation.

Opportunities where there is a co-location or proximity to acute care services, such as the local hospital or an MPS, were explored in the consultations. Some participants described situations where there was a

longstanding, supportive relationship with the health service, wherein there might be an arrangement for oversight by the RN at the health service, or the staff at the RACF could contact the RN or a doctor for advice over the phone or an RN or doctor might come to the RACF to attend to a resident. Some local hospitals comprise aged care beds, and there were instances where RNs worked shifts at both the RACF and the hospital. It was reported that under these arrangements, doctors could bill for their visit through Medicare, and that health services invoiced the RACF for the RN time. In other cases, the arrangements were quid pro quo, such as where the RACF would support the health service by making respite care available for patients when needed, and the sharing of equipment and consumables.

Our local hospital here is literally ...down the road, so we're not co-located, but we actually support each other.

In contrast to many reported positive experiences, there was a view expressed that having any reliance on the staff from acute services to support the RACF as well as undertaking their own patient responsibilities was not operationally practical and 'completely untenable', and it was a misconception that there would be RNs available. The need to be explicit about the support that was required by the RN was highlighted by a participant, for example, if it was specifically to administer medications. Potential issues around clinical care protocols were raised, with a sense expressed that the assistance provided could only be 'superficial'.

Some stakeholders reported that there were instances where there was no working relationship with the local acute care service, including where the services were co-located, and that services were only able to be accessed in the same way as the general public. This could be the case despite having attempted to establish a relationship. The workforce shortages, competition for RN staff, and budgetary constraints were raised as concerns that could be a barrier to health services and RACF working together to establish alternative arrangements.

There was discussion with stakeholders around whether there was a need for alternative arrangements with local health services to be formalised. Some participants felt that this was unnecessary in the context of a small community, with arrangements being longstanding and reliable.

And we've never had a problem. Not to say that a problem could never happen, but it's always been the systems that we've got in place have always worked very well, and residents' clinical care has never been compromised.

Others were concerned that changes in management at either the RACF or the health service could compromise the arrangement and that some sort of documentation, such as a letter from the health service CEO, should be in place to formalise and clarify the arrangement to ensure continuity. There was no support expressed for a formal contract arrangement. Importantly, all staff involved need to have an awareness and understanding of the arrangements and should have the capacity and support to operationalise them when required. A view was expressed by one stakeholder that an advantage of establishing a collaborative approach with the local hospital or MPS was that the RACF staff would not feel as intimidated as they might accessing other types of arrangements, such as telehealth.

Local medical centres and GPs are commonly an integral component of the alternative arrangements that are in place, frequently being described as the next on-call support after the site manager. Support from local GPs was found to be variable, with reports of some regularly attending on-site to see residents through to some never attending. Some provide support 'when they can'. Issues with the supply of GPs in rural and remote areas were commonly reported, with some locations having no GP locally, resulting in a reliance on telehealth and virtual emergency department services. There were also reports of locum GP services being used, including on a 'fly in fly out basis', meaning that there was not always a GP available, and/or they were not available 24/7. There were some instances reported of RNs or NPs being available to RACF from medical centres or community health services, but these were generally not a 24/7 service. Providers shared experiences where the GP provided their mobile number for after-hours access, but this was generally used only for emergencies in recognition of the workload of the GP in maintaining their practice to provide services to the local community, and one provider noted that they 'don't like to use it'.

Paramedic services

Access to in-reach programs is provided in some jurisdictions to support caring in place and reduce hospital attendance, although these are not as accessible in rural and remote locations. There are arrangements in place in some locations where a resident's care plan can be shared with the paramedic service which can then be used to come on-site to undertake assessments and provide treatments, such as S8 medications, and in circumstances such as for palliative care. Use of the ambulance service in this way requires a lot of planning and preparation, involving the resident's GP and a review process by the ambulance service. It was noted that this can result in paramedics spending a large portion of their time at RACFs, potentially depriving the community of the ambulance service, and there was a view that it was not appropriate for it to be used as a way to supplement RACF staffing. It was also highlighted that the service could be unavailable at times where they were attending to other calls, and that some areas have no access to ambulance services or they are located a distance away and could have a long wait time for the ambulance service to arrive on-site. Also, some rural and remote areas have less trained staff, with a heavy reliance on volunteers.

5.1.2 Virtual clinical care services

The use of virtual clinical care services, including telehealth, became more widespread during the pandemic, and is now used in a variety of ways by residential aged care providers in rural and remote areas. These services are often used to access medical or specialist care that is not available locally. Access to virtual services ranges from use of mobile phones through to videoconferencing via computer tablets, to 'workstations on wheels' incorporating a laptop, computer screen, webcam, and monitoring equipment. Funding for different equipment has been available to providers from a number of sources, and a broad range of virtual services are available, including GP, NP and specialist services, and programs provided by different levels of government and local health services. These include palliative care, mental health and allied health, as well as specialised services such as wound care and diabetes care.

Given the limitations of services available in rural and remote areas, the access to virtual clinical care has been embraced by many providers, with positive outcomes reported for residents. Virtual care was not seen as a substitute for face-to-face care, including RN care, but rather an enhancement to the care that could be provided and 'filling a gap' where needed.

If you're asking my preference, I would prefer the RN to come onto site. I mean, teleconferencing is good. It certainly has a place in remote areas, but you can't do an assessment via telehealth.

Some larger provider organisations are providing an internal service of 24/7 virtual access to RNs and doctors that their RACFs can use, such as when there is no RN on-site, with full access to the electronic clinical documentation. Similar services are also available from external providers, with options for different levels of clinical support.

Issues related to unfamiliarity with the residents and the staff, and the limitations on the care that could be provided virtually, were the primary concerns highlighted. One stakeholder worried that this could lead to unnecessary transfers to emergency departments. Many stakeholders felt that in the absence of an RN, there would need to be an EN on-site to be the 'eyes and ears' of the off-site clinician, to ensure they were able to communicate appropriately, carry out delegated tasks, such as checking vital signs, and follow the advice that was given. Others felt that with adequate training it was appropriate for a PCW to engage with the off-site clinician. Importantly, the person on-site should know the resident well. Scope of practice and professional registration requirements must be considered when using virtual clinical care services to ensure all staff involved are working safely and appropriately.

There was generally a view that having a nurse that could 'put their hands' on the resident was essential, and it was highlighted that an RN was still required to be 'on the ground' to do assessments and procedures and administer certain medications. The model was also seen to have a potential risk related to communicating with the resident, particularly those with cognitive impairments, sight or hearing deficits, or where there was any sort of language barriers.

A number of other concerns were raised, including the set-up requirements and maintaining training for staff, unreliable internet connections, access to care plans and clinical documentation, and services not being available 24/7. There were many strategies noted by participants to deal with these issues, such as integration of electronic care management systems, and access to 4G networks, and backup services for after hours.

5.1.3 Staffing with agency RNs

Many stakeholders noted that in order to comply with the 24/7 RN responsibility there was a need to utilise agency RNs. There were a number of issues raised, with the key concern being the cost, which was described by one stakeholder as 'just astronomical'. Some providers were paying 'whatever the cost is' to meet the 24/7 RN responsibility, but concerns were expressed about the ongoing financial impacts. In addition to the hourly rate, participants spoke of the associated on-costs associated with agency staff, including accommodation, travel, meals and other allowances. One participant advised that an agency RN was costing between \$6000 and \$7000 per week, significantly more than the salary of the site manager. Some participants indicated they used agency staff as an alternative arrangement only when required to cover RN leave, and one participant advised that agency staff were not being considered as an alternative strategy due to the cost involved.

We've steered away from agency purely because of the cost and the financial viability of the organisation. That's not viable for us to do that.

Providing accommodation for staff is another significant barrier to using agency RNs, and also a major contributor to the costs. A lack of available housing, including rental accommodation, was widely reported, and participants shared a range of strategies that were in place or being considered to assist with providing housing. These included purchasing houses, converting independent living units into staff accommodation, RACF staff renting out rooms in their homes, and erecting temporary housing. The resources required for administration, and orientation and training of agency staff, and the need to reorganise rosters to suit the shift requirements of the agency RNs were also reported as issues.

A shortage of available agency RNs were reported in some locations. Providers may have contracts with more than one agency to try to ensure they will be supplied with staff, but there are times when there are no RNs available. There is also uncertainty around the length of time the agency staff might stay. The most economic benefit is realised when agency staff are brought in for an extended period, with mention of blocks of between four to twelve weeks. The high turnover of staff can be disruptive and impacts on care safety and quality. It was highlighted by a stakeholder that particularly in more disadvantaged communities, including services for Aboriginal and Torres Strait Islander residents where culturally appropriate care is important, the unfamiliarity with the residents and the community would be a concern.

I don't see it being able to work in those settings at all. Those settings work best with long-term relationships with staff that those people trust.

There are positive experiences with using agency RN staff, with one provider expressing frustration that they sometimes have great agency staff but are not able to 'keep them' due to the contract arrangements with the agency. A model where agency staff have the capacity to transition from a contract role to a permanent role was proposed as a longer-term strategy to assist with the RN workforce shortage in rural and remote areas. Other suggestions were to regulate agency costs, and also for additional funding to be provided for agency staff. One stakeholder advised they were utilising the Rural Locum Assistance Program provided by the federal government to replace their RNs with contract staff when they went on leave, with the RACF only needing to pay the normal pay rate.

5.1.4 The role of ENs

Stakeholders consistently spoke of the important role that ENs have in the workforce. While it was noted that ENs are not a substitute for RNs, they are acknowledged as a key part of the team. Highly experienced ENs with remote access to an RN, or other virtual clinical care support, are generally seen as a good solution when

there is no RN on-site. Some participants referred to staffing with an 'EN model', where an EN on every shift, including night shift, with oversight by an RN who is available either on-site or remotely.

And particularly in rural and regional, they've been the backbone of a lot of aged care facilities.

Good ENs, well-trained ENs, are essential, I think.

ENs are able to provide support to the RN and provide resident nursing care and assessment that is beyond what a PCW or AIN can provide, although there are inconsistencies across the sector regarding which roles are able to undertake different care activities (see Section 5.1.6). There was mention that due to the long-standing deficiency of RNs in the workforce, there has been some normalising of ENs working out of scope.

The nature of the EN qualification and employment opportunities means that there will be a portion of the workforce transitioning to becoming an RN through a bachelor degree. However, there are many who are happy to continue to work as an EN. There are concerns that the EN workforce will be depleted as a result of the implementation of the mandatory care minutes responsibility from October 2023, where ENs are included in the care minutes along with PCWs and AINs, and employers could consider them to be 'too expensive'. This could be exacerbated by the additional cost of employing RNs. Related to this, there is some sense that the EN workforce is undervalued and not recognised as an important part of the skills-mix, making it an unappealing career choice.

So I'm a fan of enrolled nurses, particularly in aged care homes. I think they're an undervalued resource, well and truly.

5.1.5 Upskilling of staff

There was widespread enthusiasm for staff working in aged care to upskill. Participants offered different suggestions to enhance opportunities for the upskilling of staff, including mandatory aged care placements and transitional pathways for nurses to have exposure in aged care, developing graduate certificates and diplomas in aged care for RNs, and having aged care specific EN and RN qualifications. There was generally support for encouraging PCWs to train to become ENs, with the potential for a substantial amount of recognition of prior learning. There was a view expressed that it was more advisable for PCWs to go straight to RN training because of the employment opportunities available.

While there is generally enthusiasm for upskilling staff, there are problems with staff who are completing qualifications needing to go on leave for placements, which is inconvenient, and potentially costly, for the staff member and the employer. There is also the risk to the employer that the staff member will leave the organisation when they become qualified. Some participants from rural and remote areas expressed their preference for 'homegrown' nurses as they are already established in the community and are more likely to stay.

The allied health profession has workforce development programs underway that focus on rural and remote areas. These include the Allied Health Rural Generalist Pathway which provides formal post-graduate training programs that are embedded in health services. Rural generalists maintain a primary health professional qualification but are trained to meet the needs of rural and remote communities. Another workplace-based program provides training to build an Allied Health Assistant workforce in rural and remote areas to assist the allied health practitioners. Workplace grants and education funds are available for both programs.

5.1.6 Related issues

Recruitment and retention

There is a strong commitment to RN recruitment, with a comprehensive range of strategies being used. There are difficulties in attracting people to rural and remote areas and then retaining them. The lack of supply and cost of accommodation can be one of the barriers to securing RN staff, similarly to being able to engage agency staff. Aged care providers are also 'in competition' with local health services for RNs. Local health services can be more appealing for a range of reasons, including pay rates and programs for new graduates. It

was noted that the aged care workforce shortage should not be considered in isolation; rather it needs to be considered as part of the bigger picture along with other sectors such as acute care and disability services.

I think the last time we all got together, I thought I was only one or two nurses away, but I seem to be a lot further away than I was before. We're trying.

There were a range of experiences in recruiting RNs through various models of migration programs. Changes to the visa requirements means there is no longer a requirement to work in rural or remote areas, and this has significantly reduced the pool of applicants. Participants reported that there were large costs involved in what could potentially be a short-term period of employment, or an applicant could decide to take up employment elsewhere even though the RACF had paid the application costs. Other issues raised were the support systems that needed to be provided, such as assistance with getting a driver's license, the limited choice of food and other supplies locally, and English not being the first language. There are positive experiences, with the international staff establishing themselves in the community and choosing to stay long term.

Suggestions for increasing the supply of available RNs were: providing options for short term blocks, such as for people who are travelling and will be living in the area temporarily; pooling the RNs that are working in the local and regional health services to cover staffing gaps; and continuing the surge workforce model that was implemented by government during the pandemic.

Administration of medications and complex nursing care

There are inconsistencies between the jurisdictions regarding the administration of medications, and these were highlighted in the consultations. Practices can differ according to professional registration and competency training, and other factors including the type of medication and how it is packaged and administered, and prescribing practices. This can be very complex and outdated in respect to the changes in policy around residential aged care. In contrast to RACFs operating under public health legislation, there is some scope in the non-government sector to develop local protocols and policies around staff competencies and medication administration.

The inconsistencies in the legislation and regulations, and a lack of clarity in some areas, has meant that there are grey areas that are open to different interpretations of what is appropriate practice, and there are instances of 'normalising' inappropriate medication practices. It was highlighted that medication administration is a 'clinical process, not a task', and should not be considered as 'just pushing a trolley'.

Similar to medication administration practices, there are inconsistencies around which staff undertake different types of procedures, such as complex wound care, tracheostomy care, and catheterisations. There was advice provided that some of these procedures could be done by non-clinical staff with the right processes and instruction, given they were successfully done by carers in the community, but others needed to be done by an RN, and this should be clarified - 'grey areas need to be made white'.

There are virtual care services available to assist with instruction for procedures, such as wound dressings. Stakeholders advised that in most cases, these procedures could be managed during the day when there is an RN, or an EN, on-site.

RN scope of practice

Concerns around RNs working to top of scope were raised by many participants. However, there were diverging views on this. Some stakeholders felt that RNs could feel they were not 'doing what they're skilled to do' due to the 'oversupply' of RNs, particularly in small RACFs, but there was a more widely held view that there was a lack of understanding about the role of the RN and the value that they bring.

There is a complete disconnect between what providers perceive the role of the nurses and what it actually is.

Residential aged care has traditionally operated on a task-based model, but this needs to be changed with a realisation that RNs working to top of scope provides the best outcome for the residents and the most efficient use of their time and skills for providers. It was noted that there were opportunities due to the increasing complexity of care needs in residential aged care, included chronic illness, and mental health and psychosocial care needs, and RNs should not 'just be in the office' doing care plan reviews, rostering etc.

When facing a workforce shortage, we need to think more creatively about how you focus your precious resources to the top of scope.

5.2 Alternative skills mix arrangements

There were divergent views around alternative skills mix arrangements. Some participants expressed the view that the use of the care minutes was a 'blunt tool' with a focus on a 'one-dimensional' approach to the care needs of residents, being nursing and clinical. This can result in a risk-averse model that does not align with the principle of choice.

We're not very good at, as a profession, doing a social model of health.

The advantages of a different staffing mix, comprising multidisciplinary teams, were highlighted by some participants as offering a more holistic and preventative care approach. Comparisons were made with other care settings where a teams-based approach is the established model of care, and having a different approach in aged care was thought to be 'a bit strange'.

Some stakeholders felt that the needs of people receiving services should determine the skills mix, and that the setting should be irrelevant. Options to link to the resident care plan or the AN-ACC assessment outcome were proposed. Others felt that the appropriate skills mix arrangement would depend on the model of care that the RACF was operating.

Conversely, there were strong views that any reduction in the care minutes as they applied to non-specialised RACFs was unacceptable, and there should not be any 'chipping away at the definitions around who is in and who is out'. Having been assessed as requiring residential aged care, it was felt that using a human rights approach, residents in specialised RACFs should have equal rights to access the same care. There were concerns that changes to the skills mix could disadvantage residents by reducing access to timely and appropriate health care, particularly when considering the life expectancy gap for Aboriginal and Torres Strait Islander and homeless people which can arise through failures of access to health care.

...don't undermine because of someone's social, cultural or geographical circumstances

Many participants felt that any other care provided to residents for specific needs, such as psychosocial care provided by social workers, should be 'over and above' the skills mix specified in the care minutes responsibilities. If there was any change to the skills mix arrangements, they would need to be rigorously monitored and assessed.

5.2.1 Specialised homeless services

Different models of care for specialised homeless services were described, ranging from 'hostel' type models where all the residents are highly mobile and travelled in and out of the RACF independently, to ageing in place models where there is a mix of residents that include highly dependent bed-bound residents with complex care needs. The resident cohort was described as generally being younger than in non-specialised RACFs, but having complex psychosocial care needs, including mental health, drug and alcohol, and complex trauma care needs.

A strong emphasis on lifestyle, well-being, and enrichment programs, as well as psychosocial and behavioural support, is common across the specialised homeless services. Residents are integrated with the local health services, including psychologists, social workers, mental health teams, and medication clinics, of which some are provided as in-reach programs. Strong connections to the local community are important, and volunteers are a well utilised resource, providing one-to-one engagement such as having coffee or going on outings.

There was an example of a service operating as a household model with dedicated rostering of the PCWs, who manage the resident care plans, overseen by the RN, and undertake activities with the residents. Nurses and PCWs undertake additional training, such as trauma-informed care, holistic care and other relevant programs.

There was consensus among participants that additional skills mix was needed to meet the psychosocial care needs of the residents, although there was not a consistent view around the best model for an alternative skills mix arrangement. Social workers, occupational therapists, psychologists and recreational therapists were all mentioned as having a role in meeting care needs. One participant highlighted the need for a social worker to manage issues such as guardianship and parole matters. Management of mental health plans, and additional resources to manage behavioural issues, were also highlighted.

Particularly comes to what type of clinician do I need to help me have a good day or a good week, it's not always the RN that first comes to mind. And, in that sense, I would flag services like homeless mental health where the use of a more multidisciplinary team would be more appropriate in terms of social workers, psychologists, allied health teams.

There was no agreement of whether staff such as allied health, should be able to be included in the care minutes as a substitute for RN or EN/PCW/AIN care minutes. One participant proposed that the definition of 'clinician' in the care minutes should be broadened to be the most appropriate clinician for the requirements of the residents, with RN time able to be substituted for allied health time. Another participant suggested that RN care minutes should be able to be substituted with allied health care minutes, such as a mental health social worker, with the RN time included in the EN/PCW/AIN care minutes.

Others expressed a view that RN care time should not be 'eroded for the sake of psychosocial support', but rather, additional skills mix care minutes should be in addition to the existing responsibility. It was highlighted that people with a background of homelessness neglected their health care 'more than anyone else', and often had complex care needs with psychosocial elements. They also often have a lot of previously undiagnosed and untreated medical conditions which needed to be investigated and responded to.

What we would find is the physical health needs of some of those mental health consumers were as high as their mental health needs. So I think the risk of substituting homelessness, psychosocial supports for physical health supports would mean that you lose that ability to focus on maximising physical health and you're likely to miss deterioration in physical health because you're focusing more on the psychosocial needs of that population. So I think any consideration of substitution would carry significant risk.

Additional funding provided to specialised homeless services by the Commonwealth under the AN-ACC funding model was proposed as a resource that could be used to employ additional staff, such as allied health, to broaden the skills mix.

5.2.2 Specialised Aboriginal and Torres Strait Islander services

A strong theme that emerged in discussions around skills mix for specialised Aboriginal and Torres Islander services was the overarching challenge of recruiting and retaining staff in these often remote areas. It was reported that, similarly to RNs, allied health are a scarce workforce, with 'huge money' required to bring someone into the area. They might occasionally be available on a 'fly in fly out' basis, but they were not a permanent resource, and residents often need to travel long distances to access allied health. One participant advised that there was 'competition' for staff with services provided under the National Disability Insurance Scheme. There is also a challenge in staffing to provide culturally appropriate care.

So just even retaining staff is an issue, let alone the right cultural background mix, let alone qualification and skills mix. I think this is just one part of a really complex problem.

Our expectation of what's available and how it might be accessed needs to be tuned to those circumstances because we run the risk of creating an expectation that's just not serviceable.

A shortage of housing can also limit how many staff can be brought into the area to be employed. Employing local people can be a good option because they already have housing, but it can be difficult to develop staff capability in the community.

As with specialised homeless services, there was not a generally agreed view on an alternative skills mix arrangement. There were concerns expressed about too strong a focus on a clinical model of care, rather than a holistic model. RNs are involved in doing cultural and recreational activities in addition to their clinical role, but there is a 'wide gap' in the provision of culturally appropriate care. The importance of culturally-based care to residents' mental health and wellness was a key point that was raised. Residents can be provided with access to cultural ceremonies on country and culturally appropriate food, but there are challenges to meeting this requirement. It can be difficult to release staff from their duties at the RACF to accompany the resident, as well as not having appropriate transport for them, and so there is a heavy reliance on members of the local community. This assistance can be provided by volunteers, or in some cases a payment may be required. None of this time contributes to the care minutes.

If they could draw on their own community people, to come in visit, take them back on country, I think we'd actually have better outcomes for them.

There was some support for relaxing the requirements around staffing arrangements, including the 24/7 RN responsibility, but with additional research into what staffing profiles or skills are needed. There should be support for the Aboriginal health practitioner workforce to increase the number of qualified practitioners available to 'help get the right skills mix'. It was also suggested that Aboriginal health workers should be incorporated into the different models of care and should be included in the overall care minutes.

The comorbidities and complex care needs in the First Nations' population were highlighted by many participants, which supported retaining the RN and EN/PCW/AIN care minutes as they are for non-specialised services, and having any additional staff, such as allied health, counted as additional care time.

It does beggar belief ...that we would be arguing for less of an approach for nurses in those facilities. We would argue that there is a much more holistic approach that would be needed to support those cultural groups in a holistic way. And we would believe that nurses have got a really specific role in that – given some of the complex comorbidities that patient group present with.

5.2.3 Low acuity

It was generally reported that there are no longer homes with a homogeneous level of mostly low acuity residents due to abolishment of the low care and high care distinction and the establishment of the ageing in place policy. One participant noted that people were entering residential aged care with increasingly complex care needs, and 'if they had low care needs, they'd be at home', although, there were some reports of RACFs that had retained more of a hostel-type of resident cohort. This was possibly due to there being state-funded aged care beds available locally that cared for people with higher acuity care needs.

Stakeholders questioned how 'low acuity' would be defined, with one suggestion that the AN-ACC assessment could be used to determine the skills mix that is going to best meet the care needs of the resident. Overall, there was no support expressed for an alternative skills mix arrangement for non-specialised RACFs with low acuity residents.

6 Results – Review of exemption applications and current practice

This Section presents the results of a review of the applications and the Commission's response from aged care services eligible to apply for an exemption from the 24/7 RN responsibility. These documents provided useful insights into the skills mix of the RACFs, their existing clinical arrangements, and the steps taken to ensure the clinical care needs of residents will be met during the period for which the exemption is in force. Not all documentary evidence provided to the Department to support the measures that RACFs had in place was available for review by the project team in order to maintain RACF anonymity.

6.1 Overview of exemption applications

The Department provided the exemption applications that had been received at the time the project team undertook the review. A total of 48 exemption applications across six jurisdictions comprised 41 from RACFs in MM 5 locations, six from MM 6 locations, and one from a MM 7 location. Each application had been reviewed by the Commission to assess the steps being implemented to meet the clinical care needs of the residents where 24/7 RN care is not available as part of the approval process.

In total, there were 1,137 operational places across the 48 RACFs. This represented an average of 24 beds per facility with the smallest service having 10 beds. Approximately 30% of beds were reported as representing residents with high level complex clinical care needs. Overwhelmingly the type of complex care provided related to administering Schedule 8 medicines. Other significant types of complex care included wound care and palliative care.

All but six RACFs had an RN on site during the day shift from Monday to Friday. Of the six that did not have RN coverage during the day, a range of arrangements were available, including on-call assistance from either an RN or GP, co-location with an MPS, and referral to the local ambulance service.

Thirty-eight RACFs had access to an on-call RN to advise and provide clinical guidance to less qualified staff members on-site (such as an EN or personal care worker) over the telephone/video and 29 facilities had access to an RN who was prepared to attend the RACF as required. In the latter case the travel time for the RN ranged from three minutes to 50 minutes.

GPs provided on-call telephone/video assistance in 31 cases and 29 had access to a GP who was prepared to attend the RACF as required with a travel time ranging between three and 45 minutes. Not all GPs were prepared to attend the RACF after hours.

Ten of the RACFs were co-located with a hospital or acute/sub-acute care unit and 22 had access to on-call specialist telehealth services.

6.1.1 Protocols and procedures

RACFs were asked to describe the steps taken to ensure the clinical care needs of residents would be met in the absence of an RN who is on-site and on duty. Six RACFs answered this question by attaching protocols/procedures to evidence these arrangements. These documents were not provided to the project team in order to maintain the RACFs anonymity.

Eighteen RACFs indicated that, when an RN was not available on-site, the first step would be for the EN to call the rostered on-call RN for advice over the telephone/video. For four of these RACFs, if the on-call RN was unavailable the EN would then call the local GP for support. In cases where both the on-call RN and/or the local GP were unavailable the facility would call the local ambulance service for advice and/or transport to the nearest hospital.

Another nine RACFs indicated that they were co-located with either a hospital or acute/sub-acute unit (n = 4) or a sister facility (n = 5) where arrangements were in place for the provision of on-call support by telephone.

Six RACFs indicated that if an on-site RN or EN were unavailable then they would call the state-based Residential Aged Care Facility Support Service. This is an initiative that partners GPs, RACFs, hospital and health services and community service providers to ensure the right care is received at the right place at the right time¹¹. The Residential Aged Care Facility Support Service provides phone support and then referral to the most appropriate service.

6.1.2 Contingencies when on-call clinician unavailable

The exemption application form asked RACFs to describe their contingency arrangements and/or processes that were followed in the event of the nominated on-call clinician not being available. Three RACFs did not address this question.

Nine RACFs indicated that where an on-call clinician was unavailable the next step would be to contact the local ambulance service. Another nine indicated that their service manager (usually an RN) was the default on-call option should an RN be unavailable.

Four RACFs indicated that it was unlikely that they would have no on-call support as they had numerous local GPs to call upon. In these instances, staff were aware of the contact details of the GPs prepared to be on-call.

In most of these cases the on-call clinician, either an RN, service manager or GP, had access to the RACF's electronic clinical records.

6.1.3 Barriers to accessing emergency services

RACFs were asked to identify any barriers when accessing ambulance, hospital or other emergency medical services if clinical escalation was required. Most facilities (n = 36) could not identify any barriers to emergency medical services. Of the 12 RACFs that identified barriers, six indicated that the nearest ambulance service was at least a 20-minute drive away. Another two RACFs did not have access to a local ambulance service. Three facilities indicated that the closest hospital was at least a 25-minute drive away. In one instance the local hospital was on 'hospital bypass' because of limited resources.

6.1.4 Other links/pathways

RACFs were asked to describe their local links and other pathways used to access other clinical care providers or services in the area. Only three indicated that they did not have access to additional services.

The most common links/pathways related to services that have been made available by the state health department through community health or through their local hospital. Services available included: palliative care, wound management, allied health, and physiotherapy. Other links mentioned were to telehealth, specialist dementia services and pharmacy.

6.1.5 Workforce training

The exemption application form asked RACFs to describe any existing workforce strategies that ensure all on-site, on-call and agency staff are familiar with escalation and on-call processes. They were also asked to comment on processes that ensure all staff have the right skills mix to effectively respond to residents who have deteriorated and require clinical escalation when there is no RN on-site.

These questions were addressed by all RACFs except one. With regards to escalation processes, many services indicated that their care staff were familiar with the STOP AND WATCH Early Warning Tool¹² which is a resource used by care staff and other personnel to alert a nurse if they notice something different in a

¹¹ <https://clinicalexcellence.qld.gov.au/priority-areas/service-improvement/improving-quality-safety-and-care-older-queenslanders/rass>

¹² https://www.in.gov/health/files/INTERACT_Stop_and_Watch_Early_Warning_Tool.pdf

resident's daily care routine. Other RACFs commented that all staff were familiar with their locally developed escalation flow charts.

To address the second part of the question relating to skills mix, most facilities provided a list of available courses available to clinical staff. Most used phrases like 'mandatory', 'high compliance' or 'regular' to describe this training. The most common types of training mentioned related to First Aid, CPR, wound care and behaviour management. Several RACFs indicated that their care staff were all Certificate 3 or 4 trained in the provision of individual and ageing support.

6.1.6 Recruitment

RACFs were asked to describe their current workforce recruitment strategies to fill vacant RN positions and include any challenges in this process as well as comment about issues relating to staff retention. Only three did not provide an answer to these questions.

Eighteen RACFs specifically commented on the challenges of staff recruitment. These facilities had ongoing recruitment strategies to fill gaps in nursing staff. The challenges in recruitment related to a lack of suitable accommodation in the local area, competition with other services, the lack of opportunity for spousal jobs and poor access to schools and other services.

Twenty-five RACFs indicated that they had tried to overcome their recruitment issues by offering incentives for prospective candidates. These incentives included: accommodation assistance, above award rates of pay including a 20% rural allowance, flexible working conditions, relocation assistance, Visa sponsorship, the provision of funds for training, retention bonuses and international sponsorships.

6.2 Overview of Commission's Response

The responses from the Commission confirmed that all RACFs had a cohort of residents with either high level or complex clinical care needs. All facilities also had periods of time where an RN was not rostered on duty.

In cases where there was insufficient information provided by the RACF in the exemption application, or further clarification about the information provided was needed, a joint teleconference was held with the Department, the Commission and the RACF.

Based on the information provided by the RACFs in their initial application and after further investigation/clarification through the teleconference and/or the subsequent provision of supporting documentation, the Commission provided each facility with a clinical care factor assessment relating to risk in the following four categories:

- On-call clinical arrangements
- Alternative clinical care arrangements
- Policies, procedures and protocols
- Workforce training and management

The Commission rated whether there was an increase or decrease in risk and only four RACFs were assessed with increasing risk against these four categories as they could not demonstrate that the clinical care needs of residents could be met (when there is a deterioration in a resident's health and/or wellbeing). The Commission provided a variety of reasons for this including:

- Extended periods without RN coverage or in one instance no RN coverage
- No available back-up from an RN to support 24/7 coverage
- No formal agreements or evidence and/or policies and procedures to support alternative arrangements
- Lack of evidence to support training and/or recruitment.

Documentation on the follow up process undertaken to progress the exemption applications for the four RACFs was not available at the time the review was undertaken by the project team.

6.2.1 Summary of on-call clinical arrangements

The exemption application submission requested a description and evidence for each on-call arrangement in place. This related to the RACF's arrangements with an off-site RN, GP, NP and/or specialist telehealth service when an RN is not on-site and on duty.

For just under half of the RACFs (n=19) an RN employed by the RACF was also responsible for on-call arrangements when an RN was not available on-site. In 12 of these instances, management would provide back-up for 24/7 telephone or on-site support as required.

For seven RACFs the service or facility manager (usually an RN) would be solely responsible for 24/7 on-call support.

In only two RACFs were GPs solely responsible for providing 24/7 telephone or onsite support. However, GPs provided back-up to RN on-call arrangements in 34 facilities. In eight of these examples the GPs' commitment to the provision of support was backed-up by a signed statutory declaration.

Twenty-three RACFs also had access to telehealth services in cases where the primary on-call clinician was unavailable.

Providing all on-call clinicians with remote access to the residents' electronic care information was crucial to the success of these arrangements. Evidence to support this was provided by the facilities in most cases.

6.2.2 Alternative clinical care arrangements

The application for exemption also asked RACFs about any other alternative clinical care arrangements in place that were not covered under the on-call clinician arrangements. The most common alternative arrangement in place related to having an agreement with a closely located 'sister' RACF i.e. two RACFs in a similar geographic location managed by the same residential aged care provider. In these instances (n=12) the smaller facility would call upon the resources of the larger when on-call arrangements (mentioned above) could not be fulfilled. For example, one RACF noted:

There is a registered nurse on-site and on-duty at the [larger] residential aged care facility 24/7. The registered nurse is responsible for all care recipients at both the main facility and the [smaller facility]. The main residential aged care facility is located a 2-minute drive (900 metres) from the [smaller facility]. Should it be required, the registered nurse in charge is responsible for attending the [smaller facility] to assist care recipients if required. As part of their role, the registered nurse is to call the staff at the [smaller facility] at least once each shift. The Director of Nursing is also on-call out of hours and lives one block from the [smaller facility]. Should additional assistance be required, the Director of Nursing is able to attend the [smaller facility].

Alternative arrangements with a co-located (or proximity to a) MPS were also frequently reported (n=8). In these instances, the MPS would have an agreement with the RACF to carry out clinical assessments of residents where on-call arrangements cannot be met. One facility in NSW stated:

The service is co-located with the local multi-purpose facility, which includes an emergency department that can be accessed. If a care recipient needs to be transferred to the emergency department, this can be done by transferring the care recipient via a wheelchair (there is a hallway between the service and the emergency department).

Similarly, proximity to a hospital was also the source of alternative clinical care arrangements for many RACFs (n=8). For one RACF:

The local community hospital is located 500m from the facility. The facility is supported on-site by the Nurse Unit Manager or Registered Nurse delegate (from the Community Hospital) with daily routine clinical care

including but not limited to wound reviews and resident reviews. These periods include the weekdays where an RN is not rostered on-site and on duty, and weekends.

In the absence of supporting documentation, such as a formal agreement, many RACFs had been requested by the Commission to submit a statutory declaration regarding the alternative clinical arrangements that were in place. This included arrangements with the 'sister' facility or the neighbouring MPS or hospital. In many cases, statutory declarations were also in place to support arrangements of support from a LHD palliative care team and wound care team and for telehealth support with private providers.

Again, crucial to these arrangements was the provision of remote access to the residents' electronic care information including medications and incident management systems.

6.2.3 Policies, Procedures and Protocols

The exemption application form requested that protocols, policies or procedures for managing the escalation of clinical issues, including end-of-life care, in the absence of an RN who is on-site and on duty, must be summarised and attached to the application.

In response to this request, a wide variety of examples were described by RACFs and in many cases supporting documentation was provided. However, further clarification of these arrangements was requested during the joint teleconference with the Department, the Commission and the RACF.

As expected, a wide variety of policies, procedures and protocols were described with most related to clinical escalation/deterioration and on-call processes when an RN was not on-site or on duty. Overall, the main types of policies, procedures and protocols related to:

- **Medication Administration Policy and Procedures** relating to the administration of medication when an RN is not on-site and on duty. These mostly related to Schedule 8 medications;
- **Pain Management Policies** to assist staff in managing chronic pain using Schedule 4 medications instead of Schedule 8. In many cases the policies guide care staff to contact emergency services to manage break-through pain in the absence of an RN on-call or on duty;
- **Escalation Flowcharts** used by care staff to escalate and report concerns about resident care, deterioration, significant complaints, or serious incident response. The flowcharts prompt staff when it is appropriate to contact the on-call RN;

Transfer to Hospital Procedures for cases where a resident suffers an acute decline or in an emergency. In many cases the local ambulance service is contacted to arrange transfer to a local hospital in the absence of an on-site or on-call RN;

Alternative Clinical Care Arrangements Procedures to support care staff to manage deterioration in resident well-being, risk and incident management and alternative clinical arrangements when an RN is not available;

- **Palliative Approach and End of Life Policy and Procedures** includes developing end-of-life care plan documentation, symptom assessment scales and advance care planning. Such policy and procedures guide end of life care for residents in the absence of an RN on-call or on duty;
- **Deterioration Policies** provide information on early detection, intervention, and escalation of residents' health to prevent further health complications. These policies provide direction to care staff to report deterioration to the on-site RN or the relevant on-call clinician;
- **Wound Management Policies** provide care staff with direction on accurate assessment and management of wounds. Policies encourage the establishment of routine wound protocols including wound measurement and wound photography. The policies usually include instructions for escalation of wound management, including attendance if required of the on-call RN;
- **Falls Management Policies** outlining circumstances requiring ambulance attendance. They often include flowcharts to direct care staff to assess vital signs and diagnose impaired consciousness.

6.2.4 Workforce training and management

The exemption application submission requested evidence of workforce training strategies and workforce recruitment strategies. With regards to workforce training and recruitment, the Department had two main areas of interest:

- ensuring that all on-site, on-call and agency staff understand the services escalation and on-call processes; and
- that staff have the right skills (such as first-aid or necessary qualifications) to effectively respond to residents who have deteriorated and require clinical escalation where there is no RN on-site.

As noted in Section 6.1.5, most RACFs provided detailed information with regards to workforce management and training in relation to the 24/7 RN responsibility. Most RACFs reported having one- or two-day on-site orientation for new staff and buddy shifts to familiarise them with the service and the residents. Most also have escalation flowcharts available in hand-over room/workstation so that all staff have access to relevant information to assist them to escalate to the right person with the correct telephone number. Many RACFs also reported that staff are trained in the service electronic care management systems and can document health care changes where appropriate.

With regards to career articulation, several RACFs referred to the importance of upskilling PCWs and ENs so they can perform a wider variety of duties. A good example of this is provided by mandatory competency training for medication management and administration. This is captured with the following example provided by multiple RACFs:

All care staff that administer medication receive education and undergo annual competency assessment with a Registered Nurse or Clinical Nurse Consultant/Educator. As part of the competency assessment process, the care staff complete a 1:1 support round with the Clinical Nurse Consultant at which time the Clinical Nurse Consultant determines if a staff member is ready for formal competency assessment. When a staff member has been assessed as competent, the Clinical Nurse Consultant notifies the Facility manager and Team Leader so that only medication-competent staff are rostered on shift.

The advantages of this are that medication competent carers can administer medication when it is in a dose administration aid. They are also able to administer Schedule 8 drugs under direct supervision of the RN. Similarly, an EN can administer schedule 4 and 8 medications if delegated by an RN.

Other examples of career articulation include ensuring that all new personal care staff and nursing staff are competent in general practices including vital signs monitoring, escalation of care concerns and management of wounds, falls and changes in pain acuity.

Regarding workforce recruitment, most RACFs offered incentives to potential RNs such as a 20% rural allowance to nursing remuneration to encourage qualified personnel with accelerated pay progression for permanent staff. Other incentives offered included flexible working conditions, relocation assistance, visa sponsorship, the provision of funds for training, retention bonuses and international sponsorships.

6.3 Summary

Overall, the application process for exemption from the 24/7 responsibility, as outlined above, has described a range of on-call and alternative to on-call arrangements. It has also highlighted a range of different policies, procedures, and protocols in place to document and manage the escalation of clinical issues as well as a variety of workforce training and management issues to ensure that staff have the right skills mix to deal with situations where an RN is not on-site and on duty.

In many cases, following the teleconference with the Department and the Commission, the RACFs were able to provide statutory declarations from organisations where an 'on-call' or 'alternative' arrangement was in place. In a number of cases, these arrangements are based on good-will and raise sustainability questions if there is a change in local personnel or service provision.

Most commonly, on-call arrangements were carried out by an RN that worked for the RACF with back-up provided by the facility management (e.g. a service manager who is also an RN). Whilst this may be achievable in cases where a facility employs multiple RNs on different shifts it may not be sustainable in a smaller RACF where one RN has just worked the day shift and is on-call for the rest of that day and night. In these instances, there is potential for staff burnout.

GPs are also documented as a common approach to providing on-call back up. However, in most cases this arrangement was not supported by a written agreement. Again, the sustainability of these 'good-will' arrangements and the fact that many GPs do not provide on-call coverage for a 24-hour period dilutes the effectiveness of having a GP available. Only half of the RACFs mentioned telehealth as a backup to on-call arrangements.

Regardless of the level of support provided to an RACF when an RN is not on-site and on-duty, it is very important to give the on-call clinician access to electronic records. This was the case for most RACFs.

With regards to alternative arrangements to on-call procedures, proximity of the RACFs to an alternative service provider is key. Whether this is with a 'sister' service, an MPS or a local community hospital they are all an extremely important mechanisms for the provision of clinical support when an RN is not on-site or on duty. Again, it is important that service agreements such as memoranda of understandings should be in place to support these arrangements.

A variety of policies, procedures and protocols have been incorporated into practice at most RACFs. Many facilities were able to provide evidence of mechanisms in place for managing the escalation of clinical issues in the absence of an on-site RN. The variety of policies, procedures and protocols is not surprising given that each RACF is operating in a different context with a different resident cohort. However, the most common procedures relating to medications, escalation of symptoms, protocols for transfer to hospital and wound care, and policies relating to palliative care should be implemented in all RACFs with 30 beds or less.

A variety of workforce training strategies were in place at the applicant RACFs to help ensure that all on-site and on-call staff understand the mechanisms for service escalation and the on-call processes. A range of mechanisms was also in place to ensure staff had the right skills to effectively respond to residents who have deteriorated and require clinical escalation when there is no RN on-site. Career articulation for both care workers and ENs is critically important to supporting resident care in the absence of an RN and this should be a high priority for smaller RACFs.

7 Alternative arrangements to 24/7 RN staffing responsibility

This Section addresses Part 1 of the project regarding evidence-based alternative clinical arrangements for RACFs that are unable to meet the 24/7 RN responsibility introduced on 1 July 2023. Information included in earlier parts of this report has been synthesised and a recommended approach for implementing alternative care arrangements is presented.

It is important to recognise that identifying appropriate alternative arrangements is a complicated task without a simple solution. The objective is to ensure that alternative arrangements are both practical and suitable for implementation across the very wide and varied environments in which RACFs operate.

In practice, this means that a 'one size fits all' model will not work. Instead, a range of strategies are required to address the circumstances that arise in different locations and contexts. Further, a combination of strategies is likely to be required for individual RACFs to mitigate the risks related to not having an RN on-site and on duty.

It is equally important to recognise the broader workforce constraints that currently exist across Australia. The 24/7 RN and associated alternative arrangement requirements are only one element of a suite of reforms being implemented across the sector. A range of related policies focussed on longer-term workforce issues are also being implemented. The primary focus of this project has been on identifying short-term solutions to the shortage of RNs in rural and remote areas. The significant volume of information collected during this project and the recommendations in this report has been examined and developed in this context.

The remainder of this Section is structured as follows:

- Section 7.1 presents a logic model that conceptualises the overall core issues being addressed by the recommended alternative arrangements.
- Section 7.2 outlines five foundational elements that we consider to be non-negotiable features of any alternative arrangements.
- Section 7.3 outlines a set of four key principles that have emerged as being fundamentally important considerations in developing alternative arrangements.
- Section 7.4 presents our recommended alternative arrangements and describes the interactions likely to be relevant in different circumstances.

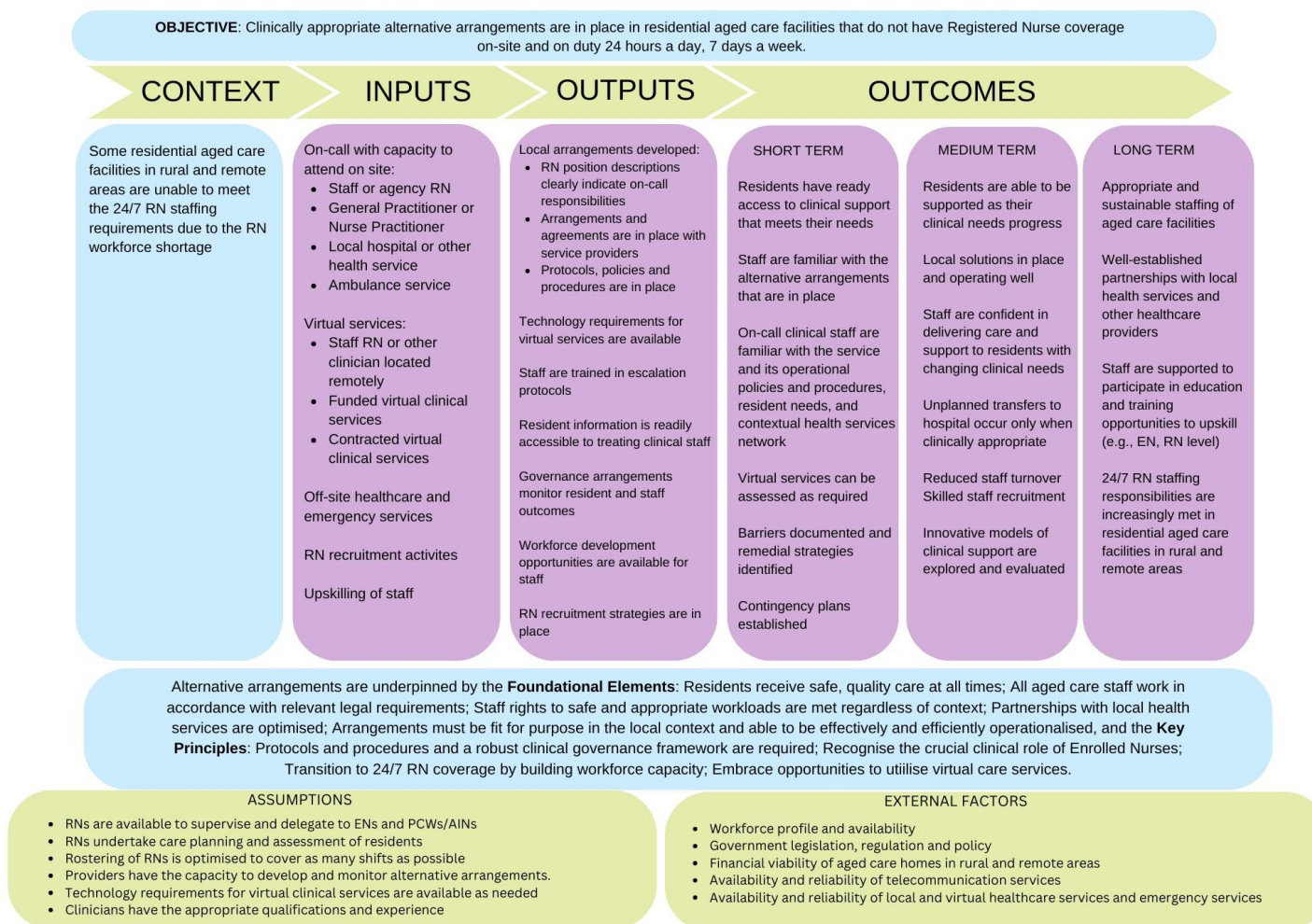
7.1 Logic Model

Logic models are often developed as a tool to demonstrate how related inputs and activities are intended to achieve a particular outcome. Logic models can also be a useful resource for monitoring and evaluation. The relationship between the different elements are clearly articulated and the aspects that are most important in achieving the intended outcomes can be identified.

A logic model based on the Australian Government's Performance Framework¹³ has been developed to describe the objectives of the alternative arrangements and outline the proposed processes, impacts and outcomes associated with their implementation. The logic model is shown at Figure 6.

¹³ <https://www.finance.gov.au/government/managing-commonwealth-resources/planning-and-reporting/commonwealth-performance-framework>

Figure 6 Alternative Arrangements: Logic Model



7.2 Foundational elements of alternative arrangements

The objective of the 24/7 RN staffing arrangements is to ensure that people residing in RACFs have access to safe, quality care at all times, irrespective of where they live or what their needs may be. It is our view that, for RACFs unable to meet the current staffing responsibilities, there are five foundational elements that are required to underpin the provision of any alternative arrangements.

7.2.1 Residents receive safe, quality care at all times

It is a given that residents of RACFs must be provided with safe, quality care that is appropriate for their care needs at all times. This is not just about meeting a regulatory requirement for staffing, it reflects the expectations and values of the Australian government and society more generally, particularly those who have entrusted their loved ones to the care of providers. Therefore, while there may be geographic and contextual factors that impact on the ability of some providers to meet the new staffing responsibilities, the needs of residents must always be met.

7.2.2 All staff work within their scope of practice

All care workers in residential aged care must work within their professional and individual scope of practice. Nursing and allied health staff must work within the requirements and expectations of their relevant registration body. Non-registered staff such as PCWs must not provide any clinical care that is required to be delivered by a health professional, including the administration of medicines outlined by their relevant state/territory authority. All staff must abide by the policies and procedures of their employment context. The individual scope of practice of all care workers in the aged care setting will also be determined by education, individual skills and competencies, and job role/ position description, highlighting the importance of ongoing development opportunities to enhance the capabilities and opportunities for increased scope of practice over time.

7.2.3 Staff rights to safe and appropriate workloads are met

Employment standards and agreements are in place to ensure workplaces are safe and appropriately resourced. All staff should be provided with a work environment, conditions and entitlements as set out within their relevant industrial award or employment contract. While a degree of flexibility may be required to ensure clinical care is available at all times for residents, alternative arrangements need to ensure that staff well-being and safety are not compromised.

7.2.4 Partnerships with local health services are optimised

RACFs must operate in partnership with local health services and networks in order to ensure that the often complex and chronic health needs of residents are met. While this is true for all facilities, it is particularly important for those which struggle to attract and retain suitably qualified clinical care staff to meet the new regulatory responsibilities due to geographical or contextual factors. Aged care providers need to proactively engage with and maintain relationships with appropriate services, including through the co-production of policies and protocols regarding their engagement with staff and residents. Clinical governance arrangements need to be formalised, including agreed mechanisms for ongoing monitoring and review. Staff working within the health and aged care services should be familiar with and confident in the use of the agreed clinical supports and escalation arrangements. Professional development opportunities should be pursued to develop a shared understanding of each other's operating environment and administrative requirements.

7.2.5 Arrangements can be effectively and efficiently operationalised

Alternative arrangements must be maintained to be fit for purpose in the local context. They should be regularly reviewed and revised where needed, ensuring they are appropriate in the current environment and can be effectively and efficiently operationalised. This includes responding to the changing care needs of the resident cohort and the availability of services.

7.3 Key principles underpinning alternative arrangements.

In addition to the foundational elements outlined above, we have identified four key principles that are provided to support the development and implementation of alternative arrangements.

7.3.1 Recognising the role of Enrolled Nurses

The important role played by ENs has emerged as an important theme throughout this project. In the academic literature, ENs have recently been described as valuable, regulated staff members who must be valued as multidisciplinary team members if Australia is to develop a world-class aged care sector (Peters 2023). The value that an experienced EN brings to an RACF emerged as a key theme in the stakeholder consultations. ENs are also a key component in the vast majority of the applications approved under the 24/7 RN exemption process.

Despite this widely expressed view that ENs are an invaluable component of the Australian residential aged care workforce, their employment across the sector varies considerably, including in rural and remote locations. In some cases, providers are reducing the size of their EN workforce. This appears largely to reflect a perspective that the additional cost associated with ENs relative to PCWs, combined with their reduced scope of practice relative to RNs is not justified.

It is important to recognise that there is a genuine shortage of ENs available to work in aged care in many locations. However, as noted in the analysis reported in Section 4.1, the availability of ENs relative to RNs is higher in regional and remote areas than in metropolitan areas.

Overall, it is our view that ENs offer an important and currently under-utilised resource for the aged care sector. ENs can perform basic clinical procedures within their authorized scope of practice including wound dressing, catheter care, administration of simple treatments or therapies, monitoring vital signs, and assisting with basic clinical assessments. This level of clinical expertise can offer effective support to RNs under various alternative arrangements where 24/7 RN is not currently possible.

7.3.2 Embracing opportunities to utilise virtual care services

The use of virtual care services has become increasingly available within the residential aged care sector. A wide range of services are now delivered using technology ranging from mobile phones through to sophisticated 'workstations on wheels' that may include a laptop, computer screen, webcam and various types of clinical assessment equipment. In some cases, funding for virtual technology has been made available to providers by different levels of government under various arrangements.

While a broad range of clinical services are now delivered using more sophisticated virtual equipment, these are predominantly used for GP, medical specialist and limited nurse practitioner services. Alternative arrangements for off-site RN services are currently delivered mainly by telephone or videoconference. A relatively small number of promising solutions have emerged that involve a package of both virtual and on-site services being provided either by an external provider or to individual RACFs within a larger organisation. Some of these solutions have emerged in response to the recent introduction of the 24/7 RN responsibility, while others have been under development for some time.

The stakeholder consultations identified a broadly consistent view regarding the legitimate and increasing role for virtual technology in rural and remote areas, including where an on-site RN is not available. At the same time, it is recognised that virtual arrangements are not ideal and cannot be considered as a replacement for hands-on care. While there are clearly functions that can only be undertaken by an on-site RN, a range of support services and advice can be effectively delivered off-site. As such, it is important to ensure that the residential aged care sector embraces opportunities to utilise virtual technology. This needs to occur in a sustainable and financially viable way for providers.

7.3.3 Transitioning to 24/7 RN coverage through building workforce capacity

This project has been tasked to identify alternative arrangements that can be established while RACFs transition to meet the 24/7 RN responsibility. The research has highlighted the variability of contexts in which RACFs operate, and the diversity of strategies that have been implemented over time to ensure residents receive safe, quality care and staff are afforded safe and supported workplace. It has revealed that despite ongoing recruitment activities and accessing of workforce initiatives a number of RACFs continue to struggle to attract and recruit a sustainable and appropriate staffing profile. There are legitimate concerns that continued investment in such activities will not, on its own, change this situation. It is clear that there is considerable scope, and appetite to build on the existing workforce using a mix of strategies including structured staff development opportunities and changes in operational processes.

A recurring theme amongst the consultations has been the limited opportunities available to staff for career progression, particularly if additional qualifications are required. Concerns raised include difficulty for staff in accessing education and training, particularly programs requiring face to face components and with mandatory (usually unpaid) placements, and for employers, the costs associated with backfilling staff while undertaking training and risks that staff will leave once they are more qualified. It is clear that the sector needs to adopt a broader approach to career progression that values and supports all staff who seek to develop their skills and foster a learning workplace culture. This could include the development of a rural and remote aged care pathway that provides a stepped approach to skills development and can articulate into a formal sector qualification (if desired) and delivered in a manner that accommodates staffs' various commitments and capacities.

The backdrop to this project has been a recognition that RNs can be a scarce resource within RACFs, particularly those in rural and remote areas. As such, there is a need for providers to maximise the capacity for RNs to work at their optimum scope of practice. This may require operational changes to ensure that staff skills are maximised, particularly during times of decreased clinical needs of residents. For example, an RN on duty overnight may have the capacity to progress organisational quality improvement initiatives or internal policy documentation. They could also provide education and training and/or clinical supervision for ENs and PCWs with whom they are working, particularly for those staff interested in pursuing career development opportunities. For example, consideration could be given to identifying elements of care planning, assessment, and care delivery that could be undertaken by less qualified staff who have received education and training and been appropriately supervised, while remaining in their related scope of practice. Opportunities for career articulation should be developed which reflect the particular needs of staff working in rural and remote RACFs.

7.3.4 Protocols and procedures

The capacity of RACFs to deliver safe, quality care is not only dependent on the availability of appropriately skilled staff; it is facilitated by robust clinical governance processes and organisational policies and procedures. Providers need to have in place processes that facilitate routine review and monitoring of residents' health and well-being, including through the introduction of standardised assessments such as those currently employed in the Palliative Aged Care Outcomes Program (PACOP). This not only requires an aptitude for adopting best practice clinical assessments, it involves building staff capacity to undertake, review and monitor trends over time. Providers need to invest in associated technology to support the implementation of appropriate clinical assessments and processes. This is not only about access to telehealth, it includes capacity for integrated clinical care records where real-time assessments can be entered and able to be reviewed by visiting clinicians, particularly when an RN is not available.

Policies and protocols to support staff access to clinical expertise need to be explicit, accessible, understood and agreed to by all parties. Not only will this require a degree of co-production with the key clinical supports external to the RACF, but staff who will be responsible for implementing the protocols will also need to be involved to ensure the solutions are workable, particularly in situations where residents may have high or critical clinical needs. Communication and escalation protocols need to be regularly reviewed, particularly

when staff and/or resident changes occur, to ensure all parties are aware of their responsibilities involved in their implementation.

Sound clinical governance require ongoing review and engagement of all parties to ensure residents' access to safe, quality care is not compromised, and staff are supported during times when an RN is not available on-site.

7.4 Recommended alternative arrangements

It is recognised that a 'one size fits all' model will not work for the range of individual contexts that RACFs operate in, and a range of strategies will be needed to suit different circumstances. A combination of strategies will most likely need to be implemented by a RACF to mitigate the risks that are related to not having an RN on-site and on duty.

Alternative arrangements will need to be formalised, such as through employment arrangements for on-call staff or service agreements with external providers. Each strategy will need to be comprehensively documented to demonstrate they are appropriate in the local context to meet the care needs of the residents. The arrangements will also need to be reviewed and updated as required when local circumstances change, such as external services being discontinued or newly established, or changes in the complexity of the clinical needs of the residents or the staffing profile. Policies and procedures will need to be up-to-date and easily accessible. Staff will be required to have an awareness and detailed understanding of the arrangements that are in place.

RACFs will need to implement an appropriate suite of arrangements that ensures all scenarios that are relevant in their individual circumstances have been addressed. The arrangements that are established must ensure that all staff are working in a safe environment within their relevant scope of practice and competency, including around delegation and supervision.

Alternative arrangements must incorporate the foundational elements and be underpinned by the key principles. There are three categories of alternative arrangements:

- On-call with capacity to attend on-site
- Virtual services
- Off-site healthcare and emergency services

7.4.1 On-call with capacity to attend on-site

These arrangements could include an RN staff member or RN agency staff, or a local health service provider, such as a GP, NP, local hospital staff, or ambulance service, to provide support in response to an unplanned event. These services may not be available 24/7.

In some circumstances, attendance on-site might be required to provide planned RN care to residents that would normally be provided by the RN who is on-site and on duty. These arrangements should be scheduled as required with the on-call clinician, to ensure the care is delivered appropriately.

Staff or agency RN

An on-call arrangement for RNs enables there to be an RN available to respond to urgent clinical care needs or emergencies that may arise when there is no RN is on-site. For this arrangement, RNs are scheduled to be on-call, on a rotating roster where there is more than one RN available. There may be circumstances where the RN makes the decision that it is not necessary to attend on-site and manages the situation remotely. It is important to note that the scope of the on-call duties may vary depending on the protocols and policies of the RACF, the acuity of residents, and state and territory legislation and regulations.

General Practitioner or Nurse Practitioner

An on-call arrangement with a local GP or NP refers to a system that enables residents to have access to clinical care on-site. It allows for timely clinical intervention and addresses clinical care needs that arise when

there is no RN is on-site. There may be circumstances where the GP or NP makes the decision that it is not necessary to attend on-site and manages the situation remotely. Importantly, the scope of the on-call service may vary depending on the specific agreements and protocols established between the clinician and the RACF.

Local hospital or other health service

An on-call arrangement between a local hospital or other local health service and the RACF involves a collaborative agreement that enables residents have access to timely clinical care and support from clinicians located at the hospital or health service with the capacity to attend the RACF when no RN is on-site. These healthcare professionals are available to provide clinical consultations, assessments, and interventions as needed without the need to transfer residents to the hospital. The specific scope of the arrangement may vary based on the specific agreement, proximity and local regulations established between the parties involved.

Ambulance services

A formal arrangement with an ambulance service provider enables residents to have access to clinical care and support from paramedics when no RN is on-site. It is important to note that this arrangement differs from dialling '000' in an emergency and the scope may vary based on the particular circumstances. It can involve sharing the care plan of residents who have complex care needs, such as those receiving palliative care.

Issues to be considered:

- the elapsed time that can realistically be expected from the clinician/service receiving the request to attend on-site and arrival at the RACF, including factors such as transport and the distance to be travelled
- details of the arrangements with the clinician/staff, including service agreements and employment agreements
- the capacity of staff at the RACF to identify events that require escalation, and appropriately manage the situation until support is available
- familiarity of the on-call clinician/service with the RACF, including the resident cohort, the skills mix and capacity of the staff, and the protocols, policies and procedures that are in place
- continuity of care, including the capacity of the clinician/service to access the clinical documentation, including care plans and medications charts, and the mechanisms in place to update the clinical documentation and provide appropriate handover and follow up
- the workload of staff, avoiding disruptions to the delivery of routine resident care, and impact on the resources of local clinicians/services
- the availability of the on-call clinician/service, such as whether it provides 24/7 coverage, and planning for situations where the clinician/service is unavailable to attend on-site.

7.4.2 Virtual services

These arrangements could involve a staff RN or other appropriately qualified clinician who is located remotely (or locally but without the capacity to attend on-site); use of virtual clinical services, including GPs and specialists; and contracted services that provide virtual access to a range of clinicians, including RNs. The scope and capabilities of the virtual service could include features such as access via telephone or secure video conferencing, integration with electronic clinical management systems, and digital tools for remote monitoring or assessments. These services may not be available 24/7.

Staff RN or other clinician located remotely

RACFs have access to RNs or other appropriately qualified clinicians who are located remotely but employed within the same organisation. This could involve a small group of RACFs located in neighbouring geographical

areas through to a large organisation with RACFs located across different states and territories. Remote access to the clinical management systems and the protocols, policies and procedures will be available. There may also be familiarity with the residents and staff at the RACFs.

Funded virtual clinical services

There is a comprehensive range of funded clinical services available to provide virtual care to residents in aged care. These include GP services, virtual emergency departments, RN and specialist nursing care, specialist medical care, including mental health, and allied health. These services are funded from various sources, including the Commonwealth and jurisdictions through to programs run by local health districts. Payment arrangements could involve billing through Medicare, other invoicing arrangements, or could be provided without charge. Remote access to the clinical management systems could be available. There may also be familiarity with the residents and staff at the RACF.

Contracted virtual clinical services

Virtual clinical services are available under a contract arrangement, providing access to RNs and other appropriately qualified clinicians. Remote access to the clinical management systems and the protocols, policies and procedures could be available. There may also be familiarity with the residents and staff at the RACF.

Issues to be considered:

- The capacity to appropriately meet the care needs of residents given the limitations on the clinical care that can be provided virtually, rather than hands-on;
- Details of the arrangements with the virtual clinical service, including service agreements and employment agreements;
- Availability of the required technology and potential disruptions to telecommunications and online access, such as interruptions to mobile services and internet connection;
- The suitability of the technology, including for use by the resident;
- Competence of the staff at the RACF to use the technology and their capacity to communicate appropriately with the remote clinicians, including providing clinical information, and to carry out the instructions provided;
- Capacity of staff at the RACF to identify events that require escalation, and appropriately manage the situation until support is available on-site;
- Familiarity of the virtual clinical service with the RACF, including the resident cohort, the skills mix and capacity of the staff, and the protocols, policies and procedures that are in place;
- Continuity of care, including the capacity of the virtual clinical service to access the clinical documentation, including care plans and medications charts, and the mechanisms in place to update the clinical documentation and provide appropriate handover and follow up;
- The workload of staff, avoiding disruptions to the delivery of routine resident care, and impact on the resources of the virtual clinical service;
- The availability of the virtual clinical service, such as whether it provides 24/7 coverage, and planning for situations where the service is delayed or unavailable.

7.4.3 Off-site healthcare and emergency services

Residents can be transported to a healthcare service, such as a medical centre or hospital emergency department, to receive clinical care, or attended by an ambulance service and transported to a health service for care if required. Escalation to off-site services or calling for emergency services should be done by an RN or other authorised clinician, or under the direction of the RN or authorised clinician, where this is appropriate.

Issues that must be considered:

- Distance to the healthcare service and travel times, and availability of appropriate transportation;
- Capacity of staff to identify events that require escalation, and appropriately manage the situation until clinical care is available;
- Capacity of staff to communicate appropriately with the health care and emergency services, including providing clinical information, and carry out the instructions provided;
- Familiarity of the healthcare or emergency service with the RACF, including the resident cohort, the skills mix and capacity of the staff, and the protocols, policies and procedures that are in place;
- Continuity of care, including the capacity of the healthcare or emergency service to access the clinical documentation, including care plans and medications charts, and the mechanisms in place to update the clinical documentation and provide appropriate handover and follow up;
- The workload of staff, avoiding disruptions to the delivery of routine resident care, and impact on the resources of the healthcare and emergency services;
- The availability of the service, such as whether it provides 24/7 coverage, and planning for situations where the service is delayed or unavailable, including where the ambulance service is unable to attend.

7.5 Recommendations: Alternative 24/7 RN arrangements

The following recommendations respond to the Part 1 of the project:

Recommendation 1.1

The Department tests the Foundational Elements and Key Principles to be used to underpin appropriate alternative arrangements.

Recommendation 1.2

The recommended Monitoring and Evaluation Framework be tested and refined to underpin a process of monitoring and evaluating agreed alternative arrangements implemented in rural and remote locations.

Recommendation 1.3

Communication and collaboration between the governance bodies and residential aged care providers in rural and remote areas is facilitated, to promote information sharing and support the planning and implementation of strategies to transition to 24/7 RN staffing.

Recommendation 1.4

Targeted strategies for increasing and supporting the RN workforce in residential aged care in rural and remote areas are further developed, in consultation with providers and other key stakeholders. The RN workforce shortages in RACFs should be considered in the context of the shortages also being experienced in healthcare and disability sectors.

8 Alternative arrangements for skills mix responsibility

This Section addresses Part 2 of the project where the Department is seeking advice on whether exemptions to the skills mix responsibilities in any specialised residential aged care services are appropriate. This includes specialised homeless and Aboriginal and Torres Strait Islander RACFs and RACFs with low acuity residents based on their AN-ACC profile.

The primary focus for this component of the project has been specialised homelessness and Aboriginal or Torres Strait Islander RACFs. Little information emerged indicating the prevalence of RACFs providing low acuity care. The project has considered differences in the care needs of residents and the associated care models that operate within this small group of specialised RACFs. Information collected through the literature review, the environment scan, and extensive stakeholder consultations has been synthesised and a set of recommendations is presented.

As outlined in Appendix 2, average care minute targets were introduced in October 2022 as the minimum quantity of care required to be provided to residents in residential aged care services. From 1 October 2023, the mandatory provision of care minutes is 200 minutes per resident per day, including a minimum of 40 minutes of RN time per day. From 1 October 2024, the mandatory care minutes will increase to 215 minutes per resident per day, including a minimum of 44 minutes of RN time per day.

Importantly, only care activities provided by RNs, ENs and PCWs/AINs can be included when counting care minutes. The Department is seeking particular advice on whether exemptions or other changes should be considered to the mix of staff able to contribute to the mandatory care minute responsibilities in these specialised aged care services. This includes potential exemptions to the 24/7 RN responsibility that was introduced on 1 July 2023.

8.1 AN-ACC funding arrangements for specialised aged care services

AN-ACC is the national funding model for residential aged care in Australia. It is an important consideration in examining the potential need for changes to the skills mix responsibilities for specialised aged care. The structure of the AN-ACC funding model is briefly outlined here in that context. A more detailed overview is provided at Appendix 8.

Around half of all care costs in residential aged care relate to services shared equally by all residents, while the other half relate to care needs specific to individual residents. The AN-ACC funding model therefore comprises two main components:

- The base care tariff: a fixed component to cover the costs of ensuring capacity and providing the care that all residents receive equally. The AN-ACC funding model includes six base care tariffs based on unavoidable characteristics of the aged care service, location and specialisation (Aboriginal and Torres Strait Islander and homeless);
- The AN-ACC classification subsidy: a variable component based on the individual care needs of residents. The subsidy accounts for the volume and mix of residents and is based on the AN-ACC class assigned to each resident following an independent care needs assessment. AN-ACC comprises 13 classes defined by resident characteristics such as level of mobility, cognitive ability, and level of function.

Funding models such as AN-ACC are typically recalibrated regularly to ensure that funding levels align with the average costs of delivering care.

Aboriginal and Torres Strait Islander services located in a remote or very remote location, and homeless aged care services are eligible to apply for specialised status. There are specific eligibility criteria for each category. For homeless services, at least 50% of residents must have complex behavioural needs and social disadvantage associated with a background of homelessness. For Aboriginal and Torres Strait Islander services at least 50% of residents must be Aboriginal or Torres Strait Islander persons.

If approved, aged care services receive additional funding through the base care tariff component of AN-ACC. The additional funding recognises the additional unavoidable costs incurred by this group of aged care services, including costs of additional care needs provided by relevant health professionals. This could, for example, include Aboriginal and Torres Strait Islander Health Practitioners or social workers.

At the time of writing, there are 44 homeless and 11 Aboriginal and Torres Strait Islander approved specialised providers that receive the additional AN-ACC base care tariff funding.

8.2 Resident profile and care models in specialised aged care

It has been well recognised that the profile of residents in specialised homeless RACFs differs from other RACFs (Rowlands et al. 2020). This cohort was described in the stakeholder consultation as younger, but with complex psychosocial care needs, including mental health, drug and alcohol, and complex trauma care needs. A trauma informed approach to care and staff who can work with challenging behaviours and build relationships has been identified as important when working with this group of residents (Rowlands et al. 2020).

Various models of care for specialised homeless services were identified. Importantly, models range from 'hostel' type models where residents are highly mobile and have less nursing care needs, to ageing in place models where there is a mix of residents that includes highly dependent residents with complex care needs. Overall, the evidence indicates that the provision of residential aged care for people affected by homelessness is likely to need a different staffing profile compared with mainstream residential aged care.

Similarly, residents in Aboriginal and Torres Strait Islander services were described as requiring additional care to ensure culturally appropriate care is provided. Stakeholders indicated that the primary issue for these RACFs relates more to the challenges associated with staff attraction and retention than skills mix or model of care issues. For example, spiritual care is important for Indigenous people but there are few staff to support this aspect of care (Sivertsen et al. 2020). Similarly, stakeholders identified that all staff in remote locations including RNs routinely deliver cultural and recreational activities as well as clinical duties.

8.3 Summary of findings

It is clear that the care needs of many residents in specialised homeless and Aboriginal and Torres Strait Islander RACFs differ from those in other RACFs. This is self-evident from the fact that additional subsidies are already allocated under the AN-ACC base care tariff. It has also been confirmed through the data collection activities conducted for this project.

The primary issue being considered is whether changes should be made to the mandatory skills mix responsibilities that were implemented on 1 October 2023 (or the 24/7 RN responsibility introduced on 1 July 2023). If such changes are not appropriate, are there alternative (new or existing) mechanisms that are more suitable to address this issue.

The academic literature offered little insight specifically related to skills mix requirements for aged care services that specialise in homeless or Aboriginal and Torres Strait Islander residents or those with a low acuity resident cohort. It did suggest that differing staff structures and care models may be required that are responsive to the needs and differences in these populations. Similarly, the environmental scan provided limited specific insights, but was useful in understanding current models of care.

Given the absence of academic evidence, additional stakeholder consultations were convened to ensure the findings and recommendations genuinely reflect the views of the sector and are as evidence based as possible. The stakeholder consultations generated a wide range of views as outlined in Section 5.2. All the available data has been synthesised to develop advice and recommendations on this issue.

There are differences in views across the sector regarding whether changes to the skills mix responsibilities are required. While there is agreement that the needs of residents in specialised homeless differ from those

in other RACFs, there is no consensus on the best approach to dealing with these differences in the context of skills mix and minimum minutes responsibilities.

There is support for relaxing the skills mix responsibilities (including 24/7 RNs) in some specialised services arising from genuine concerns that some services will not be viable under the new care minute responsibilities. The impact of this is already being seen in the 'star ratings' results for some RACFs. The contrasting view is that psychosocial care provided specific needs should be in addition to the skills mix specified in the care minutes responsibilities.

The variability in models of care and resident care needs both between and within specialised RACFs means that it is very difficult to predict the potential impact of any changes to the skills mix (or 24/7 RN) responsibilities. It is beyond the scope of this project to review the effectiveness or the appropriateness of individual models of care.

In this context, we recommend that the Dept consider conducting a study across a sample of specialised RACFs for homeless or Aboriginal and Torres Strait Islander residents. The primary aim of the study would be to review current models of care for this group of homes and develop a more sophisticated understanding of differences in staffing and other resource requirements. The study would inform ongoing policy development processes in this area.

The base care tariff in the AN-ACC funding model already includes additional funding to subsidise the known additional costs associated with specialised aged care services. The extent to which this additional funding is sufficient varies depending on the model of care operating at each aged care service. Residents in non-specialised RACFs often have significant psycho-social needs. Clinical complexity as measured by AN-ACC class should be the basis on which care minute responsibilities for individual residents are calculated.

8.4 Recommendations: Skills mix responsibilities for specialised aged care services

The following recommendations respond to the Part 2 of the project:

Recommendation 2.1

No changes should be made to the skills mix responsibility that was introduced on 1 October 2023 for specialised homeless or Aboriginal and Torres Strait Islander services or 'low acuity' RACFs. No changes should be made to the associated 24/7 RN responsibility that was introduced on 1 July 2023.

Recommendation 2.2

Conduct a one-off study across a sample of specialised RACFs for homeless or Aboriginal and Torres Strait Islander residents to review current models of care and differences in staffing and other resource requirements.

Recommendation 2.3

Care outcomes across specialised RACFs should be carefully monitored and evaluated to further inform the appropriateness of the skills mix arrangements and 24/7 RN responsibilities.

Recommendation 2.4

There should be support for the Aboriginal and Torres Strait Islander Health Workforce to increase the number of qualified practitioners and health workers and further develop and establish employment opportunities in residential aged care.

Recommendation 2.5

Any future changes to the direct care minute targets or skills mix responsibilities for specialised RACFs need to be considered in the context of the AN-ACC funding model and the appropriateness of the models of care that are in place.

9 Evaluation framework

This Section presents a proposed Monitoring and Evaluation Framework (MEF) for the alternative arrangements in place to support the provision of clinical care of residents in aged care settings which are in the process of transitioning towards meeting legislated staffing responsibilities.

The MEF provides a comprehensive approach to monitoring and evaluation as well as building the evidence base regarding clinical arrangements that can be implemented to support quality and safe outcomes for residents and staff. The evaluation strategies form the basis for monitoring that can be refined to address emerging developments in this area.

9.1 Monitoring and Evaluation Framework (MEF)

The MEF draws on the CHSD evaluation framework (Masso et al. 2017) and the Commonwealth Performance Framework (Department of Finance 2023). It considers the impacts and outcomes of the alternative arrangements across three levels:

- **Level 1: Residents and family** members of RACFs that are transitioning towards meeting legislated staffing responsibilities.
- **Level 2: Staff** involved in delivering clinical care, including RACF employees as well as external health professionals contracted to deliver clinical support.
- **Level 3: System** comprising **approved providers** and **government agencies**.

9.2 Evaluation questions

The MEF comprises a series of questions, data inputs and processes designed to ensure that aged care residents are provided with clinical care appropriate to their needs. It draws on reporting requirements already in place as well introducing additional items to support monitoring of resident outcomes and operational considerations.

The MEF also addresses issues of concern raised within the Royal Commission, such as timeliness of clinical care provision for residents in RACFs in regional and remote areas (Research Paper 16) and inter-jurisdictional arrangements to support partnership arrangements between local health and aged care services (Research Paper 7).

The questions in the MEF aim to unpack the overall objectives of the legislation to ensure appropriate clinical arrangements are in place to support safe, quality care for residents. The questions are structured to capture the impacts and outcomes across the three levels described above.

The first series of questions (Level 1) focus on the needs of residents within the RACF. Questions relate to the number and nature of residents with complex clinical needs; how and with what effect these needs are being met; and satisfaction of residents and families. Data to address these questions will draw on a mix of routinely collected data that is provided to the Department and the Commission, as well as additional purpose-developed reporting processes.

The second series of questions (Level 2) considers the impact and outcomes for RACF staff, as well as health professionals contracted to support the delivery of clinical care. Questions relate to the staffing profile and usual rostering arrangements; alternative arrangements for providing complex clinical care in the absence of an RN on duty; and staff development initiatives. Data to address these questions will be predominantly drawn from purpose-developed reporting processes.

The third series of questions (Level 3) considers broader processes in order to assess the impacts and outcomes for approved providers and government agencies. For providers, questions relate to contractual arrangements in place to facilitate oversight and/or direct provision of clinical care; clinical governance; and recruitment and capacity building activities undertaken. Data to address these questions will be predominantly drawn from purpose-developed reporting processes. Questions for government agencies

relate to: policy and program implications; inter-jurisdictional and stakeholder relationships; and legislative accountabilities. Data to address these questions will predominantly be derived from existing reporting processes.

9.2.1 Data and reporting

As noted above, the data to address the evaluation questions will be drawn from a mix of routine and purpose-developed reporting processes. Routine data sources include the Government Provider Management System (GPMS) Provider Operations Reporting (e.g., finance, governance, complaints and feedback), ACQSC (e.g., accreditation, clinical indicators, complaints, serious incidents) and Services Australia Aged Care Provider Portal (resident classifications).

We have also developed a Draft Provider Reporting Template to support approved providers collate the relevant information which can be drawn on to address the evaluation questions. The template builds on the items captured in the initial '24/7 RN Exemption Application Form', providing a comprehensive reporting format that can be routinely updated and reviewed. In the main, we recommend resident outcomes are monitored quarterly, while operational processes and outcomes be reviewed six monthly.

The MEF is presented in Table 8 below. The proposed reporting template is provided at Appendix 9.

Table 8 Alternative Arrangements - Monitoring and Evaluation Framework

Question	Information required	Data source: Existing	Data source: Draft Provider Reporting Template	Reporting frequency
Level 1: Processes, impacts and outcomes for residents				
1.1 Have clinical care needs of residents been addressed while the residential aged care facility (RACF) is transitioning to meet legislated staffing responsibilities?	Number of residents in the RACF Number of residents requiring specialist clinical care Type of care required: e.g., S8 medication, complex wound management, blood or IV infusion, palliative/end of life care Staffing mix reflects resident case-mix RACF compliance with quality and safety requirements	Star Ratings: Staffing sub-category. Provider Operations Reporting (POR) <ul style="list-style-type: none"> Governing Body statement Aged Care Quality and Safety Commission (ACQSC) <ul style="list-style-type: none"> Accreditation National Quality Indicator program data Complaints 		Baseline and then 3 monthly thereafter " " " 6 monthly

Question	Information required	Data source: Existing	Data source: Draft Provider Reporting Template	Reporting frequency
1.2 How are the care needs being met during the time in which the RACF is transitioning to meet legislated staffing responsibilities?	Frequency of call-outs per resident Reasons for call-outs e.g., Routine care; unexpected deterioration/incident; specialization required Outcomes of call-outs e.g., Usual care; Resolution of clinical concern; Transfer to hospital/ambulance; Death; Other		Question 7	3 monthly
1.3 Are residents and their families confident that care needs will be met during this time?	Resident agreements/notices Resident satisfaction/experience	GPMS:POR - Feedback, Complaints and Improvements	Question 3	Baseline, then 6 monthly thereafter
1.4 Have there been any unexpected consequences for residents?	RACF resident casemix profile - distribution of resident AN-ACC scores and changes over time Serious Incidents - types, impacts and outcomes	AN-ACC classifications of residents in care ACQSC Serious Incident Response Scheme	Question 7	Baseline, then 3 monthly thereafter
Level 2: Staff – RACF employees as well as external health professionals delivering clinical support				
2.1 What is the usual staff profile of the RACF?	Roster for care, clinical and allied health staff	QFR care time data	Question 4	Baseline
2.2 What alternative arrangements have been established to ensure care needs are met while the RACF is transitioning to meet legislated staffing responsibilities?	RN Position Description (PD) articulates on-call requirements Contracts /MOUs established with alternative clinical and allied health providers Protocols established to ensure timely access to resident records Access to and experience in use of technology		Question 4 Question 5	Baseline, then 6 monthly thereafter

Question	Information required	Data source: Existing	Data source: Draft Provider Reporting Template	Reporting frequency
Registered Nurse in person (staff, agency) Phone/video General Practitioner, Nurse Practitioner In person, telephone/video Specialist health In person, telephone/video	Contingency plans		Question 6 Question 8 Question 6	
2.3 Are all personnel (staff and non-staff) who deliver and/or oversee the delivery of complex clinical care for residents familiar with the residents' needs, RACF operational context and its policies and procedures?	Contracts/MOUs with local health services Inter-operability (?) of medical / resident client records / MyHealthRecord For in-person consultations, travel time is factored into response protocols		Question 5 Question 6 Question 6 Question 5	Baseline, then 6 monthly thereafter
2.4 Are staff familiar with and confident in using the alternative arrangements developed to support complex clinical care delivery during times when RACFs are unable to meet legislated	Protocols established to ensure timely access to alternative arrangements (e.g., care pathways, escalation protocols, contingency plans) Access to and experience in use of telephone/video technology Staff surveys		Question 6 Question 8	Baseline, then 6 monthly thereafter

Question	Information required	Data source: Existing	Data source: Draft Provider Reporting Template	Reporting frequency
staffing responsibilities?			Question 7	
2.5 Are there any unexpected consequences for staff and non-staff delivering complex clinical care?	<p>Staff changes during reporting period, including</p> <ul style="list-style-type: none"> Key personnel Clinical and care staff <p>Stakeholder feedback (unions, professional and/or provider groups)</p>	GPMS: POR Governing Body statement	<p>Questions 1, 2 and 7</p> <p>Question 7</p>	<p>Baseline, then 3 monthly thereafter</p> <p>As above, and as required</p>
Level 3: System, comprising approved providers and government agencies				
3.1 What administrative and clinical governance arrangements has the approved provider put in place to ensure complex clinical care needs are met during times when legislated staffing responsibilities cannot be met?	<p>Operational policies indicating communication, engagement and remuneration processes associated with delivering on-call health and allied health care e.g., MOUs with local health services, clinical pathways</p> <p>Costs associated with alternative arrangements</p>	Quarterly Financial Reporting	<p>Question 6</p> <p>Question 7</p>	<p>Baseline, then 6 monthly thereafter</p> <p>3 monthly</p>
3.2 What strategies have been implemented to address workforce shortages in the RACF?	<p>Recruitment activities (advertisements, participation in job fairs/trade displays) and associated costs</p> <p>Training and development activities for staff who want to upskill in clinical care</p>		<p>Question 8</p> <p>Question 8</p>	Baseline, then 6 monthly thereafter
3.3 Has the approved provider demonstrated an ongoing commitment to development opportunities to enhance the	<p>Participation rates in:</p> <p>government initiatives (e.g., Workforce Advisory Service, Business Advisory Service)</p> <p>Board/governance/executive leadership activities</p>		Question 8	Baseline, then 6 monthly thereafter

Question	Information required	Data source: Existing	Data source: Draft Provider Reporting Template	Reporting frequency
operational sustainability?				
3.4 Does the exemption framework reflect the range of contexts where on-call arrangements are required?	Exemption request rationales, acceptances, refusals by target group (small rural and remote, co-located, specialised, low acuity)	Department of Health and Aged Care (DOHAC) administrative and program data	As per program review / legislative / administrative requirements	Annually or more frequently, as required
3.5 What inter-jurisdictional activities have been undertaken to support implementation of health service engagement with RACFs at the local level?	Agendas and outcomes of relevant bodies/activities, e.g., Health Chief Executives Forum (HCEF), Aged Care Taskforce, National Strategy for the Care and Support Economy	As above		
	Profile of exemptions over time, by target group (small rural and remote, co-located, specialised, low acuity)	As above		
3.6 Are issues emerging from the implementation of the exemption framework being incorporated in ongoing policy and program considerations?	Correspondence received (Departmental and Ministerial) – number, subjects, responses - by target group	As above		
3.7 Have there been any changes in quality and safety for residents of RACFs with staffing exemptions?	Accreditation, by target group Complaints received, by target group Sanctions, by target group	Aged Care Quality and Safety Commission		Annually or more frequently as required

References

- ACQSC 2023, Regulatory Bulletin: Workforce-related responsibilities – including 24/7 registered nurse and care minutes, by Aged Care Quality and Safety Commission, Australian Government.
- Amadoru, S, Rayner, J-A, Joseph, R & Yates, P 2018, 'Factors influencing decision-making processes for unwell residents in residential aged care: Hospital transfer or Residential InReach referral?', *Australasian Journal on Ageing*, vol. 37, no. 2, pp. E61-E7.
- Anderson, J & Malone, L 2014, 'Suitability of the multi-purpose service model for rural and remote communities of Australia', *Asia Pacific Journal of Health Management*, vol. 9, no. 3, pp. 14-8.
- Arendts, G, Deans, P, O'Brien, K, Etherton-Beer, C, Howard, K, Lewin, G & Sim, M 2018, 'A clinical trial of nurse practitioner care in residential aged care facilities', *Archives of Gerontology and Geriatrics*, vol. 77, pp. 129-32.
- Australian College of Nursing 2021, Skill mix in residential aged care facilities.
- Australian Institute of Health and Welfare 2023, MyHospitals mapping details, <https://myhospitalsapi.aihw.gov.au/api/v1/reporting-units-downloads/mappings>.
- Australian Nursing and Midwifery Federation 2021, Role boundaries in the provision of personal care: ANMF Policy, <https://www.anmf.org.au/media/si2jfrqw/p_role_boundaries.pdf>.
- Brooke, NJ 2011, 'Needs of Aboriginal and Torres Strait Islander clients residing in Australian residential aged-care facilities', *The Australian journal of rural health*, vol. 19, no. 4, pp. 166-70.
- Brühl, A, Planer, K & Hagel, A 2018, 'Variation of care time between nursing units in classification-based nurse-to-resident ratios: A multilevel analysis', *Inquiry (United States)*, vol. 55.
- Bryan, SB, Murphy, JM, Kuramoto, L, Ayas, N, Baumbusch, Balka, E, Mitton, C, Harrington, C, Globerman, J & McGegor, MJ 2010, A Systematic Review of Research Evidence on: (a) 24-hour Registered Nurse Availability in Long-term Care, and (b) the Relationship between Nurse Staffing and Quality in Long-term Care. , Final report for Canadian Institutes for Health Research Expedited Knowledge Synthesis Program; Commissioning province: Saskatchewan.
- Castle, NG 2002, 'Low-care residents in nursing homes: the impact of market characteristics', *Journal of health & social policy*, vol. 14, no. 3, pp. 41-58.
- Chan, DKY, Liu, FX, Irwanto, D, Prasetyo, D, Ozorio, G, Li, F, Smith, M, Sharma, A & Chen, J 2018, 'Experience of establishing an acute geriatric outreach service versus subacute service to nursing homes', *Internal medicine journal*, vol. 48, no. 11, pp. 1396-9.
- Chandler, M, Madison, J & Han, G 2005, 'Australian residential aged care: skills mix and funding post 1997 reforms', *Geriatrics*, vol. 23, no. 1, pp. 5-11.
- Chou, S-C, Boldy, DP & Lee, AH 2002a, 'Staff satisfaction and its components in residential aged care', *International Journal for Quality in Health Care*, vol. 14, no. 3, pp. 207-17.
- Chou, S-C, Boldy, DP & Lee, AH 2002b, 'Resident satisfaction and its components in residential aged care', *The Gerontologist*, vol. 42, no. 2, pp. 188-98.
- Chróinin, DN, Anthony, A, Acosta, RM, Thambyaiyah, D, Hasan, N & Patil, A 2023, 'Residential Aged Care Facilities During the COVID-19 Pandemic: A Staff Survey on Impact and Resources', *Journal of Gerontological Nursing*, vol. 49, no. 3, pp. 13-7.
- Clark, S, Parker, R, Prosser, B & Davey, R 2013, 'Aged care nurse practitioners in Australia: evidence for the development of their role', *Australian Health Review*, vol. 37, no. 5, pp. 594-601.
- Cloutier, D, Cox, A, Kampen, R, Kobayashi, K, Cook, H, Taylor, D & Gaspard, G 2016, 'A Tale of Two Sites: Lessons on Leadership from the Implementation of a Long-term Care Delivery Model (CDM) in Western Canada', *Healthcare (Basel, Switzerland)*, vol. 4, no. 1.
- Collins, R, Charles, J, Moser, A, Birmingham, B, Grill, A & Gottesman, M 2020, 'Improving medical services in Canadian long term care homes', *Canadian Family Physician*.
- Conway, J, Higgins, I, Hullick, C, Hewitt, J & Dilworth, S 2015, 'Nurse-led ED support for residential aged care facility staff: an evaluation study', *Int Emerg Nurs*, vol. 23, no. 2, pp. 190-6.

- Cookson, D 2017, Mandated nursing staff to resident ratios in aged care - Summary of evidence, New Zealand Nurses Organisation, Wellington.
- Cornell, PY, Zhang, W & Thomas, KS 2020, 'Changes in Long-Term Care Markets: Assisted Living Supply and the Prevalence of Low-Care Residents in Nursing Homes', *Journal of the American Medical Directors Association*, vol. 21, no. 8, pp. 1161-.
- Craswell, A, Coates, K, Johnston-Devin, C, Sriram, D, Broadbent, M & Wallis, M 2023, 'Developing a nurse practitioner to work in residential aged care: A qualitative evaluative study', *Collegian*.
- Dai, J, Liu, F, Irwanto, D, Kumar, M, Tiwari, N, Chen, J, Xu, Y, Smith, M & Chan, DK 2021, 'Impact of an acute geriatric outreach service to residential aged care facilities on hospital admissions', *Aging medicine (Milton (N.S.W.))*, vol. 4, no. 3, pp. 169-74.
- Dai, Z 2023, 'Telehealth in long-term care facilities during the Covid-19 pandemic – Lessons learned from patients, physicians, nurses and healthcare workers', *BMC Digital Health*, vol. 1, no. 1, p. 2.
- De Pietro, C, Camenzind, P, Edwards-Garavoglia, S, Spranger, A, Wittenbecher, F & Quesntin, W 2015, Switzerland: Health system review, European Observatory on Health Systems and Policies.
- Department of Finance 2023, Commonwealth Performance Framework, <<https://www.finance.gov.au/government/managing-commonwealth-resources/planning-and-reporting/commonwealth-performance-framework>>.
- Department of Health and Aged Care 2022a, Aged care service list: 30 June 2022, <https://www.gen-agedcaredata.gov.au/resources/access-data/2022/october/aged-care-service-list-30-june-2022>.
- Department of Health and Aged Care 2022, Guiding principles for medication management in residential aged care facilities, Commonwealth of Australia (Department of Health and Aged Care), <<https://www.health.gov.au/resources/publications/guiding-principles-for-medication-management-in-residential-aged-care-facilities?language=en>>.
- Department of Health and Aged Care 2023, Care minutes and 24/7 registered nurse responsibility guide, Commonwealth of Australia (Department of Health and Aged Care), <<https://www.health.gov.au/resources/publications/care-minutes-and-247-registered-nurse-responsibility-guide>>.
- Department of Health Social Services and Public Safety 2022, Care Standards for Nursing Homes., accessed 21 Aug 2023 <https://www.rqia.org.uk/RQIA/files/7d/7dec5d24-796a-440a-9a60-7deb7112c994.pdf> Northern Ireland.
- Donnelly, D & Finch, J 2017, 'PROACT - A Journey of Integration& Collaboration of Health Services into Residential Aged Care', *International Journal of Integrated Care (IJIC)*, vol. 17, pp. 1-2.
- Dwyer, T, Craswell, A, Rossi, D & Holzberger, D 2017, 'Evaluation of an aged care nurse practitioner service: quality of care within a residential aged care facility hospital avoidance service', *BMC Health Services Research*, vol. 17, pp. 1-11.
- Dyer S, Valeri M, Arora N, Ross T, Winsall M, Tilden D & Crotty M 2020, Review of international systems of long-term care of older people, Royal Commission into Aged Care Quality and Safety.
- Dyer, S, van den Berg, M, Barnett, K, Brown, A, Johnstone, G, Laver, K, Lowthian, J, Maeder, A, Meyer, C, Moores, C, Ogrin, R, Parrella, A, Ross, T, Shulver, W, Winsall, M & Crotty, M 2019, Review of Innovative Models of Aged Care, Adelaide, Australia.
- El-Masri, MM, Omar, A & Groh, EM 2015, 'Evaluating the Effectiveness of a Nurse Practitioner-Led Outreach Program for Long-Term-Care Homes', *The Canadian journal of nursing research = Revue canadienne de recherche en sciences infirmieres*, vol. 47, no. 3, pp. 39-55.
- Fan, L, Hou, X-Y, Zhao, J, Sun, J, Dingle, K, Purtill, R, Tapp, S & Lukin, B 2016, 'Hospital in the Nursing Home program reduces emergency department presentations and hospital admissions from residential aged care facilities in Queensland, Australia: a quasi-experimental study', *BMC Health Services Research*, vol. 16, no. 1, p. 46.
- Federal Ministry of Health 2016, Germany's Long Term Care Strengthening Acts Federal Ministry of Health, Germany. , viewed 8 September 2023, <<https://www.bundesgesundheitsministerium.de/en/topics/topics/long-term-care/germanys-long-term-care-strengthening-acts.html>>.
- Gayot, C, Laubarie-Mouret, C, Zarca, K, Mimouni, M, Cardinaud, N, Luce, S, Tovenia, I, Durand-Zaleski, I, Laroche, M-L, Preux, P-M & Tchalla, A 2022, 'Effectiveness and cost-effectiveness of a telemedicine programme for preventing

unplanned hospitalisations of older adults living in nursing homes: the GERONTACCESS cluster randomized clinical trial', *BMC geriatrics*, vol. 22, no. 1, p. 991.

Gilbert, A, Owusu-Addo, E, Feldman, P, Mackell, P, Garratt, S & Brijnath, B 2020, *Models of Integrated Care, Health and Housing: Report prepared for the Royal Commission into Aged Care Quality and Safety*, National Ageing Research Institute, Parkville, Australia.

Grant, KL, Lee, DD, Cheng, I & Baker, GR 2020, 'Reducing preventable patient transfers from long-term care facilities to emergency departments: a scoping review', *CJEM*, vol. 22, no. 6, pp. 844-56.

Graverholt, B, Forsetlund, L & Jamtvedt, G 2014, 'Reducing hospital admissions from nursing homes: a systematic review', *BMC Health Services Research*, vol. 14, no. 1, pp. 1-8.

Gray, LC, Edirippulige, S, Smith, AC, Beattie, E, Theodoros, D, Russell, T & Martin-Khan, M 2012, 'Telehealth for nursing homes: the utilization of specialist services for residential care', *Journal of Telemedicine and Telecare*, vol. 18, no. 3, pp. 142-6.

Gruber, EM, Zeiser, S, Schröder, D & Büscher, A 2021, 'Workforce issues in home- and community-based long-term care in Germany', *Health Soc Care Community*, vol. 29, no. 3, pp. 746-55.

Haines, TP, Palmer, AJ, Tierney, P, Si, L & Robinson, AL 2020, 'A new model of care and in-house general practitioners for residential aged care facilities: a stepped wedge, cluster randomised trial', *Medical Journal of Australia*, vol. 212, no. 9, pp. 409-15.

Hullick, C, Conway, J, Hall, A, Murdoch, W, Cole, J, Hewitt, J, Oldmeadow, C & Attia, J 2022, 'Video-telehealth to support clinical assessment and management of acutely unwell older people in Residential Aged Care: a pre-post intervention study', *BMC geriatrics*, vol. 22, no. 1, p. 40.

Hullick, C, Conway, J, Higgins, I, Hewitt, J, Dilworth, S, Holliday, E & Attia, J 2016, 'Emergency department transfers and hospital admissions from residential aged care facilities: a controlled pre-post design study', *BMC geriatrics*, vol. 16, pp. 1-10.

Hutchinson, AF, Parikh, S, Tacey, M, Harvey, PA & Lim, WK 2015, 'A longitudinal cohort study evaluating the impact of a geriatrician-led residential care outreach service on acute healthcare utilisation', *Age and ageing*, vol. 44, no. 3, pp. 365-70.

Independent Health and Aged Care Pricing Authority 2023, *Residential Aged Care Pricing Advice 2023-24: Technical Specifications*, Commonwealth of Australia (Independent Health and Aged Care Pricing Authority), <<https://www.ihacpa.gov.au/resources/residential-aged-care-pricing-advice-2023-24>>.

Jennings, N, Lowe, G & Tori, K 2021, 'Nurse practitioner locums: a plausible solution for augmenting health care access for rural communities', *Australian Journal of Primary Health*, vol. 27, no. 1, pp. 1-5.

Keelan, K, Pitama, S, Wilkinson, T & Lacey, C 2021, 'Indigenous peoples' experiences and preferences in aged residential care: a systematic review', *AlterNative*, vol. 17, no. 2, pp. 175-82.

Kontunen, PJ, Holstein, RM, Torkki, PM, Lang, ES & Castrén, MK 2023, 'Acute outreach service to nursing homes: A systematic review with GRADE and triple aim approach', *Scandinavian Journal of Caring Sciences*, vol. 37, no. 2, pp. 582-94.

Kroneman, M, Boerma, W, van den Berg, M, Groenewegen, P, de Jong, J & van Ginneken, E 2016, 'The Netherlands: health system review.', *Health Systems in Transition*, vol. 18, no. 2, pp. 1-239.

Lau, L, Chong, CP & Lim, WK 2013, 'Hospital treatment in residential care facilities is a viable alternative to hospital admission for selected patients', *Geriatrics & Gerontology International*, vol. 13, no. 2, pp. 378-83.

Lloyd, T, Wolters, A & Steventon, A 2017, *Technical appendix: The impact of providing enhanced support for care home residents in Rushcliffe*, London: The Health Foundation.

Masso, M & Thompson, C 2014, *Nurse practitioners in NSW 'Gaining Momentum': rapid review of the nurse practitioner literature*, University of Wollongong.

May, S, Jonas, K, Fehler, GV, Zahn, T, Heinze, M & Muehlensiepen, F 2021, 'Challenges in current nursing home care in rural Germany and how they can be reduced by telehealth - an exploratory qualitative pre-post study', *BMC Health Services Research*, vol. 21, no. 1, pp. 1-10.

- McVay, D 2023a, World Health Systems Facts – Netherlands: Long-Term Care viewed 24 August 2023, <<https://healthsystemsfacts.org/national-health-systems/bismarck-model/netherlands/netherlands-long-term-care/>>.
- Ministry of Health 2023, Sector Guidance for Ngā Paerewa Health and Disability Services Standard (NZS 8134:2021). Part 2: Workforce and Structure., New Zealand Government, <<https://www.health.govt.nz/our-work/regulation-health-and-disability-system/certification-health-care-services/services-standard/resources-nga-paerewa-health-and-disability-services-standard/sector-guidance-nga-paerewa-health-and-disability-services-standard-nzs-81342021/part-2>>.
- Mor, V, Zinn, J, Gozalo, P, Feng, Z, Intrator, O & Grabowski, DC 2007, 'Prospects for transferring nursing home residents to the community', Health Affairs, vol. 26, no. 6, pp. 1762-71.
- Mueller, C, Arling, G, Kane, R, Bershadsky, J, Holland, D & Joy, A 2006, 'Nursing home staffing standards: their relationship to nurse staffing levels', Gerontologist, vol. 46, no. 1, pp. 74-80.
- Munyisia, EN, Yu, P & Hailey, D 2011, 'How nursing staff spend their time on activities in a nursing home: an observational study', Journal of Advanced Nursing (John Wiley & Sons, Inc.), vol. 67, no. 9, pp. 1908-17.
- Ness, TM, Söderberg, S & Hellzén, O 2020, 'The same care providers over time who make individual adjustments and have competence' Older South Sami People in Sweden's expectations of home nursing care', Scandinavian Journal of Caring Sciences, vol. 34, no. 1, pp. 181-9.
- Neumayer, B, Chapman, J & Whiteford, G 2003, 'Role of multi-purpose service programs providing residential aged care in rural Australia: a discussion paper', Australian Journal of Rural Health, vol. 11, no. 6, pp. 287-91.
- Nursing and Midwifery Board of Australia 2016a, Enrolled nurse standards for practice, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/enrolled-nurse-standards-for-practice.aspx>>.
- Nursing and Midwifery Board of Australia 2016a, Enrolled nurse standards for practice, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/enrolled-nurse-standards-for-practice.aspx>>.
- Nursing and Midwifery Board of Australia 2016b, Registered nurse standards for practice, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/registered-nurse-standards-for-practice.aspx>>.
- Nursing and Midwifery Board of Australia 2020, Decision-making framework for nursing and midwifery, <<https://www.nursingmidwiferyboard.gov.au/codes-guidelines-statements/frameworks.aspx>>.
- Nursing and Midwifery Board of Australia 2022, Fact sheet: Scope of practice and capabilities of nurses and midwives, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Fact-sheet-scope-of-practice-and-capabilities-of-nurses-and-midwives.aspx>>.
- Nursing and Midwifery Board 2022a, Fact sheet: Enrolled nurses and medicines administration, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Enrolled-nurses-and-medicine-administration.aspx>>.
- Pennington, KR, Clark, KD & Knight, S 2020, 'A bitter pill to swallow: registered nurses and medicines regulation in remote Australia', Rural and Remote Health, vol. 20, no. 4.
- Perry, M, Carpenter, I, Challis, D & Hope, K 2003, 'Understanding the roles of registered general nurses and care assistants in UK nursing homes', J Adv Nurs, vol. 42, no. 5, pp. 497-505.
- Peters, MD 2023, 'Recognising and supporting the role of enrolled nurses in Australian nursing homes', The Medical Journal of Australia, vol. 218, no. 6, pp. 284-.
- Reed, RL 2015, 'Models of general practitioner services in residential aged care facilities', Australian Family Physician, vol. 44, no. 4, pp. 176-9.
- Richardson, B & Bartlett, H 2009, 'The impact of ageing-in-place policies on structural change in residential aged care', Australasian Journal on Ageing, vol. 28, no. 1, pp. 28-31.
- Rowlands, A, Poulos, R, Agalotis, M, Faux, S, Raguz, A & Poulos, C 2020, 'Designing residential aged care for people at risk of, or experiencing, homelessness: An exploratory Australian study', Health and Social Care in the Community, vol. 28, no. 5, pp. 1743-53.

Royal Commission into Aged Care Quality and Safety 2021, Final Report: Care, Dignity and Respect.

Schwartz, S 2019, Educating the nurse of the future: report of the independent review of nursing education, Department of Health Canberra, Australia.

Shippee, TP, Fabius, CD, Fashaw-Walters, S, Bowblis, JR, Nkimbeng, M, Bucy, TI, Duan, Y, Ng, W, Akosionu, O & Travers, JL 2022, 'Evidence for Action: Addressing Systemic Racism Across Long-Term Services and Supports', J Am Med Dir Assoc, vol. 23, no. 2, pp. 214-9.

Sivertsen, N, Harrington, A & Hamiduzzaman, M 2020, 'Two-eyed seeing': the integration of spiritual care in Aboriginal residential aged care in South Australia', Journal of Religion, Spirituality & Aging, vol. 32, no. 2, pp. 149-71.

Slaugh, VW, Scheller-Wolf, AA & Tayur, SR 2018, 'Consistent staffing for long-term care through on-call pools', Production and Operations Management, vol. 27, no. 12, pp. 2144-61.

Smith, K, Grundy, JJ & Nelson, HJ 2010, 'Culture at the centre of community based aged care in a remote Australian Indigenous setting : A case study of the development of Yuendumu Old People's Programme', Rural and Remote Health, vol. 10, no. 4, pp. 234-48.

Sturney, I 2020, International Health Care System Profiles: Switzerland, Swiss Health Observatory.

Sunner, C, Giles, MT, Kable, A & Foureur, M 2023, 'Does telehealth influence the decision to transfer residents of residential aged care facilities to emergency departments? A scoping review', International Journal of Older People Nursing, vol. 18, no. 1, p. e12517.

Sussman, T, Barken, R & Grenier, A 2020, 'Supporting older homeless persons' positive relocations to long-term care: Service provider views', Gerontologist, vol. 60, no. 6, pp. 1149-58.

Szebehely, M 2020, The impact of COVID-19 on long-term care in Sweden. , LTCcovid.org, Long-Term Care Policy Network, CPEC-LSE, 22 July 2020.

The Legislative Council Secretariat 2023, Fact Sheet: Residential long-term care services for the elderly in South Korea. FS03/2023, The Legislative Council Commission, https://app7.legco.gov.hk/rpdb/en/uploads/2023/FS/FS03_2023_20230621_en.pdf.

The Weekly Source 2023, Denmark limited construction of nursing homes in 1988 – leading to 30% drop in aged care beds DCM Media, <<https://www.theweeklysource.com.au/topic-aged-care/denmark-limited-construction-of-nursing-homes-in-1988-leading-to-30-drop-in-aged-care-beds>>.

Udesen, SEJ, Rasmussen, C-H, Mikkelsen, S, Andersen, N, Brabrand, M & Lassen, AT 2023, 'Mobile emergency department care to nursing home residents: a novel outreach service', Age & Ageing, vol. 52, no. 3, pp. 1-9.

Valk-Draad, MP & Bohnet-Joschko, S 2022, 'Nursing Home-Sensitive Hospitalizations and the Relevance of Telemedicine: A Scoping Review', International journal of environmental research and public health, vol. 19, no. 19.

Venturato, L & Drew, L 2010, 'Beyond 'doing': Supporting clinical leadership and nursing practice in aged care through innovative models of care', Contemporary Nurse, vol. 35, no. 2, pp. 157-70.

Wagg, A, Hoben, M, Ginsburg, L, Doupe, M, Berta, W, Song, Y, Norton, P, Knopp-Sihota, J & Estabrooks, C 2023, 'Safer Care for Older Persons in (residential) Environments (SCOPE): a pragmatic controlled trial of a care aide-led quality improvement intervention', Implement Sci, vol. 18, no. 1, p. 9.

Warnes, AM & Crane, MA 2000, 'The achievements of a multiservice project for older homeless people', Gerontologist, vol. 40, no. 5, pp. 618-26.

Wei, Z & Richardson, S 2010, 'Are older workers less productive? A case study of aged care workers in Australia*', Economic Record, vol. 86, no. SUPPL. 1, pp. 115-23.

Appendix 1: Recommendation 86: Minimum staff time standard for residential care

The following is an excerpt from the final report of the Royal Commission into Aged Care Quality and Safety (Royal Commission into Aged Care Quality and Safety 2021):

Recommendation 86: Minimum staff time standard for residential care

1. The Australian Government should require approved providers of RACFs to meet a minimum staff time quality and safety standard. This requirement should take the form of a quality and safety standard for residential aged care. The minimum staff time standard should allow approved providers to select the appropriate skills mix for delivering high quality care in accordance with their model of care.
2. From 1 July 2022, the minimum staff time standard should require approved providers to engage registered nurses, enrolled nurses, and personal care workers for at least 200 minutes per resident per day for the average resident, with at least 40 minutes of that staff time provided by a registered nurse.
3. In addition, from 1 July 2022, the minimum staff time standard should require at least one registered nurse on site per RACF for the morning and afternoon shifts (16 hours per day).
4. From 1 July 2024, the minimum staff time standard should increase to require approved providers to engage registered nurses, enrolled nurses, and personal care workers for the average resident for at least 215 minutes per resident per day for the average resident, with at least 44 minutes of that staff time provided by a registered nurse.
5. In addition, from 1 July 2024, the minimum staff time standard should require at least one registered nurse on site per RACF at all times.
6. The minimum staff time standard should be linked to the casemix-adjusted activity based funding model for RACFs. This means that approved providers with a higher than average proportion of high needs residents would be required to engage additional staff, and vice versa.
7. Approved providers should be able to apply to the System Governor for an exemption from the quality and safety standard relating to staff skills mix, but not the standard relating to numbers of staff. Any exemption should be granted for a limited time, and details of the exemption should be published on My Aged Care. The grounds for granting an exemption should include:
 - (a) specific purpose RACFs, such as specialist homeless RACFs, where the profile of the residents is such that it may be appropriate to substitute a registered nurse with another qualified health professional
 - (b) RACFs that are co-located with a health service, such as Multi-Purpose Services, where registered and enrolled nurses are present at the co-located health service
 - (c) regional, rural and remote RACFs, where the approved provider can demonstrate it has been unable to recruit sufficient numbers of staff with the requisite skills, and
 - (d) RACFs where an alternative skills mix is being trialled and it would be appropriate to substitute a registered nurse with another qualified health professional. There should be a requirement for any such trial to be comprehensively evaluated and publicly reported.
8. The Australian Commission on Safety and Quality in Health and Aged Care should review and update this standard as appropriate. At a minimum, this should occur in line with significant revisions of the casemix classification for RACFs, or at least every five years.

Appendix 2: Care minutes and 24/7 registered nurse responsibilities

The following information provides a brief summary of mandatory care minutes and the 24/7 nursing responsibilities, including an overview of who is regarded as a care worker and their responsibilities under the proposed changes.

Care Workers

Under the care minutes responsibilities that have been implemented, care can only be delivered by registered nurses (RN), enrolled nurses (EN), personal care workers (PCW) and assistants in nursing (AIN). Details of each aged care occupation (as specified by the Department of Health and Aged Care and the Aged Care Quality and Safety Commission) are shown below (Aged Care Quality and Safety Commission 2023; Department of Health and Aged Care 2023):

Registered nurses

An RN (also known as Division 1 nurse in Victoria) is a person registered under the National Law (and continues to maintain their registration) as an RN in Australia. In general, RNs are expected to provide nursing care including complex patient assessment, care plan development and evaluation of care. The RN has supervisory responsibilities for ENs and PCW/AINs as well as delegating care and responsibilities to the care team.

Enrolled nurses

An EN (also known as a Division 2 nurse in Victoria) is a person registered under the National Law (and continues to maintain their registration) as an EN in Australia. In general, ENs provide nursing care as delegated by the RN which includes but not limited to patient assessment, wound management and administration of prescribed medications.

Personal care workers / Assistants in nursing

A PCW is an employee classified under the Aged Care Award 2010 or an equivalent enterprise agreement as an Aged Care employee Level 2 (Grade 1 PCW) to Aged Care employee Level 7 (Grade 5 PCW) (excluding Aged care employee Level 6), and an AIN (or Nursing Assistant) is an employee under the Nurses Award 2020.

In general, PCW/AINs assist with daily living routines and perform tasks as delegated by nurses. Activities of a PCW/AIN that can be reported as care minutes include assisting residents with:

- daily living routines and direct care activities (such as self-care or personal care) for example, assistance with eating and drinking, monitoring fluid intake, skin care, ambulation, bathing and washing, dressing, hair care, mouth care, positioning, shaving, bladder and bowel care (continence management), mobility and transfers (such as getting in and out of bed or to and from the toilet);
- social and emotional support for residents and their families, for example, supporting residents to be and feel connected, heard, valued and fulfilled;
- regular monitoring and support of residents' health and wellbeing.

PCWs and AINs do not have regulated minimum training requirements or ongoing professional development obligations, and are not subject to a registration or licensing system. Training for PCWs and AINs are provided by Australia's vocational and education training (VET) system and delivered by registered training organisations (RTOs). PCWs can gain aged care specific qualifications through VET including Certificate III in Individual Support (Ageing) and Certificate IV in Ageing Support. AINs generally require a Certificate III in Health Services Assistance or working towards another formal qualification in nursing (Aged Care Quality and Safety Commission 2023, p16).

While both PCW and AINs are unregulated professions and the job descriptions/role boundaries are largely defined by individual service providers, the Department of Health and Aged Care, Nursing and Midwifery Board of Ahpra, and the Australian Nursing and Midwifery Federation stipulate that all personal care must be

delivered under the decision making, guidance and supervision of senior nursing staff (RNs) (Australian Nursing and Midwifery Federation 2021; Department of Health and Aged Care 2023; Nursing and Midwifery Board of Australia 2020).

Care minutes/skills mix responsibilities and reporting

Introduced in October 2022, average care minutes targets are the minimum quantity of care required to be provided to residents in residential aged care services. From 1 October 2023, the mandatory provision of care minutes is 200 minutes per resident per day, including a minimum of 40 minutes of RN time per day. From 1 October 2024, the mandatory care minutes will increase to 215 minutes per resident per day, including a minimum of 44 minutes of RN time per day.

The sector-wide average care minutes targets shown above are the care minutes expected per resident per day, averaged across the sector. Where a service's care minutes target (automatically calculated based on the service's resident case mix in the previous quarter) differs from the sector-wide average target, the service is only expected to meet their service-level care minutes target.

Direct care minutes are calculated as an average score for each resident each quarter based on the following formula: Direct care hours/occupied bed days x 60. Only direct clinical and personal care activities provided by specified workers (RNs, ENs or PCWs/AINs) can be counted and all leave, lunch breaks and time spent on non-care tasks (rostering, service level admin, laundry, training, catering) must be excluded (Department of Health and Aged Care 2023). Assessments, care planning, arranging appointments and liaising with families are all activities that are included as direct care minutes (Department of Health and Aged Care 2023).

Providers are required to report average care minutes per resident to the Department of Health and Aged Care on a quarterly basis via the Quarterly Financial Report (QFR).

24/7 RN responsibility and reporting

From 1 July 2023, approved providers will be required to have an RN on-site and on duty at all times in each residential aged care facility (RACF). As set out in section 54-1A of the Aged Care Amendment (Implementing Care Reform) Act 2022, the delegate of the Secretary of the Department may grant an exemption from the responsibility for up to 12 months for RACFs that:

- Are located in a MM 5, 6 or 7 area;
- Have no more than 30 operational places;
- Have taken reasonable steps to ensure that the clinical care needs of consumers at the RACF will be met at all times during the period for which the exemption is in force.

All approved providers must submit a monthly report to the Department of Health and Aged Care on their compliance with the 24/7 RN responsibility (even where an exemption has been granted). This includes:

- reporting of every period of 30 minutes or more that an RN was not on-site and/or not on duty,
- the reason an RN was not on-site and/or on duty for each such period, and
- the alternative arrangements made to ensure that the clinical care needs of consumers were met while an RN was not on-site and/or on duty (or that alternative arrangements were not made) for each such period.

Monitoring

The Aged Care Quality and Safety Commission will actively monitor risks for consumers with regard to how approved providers are responding to their care minutes and 24/7 RN responsibilities, including where there are exemptions from the 24/7 RN responsibility (Aged Care Quality and Safety Commission 2023).

Appendix 3: Expert Reference Group membership

Name	Role/Organisation
Associate Professor Rob Gordon (Chair)	Director, Centre for Health Service Development, University of Wollongong
Dr Conrad Kobel	Senior Research Fellow, University of Wollongong
Ms Carol Loggie	Research Fellow, University of Wollongong
Ms Pam Grootemaat	Associate Research Fellow, University of Wollongong
Professor Susan Kurrle	Director, Cognitive Decline Partnership Centre, Faculty of Medicine and Health, University of Sydney
Ms Tanya McIver	Executive Manager, Residential Services, Warrina Homes
Ms Anne Liddell	Head of Policy, Aged and Community Care Providers Association (ACCPA)
Dr Melanie Wroth	Chief Clinical Advisor, Aged Care Quality and Safety Commission (ACQSC)
Ms Mary Quinlan	Executive Officer, Aged Care Workforce Remote Accord
Ms Julie Reeves	Federal Professional Officer, Australian Nurses and Midwives Federation (ANMF)
Ms Wendy Hubbard	General Manager, Australian Regional and Remote Community Services (ARRCS)
Ms Katherine Isbister	CEO, CRANA Plus
Ms Frances Rice	Senior Nurse Advisor, Department of Health and Aged Care
Ms Samara Rodway	Policy Officer, National Aboriginal and Torres Strait Islander Ageing and Aged Care Council (NATSIAACC)
Ms Tanya Vogt	Executive Officer, Nursing and Midwifery Board of Australia, Australian Health Practitioner Regulation Agency (Ahpra)
Mr Craig Gear	CEO, Older Persons Advocacy Network (OPAN)
Professor Claire Johnson	National Director, Palliative Aged Care Outcomes Program (PACOP)
Ms Catherine Ole	Nursing Director, Aged Care at South West Hospital, Queensland Health
Mr Phillip Goulding	General Manager, Aged Care, Wintringham Specialist Aged Care

Ex Officio

Name	Organisation
Ms Penny Philbrick	Department of Health and Aged Care
Ms Lorrae Paterson	Department of Health and Aged Care
Ms Fiona Brooke	Department of Health and Aged Care

Appendix 4: Expert Reference Group Terms of Reference

Purpose

The purpose of the Alternative arrangements for residential aged care staffing responsibilities project Expert Reference Group (the ERG) is to provide expert advice in relation to the development of recommendations for alternative staffing and skill mix arrangements for residential aged care.

Role and function

The Centre for Health Service Development (CHSD) at the University of Wollongong has been commissioned by the Department of Health and Aged Care to undertake research to support the implementation of effective, clinically appropriate and safe alternatives for use in specific circumstances in residential aged care. The project comprises two parts:

- Identify and recommend evidence-based alternative clinical arrangements for RACFs unable to provide 24/7 on-site and on duty RN care (referred to as 'alternative 24/7 RN arrangements').
- Identify and recommend alternative skills mix arrangements for specialised RACFs and RACFs co-located with a health service (referred to as 'alternative skills mix arrangements')

The ERG will be established to support the project team to address the key research questions for the project, including:

- Identify current and/or potential alternative 24/7 RN arrangements and alternative skills mix arrangements that ensure quality clinical care and safety of residents;
- Support the evidence review process through identifying potential research data that may not be readily accessible using traditional search strategies, and assist with interpretation ('sense-making') of research findings;
- Identify potential informants to participate in the stakeholder consultations (Phase 3 of this project);
- Support the development of recommendations, particularly in relation to relevant policy, practice and regulatory implications; and
- Confirm and socialise the project outcomes, through relevant industry, professional and consumer networks.

The role of the ERG is to provide advice to CHSD. It will not act as a decision-making body. Individual members may be asked to contribute to the project on specific matters as the need arises.

To support these functions, members of the ERG will act in a collegiate and collaborative manner when debating and resolving issues; and respect the confidentiality of the ERG's proceedings.

Membership and quorum

The ERG will be chaired by Associate Professor Rob Gordon, Director CHSD. Members will have expertise or experience relevant to the project, such as aged care nursing and aged care delivery in regional and remote areas.

Members of the ERG will be selected based on their individual expertise and will not be representatives of their respective organisation. As such, member proxies will not be permitted except in exceptional circumstances. Attendance by a proxy will be authorised by the Chairperson on a case-by-case basis. The Chairperson may choose to invite other individuals or groups to attend meetings as required.

A quorum is not required as the ERG's role is of an advisory nature only.

Remuneration arrangements

As necessary, CHSD will cover reasonable travel costs associated with participation in ERG meetings. ERG Members will not be paid sitting fees.

Timeframe and meeting requirements

The ERG will exist during the life span of the alternative arrangements for residential aged care staffing responsibilities project which is being undertaken between March 2023 and August 2023. Following the completion of the project, the ERG will cease.

The ERG is expected to meet between three and five times over the course of the project. The first meeting will occur on 31 May 2023 and will be held as a face-to-face meeting. This meeting will be used to confirm the key research questions and review the outcomes of the evidence review and environmental scan being undertaken by CHSD regarding potential examples where alternative arrangements are effectively applied.

Subsequent meetings will be scheduled approximately monthly and will be held by teleconference or as face-to-face meetings as determined appropriate by the Chairperson. If required, teleconferencing will also be available for face-to-face meetings for any members who are unable to attend in person.

The Chairperson will determine the format and/or location of the meetings as they occur. Meeting papers will be provided by CHSD prior to the meeting.

Confidentiality and transparency

The ERG considers and discusses material that should be considered to be of a sensitive and/or commercial nature. Members and attendees acknowledge their responsibility to maintain confidentiality of all information that is not in the public domain. Members or invited guests will be required to sign a Confidentiality Agreement.

Members will also be required to declare to the Chairperson any conflict of interest that may arise throughout the course of the project.

Appendix 5: Completed stakeholder consultations

Organisation	Stakeholder category
Aboriginal Community Services, SA	Provider
Aged Care Quality and Safety Commission	Regulator
ANMF Aged Care Working Group	Workforce
Australian Association of Gerontology	Peak organisation
Australian College of Nursing	Workforce
Cooinda Coonabarabran, NSW	Provider
Dementia Australia	Representatives of Older Australians
Goodwin Village, Donald, VIC	Provider
HammondCare Darlinghurst, NSW	Provider
Health Services Union	Workforce
Healthcare Australia	Workforce
Hunter New England Aged Care Emergency Service, Palliative Care and Care for Older People / Hunter New England and Central Coast Primary Health Network	Health services
Juniper Aged Care, WA	Provider
Juniper Gerdewoonem, Kununurra, WA	Provider
McLean Care	Provider
Mt View Homes, Booleroo Centre, SA	Provider
National Rural Health Alliance	Peak organisation
NSW Ambulance Services	Health services
NSW Nurses and Midwives' Association	Workforce
Older Persons Advocacy Network	Representatives of Older Australians
Partners in Cultural Aged Care Alliance	Representatives of Older Australians
Services for Australian Rural and Remote Allied Health	Peak organisation

Uniting - Aged Care Services	Provider
Uniting Annarsley, NSW	Provider
Victorian regional aged care homes (AdventCare, Eventide, Moyola, Sunnyside House, Dunmunkle Lodge, Goodwin Village, Edgarley Assisted Living, Kellock Lodge, Aberlea Mortlake)	Provider
WA Country Health Service	Health services

Appendix 6: Academic literature review

Introduction

Following the outcomes of the Royal Commission into Aged Care Quality and Safety, The Department of Health and Aged Care (The Department) has undertaken a raft of measures aimed at improving the delivery and experience of aged care in Australia. Safe and adequate levels of staffing are an important aspect of the delivery and experience of aged care. One such staffing measure is that from 1 July 2023, approved providers will be required to have an RN on-site and on duty at all times in each RACF. The Department may grant an exemption from this responsibility for up to 12 months for RACFs that meet specific criteria including:

- Are located in a MM 5, 6 or 7 area;
- Have no more than 30 operational places; and
- Have taken reasonable steps to ensure that the clinical care needs of consumers at the RACF will be met at all times during the period for which the exemption is in force.

The Centre for Health Service Development (CHSD) had been commissioned by the Department of Health and Aged Care to undertake the 'Alternative arrangements for residential aged care staffing responsibilities' project to support the implementation of the government's staffing responsibilities for RACFs.

To ensure that the project is underpinned by strong evidence we conducted a review of the peer reviewed literature to capture current developments for alternative clinical arrangements for RACFs that are unable to meet the 24/7 RN responsibility. This review includes an outline of the methodology used to conduct our search of the academic literature, the results of our search, the main findings and a short discussion relating to the findings.

Methods

Search strategy

The search strategy for this evidence review was developed with assistance from a university research librarian. Databases interrogated for the review included CINAHL, PsycINFO, Medline and Scopus. The electronic search of CINAHL, PsycINFO and Medline was carried out using EBSCOhost, an online database. Scopus was searched via the University of Wollongong's library database.

Eligibility criteria included all peer-reviewed literature published from the year 2000 to present in English language. Search terms used are highlighted in Table 9. Search terms 'numbers 1 AND 2' were constant and combined with 'numbers 3a to 3h'. The search focused Australian literature but included articles from the USA, Canada, Europe and New Zealand where relevant.

Table 9 Search terms used for the evidence review

Number					
1	Nursing home OR long-term care OR residential aged care OR skilled nursing facility OR aged care facility OR aged care home				
2	Nurs* OR staff* OR night shift OR workforce shortage				
	Search terms	Results	Papers excluded	Assessed for eligibility	Included for review
3	AND Alternative arrangement OR Alternative work	508	452	56	9

	arrangement OR Alternative model of care OR Alternative clinical care arrangement OR Care substitution OR clinical arrangements OR exemption OR waiver				
3a	AND Digital health OR telemedicine OR telenursing	1,300	1,291	9	10
3b	AND “Multi purpose service” OR MPS OR “colocated” or “co- located”	47	46	1	2
3c	AND “decision support”	273	272	1	1
3d	AND “collaborative care” AND “model”	54	53	1	1
3e	AND Inreach OR outreach	332	310	22	13
3f	Homeless OR “social* disadvantage” OR “financial* disadvantage” OR “indigent population” OR “transient population” OR transiency	106	88	18	2
3g	Indigenous OR Aboriginal OR “Torres Strait Islander” OR “First Nations” OR “native American” OR Maori	230	205	25	7
3h	“low acuity” OR “low care”	164	144	20	9
Total		3,014	2,861	153	54

Search results

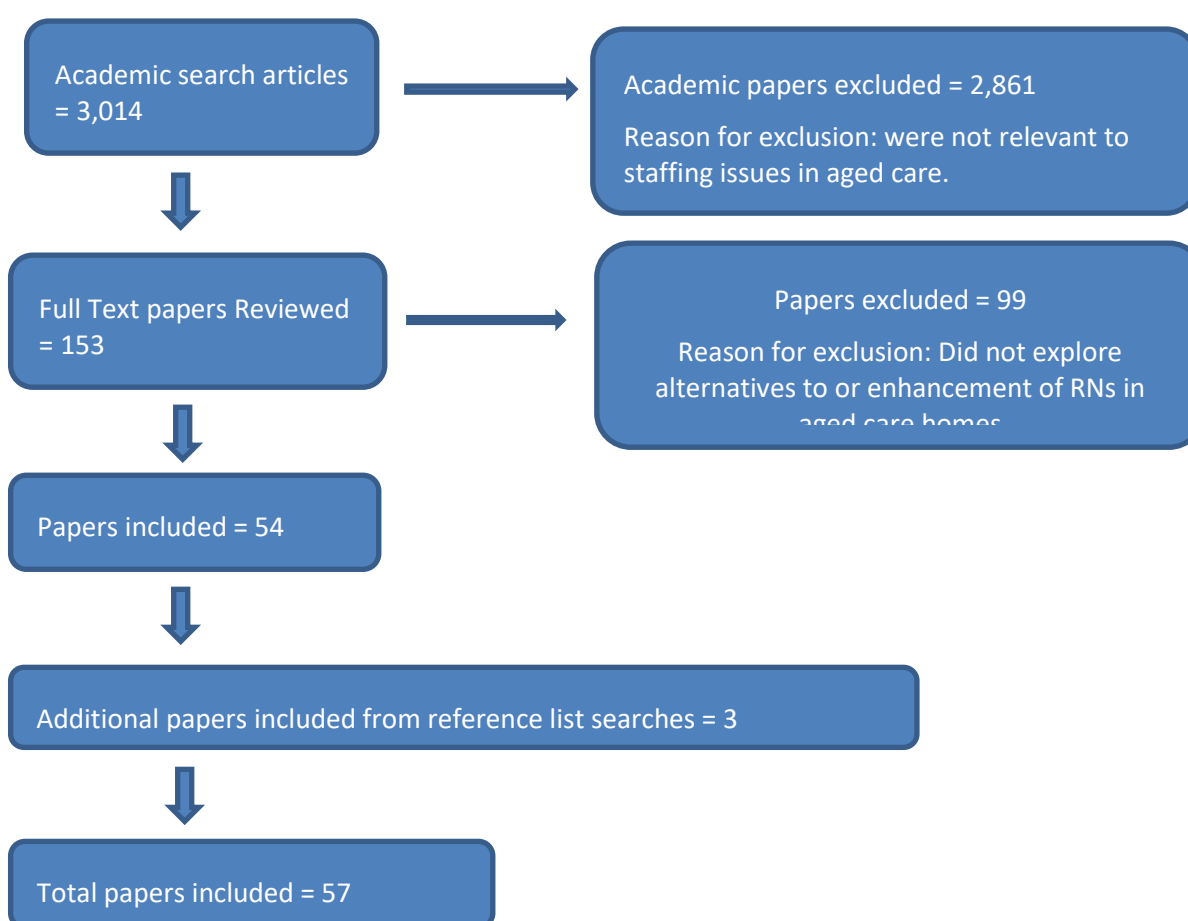
Relevant articles were included if there was a focus on nursing staff outcomes as a result of alternative staffing arrangements and/or care models that promoted the role of the care staff. We included a range of

evidence levels to cast a broad net for identifying possible alternatives for 24/7 RN care in RACFs. Figure 7 below provides an outline of search results and the number of articles included in the review. A total 57 articles were identified as relevant to the review.

Data extraction

Articles were imported into an Endnote Database for reference management. Tables were created that included information on the lead author, date, title and country of origin; intervention or issue studied; and study description. Main findings were tabulated for the following themes: Telehealth, inreach/outreach services, homelessness, Indigenous, low acuity, Multi-Purpose Services and other alternatives such as GP and nurse led interventions. Level of evidence was also determined. Levels of evidence were graded according to the NHMRC levels of evidence¹⁴. Papers were graded for evidence level to inform recommendations from the review. Themes in the literature have been collated and reported below.

Figure 7 Flowchart for paper inclusion/exclusion



Results

The search identified 57 articles of relevance to the review, the majority of which were Australian.

Eleven papers explored telehealth support for aged care. A scoping review with systematic design from Germany was the highest level of evidence (Valk-Draad & Bohnet-Joschko 2022).

¹⁴ NHMRC 2009. APPENDIX F: Levels of evidence and recommendation grading. Accessed 9 August 2023 at: <https://www.nhmrc.gov.au/sites/default/files/images/appendix-f-levels-of-evidence.pdf>

Two other non-systematic scoping reviews from Australia (Sunner et al. 2023) and Canada (Grant et al. 2020) were identified. An Australian review and discussion article was identified (Dai 2023). An article by the College of Family Physicians of Canada was also identified (Collins et al. 2020). After the reviews related to telehealth in aged care, a French pseudorandomised trial of a gerontological telemedicine program was the next highest level of evidence (Gayot et al. 2022). Two Australian comparative concurrent control studies looked at nurse-led telephone support (Conway et al. 2015) and video telehealth (Hullick et al. 2022). The remaining three studies were qualitative in nature, including a study from Germany about video consultations in long-term care (May et al. 2021), an Australian study of telehealth and specialist services (Gray et al. 2012) and an Australian study of a telephone triage service (Donnelly & Finch 2017).

We identified nine papers that related to support for aged care and aged care staff from physicians, nurse practitioners and advanced practice nurses. Two systematic reviews were included, a Norwegian systematic review of geriatric specialist services (Graverholt et al. 2014) and an Australian systematic review of nurse practitioners in RACFs (Clark et al. 2013). We also found two Australian non-systematic reviews of nurse practitioner and GPs in RACFs (Masso & Thompson 2014; Reed 2015). We found two Australian pseudorandomised controlled trials, one of GPs in aged care program (Haines et al. 2020) and the other of nurse practitioner visitation (Arendts et al. 2018). An English case controlled study of GP support in RACFs (Lloyd et al. 2017) and two Australian qualitative studies of advanced practice nurses and a nurse practitioner model of care (Craswell et al. 2023; Dwyer et al. 2017) were also included.

Twelve studies either focussed on or involved in-reach/outreach services to RACFs. Of these, only one was a systematic review by authors from Finland and Canada (Kontunen et al. 2023). The remainder were level three and four studies with four controlled studies (Dai 2023; Fan et al. 2016; Hullick et al. 2016; Lau et al. 2013), two cohort studies (El-Masri et al. 2015; Hutchinson et al. 2015) one uncontrolled comparative (Dai et al. 2021), three qualitative/descriptive studies (Amadoru et al. 2018; Chróinin et al. 2023; Udesen et al. 2023) and one discussion paper (Jennings et al. 2021). Of the non-review studies, the majority were Australia (n=10) with one study from Canada (El-Masri et al. 2015) and one study from Denmark (Udesen et al. 2023).

We identified two papers that focussed on specialised aged care services for older people affected by homelessness (Rowlands et al. 2020; Sussman et al. 2020). Both of these papers were qualitative studies that looked at the requirements for aged care homeless services and the needs of those affected by homelessness. There were seven papers related to the provision of care to aged indigenous populations. Two of these were systematic reviews conducted by Australian authors (Brooke 2011; Keelan et al. 2021). The remainder were qualitative/case studies from Sweden (Ness et al. 2020), USA (Shippee et al. 2022) and Australia (Sivertsen et al. 2020; Smith et al. 2010), with only one comparative study looking at leadership style for equitable care in Western Canada (Cloutier et al. 2016).

We identified two papers from Australia relating to Multi-Purpose Services, a realist review (Anderson & Malone 2014) and a qualitative comparative study in rural Australia (Neumayer et al. 2003).

Nine studies related to low acuity aged care services, of which two retrospective cohort studies from the USA were the highest level of evidence (Castle 2002). There were two other studies from the USA including a second retrospective cohort study (Mueller et al. 2006) and a cross sectional study (Mor et al. 2007). A comparative study without controls from Germany (Brühl et al. 2018) was the only other non-Australian study. There were four studies from Australia that looked at low acuity care or populations, two of which used a cross sectional survey with stratified random sampling (Chou et al. 2002a; Chou et al. 2002b) and two that used a comparative study design (Munysia et al. 2011; Richardson & Bartlett 2009). A final paper included a discussion piece on structural reforms to aged care funding in Australia (Chandler et al. 2005).

There were five studies relating to other alternatives that did not fit into a major theme. This included a theoretical study from the USA of an on call staff pool (Slaugh et al. 2018), a Canadian case-control study of RACF staff led quality improvement (Wagg et al. 2023), an Australian cohort study of RACF nurse productivity by age (Wei & Richardson 2010), an Australian qualitative study of an advanced practice model of care (Venturato & Drew 2010) and a UK qualitative study of RN and care assistant roles (Perry et al. 2003).

Findings and themes emerging from the literature

The review found several staffing models and staff support strategies that may improve the care and management of residents in aged care but there was little evidence for direct substitution of a 24/7 RN. We found evidence for staff support mechanisms, such as telehealth and outreach services, or the use of nurse practitioners and/or GPs to support clinical care in residential RACFs. In addition, we found evidence for the models of care provided by specialised RACFs for homeless or indigenous residents, low acuity services and Multi-Purpose Services. Staffing alternatives for rural and remote locations were not a specific focus in the literature but were addressed in relation to a range of staffing support and service models.

Telehealth and telemedicine

Telehealth is used to describe any interaction that uses real-time visual assessment. Telemedicine describes occasions where a physician or health professional is assessing and prescribing treatment via the use of telephone or videoconference services. Telehealth offers flexibility of time, location, and improved healthcare efficiency (Dai 2023). Telehealth may also provide a potential mechanism to reduce inequalities in healthcare by delivering knowledge, resources and skills to support staff in rural communities where they do not have ready access to clinical expertise.

Access to care and professional services

Gray et al. (2012) studied what types of consultations currently provided on-site to aged care residents could be provided by telehealth. They found that many consultations currently being provided on-site could be provided by telehealth, including general medical histories and discussion with a patient.

Dai (2023) found evidence that the use of telehealth may indicate disparity in access to healthcare, with those in urban areas more likely to have access to a GP in person. Gayot et al. (2022) also found positive result after the implementation of a telemedicine program in regional areas of France that were lacking in medical facilities and/or qualified medical personnel. Sunner et al. (2023) also found that access to video and telehealth improved access to expert clinicians.

A recent qualitative study of the implementation of a video-consultation programme among RACFs in rural Germany (May et al. 2021) found that clinical information was less likely to be lost, additional work spared and medication and assistive devices were provided more quickly. The authors stated that while telehealth cannot replace in person visits to RACFs, when properly integrated, video health does offer an alternative and can help address shortages of specialists in rural areas.

Emergency Department transfers and hospitalisation

The role of telehealth in avoiding unnecessary Emergency Department presentations and hospitalisation of aged care residents has been widely studied. A recent scoping review identified research that demonstrated that use of telehealth can improve the management of residents and reduce unnecessary transfers to Emergency Departments and admissions to hospital (Sunner et al. 2023).

Another recent scoping review of the relevance of telemedicine in the residential aged care setting also looked at the rate of hospitalisation as well as costs and staff acceptance involved (Valk-Draad & Bohnet-Joschko 2022). The authors reviewed sixteen comparative studies and found fourteen studies that reported a reduction in hospitalisation rates after the introduction of telemedicine. RACFs where telemedicine had been introduced for a longer time or had a higher level of acceptance of telemedicine showed lower hospitalisation rates. The increased presence of physicians in an RACF appears to reduce hospitalisation of residents, an effect that appeared to apply to support via telemedicine as well. The authors suggested that RACFs should consider offering telemedicine all day all week (24/7) and prepare, train and engage their staff in the use of telemedicine.

Gayot et al. (2022) reported on a trial of a gerontological telemedicine programme in regions in France that were lacking in medical facilities and/or qualified medical providers. They found that unplanned hospitalisations were higher in the control group (32.5%) compared to the intervention group (23.4%;

$p=0.034$). Overall, they found that the programme reduced transfers to hospital but not admissions to hospital. Conversely, when Hullick et al. (2022) trialled the addition of video telehealth to existing telehealth services for RACFs, they found only a non-significant decrease in hospitalisations after the introduction of video telehealth.

Donnelly and Finch (2017) describe an aged care telephone triage services staffed by experienced RNs. The telephone service offers telephone support to RACFs, can arrange outreach to RACFs for clinical issues and referral to appropriate services. The telephone service was estimated to have saved 2,427 ED presentations from July 2009 to June 2010 across the district. In addition, Conway et al. (2015) conducted an impact evaluation of a nurse-led telephone support service for RACFs. The intervention reduced ED presentation by 16%, reduced ED admission by 19% and showed a 35% reduction of inpatients days among residents from the four intervention RACFs.

Staff support

A recent scoping review (Sunner et al. 2023) summarised the evidence of the effectiveness and experience of using telehealth in RACFs to assist decision making of RACF staff regarding the transfer of residents to the emergency department. In total, 31 articles were synthesised for the review. Sunner et al. (2023) found telehealth to be of great benefit to the clinical assessment process. Staff noted an improvement in their assessment skills and an increase in professional satisfaction as a result of using telehealth. RACF staff also felt more confident to care for the residents. All studies found telehealth to be very acceptable.

Sunner et al. (2023) found that telehealth improved relationships between the GP, the nurse and the resident and was an efficient use of resources. It allowed integration between the clinical team at the RACF and the primary attending physician. The review found that residents are more likely to be transferred when staff are unable to make confident informed decisions about resident management and treatment. While video and telehealth improves access to expert clinicians, there was also an improvement in RACF staff skills and knowledge through participation in joint assessment. Resident's experience of telehealth was positive and acceptable, as collaboration with clinicians and inclusion in the decision-making process built trust that their care was being managed. For staff, telehealth offered a second opinion and supported teaching/learning when a more skilled colleague or clinician was involved in the consultation (Sunner et al. 2023).

Limitations

Staff may feel that their workload had increased as a result of telehealth (Sunner et al. 2023). Staff may also feel it is difficult to embed telehealth in RACFs due to insufficiently experienced staff and staff turnover. The engagement of RACF staff with telehealth was also mixed, with (Sunner et al. 2023) concluding that telehealth is not used to its full potential.

Grant et al. (2020) conducted a scoping review of interventions that are most effective in reducing preventable transfers from RACFs to the emergency department. They found mixed results and were not able to determine the effectiveness for reducing transfers to the emergency department.

Hullick et al. (2022) trialled the addition of video telehealth to existing telehealth services for RACFs. They found only a non-significant decrease in hospitalisations after the introduction of video telehealth. They concluded that more research needs to be done to see where video telehealth can add value where existing telephone support may be adequate in a busy aged care environment.

For telehealth to be used optimally it requires continuing government funding for suitable technology and devices, particularly in rural and remote settings (Dai 2023). Also, Dai et al. (2023) found evidence that the use of telehealth may indicate disparity in access to healthcare, with those in urban areas more likely to have access to a GP in person. Experts in the field have also stated that virtual care was limited in that it cannot provide in-person assessment. In addition, a standardised process is required that includes hardware, software, privacy and security and transfer of health information offsite (Collins et al. 2020).

Support from nurse practitioners (NPs)

The potential role of NPs in an Australian context was first explored in the early 1990s in NSW. This early work led to the appointment of the first NP in 2001 working as a Remote Generalist in Wanaaring in remote north west NSW (Masso & Thompson 2014). Since then the numbers of NPs has risen sharply in Australia. According to the Nursing and Midwifery Board there are currently 2,656 NPs operating in Australia (Nursing and Midwifery Board of Australia 2023).

One of the reasons for creating the role of the NP assumes that they will improve access to health services particularly in areas where there is a shortage of providers or geographical isolation (Masso & Thompson 2014). However, there is a significant gap in the literature in terms of studies investigating NPs in rural and remote locations in Australia (Masso & Thompson 2014).

With the numbers of GPs visiting RACFs in decline and the fact that RACFs struggle to access GPs there is perhaps scope for NPs to contribute to the care of older residents in aged care, although NPs are not being utilised in large numbers in RACFs (Collins et al. 2020; Craswell et al. 2023).

Models of care where NPs can support the elderly include working in private practice, being situated in the RACF, working from community-based organisations, or as an outreach service from the acute hospital setting as a member of a multidisciplinary team (Dwyer et al. 2017).

There is evidence that nurse practitioners can improve quality of care in RACFs, however in most cases the nurse practitioner's salary and associated cost is covered by the RACF. This is not within the capacity of most RACFs, particularly those in rural and remote settings (Clark et al. 2013).

NP locums have the potential to provide support to RACFs in rural and remote areas. Interim findings of a NP led locum after-hours on-call model in Victoria suggest that the model is meeting, and in some cases, surpassing all stakeholders' expectations (Jennings et al. 2021).

A nurse practitioner model of care in a hospital avoidance program in regional Queensland demonstrated that the service was "dynamic, flexible and responsive to both patient [resident] and organisational demands" (Dwyer et al. 2017). In this study four and a half full-time NPs were positioned within a community-based in-reach service called the Residential Acute Care Services. They serviced ten RACFs with a total of 773 beds, with one NP available on-call after hours. Results showed that the NPs were able to deliver a range of timely health services and complimented services provided by the RACFs. At the same time the NP over time was able to upskill and support RACF staff to keep the residents at home.

Craswell et al. (2023) found that barriers and enablers to the effectiveness of nurse practitioners in aged care may include physical structural elements such as integrated practice management software, however, social issues such as acceptance by existing staff and visiting GPs was also a barrier, but this improved over time.

There are also financial inhibitors with the perverse rates of financial reimbursement available for NPs through Medicare (Ervin et al. 2019) (Ervin et al. 2019). Enablers included collaboration, enhanced assessment and surveillance of residents and improved communication (Craswell et al. 2023)

Arendts et al. (2018) conducted a cluster controlled clinical trial of nurse practitioners in RACFs and their ability to reduce residents transfer to the ED. Nurse practitioners visited the RACF a minimum of three days a week with an on-call arrangement. The authors found a non-significant reduction in rates of ED transfers ($p=0.34$) and better maintained resident quality of life. Nurse practitioner care coordination resulted in no statistically significant change in rates of ED transfer or health care utilisation, but better maintained resident quality of life.

Support from GPs

GPs have historically provided most primary care services in RACFs. However, recent data suggest that this involvement is dwindling with approximately only 20% of GPs engaging in residential aged care (Reed 2015). According to Reed (2015) there are at least five different general practice models of care which represent different ways that a GP might support residents in an RACF.

The continuity model

The continuity model is a situation in which an elderly patient can continue to see their regular GP after transfer to an RACF. According to the RACGP, this is the preferred model of care, however according to a 2010 Catholic Healthcare national survey, over two-thirds of residents admitted to an RACF need to make alternative arrangements for their general practice care.

RAC panel model

This model is where a GP sees all of the RACF for their practice allowing them to continuously provide care to a number of RACF patients referred to as a 'panel'. The benefit of this for the GP is that they can apply for the Aged Care Access Incentive (an annual payment of \$5,000 for a minimum of 140 occasions of service).

GPs with a special interest in residential aged care

These GPs are particularly committed to providing aged care despite the low compensation. They may have an established relationship with a number of RACFs in a particular geographic area. It is reported that the number of these GPs in Australia is low "but could account for care of a substantial number RACF patients" (Reed, 2015, p.177).

Longitudinal general practice team model

This is where a GP delegates tasks related to the care of residents to a general practice nurse rather than to staff employed by the RACF. The payments for such services are less than those paid directly to GPs and is considered an impediment to developing integrated GP-nurse practitioner models of care.

Residential Aged Care Facility-based models of care

In some cases an RACF may employ a GP to provide monitoring of residents and also to review the clinical services provided to residents by aged care staff. In this way a GP can apply their clinical and administrative skills to guide the RACF in providing care and ongoing clinical governance. This model of care is beyond the scope of this review.

Haines et al. (2020) reported on a trial of an alternative model of care where GPs were employed by the RACF as members of staff, clinical managers were employed to work with the GPs and some RN tasks were reallocated to care assistant to free the RNs up to work on resident care planning. Employing GPs within RACFs was associated with a reduction in unplanned hospital transfers ($p < 0.001$), admissions ($p < 0.001$) and out-of-hours call-outs to GPs ($p = 0.002$) but also an increase in reported falls ($p < 0.001$). The authors concluded that while it was difficult to recruit GPs to RACFs, it could reduce the burden of unplanned hospital admissions and address under-reporting of adverse events (Haines et al. 2020).

A study of an enhanced support package for older people living in RACFs in England (Lloyd et al. 2017) included the development of partnerships with GPs as well as advocacy support and peer support from community nurses and meeting with care managers. Outcomes showed a reduction in A&E attendances (29%, $p = 0.002$) and reduced hospital admissions (23%, $p = 0.024$). RACFs were encouraged to have an aligned General Practice and GPs were encouraged to visit the facility on a regular basis.

A systematic review of interventions to reduce acute hospitalisations from nursing homes (Graverholt et al. 2014) found that interventions where physicians conducted regular and on-call visits for services helped reduce hospitalisations. In particular, interventions that included a nurse/physician team doing comprehensive geriatric assessments and reviewing medication and supporting staff were effective.

Support from outreach services

Outreach services are team based services that may provide a range of services to RACFs, including telephone support, assessment and treatment services as well as other consultation and coordination services. A review by Grant et al. (2020) found there is growing evidence that outreach services can help to reduce transfer of residents to the ED. The design of the outreach service appears to be critical though, with interdisciplinary teams being the most effective in reducing transfers to the ED. The most effective interventions at reducing

transfer to the ED involved regular physician assessment, with physicians being called on an as needed basis having a more modest effect on transfer to the ED from the RACF (Grant et al. 2020).

Outreach services identified were often geriatrician lead (Amadoru et al. 2018; Chan et al. 2018; Dai et al. 2021; Hutchinson et al. 2015; Udesen et al. 2023) or were RN or NP lead (Donnelly & Finch 2017; El-Masri et al. 2015; Fan et al. 2016).

Geriatrician led

The Acute Geriatric Outreach Service (Chan et al. 2018; Dai et al. 2021), based in Sydney, included one FTE geriatrician, one FTE aged care nurse, and one FTE geriatric trainee. Geriatricians and nurses triage referrals and visit the RACF to assess and manage the patient. The program outcomes showed a 36.1% reduction in the risk of hospital admissions but the service was only available from 9am-5pm Monday to Friday.

The Residential inReach (RiR) service in Melbourne is also a geriatrician led program that operates 7 days a week between 9am and 5pm (Amadoru et al. 2018). The service offers telephone advice, geriatrician and nursing reviews, acute interventions, palliative care, catheter and PEG tube management, discharge follow-up and coordination of specialist consultation. A qualitative study of the service found that the main reason for utilisation of the service were to help manage complex decision-making processes in the RACF, variability in hospital-based medical and nursing care and the perceived positive impact on service and patient outcomes (Amadoru et al. 2018).

The Residential Care Intervention Program in the Elderly (RECIPE) (Hutchinson et al. 2015) is a geriatrician-led, multidisciplinary service in a Melbourne hospital that provides outreach to 73 RACFs. The outreach team receives referrals from RACF staff or GPs, they are triaged (either same day or same week) and are visited by a nurse specialist, aged care registrar or geriatrician. The service reduced LOS in hospitals ($p=0.003$) and reduced admissions over time ($p=0.046$) (Hutchinson et al. 2015). However, the service does not appear to be set up to respond to overnight or emergency situations.

An interesting outreach model was a Danish mobile service of consultants who perform emergency care in nursing homes (Udesen et al. 2023). When an emergency call comes in from a nursing home, medical dispatch will assess and send either an ED consultant or a consultant and an ambulance or anaesthesiologist-manned mobile emergency care unit that is operating in the area. In collaboration with nursing home staff, residents and relatives, the consultant provides on-site emergency evaluation and treatment. Results indicated that seven out of eight residents could remain in the nursing home after being assessed by the ED consultants (Udesen et al. 2023). Additional research is needed to show the effectiveness of the model.

Nurse or Nurse Practitioner Led

Donnelly et al. (2017) describes a nurse led aged care telephone triage service staffed by experienced RNs based in Sydney. The service offers telephone support to RACFs, can arrange outreach to RACFs for clinical issues and referral to appropriate services during business hours. The service is supported by an outreach service to improve access to primary health care for older people residing in aged care homes and the provision of clinical nursing services to RACFs during business hours. The outreach team consists of three experienced RNs. The model includes a central point of contact, utilises a care manual with evidence-based algorithms for clinical care, education and clinical coaching to RACF staff and collaboration. Further research is required to show the effectiveness of the model.

A Canadian outreach model involved 14 mobile nurse practitioner (NP) lead outreach teams that provided consultation, timely onsite assessment and/or treatment (El-Masri et al. 2015). The NP is employed by the hospital but works out of the RACF in collaboration with the nursing and medical staff. Results showed that NPs were more likely than MDs and RNs to manage chronic or exacerbated chronic conditions ($p<0.001$). The authors argued that the implementation of an NP lead outreach service located at the RACF was associated with better judgement in regards to ED transfers. NPs transferred only 10.8% of their cases to ED but all of these were rated as urgent or higher.

Hospital in the Nursing Home is a multi-component programme comprised of a team of ED-based nurses working in partnership and coordinating with RACF RACFs staff and other health providers (Fan et al. 2016). The aim is for the resident to receive correct treatment in the correct location at correct times. A key contact is an ED nurse who has previous geriatric care experience. Fan et al. (2016) found that the service reduced hospital admission rates per 1000 RACF beds (0.66; $p<0.0001$). It was not clear if the service was available outside business hours.

Hullick et al. (2016) examined the effects of an Aged Care Emergency (ACE) service on reducing the transfer from RACFs to an ED, admission and LOS. The service model was led by an ED advanced practice nurse with aged care skills, an algorithm based problem management system for staff with a manual that could be used by RNs, AINs, PCAs, GPs, and ED staff, and an education program for RACF staff, and RN consultation service based in the ED 12hr a day/7 days a week, with the main role being to assist decision making and receive clinical handover in ED when a resident was transferred, assess transfer for purpose and goal of transfer to ED, proactive case management and to build collaborative relationships. Four Australian RACFs were included in the intervention study, with two matched control RACFs per intervention RACF and compared using a pre-post analysis of hospital admission data. Prior to intervention, intervention RACFs were 59% more likely to be admitted to hospital compared to controls. While all RACFs increased their admission rate over time, intervention RACFs were 40% less than controls ($p=0.0012$). The authors found that by defining the purpose of the hospital transfer and the patient's care goals and active case management in the ED, admission could be avoided. The authors found a greater impact on hospital admission than ED transfer, with little impact on ED transfer. Since the initial study, the ACE service has grown to 8 EDs covering 120 RACFs. The telephone service has increased to a 24hr/7days a week service. This complex, multi-strategy service, led by nursing staff, successfully reduced hospital admission of RACF residents by defining goals of care prior to transfer to the ED.

General support issues

Of the services reviewed, most outreach services work within general business hours. Outreach services appear to be effective in reducing transfers to EDs from RACFs, however, may not be flexible enough to provide service in an overnight capacity. Given that the services included here were mostly metropolitan and regional services, it is not clear how effective they would be in rural and remote regions. A review by Kontunen et al. (2023) found that solely acute outreach service interventions seems to depend on the level of acuity and somewhat on the skill level of the outreach team members on whether residents were treated on-site or were transferred to hospital. In addition, they concluded that outreach services with preventive components to RACFs might reduce ED transfers and hospitalisations.

Outreach services may be valuable in improving the capacity of RACFs to provide more effective care for residents, thus reducing the likelihood of unexpected events occurring for nursing and care staff to manage.

Other support mechanisms

We found several papers that did not neatly fit with the themes above and they are discussed here as other support mechanisms or options. These papers looked at nurse productivity by age, the impact of quality improvement and the creation of new roles in an advanced practice model and the creation of a staffing pool to provide consistent staffing.

Wei and Richardson (2010) conducted a case study of the productivity levels of nurses by age group in residential aged care in Australia. They found that nurses became more productive as they got older, i.e. nurses between ages 30 and 49 were 85% more productive than nurses under 30, while those who were 50 and over were 95% more productive than younger nurses. The authors concluded that nurses become more productive as they gain experience and knowledge.

Simply increasing staffing levels in RACFs may not necessarily ensure the more complex needs of aged care residents are addressed (Wagg et al. 2023). A Canadian study of nurse aide-led quality improvement interventions in aged care environments (Wagg et al. 2023) found that where nurse-aides were enabled to lead quality improvement (QI) and implement the use of evidence-informed best practice, there was a

reduction in resident pain levels ($p=0.02$) and, where QI teams addressed resident mobility, there was reduced resident dependency. The study was underpowered, and as such, was unable to show overall outcomes of improvements, but the encouraging results should be considered for further study.

A qualitative exploratory study of an Advanced Practice Model of care in an RACF (Venturato & Drew 2010) involved creating new staffing roles, including clinical assistants to RNs, and clinical team leaders, who are personal care workers (PCW) with extra supervisory and delegation responsibilities assisting the RN as well as non-clinical team leaders and support. These new roles supported the PCW-RN-Nurse Manager hierarchy. RNs were supported by clinical care staff, case management staff and other non-direct care staff (e.g. education, management, QA activities). The roles and expectations of the staff were clarified, enabling RNs to assume a proactive leadership approach to care and case management. Although hierarchical, the strengthening of team affiliations based on type of support rather than control ensured a collegial atmosphere is maintained. Perry et al. (2003) also found that role definition was important to coordinate and plan resident care. They found that registered general nurse roles tended to include doing anything while care assistants were more defined by what they cannot do, making it difficult to delegate tasks to other workers.

Slaugh et al. (2018) found that consistent staffing for RACFs could be achieved through an on-call pool of staff. They conducted a study in which a restricted pool of part-time nurse aides were called upon to reduce staffing costs by 24% and improve care. The authors concluded that reducing reliance on agency staff and employing a higher number of regularly assigned part-time staff was a useful strategy. This was also reflected in the evaluation by Smith et al. (2010) of an Aboriginal aged care service.

Specialised services

Homeless services

Our search identified relatively few articles relating to specialised homeless services. Homeless people are affected by a range of issues in regards to entering and remaining in aged care services. However, Sussman et al. (2020) argued that when a person affected by homelessness is moved into long-term care, challenges to finding appropriate accommodation could be overcome by frequent support for the person, staff training and education, and flexible rules and regulations. It was stressed that service providers needed to work together and provide ongoing support. Staff fears may result in staff reacting inappropriately to older homeless persons, e.g. if they are talking loudly doesn't mean they will get assaulted. Lack of education about the drivers of homelessness can lead to resentment on the part of staff.

Homeless people are often affected by prejudice and stereotypes (Sussman et al. 2020) and training in working with this population is essential. For example, heavy alcohol abuse appears to be the most likely issue associated with unsuccessful settlement in residential care (Warnes & Crane 2000) and services need to have staff who can assist people in this aspect of care.

Rowlands et al. (2020) reported on a qualitative study of an Australian model of residential aged care for people affected by homelessness. They found that specialised aged care services for the homeless needed to address issues including loss and trauma experienced by the resident, alcohol and other drugs, challenging behaviour, loneliness and the need for residents to be able to keep their pets. Building relationships with clients was an important aspect of care, as was the need for a trauma-informed practice framework in aged care services for people experiencing, or at risk of experiencing, homelessness to address issues related to trauma and loss as well as to address issues with mental health, substance dependence and social disadvantage. Cognitive impairment also must be considered. All these aspects need to inform staffing in services that cater mostly to the needs of people experiencing or are at risk of homelessness. Location of the RACF where those experiencing homelessness were more likely to be found was important.

Rowlands et al. (Rowlands et al. 2020) argue that "understanding the lived experience within a trauma-informed framework, in addition to best practice aged and dementia care and a strengths-based approach, should inform care management, operational policies and staffing in an RACF catering specifically to the needs of people experiencing, or at risk of, homelessness." Simply employing RNs without this understanding of the

population may not be appropriate in providing aged care services for people who are affected by homelessness. Staff training, support, awareness and teamwork are all necessary ingredients to deliver a relationship-based model of care with ongoing assessment that is closely aligned to staff discipline (i.e. nurse, social worker etc.) as well as individual, values and ethics. In addition, staff who work with those experiencing, or who have experienced, homelessness need to be able to show genuineness and 'love' for their clients while maintaining professional boundaries.

The provision of residential aged care for older people affected by homelessness is likely to need a different staffing profile compared to mainstream residential aged care due to the significantly different profile of this population.

Indigenous services

The literature on staffing models in indigenous services identified through our search was sparse and often related to identifying the problem or need rather than staffing models appropriate for aged care. Brooke (2011) reviewed the needs of Aboriginal and Torres Strait Islander residents in Australian RACFs. They argued that care for Aboriginal and Torres Strait Islander people in aged care requires a collaborative and individual approach. In particular, cultural safety is paramount through the maintenance of culturally competent staff.

Smith et al. (2010) reported on the development of Yuendumu Old People's Programme (YOPP) in Alice Springs, Central Australia. YOPP was a comprehensive, community-based aged care service. The model emphasised and recognises mutual competence between traditional and mainstream service culture. The authors note that staffing can be erratic when family and community life demand the attention of workers, but it was also observed that the model had a large pool of workers to draw on. At times the community allowed some ceremonial adaption to allow workers to maintain service provision during ceremonial periods. It was also found that, due to a range of political and cultural factors, often related to past trauma and complex cultural issues, it was difficult for non-local Indigenous staff to work effectively with local people. The importance of long-term personal relationships was emphasised in sustaining service provision in a cross-cultural setting. It was these relationships that were able to accommodate change over time rather than the quick implementation of new ideas that could not be sustained. The success of the program often relied on local control of the program and the employment of local staff. Development of capacity of the local workforce was also important, with the intermittent presence of the non-Indigenous Project Worker as a 'specialist in the field', adding to sustainability of the model. This also contributed to local ownership and reduced the risk of burnout of the Project Worker, who could be there in a support role.

Siversten et al. (2020) studied the integration of spiritual care in Aboriginal aged care in South Australia. The study found that spiritual care was important for Aboriginal people but that there were few Aboriginal staff to support this, and even if there were, they may not have specific knowledge essential for this aspect of care. Understaffing of Aboriginal care workers and employee turnover was identified as an issue in providing spiritual care for Aboriginal residents.

Cloutier et al. (2016) reported on a new care delivery model designed to promote more equitable care for long-term care residents in Western Canada. In particular, the authors used a qualitative study design to ask the question of how leadership style affected the implementation of the care delivery model. The authors found that a servant leadership style was better able to create and sustain the conditions required for the successful implementation of the new model compared to a leadership style that was less inclusive, proactive and more resistant to change. In particular, a leadership style that was more compassionate, empowering, collegial and supportive experienced a more optimal transition to the new care model. In addition, staff turnover (in both general staff and leadership staff), which increased reliance on part-time staff, meant leadership had less knowledge of their staff to implement the new program. A slower lead up time and a more servant "thinking outside the box" approach to leadership was more supportive of the change. Having a safe space to discuss and strategize also added to the success.

Keelan et al. (2021) reviewed Indigenous preferences in aged care and found that Indigenous preferences for care were more likely to be observed in long-term care homes where the Indigenous composition of the staff reflected the Indigenous make-up of its residents.

Ness et al. (2020) studied Sweden's Indigenous South Sami people's expectations of aged care. The authors interviewed 56 people with a South Sami background, aged between 65 and 90 years. The authors found a main overarching theme in which participants expected the same care providers over time. This was underpinned by two sub-themes: Expecting care providers to know and recognise the residents, and 'not having to explain myself all the time'. Participants also expected individual adjustments when receiving care, with the subthemes of "seeing my needs" and "being flexible". Professional competence and relational competence were also important.

The success of indigenous aged care is often dependent on a number of factors including a collaborative, individual approach that emphasises the development of relationships. Staffing aspects that contribute to sustainability of aged care services include the employment of local Aboriginal and Torres Strait Islander staff who can take ownership of the service, with a leadership model that was more aligned to serving the community and allowed for the development of capacity over time rather than quick fix attempts.

Low acuity

In Australia, hostel accommodation is now funded the same as for higher care RACFs with the aim of facilitating ageing in place (Chandler et al. 2005). While in theory the reform provided the opportunity for hostels to care for people with higher dependency levels and nursing homes to care for lower dependency levels to facilitate ageing in place, the changes did not change the staffing ratios and the level of expertise of carers at the bedside. Further changes have allowed hostels to invest in capital improvements, employ more RNs, and change service managers into Directors of Nursing, with award coverage, paid under the charitable sector. Chandler et al. (2005) also observed a decreasing trend in the employment of RN staff and increasing employment of non-nursing staff. However, hostels, to cater for the ageing in place trend, have moved towards a more nursing based staff mix.

Castle (2002) found that nursing homes were sensitive to their market in relation to low-care residents, such that the more nursing homes compete with other homes, the less likely they are to have lower care residents. They argue that policies that increase competition between nursing homes are more likely to reduce the number of low-care residents in nursing homes. There may be cost savings in diverting low-care residents to other low-care settings. On the other hand, the complexity of whether residents will get adequate care in these low-care settings needs to be explored (Castle 2002).

The impact of ageing in place reforms (1997) has increased access to high care but there has also been a decrease in low care provision (Richardson & Bartlett 2009). Richardson and Bartlett (2009) also find that the reduction in low care has been addressed by an increase in community care provision. Those who do not have satisfactory home environments are now less likely to benefit from low care options. They also found that, while some low care homes were co-located with a high care home and run by a larger provider, most low-care RACFs were likely to be small in size and run by a single provider in an outer rural or remote community with a strong focus on Aboriginal and Torres Strait Islander special needs groups (Richardson & Bartlett 2009).

Mor et al. (2007) found that states with lower investment in community alternatives had higher proportions of low-care residents in nursing homes. Cornell et al. (2020) argue that the supply of assisted living (lower acuity care) provides a necessary choice within the aged care market continuum for those who need assistance with living but don't need the 24-hour skilled care provided in nursing homes. This paper also showed that the availability of assisted living in the community would reduce the level of low care residents living in nursing homes ($p=0.026$). In the US, many assisted living beds are privately funded, restricting access to those who have the funds to pay for them. Assisted living also has less regulation and oversight than nursing homes, which may allow for more flexibility in the care provided, but it is also not clear on the safety levels of care within assisted living (Cornell et al. 2020).

Bruhl et al. (2018) showed that minimum standards are still no guarantee that residents will receive the level of nursing care required for their level of acuity. More than 40% or more of residents at lower acuity levels are receiving less than the required levels of care and between 15% and 20% of residents at higher levels of acuity are receiving less than recommended levels of care, i.e., residents not getting the recommended levels of care rose from 15% at the highest acuity to over 40% at the lowest levels of acuity.

Chou et al. (2002a) conducted a cross sectional survey with aged care staff in a stratified sample of Western Australian nursing homes and hostels, asking whether there were differences in staff satisfaction between nursing homes and hostels. They found that staff satisfaction is directly influenced by workload, team spirit and professional support for both nursing home and hostel staff. The authors found that the mean composite score for personal job satisfaction, workload, training and professional support were significantly lower for nursing home staff compared to hostel staff. Hostel staff appeared to be better trained compared to nursing home staff but nursing home staff also appeared to have a heavier workload ($p < 0.001$). The authors also found that the reliance on outside staff allowed little time to build up co-operative relationships and team spirit, with casual staff sometimes creating additional work for permanent staff. Staff turnover was also an issue in this respect. The authors found that management and leadership were pivotal to staff satisfaction.

The authors argued that professional development and support was integral to staff satisfaction and maintaining a stable staff and continuity of care. They also found that, with different factors affecting staff satisfaction in nursing homes and hostels, separate professional development strategies should be considered (Chou et al. 2002a)

When the same authors observed residents' satisfaction, (Chou et al. 2002b) they found greater resident satisfaction among hostel residents. They also found that increasing all aspects of staff care is important for resident satisfaction. One of the authors' recommendations was to develop guidelines for staff selection, the development of professional behaviour and the role of staff in resident satisfaction.

There was no difference between high and low care nurse time spent on documentation, indirect care, personal and other nursing duties in a study by Munyisia et al. (2011), in which they studied differences in nursing activities between high and low-care nursing homes. The authors found that nursing in high care homes spent significantly more time on direct care activities ($p < 0.01$) compared to nurse in low care homes. Nursing staff in low-care homes spent significantly more time in communication ($p < 0.01$), medication management ($p < 0.01$), and in-transit between tasks ($p < 0.01$).

In high care homes, RNs spent 48.4% of time on communication, followed by medication management (18.1%) and documentation (17.7%). ENs spent most of their time on communication (37.7%), documentation (29.0%) and medication management (17.8%). In low care homes, PCs spent most of their time on communication (42.6%), followed by direct care (14.9%) and documentation (11.8%). RAO spent 51.9% of their time on communication, direct care (34.3%) and documentation (4.5%). This was a single home study so generalisation is limited. The study was also confined to day-shifts so it is not clear what activities they would engage in during this time (Munyisia et al. 2011).

Multi-Purpose Services (MPSs)

MPSs aim to provide a range of health and medical services in one location (e.g. acute care, aged care, primary care) and is a model often implemented in small or remote communities where the local population may be too small to support individual services. MPSs are exempt from the 24/7 RN mandate. There may be some lessons from the success of Multi-Purpose Services.

A review conducted by Anderson and Malone (2014) on the MPS model reported that while the aim of the MPS is to be a one stop shop, reality may be that the service is spread over several sites. A mismatch between community perceived need and funding availability may lead to a compromise that does not necessarily serve the local population. Financial viability may also require a pooling of funds and streamlining of services, creating an expectation of a reduction in management and administrative costs. This could lead to a perception of job losses. There is also a fear of draining aged care funding to pay for more urgent acute care

needs, creating a disincentive for aged care services to merge. Multi-skilling of staff is also often required due to low staff number. These low staff numbers (two nurse per shift) may also mean that aged care residents are left unattended when staff are called into the emergency department. Many of these issues make it difficult to attract staff and to support staff professional development. However, the integration of services and creation of economies of scale enhances the viability of existing services and the tailoring of services to community need.

A more recent report prepared by the Centre for Health Economics reviewed the MPS policy and program responses that have been implemented to face challenges previously identified within the model (Centre for Health Economics Research and Evaluation 2019). It concluded that the model continues to be appropriate for delivering integrated health and aged care services, allowing for flexibility in meeting the individual needs of rural and remote communities. However, a number of key barriers were identified in terms of the program's overall effectiveness, including appropriateness for a number of populations (people with behavioural /psychological/dementia related problems and culturally appropriate care for Aboriginal and Torres Strait Islander people). This report contained recommendations including the development of a working group of Commonwealth and State Officials to oversee governance the program, an in-depth review of the program's vision, and a review of its funding, infrastructure and policy.

Discussion

This review focussed on literature related to staffing alternatives for the 24/7 RN responsibility for Australian RACFs. In particular, RACF in rural or remote areas, as well as those RACFs that could be considered smaller and/or specialised services. While we observed few alternatives to the 24/7 RN requirement in the literature, there are models of care, staffing models and support technology that are useful or should be further investigated, particularly in relation to situations where staffing is a challenge for RACFs.

The use of telehealth was often studied as a way to improve access to physician and nursing care and/or advice. While telehealth is a valuable tool for improving access to professional health care, a range of challenges have been identified. These include technology complications, computer literacy and competencies of residents and difficulties in performing physical examinations and communication with patients who have complex needs (cognitive, hearing or visual impairments) (Dai et al. 2022; Doraiswamy et al. 2021). However, when properly integrated, telehealth can help address shortages of specialists in rural areas (May et al. 2021). Research done for the Royal Commission into Aged Care showed that integrated models of aged care, such as the MPS, tend to work well in rural and remote areas (Gilbert et al. 2020).

In-reach and outreach services were valuable in improving access to care and promoting hospital avoidance, however, flexibility and availability overnight may be an issue for some services. Best outcomes were more likely to be achieved where professional staff such as GPs, consultant and nurse practitioners, were a regular presence in the RACF rather than just on call. The Australian College of Nursing recommends that every RACF has access to an advanced practice nurse or nurse practitioner to support or supplement the role of the RN on-site, encouraging a multidisciplinary approach that allows an NP to work across multiple RACFs to provide governance, teaching and leadership and support residents with multi-morbidities and complexities (Australian College of Nursing 2021).

There was a paucity of research and evaluation into specialised services, such as aged care services for those affected by homelessness and indigenous populations. Research identified implied the need for a different structure in these populations, including differing staff structures and care models that are responsive to the needs and differences in these populations compared with the general aged care population (Brooke 2011; Rowlands et al. 2020).

Studies of low acuity aged care are sparse, although they suggest there are differences not just in acuity of residents but differences in staff satisfaction (Chou et al. 2002a). Changes in hostel and low care funding, to promote aging in place, have led to changes in resident profiles in hostels and a move to a more nursing based staff mix (Chandler et al. 2005) as well as a decrease in the provision of low care options (Richardson & Bartlett 2009).

Multi-Purpose Services appear to be an effective model in areas where the local population doesn't support separate services, such as in rural and remote locations, however, attracting staff and supporting them with professional development is still an issue. In spite of this, MPSs remain one of the most effective models of care provision in rural and remote regions (Anderson & Malone 2014). In addition, consistent staffing may be achieved in a local area by employing a larger pool of local part time staff, as opposed to accessing agency staff with little knowledge of local resident populations (Slaugh et al. 2018; Smith et al. 2010).

There is evidence that older, more experienced nurses are more productive than younger nurses (Wei & Richardson 2010) supporting strategies to include older nurses as a resource for RACF. The creation of new roles as part of an advanced practice model of care, role definition to support the work of RNs and the creation of restricted staffing pools from which providers can source staff may also provide options that could be explored in relation supporting 24/7 staffing in RACF (Perry et al. 2003; Venturato & Drew 2010).

This was a rapid review that aimed to provide evidence for alternatives to 24/7 RN care in Australian RACFs and as such may not have identified all literature in the field. We aimed to undertake a comprehensive search and as such, we have identified a broad range of evidence relating to staffing and staff support in RACFs. We did not place a restriction on the levels of evidence included in order to gain an understanding of how aged care has innovated with regard to staffing in RACFs.

We identified a range of options that RACFs may use to support alternatives to a 24/7 RN model. However, many of these options would require significant investment in time and resources to ensure their effective implementation, including telehealth and outreach services with support from medical specialists and advanced practice nursing. There is some support for different staffing models in relation to specialised homeless and Aboriginal and Torres Strait Islander services in terms of staffing mix, but further research is needed with regard to the type of staff and models of care. MPS models appear to be the most effective models available for service provision in rural and remote locations. Further research into staffing pool models and the employment of older nurses may also provide outcomes in supporting RN staff in aged care.

References

- ACQSC 2023, Regulatory Bulletin: Workforce-related responsibilities – including 24/7 registered nurse and care minutes, by Aged Care Quality and Safety Commission, Australian Government.
- Amadoru, S, Rayner, J-A, Joseph, R & Yates, P 2018, 'Factors influencing decision-making processes for unwell residents in residential aged care: Hospital transfer or Residential InReach referral?', *Australasian Journal on Ageing*, vol. 37, no. 2, pp. E61-E7.
- Anderson, J & Malone, L 2014, 'Suitability of the multi-purpose service model for rural and remote communities of Australia', *Asia Pacific Journal of Health Management*, vol. 9, no. 3, pp. 14-8.
- Arendts, G, Deans, P, O'Brien, K, Etherton-Beer, C, Howard, K, Lewin, G & Sim, M 2018, 'A clinical trial of nurse practitioner care in residential aged care facilities', *Archives of Gerontology and Geriatrics*, vol. 77, pp. 129-32.
- Australia, NaMBo 2022, Fact sheet: Enrolled nurses and medicines administration, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Enrolled-nurses-and-medicine-administration.aspx>>.
- Australian College of Nursing 2021, Skill mix in residential aged care facilities.
- Australian Government 2023, Draft National Care and Support Economy Strategy 2023: Care and Support Economy Taskforce.
- Australian Government Department of Health and Aged Care 2023, Nurse Practitioner Workforce Plan.
- Australian Institute of Health and Welfare 2023, MyHospitals mapping details, <<https://myhospitalsapi.aihw.gov.au/api/v1/reporting-units-downloads/mappings>>.
- Australian Nursing and Midwifery Federation 2021, Role boundaries in the provision of personal care: ANMF Policy, <https://www.anmf.org.au/media/si2jfrqw/p_role_boundaries.pdf>.
- Brooke, NJ 2011, 'Needs of Aboriginal and Torres Strait Islander clients residing in Australian residential aged-care facilities', *The Australian journal of rural health*, vol. 19, no. 4, pp. 166-70.
- Brühl, A, Planer, K & Hagel, A 2018, 'Variation of care time between nursing units in classification-based nurse-to-resident ratios: A multilevel analysis', *Inquiry (United States)*, vol. 55.
- Bryan, SB, Murphy, JM, Kuramoto, L, Ayas, N, Baumbusch, Balka, E, Mitton, C, Harrington, C, Globerman, J & McGegor, MJ 2010, A Systematic Review of Research Evidence on: (a) 24-hour Registered Nurse Availability in Long-term Care, and (b) the Relationship between Nurse Staffing and Quality in Long-term Care. , Final report for Canadian Institutes for Health Research Expedited Knowledge Synthesis Program; Commissioning province: Saskatchewan.
- Care, DoHaA 2022, Guiding principles for medication management in residential aged care facilities, Commonwealth of Australia (Department of Health and Aged Care), <<https://www.health.gov.au/resources/publications/guiding-principles-for-medication-management-in-residential-aged-care-facilities?language=en>>.
- Castle, NG 2002, 'Low-care residents in nursing homes: the impact of market characteristics', *Journal of health & social policy*, vol. 14, no. 3, pp. 41-58.
- Centre for Health Economics Research and Evaluation 2019, Aged care in MPS: Response to the Australian Government Terms of Reference
- Chan, DKY, Liu, FX, Irwanto, D, Prasetyo, D, Ozorio, G, Li, F, Smith, M, Sharma, A & Chen, J 2018, 'Experience of establishing an acute geriatric outreach service versus subacute service to nursing homes', *Internal medicine journal*, vol. 48, no. 11, pp. 1396-9.
- Chandler, M, Madison, J & Han, G 2005, 'Australian residential aged care: skills mix and funding post 1997 reforms', *Geriatrics*, vol. 23, no. 1, pp. 5-11.
- Chou, S-C, Boldy, DP & Lee, AH 2002, 'Resident satisfaction and its components in residential aged care', *The Gerontologist*, vol. 42, no. 2, pp. 188-98.
- Chou, S-C, Boldy, DP & Lee, AH 2002a, 'Staff satisfaction and its components in residential aged care', *International Journal for Quality in Health Care*, vol. 14, no. 3, pp. 207-17.

- Chou, S-C, Boldy, DP & Lee, AH 2002b, 'Resident satisfaction and its components in residential aged care', *The Gerontologist*, vol. 42, no. 2, pp. 188-98.
- Chróinín, DN, Anthony, A, Acosta, RM, Thambyaiyah, D, Hasan, N & Patil, A 2023, 'Residential Aged Care Facilities During the COVID-19 Pandemic: A Staff Survey on Impact and Resources', *Journal of Gerontological Nursing*, vol. 49, no. 3, pp. 13-7.
- Clark, S, Parker, R, Prosser, B & Davey, R 2013, 'Aged care nurse practitioners in Australia: evidence for the development of their role', *Australian Health Review*, vol. 37, no. 5, pp. 594-601.
- Cloutier, D, Cox, A, Kampen, R, Kobayashi, K, Cook, H, Taylor, D & Gaspard, G 2016, 'A Tale of Two Sites: Lessons on Leadership from the Implementation of a Long-term Care Delivery Model (CDM) in Western Canada', *Healthcare (Basel, Switzerland)*, vol. 4, no. 1.
- Collins, R, Charles, J, Moser, A, Birmingham, B, Grill, A & Gottesman, M 2020, 'Improving medical services in Canadian long term care homes', *Canadian Family Physician*.
- Conway, J, Higgins, I, Hullick, C, Hewitt, J & Dilworth, S 2015, 'Nurse-led ED support for residential aged care facility staff: an evaluation study', *Int Emerg Nurs*, vol. 23, no. 2, pp. 190-6.
- Cookson, D 2017, *Mandated nursing staff to resident ratios in aged care - Summary of evidence*, New Zealand Nurses Organisation, Wellington.
- Cornell, PY, Zhang, W & Thomas, KS 2020, 'Changes in Long-Term Care Markets: Assisted Living Supply and the Prevalence of Low-Care Residents in Nursing Homes', *Journal of the American Medical Directors Association*, vol. 21, no. 8, pp. 1161-.
- Craswell, A, Coates, K, Johnston-Devin, C, Sriram, D, Broadbent, M & Wallis, M 2023, 'Developing a nurse practitioner to work in residential aged care: A qualitative evaluative study', *Collegian*.
- Dai, J, Liu, F, Irwanto, D, Kumar, M, Tiwari, N, Chen, J, Xu, Y, Smith, M & Chan, DK 2021, 'Impact of an acute geriatric outreach service to residential aged care facilities on hospital admissions', *Aging medicine (Milton (N.S.W.))*, vol. 4, no. 3, pp. 169-74.
- Dai, Z 2023, 'Telehealth in long-term care facilities during the Covid-19 pandemic – Lessons learned from patients, physicians, nurses and healthcare workers', *BMC Digital Health*, vol. 1, no. 1, p. 2.
- Dai, Z, Sezgin, G, Li, J, Franco, GS, McGuire, P, Datta, S, Pearce, C, McLeod, A & Georgiou, A 2022, 'Telehealth utilisation in residential aged care facilities during the COVID-19 pandemic: A retrospective cohort study in Australian general practice', *Journal of Telemedicine and Telecare*, vol. 0, no. 0, p. 1357633X221094406.
- De Pietro, C, Camenzind, P, Edwards-Garavoglia, S, Spranger, A, Wittenbecher, F & Quesntin, W 2015, *Switzerland: Health system review*, European Observatory on Health Systems and Policies.
- Department of Finance 2023, *Commonwealth Performance Framework*, <<https://www.finance.gov.au/government/managing-commonwealth-resources/planning-and-reporting/commonwealth-performance-framework>>.
- Department of Health and Aged Care 2022, *Aged care service list: 30 June 2022*, <https://www.gen-agedcaredata.gov.au/resources/access-data/2022/october/aged-care-service-list-30-june-2022>.
- Department of Health and Aged Care 2023, *Care minutes and 24/7 registered nurse responsibility guide*, Commonwealth of Australia (Department of Health and Aged Care), <<https://www.health.gov.au/resources/publications/care-minutes-and-247-registered-nurse-responsibility-guide>>.
- Department of Health Social Services and Public Safety 2022, *Care Standards for Nursing Homes.*, accessed 21 Aug 2023 <https://www.rqia.org.uk/RQIA/files/7d/7dec5d24-796a-440a-9a60-7deb7112c994.pdf> Northern Ireland.
- Donnelly, D & Finch, J 2017, 'PROACT - A Journey of Integration& Collaboration of Health Services into Residential Aged Care', *International Journal of Integrated Care (IJIC)*, vol. 17, pp. 1-2.
- Doraiswamy, S, Jithesh, A, Mamtani, R, Abraham, A & Cheema, S 2021, 'Telehealth Use in Geriatrics Care during the COVID-19 Pandemic—A Scoping Review and Evidence Synthesis', *International journal of environmental research and public health*, vol. 18, no. 4, p. 1755.

- Dwyer, T, Craswell, A, Rossi, D & Holzberger, D 2017, 'Evaluation of an aged care nurse practitioner service: quality of care within a residential aged care facility hospital avoidance service', *BMC Health Services Research*, vol. 17, pp. 1-11.
- Dyer S, Valeri M, Arora N, Ross T, Winsall M, Tilden D & Crotty M 2020, Review of international systems of long-term care of older people, Royal Commission into Aged Care Quality and Safety.
- Dyer, S, van den Berg, M, Barnett, K, Brown, A, Johnstone, G, Laver, K, Lowthian, J, Maeder, A, Meyer, C, Moores, C, Ogrin, R, Parrella, A, Ross, T, Shulver, W, Winsall, M & Crotty, M 2019, Review of Innovative Models of Aged Care, Adelaide, Australia.
- El-Masri, MM, Omar, A & Groh, EM 2015, 'Evaluating the Effectiveness of a Nurse Practitioner-Led Outreach Program for Long-Term-Care Homes', *The Canadian journal of nursing research = Revue canadienne de recherche en sciences infirmieres*, vol. 47, no. 3, pp. 39-55.
- Ervin, K, Reid, C, Moran, A, Opie, C & Haines, H 2019, 'Implementation of an older person's nurse practitioner in rural aged care in Victoria, Australia: a qualitative study', *Human Resources for Health*, vol. 17, no. 1, p. 80.
- Fan, L, Hou, X-Y, Zhao, J, Sun, J, Dingle, K, Purtill, R, Tapp, S & Lukin, B 2016, 'Hospital in the Nursing Home program reduces emergency department presentations and hospital admissions from residential aged care facilities in Queensland, Australia: a quasi-experimental study', *BMC Health Services Research*, vol. 16, no. 1, p. 46.
- Federal Ministry of Health 2016, Germany's Long Term Care Strengthening Acts Federal Ministry of Health, Germany. , viewed 8 September 2023, <<https://www.bundesgesundheitsministerium.de/en/topics/topics/long-term-care/germanys-long-term-care-strengthening-acts.html>>.
- Gayot, C, Laubarie-Mouret, C, Zarca, K, Mimouni, M, Cardinaud, N, Luce, S, Tovenia, I, Durand-Zaleski, I, Laroche, M-L, Preux, P-M & Tchalla, A 2022, 'Effectiveness and cost-effectiveness of a telemedicine programme for preventing unplanned hospitalisations of older adults living in nursing homes: the GERONTACCESS cluster randomized clinical trial', *BMC geriatrics*, vol. 22, no. 1, p. 991.
- Gilbert, A, Owusu-Addo, E, Feldman, P, Mackell, P, Garratt, S & Brijnath, B 2020, Models of Integrated Care, Health and Housing: Report prepared for the Royal Commission into Aged Care Quality and Safety, National Ageing Research Institute:, Parkville, Australia.
- Grant, KL, Lee, DD, Cheng, I & Baker, GR 2020, 'Reducing preventable patient transfers from long-term care facilities to emergency departments: a scoping review', *CJEM*, vol. 22, no. 6, pp. 844-56.
- Graverholt, B, Forsetlund, L & Jamtvedt, G 2014, 'Reducing hospital admissions from nursing homes: a systematic review', *BMC Health Services Research*, vol. 14, no. 1, pp. 1-8.
- Gray, LC, Edirippulige, S, Smith, AC, Beattie, E, Theodoros, D, Russell, T & Martin-Khan, M 2012, 'Telehealth for nursing homes: the utilization of specialist services for residential care', *Journal of Telemedicine and Telecare*, vol. 18, no. 3, pp. 142-6.
- Gruber, EM, Zeiser, S, Schröder, D & Büscher, A 2021, 'Workforce issues in home- and community-based long-term care in Germany', *Health Soc Care Community*, vol. 29, no. 3, pp. 746-55.
- Haines, TP, Palmer, AJ, Tierney, P, Si, L & Robinson, AL 2020, 'A new model of care and in-house general practitioners for residential aged care facilities: a stepped wedge, cluster randomised trial', *Medical Journal of Australia*, vol. 212, no. 9, pp. 409-15.
- Hullick, C, Conway, J, Hall, A, Murdoch, W, Cole, J, Hewitt, J, Oldmeadow, C & Attia, J 2022, 'Video-telehealth to support clinical assessment and management of acutely unwell older people in Residential Aged Care: a pre-post intervention study', *BMC geriatrics*, vol. 22, no. 1, p. 40.
- Hullick, C, Conway, J, Higgins, I, Hewitt, J, Dilworth, S, Holliday, E & Attia, J 2016, 'Emergency department transfers and hospital admissions from residential aged care facilities: a controlled pre-post design study', *BMC geriatrics*, vol. 16, pp. 1-10.
- Hutchinson, AF, Parikh, S, Tacey, M, Harvey, PA & Lim, WK 2015, 'A longitudinal cohort study evaluating the impact of a geriatrician-led residential care outreach service on acute healthcare utilisation', *Age and Ageing*, vol. 44, no. 3, pp. 365-70.

- Independent Health and Aged Care Pricing Authority 2023, Residential Aged Care Pricing Advice 2023-24: Technical Specifications, Commonwealth of Australia (Independent Health and Aged Care Pricing Authority), <<https://www.ihacpa.gov.au/resources/residential-aged-care-pricing-advice-2023-24>>.
- Jennings, N, Lowe, G & Tori, K 2021, 'Nurse practitioner locums: a plausible solution for augmenting health care access for rural communities', *Australian Journal of Primary Health*, vol. 27, no. 1, pp. 1-5.
- Keelan, K, Pitama, S, Wilkinson, T & Lacey, C 2021, 'Indigenous peoples' experiences and preferences in aged residential care: a systematic review', *AlterNative*, vol. 17, no. 2, pp. 175-82.
- Kontunen, PJ, Holstein, RM, Torkki, PM, Lang, ES & Castrén, MK 2023, 'Acute outreach service to nursing homes: A systematic review with GRADE and triple aim approach', *Scandinavian Journal of Caring Sciences*, vol. 37, no. 2, pp. 582-94.
- Kroneman, M, Boerma, W, van den Berg, M, Groenewegen, P, de Jong, J & van Ginneken, E 2016, 'The Netherlands: health system review.', *Health Systems in Transition*, vol. 18, no. 2, pp. 1-239.
- Lau, L, Chong, CP & Lim, WK 2013, 'Hospital treatment in residential care facilities is a viable alternative to hospital admission for selected patients', *Geriatrics & Gerontology International*, vol. 13, no. 2, pp. 378-83.
- Lloyd, T, Wolters, A & Steventon, A 2017, Technical appendix: The impact of providing enhanced support for care home residents in Rushcliffe, London: The Health Foundation.
- Masso, M & Thompson, C 2014, Nurse practitioners in NSW 'Gaining Momentum': rapid review of the nurse practitioner literature, University of Wollongong.
- May, S, Jonas, K, Fehler, GV, Zahn, T, Heinze, M & Muehlensiepen, F 2021, 'Challenges in current nursing home care in rural Germany and how they can be reduced by telehealth - an exploratory qualitative pre-post study', *BMC Health Services Research*, vol. 21, no. 1, pp. 1-10.
- McVay, D 2023a, World Health Systems Facts – Netherlands: Long-Term Care viewed 24 August 2023, <<https://healthsystemsfacts.org/national-health-systems/bismarck-model/netherlands/netherlands-long-term-care/>>.
- McVay, D 2023b, World Health Systems Facts. Switzerland: Long-term care viewed 24 August 2023, <<https://healthsystemsfacts.org/switzerland/switzerland-long-term-care/>>.
- Ministry of Health 2023, Sector Guidance for Ngā Paerewa Health and Disability Services Standard (NZS 8134:2021). Part 2: Workforce and Structure., New Zealand Government, <<https://www.health.govt.nz/our-work/regulation-health-and-disability-system/certification-health-care-services/services-standard/resources-nga-paerewa-health-and-disability-services-standard/sector-guidance-nga-paerewa-health-and-disability-services-standard-nzs-81342021/part-2>>.
- Mor, V, Zinn, J, Gozalo, P, Feng, Z, Intrator, O & Grabowski, DC 2007, 'Prospects for transferring nursing home residents to the community', *Health Affairs*, vol. 26, no. 6, pp. 1762-71.
- Mueller, C, Arling, G, Kane, R, Bershadsky, J, Holland, D & Joy, A 2006, 'Nursing home staffing standards: their relationship to nurse staffing levels', *Gerontologist*, vol. 46, no. 1, pp. 74-80.
- Munyisia, EN, Yu, P & Hailey, D 2011, 'How nursing staff spend their time on activities in a nursing home: an observational study', *Journal of Advanced Nursing* (John Wiley & Sons, Inc.), vol. 67, no. 9, pp. 1908-17.
- Ness, TM, Söderberg, S & Hellzén, O 2020, 'The same care providers over time who make individual adjustments and have competence' Older South Sami People in Sweden's expectations of home nursing care', *Scandinavian Journal of Caring Sciences*, vol. 34, no. 1, pp. 181-9.
- Neumayer, B, Chapman, J & Whiteford, G 2003, 'Role of multi-purpose service programs providing residential aged care in rural Australia: a discussion paper', *Australian Journal of Rural Health*, vol. 11, no. 6, pp. 287-91.
- Nursing and Midwifery Board of Australia 2016a, Enrolled nurse standards for practice, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/enrolled-nurse-standards-for-practice.aspx>>.
- Nursing and Midwifery Board of Australia 2016b, Registered nurse standards for practice, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/registered-nurse-standards-for-practice.aspx>>.

Nursing and Midwifery Board of Australia 2020, Decision-making framework for nursing and midwifery, <<https://www.nursingmidwiferyboard.gov.au/codes-guidelines-statements/frameworks.aspx>>.

Nursing and Midwifery Board of Australia 2022, Fact sheet: Scope of practice and capabilities of nurses and midwives, <<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Fact-sheet-scope-of-practice-and-capabilities-of-nurses-and-midwives.aspx>>.

Nursing and Midwifery Board of Australia 2023, Registrant data (01 April 2023 to 30 June 2023)

Pennington, KR, Clark, KD & Knight, S 2020, 'A bitter pill to swallow: registered nurses and medicines regulation in remote Australia', *Rural and Remote Health*, vol. 20, no. 4.

Perry, M, Carpenter, I, Challis, D & Hope, K 2003, 'Understanding the roles of registered general nurses and care assistants in UK nursing homes', *J Adv Nurs*, vol. 42, no. 5, pp. 497-505.

Peters, MD 2023, 'Recognising and supporting the role of enrolled nurses in Australian nursing homes', *The Medical Journal of Australia*, vol. 218, no. 6, pp. 284-.

Reed, RL 2015, 'Models of general practitioner services in residential aged care facilities', *Australian Family Physician*, vol. 44, no. 4, pp. 176-9.

Richardson, B & Bartlett, H 2009, 'The impact of ageing-in-place policies on structural change in residential aged care', *Australasian Journal on Ageing*, vol. 28, no. 1, pp. 28-31.

Rowlands, A, Poulos, R, Agaliotis, M, Faux, S, Raguz, A & Poulos, C 2020, 'Designing residential aged care for people at risk of, or experiencing, homelessness: An exploratory Australian study', *Health and Social Care in the Community*, vol. 28, no. 5, pp. 1743-53.

Royal Commission into Aged Care Quality and Safety 2021, Final Report: Care, Dignity and Respect.

Schouten, K, Lindeman, MA & Reid, JB 2013, 'Nutrition and older indigenous australians: service delivery implications in remote communities. A narrative review', *Australas J Ageing*, vol. 32, no. 4, pp. 204-10.

Schwartz, S 2019, *Educating the nurse of the future: report of the independent review of nursing education*, Department of Health Canberra, Australia.

Shippee, TP, Fabius, CD, Fashaw-Walters, S, Bowblis, JR, Nkimbeng, M, Bucy, TI, Duan, Y, Ng, W, Akosionu, O & Travers, JL 2022, 'Evidence for Action: Addressing Systemic Racism Across Long-Term Services and Supports', *J Am Med Dir Assoc*, vol. 23, no. 2, pp. 214-9.

Sivertsen, N, Harrington, A & Hamiduzzaman, M 2020, 'Two-eyed seeing': the integration of spiritual care in Aboriginal residential aged care in South Australia', *Journal of Religion, Spirituality & Aging*, vol. 32, no. 2, pp. 149-71.

Slaugh, VW, Scheller-Wolf, AA & Tayur, SR 2018, 'Consistent staffing for long-term care through on-call pools', *Production and Operations Management*, vol. 27, no. 12, pp. 2144-61.

Smith, K, Grundy, JJ & Nelson, HJ 2010, 'Culture at the centre of community based aged care in a remote Australian Indigenous setting : A case study of the development of Yuendumu Old People's Programme', *Rural and Remote Health*, vol. 10, no. 4, pp. 234-48.

Sturney, I 2020, *International Health Care System Profiles: Switzerland*, Swiss Health Observatory.

Sunner, C, Giles, MT, Kable, A & Foureur, M 2023, 'Does telehealth influence the decision to transfer residents of residential aged care facilities to emergency departments? A scoping review', *International Journal of Older People Nursing*, vol. 18, no. 1, p. e12517.

Sussman, T, Barken, R & Grenier, A 2020, 'Supporting older homeless persons' positive relocations to long-term care: Service provider views', *Gerontologist*, vol. 60, no. 6, pp. 1149-58.

Szebehely, M 2020, *The impact of COVID-19 on long-term care in Sweden*. , LTCcovid.org, Long-Term Care Policy Network, CPEC-LSE, 22 July 2020.

The Legislative Council Secretariat 2023, Fact Sheet: Residential long-term care services for the elderly in South Korea. FS03/2023, The Legislative Council Commission, https://app7.legco.gov.hk/rpdb/en/uploads/2023/FS/FS03_2023_20230621_en.pdf.

The Weekly Source 2023, Denmark limited construction of nursing homes in 1988 – leading to 30% drop in aged care beds DCM Media, <<https://www.theweeklysource.com.au/topic-aged-care/denmark-limited-construction-of-nursing-homes-in-1988-leading-to-30-drop-in-aged-care-beds>>.

Udesen, SEJ, Rasmussen, C-H, Mikkelsen, S, Andersen, N, Brabrand, M & Lassen, AT 2023, 'Mobile emergency department care to nursing home residents: a novel outreach service', *Age & Ageing*, vol. 52, no. 3, pp. 1-9.

Valk-Draad, MP & Bohnet-Joschko, S 2022, 'Nursing Home-Sensitive Hospitalizations and the Relevance of Telemedicine: A Scoping Review', *International journal of environmental research and public health*, vol. 19, no. 19.

Venturato, L & Drew, L 2010, 'Beyond 'doing': Supporting clinical leadership and nursing practice in aged care through innovative models of care', *Contemporary Nurse*, vol. 35, no. 2, pp. 157-70.

Wagg, A, Hoben, M, Ginsburg, L, Doupe, M, Berta, W, Song, Y, Norton, P, Knopp-Sihota, J & Estabrooks, C 2023, 'Safer Care for Older Persons in (residential) Environments (SCOPE): a pragmatic controlled trial of a care aide-led quality improvement intervention', *Implement Sci*, vol. 18, no. 1, p. 9.

Warnes, AM & Crane, MA 2000, 'The achievements of a multiservice project for older homeless people', *Gerontologist*, vol. 40, no. 5, pp. 618-26.

Wei, Z & Richardson, S 2010, 'Are older workers less productive? A case study of aged care workers in Australia*', *Economic Record*, vol. 86, no. SUPPL. 1, pp. 115-23.

Table of included papers

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Amadoru (2018) Factors influencing decision- making processes for unwell residents in residential aged care: Hospital transfer or Residential InReach referral? Australia	A geriatrician led outreach service to RACFs offering telephone advice patient review and interventions, discharge follow-up and specialist consultation coordination	Qualitative study involving interviews with 31 aged care come staff, 5 GPs and four outreach service RNs.	The Residential InReach was relied on to help manage unwell residents. The outreach service was utilised to help manage complex decision-making processes in the RACF, variability in aged care home-based medical and nursing care and the positive impact on service and patient outcomes. Issues were that the service was not available 24/7	Inreach/ outreach	Robust qualitative study Level 3 (3)
Anderson (2014) Suitability of the Multi- Purpose Service Model for Rural and Remote Communities of Australia. Australia	Multi-purpose services are health and aged care services merged to allow the sustainability of services in small rural and remote communities	This article reviewed 38 papers to provide an overview of the issues related to health and aged care services in rural and remote communities	The authors found that the Multi-Purpose Service is the most appropriate model for the delivery of health and aged care services in many rural and remote communities. Further research is needed on balancing	Multi-Purpose Services	Realist review Level 2

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			community need and desire with funding limitations.		
Arendts (2018) A clinical trial of nurse practitioner care in residential aged care facilities Australia	To reduce unnecessary resident transfer to the ED, Nurse Practitioners will visit the RACF a minimum of three days a week with an on-call arrangement.	A cluster controlled clinical trial of nurse practitioner care in RACFs. There were three intervention RACFs and three control.	The authors found a non- significant reduction in rates of ED transfers ($p=0.34$) and better maintained resident quality of life. Nurse practitioner care coordination resulted in no statistically significant change in rates of ED transfer or health care utilisation, but better maintained resident quality of life.	Nurse and GP led interventions	Controlled trial Level 3 (1)
Brooke (2011) Needs of Aboriginal and Torres Strait Islander clients residing in Australian residential aged-care facilities Australia		Systematic Review to identify evidence-based practice guidelines to support the care needs of Aboriginal and Torres Strait Islander clients	The review found that there were challenges in providing a suitably skilled workforce to support Aboriginal and Torres Strait Islander people. A unique set of skills is required	Aboriginal and Torres Strait Islander services	Systematic Review Level 1

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
		residing in RACFs.	to provide culturally appropriate care. The authors estimated that only 1% of aged care RNs and less than 2% of direct care workers are Aboriginal and Torres Strait Islander. Knowledge translation and cultural safety are important aspect of training for staff working with this population.		
Bruhl (2018) Variation of care time between nursing units in classification- based nurse- to-resident ratios: A multilevel analysis Germany	Care levels and minutes were defined for German aged care homes. This study aimed to assess the impact and validity of care levels and care times.	The authors collected real time measures for each resident over 48 hours across 61 aged care homes and 68 nursing units. (Total of 120 long term care homes)	More than 40% or more of residents at lower acuity levels receiving less than the required levels of care and between 15% and 20% of residents at higher levels of acuity receiving less than recommended levels of care, i.e. residents not getting the recommended levels of care rose from 15% at the highest acuity to over	Low acuity services	Comparative study without controls Level 3 (3)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			40% at the lowest levels of acuity.		
Castle (2002) Low-care residents in nursing homes: the impact of market characteristics. USA	This analysis examines the effect of nine market factors on the prevalence of low-care residents in long term care.	Analysed administrative data from two sources, the 1995 On-line Survey and Certification of Automated Records (OSCAR) and the 1995 Area Resource File (ARF). The OSCAR and the ARF data are used to examine the effect of nine market factors on the prevalence of low-care residents in 14,646 nursing homes.	There is evidence that low-care residents are relevant in long-term care. The more that nursing homes compete with each other, the less likely they are to have low-care residents. There is strong evidence that nursing homes are sensitive to their market environment.	Low acuity services	Retrospective cohort study Level 3 (2)
Chandler (2005) Australian residential aged care: skills mix and funding post 1997 reforms Australia	Discussion piece	Discussion of structural reforms that resulted in changes to the way residential aged care in RACFs and hostels was funded	Chandler notes that there is a decreasing trend in the employment of RN staff and increasing employment of non-nursing staff. Hostels, to cater for the ageing in place trend, have moved towards a more nursing based staff mix.	Low acuity services	N/A

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Chou (2002a) Staff satisfaction and its components in residential aged care Western Australia	The aim of the study was to assess differences in staff satisfaction between nursing homes and hostels.	Cross-sectional survey design. RACFs selected using stratified random sampling. Included 610 nursing homes and 373 hostels. Relationships were examined using structural equation modelling.	Workload, team spirit and professional support influenced staff satisfaction. Hostel staff had higher satisfaction. In nursing homes, reliance on outside staff reduced relationship building and team spirit and sometimes increased workload of permanent staff. Management and leadership were pivotal to staff satisfaction.	Low acuity services	Cross sectional survey with stratified random sample selection Level 3 (3)
Chou (2002b) Resident satisfaction and its components in residential aged care Western Australia	The aim of the study was to assess differences in resident satisfaction between nursing homes and hostels.	Cross-sectional survey design. RACFs were selected using stratified random sampling. Included 394 nursing home and 752 hostel residents. Relationships were examined using structural equation modelling.	Found greater satisfaction among hostel residents. Staff selection guidelines should be developed as well as development of professional behaviour.	Low acuity services	Cross sectional survey with stratified random sample selection Level 3 (3)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Chróinín (2023) Australia	Two outreach services provide services to 25 RACFs in two local government areas	Surveyed the 25 RACFs about the impact of COVID on staffing and resources, including staffing shortages. Cross sectional survey.	The survey reported that strategies used to cover staff shortages included increasing the hours of part time staff, hiring more staff, re- hiring retired staff, agency nurses or using student nurses more (or using staff on student visas). RACFs felt supported by GPs and outreach services.	Inreach/outreach	Cross sectional survey Level 4
Clark (2013) Aged care nurse practitioners in Australia: evidence for the development of their role Australia	Nurse practitioners contribution to improving health care outcomes in residential aged care.	Systematic review of Australian evidence	Nurse practitioners improve health outcomes for aged care residents, particularly those in hard to reach populations.	Nurse and GP led interventions	Systematic review Level 1
Cloutier (2016) A Tale of Two Sites: Lessons on Leadership from the Implementatio n of a Long- term Care Delivery Model (CDM) in Western Canada Canada	A new care delivery model designed to promote more equitable care for RACF residents in Western Canada.	Qualitative design in which leadership personnel and direct care staff from 2 care RACFs were interviewed. Participants were interviewed either one to one or in small	A servant leadership style was better able to create and sustain the successful implementation of the new model compared to a leadership style that was less inclusive,	Indigenous services	Comparative study with two arm comparison Level 3 (3)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
		groups at 2 time points. Round 1 included 52 participants (Home A = 30, Home B = 22) and round 2 included 66 participants (Home A = 33, Home B = 33).	proactive and more resistant to change. A more compassionate, empowering, collegial and supportive leadership style provided a more optimal transition to the new care model.		
Collins (2020) Improving medical services in Canadian long term care homes Canada	Recommendations from the College of Family Physicians of Canada on improving medical services in Canadian long term care homes.	Contribution by experts in the field.	Virtual care is limited (useful for non-urgent tasks) but in-person assessment should be considered where needed. A standardised process is required that includes hardware, software, privacy and security and transfer of health information offsite. Recommendations included a suggestion that there be 4 hours/week for every 25-30 residents of physician care. Adequate	Telehealth Other alternatives	Expert opinion; N/A

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			remuneration that reflects increased complexity and acuity of residents. Continuing medical education.		
Conway (2015) Nurse-led ED support for Residential Aged Care Facility staff: An evaluation study. New South Wales	Nurse-led telephone support service for RACFs.	Impact evaluation over nine months using pre and post intervention design. Included 4 intervention RACFs and 8 control RACFs	Reduced ED presentation by 16%, reduced ED admission by 19% and 35% reduced inpatient days among residents from the 4 intervention RACFs. There was also high staff satisfaction.	Telehealth	Comparative study with concurrent controls Level 3 (2)
Craswell (2023) Developing a nurse practitioner to work in residential aged care: A qualitative evaluative study. Queensland	The effectiveness of advanced practice nurses, such as nurse practitioners, in aged care settings.	Qualitative study (interviews and focus groups) of about how best to develop NP from the existing workforce in this setting. Nine residents and 25 staff participated in interviews and focus groups.	The authors identified enablers and barriers to the NPC role in an aged care setting. The NPC was a valuable addition to the team and actively involved in resident care. Timely assessments	Nurse and GP led interventions	Qualitative study with no comparison; Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			and a collaborative relationships with other RACF staff the NP had a positive effect on resident care, while RACF staff felt supported by the NP.		
Dai (2021) Impact of an acute geriatric outreach service to residential aged care facilities on hospital admissions Australia	AGOS geriatricians and nurses triage referrals and visit the RACFs to assess and manage patients. It is comprised of one FTE geriatrician, one FTE aged care nurse, and one FTE geriatric trainee. It receives referrals of acutely unwell patients from 17 RACFs in the Bankstown catchment area. The service delivers "hospital in the home" interventions. They work with private pathology and radiology providers, private wound nurse	Analysed administrative data from 1 January 2016 to 31 December 2019 for the acute geriatric outreach service (AGOS).	Outcomes showed a 36.1% reduction in the risk of hospital admissions. Given that there were other services that may have had some impact on reductions in ED admissions, it is suggested that the service be evaluated in comparison to a similar region without the AGOS.	Inreach/outreach	Retrospective control study Level 3 (2)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
	practitioners and community nursing service.				
Dai (2021) Impact of an acute geriatric outreach service to residential aged care facilities on hospital admissions. New South Wales	Implementation of a metropolitan Acute Geriatric Outreach Service (AGOS). The service operated during Monday-Friday 9am-5pm only.	Used a before and after study design with a cost benefit analysis. Reviewed clinical data and ED presentations via ambulance.	In the post AGOS implementation period, modelling showed 10% reduced ED presentations. Cost benefit showed an average saving of \$2353 per individual. There was a \$5,18 saving for every dollar spent on AGOS. The service was valuable and well received by nursing home staff with	Inreach/outreach	Comparative study, no controls; Level 3 (3)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			increased referrals over time (29% 2013 to 76% at time of writing).		
Dai (2023) Telehealth in long-term care facilities during the Covid-19 pandemic – Lessons learned from patients, physicians, nurses and healthcare workers. Australia	Use of telehealth in aged during the COVID pandemic	Literature review and discussion article of the results from a study from Dai et al. (2022).	The use of telehealth may indicate disparity in access to healthcare. Those in urban areas are more likely to have access to a GP in person. Additionally, areas with slow or intermittent internet, poor or lack of equipment, lack of information technology and communication skills and literacy. Reducing healthcare inequity in long-term care, especially in remote settings, will depend on continuity of government funding for technology and equipment, transparent billing codes the	Telehealth	N/A

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			protection of patient privacy and security.		
Donnelly (2017) PROACT - A Journey of Integration& Collaboration of Health Services into Residential Aged Care New South Wales	Aged care telephone triage service, staffed by experienced RNs was implemented in 2008. The telephone service offers telephone support to RACFs, can arrange outreach to RACFs for clinical issues and referral to appropriate services. An Outreach team was added to the service in 2010.	Descriptive study, no outcomes reported.	During July 2009 and June 2010 the telephone triage service was estimated to have saved 2427 ED presentations across the district. The outreach team consists of three experienced RNs. The model includes a central point of contact, utilises a care manual with evidence based algorithms for clinical care, education and clinical coaching to RACF staff, collaboration etc. From June 2016 to January 2017, the	Telehealth Inreach/outreac h	Descriptive study only Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			service provided 777 occasions of service for 193 residents, of which 166 would have otherwise been transferred to the ED.		
Dwyer (2017) Evaluation of an aged care nurse practitioner service: quality of care within a residential aged care facility hospital avoidance service Queensland	Aim was to evaluate quality of an aged care Nurse practitioner model of care in regional Queensland. Included four and a half full time nurse practitioners. Serviced ten RACFs using in-reach service model. One NP was on call after hours.	Donabedians evaluation framework was used. Included interview with nine health professionals four RACF residents and their families and two nurse practitioners.	NPs were able to fill the service gaps that occur when primary care physicians were not available, i.e. a complementary service. The NP was also able to upskill RACF staff.	Nurse and GP led interventions	Qualitative study Level 4
El-Masri (2015) Evaluating the Effectiveness of a Nurse Practitioner-Led Outreach Program for Long-Term-Care Homes Canada	Involved a model of care designed to improve access to primary health care for aged care residents through 14 mobile Nurse practitioner lead outreach teams to provide consultation, timely onsite assessment	An observational prospective cohort design was developed between 2011 and 2014 to explore the impact of implementing an NP-led outreach program on the health outcomes of LTC residents.	Results showed that NPs were more likely than MDs and RNs to manage chronic or exacerbated chronic conditions ($p < 0.001$). The authors argued that the implementation of an NP lead outreach service located at the RACF was associated with	Inreach/outreach	Prospective cohort study Level 3 (2)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
	and/or treatment.		better judgement in regards to ED transfers. NPs transferred only 10.8% of their cases to ED but all of these were rated as urgent or higher. Results also showed that RNs were more likely to transfer to ED, due to less skills compared to NPs and MDs.		
Fan (2016) Hospital in the Nursing Home program reduces emergency department presentations and hospital admissions from residential aged care facilities in Queensland, Australia: a quasi-experimental study Australia	Hospital in the Nursing Home program with a team of ED-based nurse working in partnership with RACF staff and other health providers.	Quasi-experimental study with an intervention hospital and a control hospital. Routine administrative data extracted for analysis.	The service reduced hospital admission rates ($p < 0.0001$) and ED presentation rates ($p < 0.0001$). It was not clear if the service was available outside of business hours.	Inreach/outreach	Case control study Level 3 (2)
Gayot (2022) Effectiveness and cost-effectiveness of a telemedicine	Gerontological telemedicine programme in regions lacking medical facilities and/or	A 12-month, multicentre, prospective cluster-randomised trial conducted in	Unplanned hospitalisations were higher in the control group (32.5%) compared to	Telehealth	Pseudorandomised trial Level 3 (1)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
programme for preventing unplanned hospitalisations of older adults living in nursing homes: the GERONTACCES cluster randomized clinical trial. France	qualified medical providers.	nursing homes. Included 426 randomised participants. The intervention group was telehealth assessed every 3 months. Intervention and control groups, comprehensive onsite visits were conducted at baseline and final visit.	the intervention group 23.4% (p = 0.034). Overall the program reduced the proportion of residents transferred to hospital but did not reduce the number of residents admitted to hospital.		
Grant (2020) Reducing preventable patient transfers from long-term care facilities to emergency departments: a scoping review Canada	Staff/care models that reduce residents transfer from RACFs to the ED.	Scoping review of interventions that are most effective in reducing preventable transfers from RACFs to the ED.	Regarding telemedicine to reduce transfers, results were mixed and effectiveness for reducing transfer to ED was not determined. Intervention using outreach teams showed mixed results. Outreach team led by nurse practitioners were effective in reducing transfer from RACF to the ED. Design of outreach team was important. Interdisciplinary	Telehealth Inreach/outreach	Scoping review Level 2

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			teams were effective in reducing transfer, as was regular physician assessment. Physicians attending the RACF on an as needs basis was less effective.		
Graverholt (2014) Reducing hospital admissions from nursing homes: a systematic review Norway	To summarise the effects of interventions to reduce acute hospitalisations from nursing homes.	Systematic Review	Geriatric specialist services were able to reduce hospitalisations from RACFs. These included interventions where physicians conducted regular and on-call visits for services that would otherwise require hospitalisation and a nurse/physician team doing comprehensive geriatric assessments and reviewing medication and supporting staff.	Nurse and GP led interventions	Systematic Review Level 1

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Gray (2012) QTelehealth for nursing homes: the utilization of specialist services for residential care. Queensland	Gain information on what specialist services can be done via telehealth.	Review of RACF data regarding physician consultations with residents at a large, urban, RACF.	There were a range of non- acute consultations that could be carried out via telehealth, including those that were about medical history and discussion with the patient.	Telehealth	Case study comparison approach Level 4
Haines (2020) A new model of care and in- house general practitioners for residential aged care facilities: a stepped wedge, cluster randomised trial. Tasmania	Alternative model of care where GPs were employed by the RACF as members of staff, clinical managers were employed to work with the GPs and some RN tasks were reallocated to care assistant to free the RNs up to work on resident care planning.	A stepped wedge, cluster randomised controlled trial with cohort and cross-sectional elements. Trial lasted 90 weeks from 2012 to 2014 and included 15 RACFs.	Employing GPs within RACFs was associated with a reduction in unplanned hospital transfers ($p < 0.001$), admissions ($p < 0.001$) and out- of-hours call- outs to GPs ($p = 0.002$) but also an increase in reported falls ($p < 0.001$).	Nurse and GP led interventions	Pseudorand omised controlled trial Level 3 (1)
Hullick (2020) Video- telehealth to support clinical assessment and management of acutely unwell older people in Residential Aged Care: a pre-post	The aim was to test whether video telehealth was superior to other forms of telehealth in the management of acutely unwell patients from RACFs.	Controlled pre- post study with 14 RACFs. Five intervention RACFs added video telehealth services to other existing telehealth services, while eight facilities provided services as	The authors found a non- significant reduction in hospital admission rates or ED visits after the introduction of video health. The authors concluded that more needs to be done to	Telehealth	Comparative study with concurrent control Level 3 (2)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
intervention study New South Wales		usual. The study compared the 14 months before and 14 months after the introduction of video telehealth.	ascertain what video can add when telephone alone may be all that is required when managing competing patient priorities.		
Hullick et al. (2016) Emergency department transfers and hospital admissions from residential aged care facilities: a controlled pre-post design study New South Wales	This was a service model lead by an ED advanced practice nurse with aged care skills.	The authors used a pre-post analysis of hospital data to compare four intervention RACFs with eight matched controls (2 per intervention facility).	Intervention RACFs had 40% less admissions than control RACFs ($p=0.0012$). Defining goals of care before transfer to ED successfully reduced hospital admissions.	Inreach/outreach	Comparative study with concurrent control Level 3 (2)
Hutchinson (2015) A longitudinal cohort study evaluating the impact of a geriatrician-led residential care outreach service on acute healthcare utilisation Victoria	Geriatrician-led, multidisciplinary model of care: Residential Care Intervention Program in the Elderly (RECIPE) service provided outreach services to 73 RACFs.	The study was conducted from September 2004 to June 2011 and involved the analysis of administrative data using time series analysis and statistical modelling.	The intervention reduced LOS in hospitals ($p=0.003$) and reduced admissions over time ($p=0.046$), however the service does not appear to be set up to respond to overnight/emergency situations.	Inreach/outreach	Retrospective cohort study Level 3 (2)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Jennings (2021) Nurse practitioner locums: a plausible solution for augmenting health care access for rural communities Australia	Review and discussion of the role of nurses and midwives in rural and remote communities.	Nurse practitioner led care is the primary focus of this paper.	NP-led after- hours, on-call and onsite healthcare services currently augment the existing healthcare model of care in several health services across central and rural Victoria, Australia, including RACFs. Interim findings of a NP led locum after- hours on-call model in Victoria suggest that the model can provide a reliable service, equitable and efficient health care to rural and remote communities.	Inreach/outreach	N/A Discussion paper
Keelan (2021) Indigenous peoples' experiences and preferences in aged residential care: a systematic review Australia	There is low use of residential aged care by Indigenous older persons, indicating that unrecognised barriers exist.	Systematic Literature review of a) literature exploring older Indigenous experiences of aged care, b) critical factors shaping Indigenous experiences in aged care settings.	The authors examined 45 studies and included eight in the review. Indigenous older people were younger, had more complex health conditions and were less likely to receive dental and mental health	Indigenous services	Systematic Review Level 1

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			services. Indigenous preferences for care were more likely to be observed in long-term care homes where the Indigenous composition of the staff reflected the Indigenous make-up of it's residents.		
Kontunen (2023) Acute outreach service to nursing homes: A systematic review with GRADE and triple aim approach Finland and Canada	Outreach services are developing as a way to prevent unnecessary transfers of aged care residents to the ED.	Systematic review of performance of acute care services or people in nursing homes and long-term homecare.	The reviewers found that studies that were solely acute outreach service interventions seems to depend on the level of acuity and somewhat on the skill level of the outreach team members on whether residents were treated on-site or were transferred to hospital. The authors concluded that outreach services with preventive components to nursing homes might reduce ED transfers and hospitalisations.	Inreach/outreach	Systematic Review Level 1

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Lau (2013) Hospital treatment in residential care facilities is a viable alternative to hospital admission for selected patients. Victoria.	To determine if hospital treatment in an RACF, led by a geriatric team, is more effective than admission to hospital.	A case comparison of treatment in RACF (TRC) groups with historical controls design. Residential Care Intervention Program in The Elderly (RECIPE) was compared with a conventional treatment group.	The study included 95 patients in the TRC and 167 in the usual care groups. Treatment in residential care was an effective way to manage the health care of aged care residents. There was no difference in mortality between the TRC and usual care groups. The program was viable for those with dementia and those who needed palliative care support ($p < 0.001$). Rehospitalisation rates were similar for both groups but length of treatment was significantly shorter for TRC patients (mean 2 days) compared to usual care (mean 11 days) ($p < 0.001$)	Inreach/outreach	Case-control study Level 3 (3)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Loyd (2017) Briefing: The impact of providing enhanced support for RACF residents in Rushcliffe. England	The impact of an enhanced support package for older people living in RACFs. It involves a partnership between GPs, local community services including: GP partnerships, advocacy support, regular visits by GP to RACF, peer nursing support from community nurses, meeting with care managers to enhance care provision.	Studied effect of enhanced support on 23 RACFs between 2014 and 2016. Data linkage study. Studied the intervention group and comparison group using a range of impact measures. Regression models were then developed.	The intervention group experienced 29% fewer A&E attendances than the matched comparison group ($p = 0.002$) and 23% lower emergency hospital admissions compared to the comparison group ($p = 0.024$).	Nurse and GP led interventions	Case-control study Level 3 (3)
Masso (2014) Nurse practitioners in NSW 'Gaining Momentum': rapid review of the nurse practitioner literature Australia	What do Nurse practitioners do, what are the outcomes and what factors influence success of nurse practitioners.	Rapid Review	Nurse practitioners can improve access to health care in areas of shortage and geographical isolation but there is a gap in the literature regarding nurse practitioners in rural and remote Australia.	Nurse and GP led interventions	N/A

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
May (2021) Challenges in current nursing home care in rural Germany and how they can be reduced by telehealth - an exploratory qualitative pre- post study. Germany	Implementing video consultations in longer-term nursing care.	Qualitative study of 21 pre (n=13) and post (n=8) interviews.	After implementation , it was found that clinical information was less likely to be lost, additional work was spared, and medication and assistive devices were provided more quickly. While telehealth cant replace in person/physical visits, when properly integrated, video health does offer an alternative. Can help address shortages of medical specialists in rural areas.	Telehealth	Qualitative, pre-post design Level 4
Mor (2007) Prospects for transferring nursing home residents to the community USA	The study aimed to estimate residents of nursing homes who could return to the community and/or rates of those needing low level care.	Used the CMS national registry of nursing homes resident assessment from the Minimum Data Set to examine rates of those meeting low care needs	States with lower investment in community care had higher rates of low care residents in nursing homes.	Low acuity services	Single cross- sectional design Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Mueller (2006) Nursing Home Staffing Standards: Their Relationship to Nurse Staffing Levels USA	A review of staffing standards across 50 USA states to determine link between staffing levels and staffing standards.	Comparison of staffing standards and nursing staffing data, i.e. minimum hours per resident day. Linear model were developed.	The variance in nursing home staffing was greater within states than between states. Resident acuity and funding may also be related to staffing levels.	Low acuity services	Retrospective cohort study Level 3 (3)
Munyisia (2011) How nursing staff spend their time on activities in a nursing home: an observational study New South Wales	A study of how nursing staff spend their time in a nursing home, e.g. staff deployment and effects on nursing practice.	Used a work sampling observational approach to recording nursing activity at one 110 bed nursing home in Australia. The nursing home is separated into two units, high care (53 beds) and low care (46 beds).	Nurses in low care spent significantly more time in communication ($p<0.01$), medication management ($p<0.01$) and in transit between tasks ($p<0.01$) while nurses in high care spent more time in direct care activities ($p<0.01$)	Low acuity services	Comparative study Level 3 (3)
Ness (2020) The same care providers over time who make individual adjustments and have competence' Older South Sami People in Sweden's expectations of home nursing care. Sweden	Examination of the view of nursing home care from the perspective of South Sami people in Sweden.	Telephone interviews with 56 South Sami people (25 men and 31 women) with median age 74 years.	The main theme included the expectation of the same care provider over time, and two subthemes, including the desire that carers would recognise them and 'to not have to explain myself all the time.'	Indigenous services	Qualitative study with cross sectional approach Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Neumayer (2003) Role of multi-purpose service programs providing residential aged care in rural Australia: a discussion paper Australia	To determine if multi-purpose services deliver better aged care compared to traditional hospital services.	Comparison study of services that had converted to the MPS model (n=6) and those that had remained as traditional hospitals (n=3).	MPS services resulted in increased access to aged care services, improved standards in accommodation and more flexible bed usage in rural areas. Traditional hospitals that are not co- located with other services were not able to provide better access to aged care.	Multipurpose services	Qualitative Comparative study Level 3 (3)
Perry (2003) Understanding the roles of registered general nurses and care assistants in UK nursing homes UK	The aim was to distinguish the difference between the roles of registered general nurses (RGNs) and care assistants (CAs).	Qualitative study including interviews with 9 RGNs and 12 CAs.	The RGN role tends to include doing anything and everything while CA roles are more limited and tend to be characterised by what they can't do. This makes it hard for RGNs to delegate tasks to CAs. An increase in assistive staff was needed but also, resident dependency was a good measure of required staffing levels. Clearly defined	Other alternatives	Qualitative study no comparison Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			role descriptions are needed for co- ordinate, plan and provide resident care.		
Reed (2015) Models of general practitioner services in residential aged care facilities South Australia	To describe different models of general practice care in RACFs.	Review of literature	Describes several GP models of care within RACFs including: the continuity model in which GPs continue with the same patients as they enter aged care; The RAC panel model in which a GPs sees all the patients for one or more RACFs; GPs with special interests in providing care in RACFs; general practice teams that include GPs with Nurse practitioners or practice nurses; RACF-based models where an RACF establishes a relationship with a GP that may include	Nurse and GP led interventions	Literature review - not systematic Level 2

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			clinical governance.		
Richardson (2009) The impact of ageing-in-place policies on structural change in residential aged care Queensland	The impact of aging in place policies on resident dependency, in particular low care homes receiving funding for high care residents i.e. aging in place as residents transfer from low care needs to higher care needs.	High and low care homes were compared using data gathered from accreditation reports over two 3 year accreditation cycles (1998- 2001; 2001- 2004). Outcomes from T1 (2001) were compared to outcomes at T2 (2004) using paired sample t- test.	There was a statistically significant increase in the proportion of high care residents living in low-care homes between T1 and T2 ($p=0.005$)	Low acuity services	Comparative study Level 3 (3)
Rowlands (2020) Designing residential aged care for people at risk of, or experiencing, homelessness: An exploratory Australian study Australia	Exploration of the care needs of older people with co-morbid conditions who are facing homelessness and development of a preferred model of aged care.	The authors conducted interviews and focus groups with 29 participants from providers in aged care for those affected by homelessness.	A model of aged care for those affected by homelessness should address loss and trauma experienced by the resident, use a strengths based approach and build relationships between staff and residents. Staff employed in this specialised sector need to have an understanding of these aspects. Other disciplines may	Homeless services	Qualitative/ca se study Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			be explored, e.g. social workers, as care providers.		
Shippee (2022) Evidence for Action: Addressing Systemic Racism Across Long-Term Services and Supports USA	Examination of racial/ ethnic disparities in quality of life in RACFs with a high proportion of BIPOC residents.	Used a mixed methods design involving case studies of 6 high-proportion BIPOC nursing homes (96 resident interviews, 61 staff interviews, 614 hours of observation). Also, state-wide (Minnesota) survey data analysis of minimum data set.	BIPOC residents experienced lower quality of life compared to white residents across a range of domains. There was also variability in quality of life between high- proportion BIPOC RACFs. Staff training, additional staffing and culturally specific programming were recommended by the authors.	Indigenous services	Mixed methods qualitative and cross- sectional survey Level 4
Siversten (2020) Two- eyed seeing': the integration of spiritual care in Aboriginal residential aged care in South Australia	The integration of spiritual care in Aboriginal aged care	A qualitative exploration from conversational interviews with 7 Aboriginal residents and 19 carers.	While spiritual care is important for Aboriginal people there was few Aboriginal staff who could support this aspect of care. Understaffing of Aboriginal workers and	Indigenous services	Qualitative/ca se study Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			high staff turnover were identified as an issue in providing spiritual care for Aboriginal residents.		
Slaugh (2018) Consistent Staffing for Long-Term Care through On-Call Pools. USA	Nursing Aides who care for residents over shifts for one month.	This study analyses both staffing cost and care consistency when nurse aides are subject to random absences on each shift. Produced numerical structural models relating to number of on-call pool staff, staff costs and inconsistency level.	The authors found that using a pool of part-time nurse aides can both reduce staffing cost and improve consistency of care. They found that a 'restricted' on-call pool outperformed an 'open' on-call pool. The models showed that for a 1-200 bed RACF, staff absence costs reduced by 24% and significantly reduced the staffing inconsistency level. The authors concluded that nursing homes that reduced the number of rental agency aides, employ a higher number of regularly assigned aides to	Other alternatives	Theoretical study Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			accommodate a higher number of part-time aides was a useful strategy.		
Smith (2010) Culture at the centre of community based aged care in a remote Australian Indigenous setting: a case study of the development of Yuendumu Old People's Programme. Central Australia	Yuendumu is a Walpiri Aboriginal community north west of Alice Springs. The Yuendumu Old People's Programme (YOPP) is a comprehensive, community based aged care service.	A case study approach was used to describe aspects of the service.	In regards to staffing the model has a large pool of workers to draw on. The service could also be adaptive to accommodate workers cultural needs. For a range of complex issues, non-local Indigenous staff were often not able to work with local people. Long term personal relationships were emphasised. There was an emphasis on the development of the local workforce with the intermittent presence of a	Indigenous services	Qualitative/case study approach Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			non-Indigenous project worker as a 'specialist in the field'. This contributed to local ownership and protected the project worker from burnout.		
Sunner (2023) Does telehealth influence the decision to transfer residents of residential aged care facilities to emergency departments? A scoping review New South Wales	Does telehealth assist in reducing avoidable transfer to hospital	Scoping Review exploring evidence around whether telehealth influences decision transfer RACF residents to hospital.	Residents are transferred when staff are unable to make confident informed decisions about resident management and treatment. Video/telehealth improves access to expert clinicians. RACF staff knowledge and skills are improved by participation in joint assessment.	Telehealth	Scoping Review Level 2
Sussman (2020) Supporting older homeless persons' positive relocations to long-term care: Service	The relocation of older homeless persons to long-term care.	Qualitative study involving interviews with 8 service providers.	Older homeless persons are a difficult to place group characterised by somewhat low acuity but high behavioural issues who require	Homeless services	Qualitative/case study approach Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
provider views Canada			specialist care and specialist staff training.		
Udesen (2023) Mobile emergency department care to nursing home residents: a novel outreach service Denmark	A Danish mobile service of consultants who perform emergency care in nursing homes. The service responds to emergency calls from nursing homes by sending an ED consultant/spec ialist or a consultant and an ambulance. The consultant provides on-site emergency evaluation and treatment.	Descriptive study of the service.	Results indicated that seven out of eight residents could remain in the nursing home after being assessed by the ED consultants. Care was generally completed in the one visit.	Inreach/outreac h	Descriptive study Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
Valk-Drad (2022) Nursing Home- Sensitive Hospitalization s and the Relevance of Telemedicine: A Scoping Review Germany	Change in rate of hospitalisation, cost savings and staff acceptance of telemedicine in a nursing home setting.	Scoping Review. Sixteen comparative studies published from 2001-2022 were included.	In regards to study outcomes, the authors found fourteen studies that reported a reduction in hospitalisation rate for nursing home residents or subgroups of residents after the introduction of telemedicine. Nursing homes where telemedicine had been introduced for a longer time or had a higher level of acceptance of telemedicine showed lower hospitalisation rates. The increased presence of Physicians in a nursing home appears to reduce hospitalisation of residents, an effect that appeared to apply to support via telemedicine as well. The authors suggested that nursing homes should consider offering telemedicine all	Telehealth	Scoping review with systematic approach Level 1

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
			day all week (24/7) and prepare, train, engage their staff in the use of telemedicine.		
Venturato (2010) Beyond 'doing': Supporting clinical leadership and nursing practice in aged care through innovative models of care Queensland	Explored a model of care in and RACF. This included innovative staffing arrangements called the Advanced Practice Model of Care. New staffing roles included: Clinical assistants to RNs (1 ex-RN, 1 2nd year student and 1 ex-EN), Clinical team leaders who are PCWs with some extra supervisory and delegation responsibilities who assist the RN, Non-clinical team leaders	Exploratory study using a range of qualitative methods, including interviews and focus groups.	In this model RNs are supported by clinical care staff, case management staff and other non-direct care staff (e.g. education, management, QA activities). The additional roles has clarified the roles and expectations of the staff and enabled RNs to assume a proactive leadership approach to care and case management. Although hierarchical, the strengthening	Other alternatives	Qualitative approach Level 4

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
	for admin support and non-direct care. These new roles support the traditional PCW-RN-Nurse Manager hierarchy.		of team affiliations based on type of support rather than control has ensured a collegial atmosphere is maintained.		
Wagg (2023) Safer Care for Older Persons in (residential) Environments (SCOPE): a pragmatic controlled trial of a care aide-led quality improvement intervention. Canada	The Safer Care for Older Persons in (residential) Environments (SCOPE) intervention. Increased staffing has not met the increasingly complex needs of aged care residents. Care aides were enabled to lead quality improvement and implement the use of evidence-	Care aide-led teams implemented interventions through networking, QI education meetings, quality advisors and senior leader support. This was a controlled trial with random selection of intervention clinical care units matched post hoc with control units at 25 intervention sites and 32	There was no significantly different outcomes between intervention and control units or for staff outcomes. Resident adjusted outcomes showed less pain in the intervention group ($p=0.02$) and reduced resident dependency where teams addressed mobility	Other alternatives	Case-control study Level 3 (2)

Lead Author (year) Title Country	Intervention/ study aim	Study description	Main findings	Main Theme	Quality of Evidence
	informed best practice.	care units. Outcomes included change in the use of research plus secondary staff and resident measures.	($p < 0.0001$). The study may have been underpowered to detect expected changes.		
Wei (2010) Are older workers less productive? A case study of aged care workers in Australia. Australia	This paper is a case study of the differences in labour productivity by age group in the residential aged care industry in Australia.	2007 census of residential RACFs data was used to examine productivity differentials between younger and older workers.	Nurses between ages 30 and 49 were 85% more productive than nurses under 30, while those who were 50 and over were 95% more productive than younger nurses. For all care workers in the study carers between 30 and 49 were 41% more productive than younger workers, while older workers were 19% more productive.	Other alternatives	Retrospective cohort study Level 3 (3)

Appendix 7: Scope of practice and competencies overview – RNs, ENs PCWs/AINs

This Appendix provides an overview of the roles of personal care workers (PCW), assistants in nursing (AIN), enrolled nurses (EN) and registered nurses (RN) in residential aged care, including qualifications and duties/scope of practice. Nursing and aged care scope of practice is not regulated or clearly defined in many cases, with considerable variation across states and territories (Schwartz 2019). The duties that can be undertaken by unregulated care workers (variously named) is even more ambiguous and open to interpretation which can lead to poorer quality of care outcomes. Table 10 brings together the requirements for registration, various guidelines and standards for practice from the Nursing and Midwifery Board of Australia and the Department of Health and Aged Care.

Table 10 Overview of the roles of PCWs/AINs, ENs and RNs

PCW / AIN	EN	RN
Qualifications and clinical placement hours		
<p>Not regulated professions. No minimum qualification.</p> <p>Typical qualifications:</p> <ul style="list-style-type: none"> ▪ Certificate III in Individual Support (Ageing) ▪ Certificate III in Individual Support (Disability) ▪ Certificate IV in Ageing Support ▪ Certificate III in Health Services Assistance ▪ Working towards another formal qualification in nursing <p>6- 12 months to complete</p> <p>Work placement hours:</p> <p>Students complete a minimum of</p> <ul style="list-style-type: none"> ▪ 120 hours or work placement for Certificate III in Individual Support (Ageing) and Certificate IV in Ageing Support ▪ 80 hours for the specialisation: Assisting in nursing work in acute care Certificate III in Health Services Assistance 	<p>Qualifications:</p> <p>Diploma of nursing (AQF 5)¹</p> <p>Minimum 18 months within the vocational education training (VET) sector, delivered by Registered Training Organisations (RTO).</p> <p>Clinical placement hours:</p> <p>Students complete a minimum of 400 hours of clinical placement in a variety of settings.</p>	<p>Qualifications:</p> <ul style="list-style-type: none"> ▪ Bachelor of nursing (AQF 7)¹ <p>Three years full time (or equivalent), tertiary education</p> <p>or</p> <ul style="list-style-type: none"> ▪ Master's degree (AQF 9)¹ <p>Two years or equivalent. Graduates commonly complete a supported transition to practice program, though this is not mandatory.</p> <p>Clinical placement hours:</p> <p>Students complete a minimum of 800 hours of clinical placement in a variety of settings.</p>
Career progression		

PCWs/AINs can articulate to EN or RN. Recognition given to prior learning is determined individually by each higher education provider.	ENs can articulate to RN. Recognition given to prior learning is determined individually by each higher education provider.	The pathway from RN to NP is set out in the NP Accreditation Standard and the NP Endorsement Registration Standard.
Aged Care specific training/ Qualifications		
Equip Aged Care Learning Packages ²	Aged Care Transition to Practice Program ³ Equip Aged Care Learning Packages ²	Aged Care Transition to Practice Program ³ Equip Aged Care Learning Packages ²
Supervision		
Work under the supervision and delegation of RN or EN (Department of Health and Aged Care 2023; Nursing and Midwifery Board of Australia 2020)	Work under direct or indirect ⁴ supervision by an RN/NP at all times (Department of Health and Aged Care 2023; Nursing and Midwifery Board of Australia 2020)	No supervision requirements
Duties/scope of practice		
<p>Duties are defined by the employer via their job description and aged care home protocols. Typically, these take into account the individual qualifications and competencies of PCWs/AINs. Regulation regarding the supply and administration of medications have implications for PCW/AINs job duties (see 'Medication Administration' section).</p> <p>PCW/AINs will be delegated care by the RN and are accountable for providing the delegated care, agree to the level of supervision needed and cannot sub-delegate care without referring to the delegator.</p> <p>Typically, PCWs/AINs assist with daily living routines, social and emotional support, regular monitoring of</p>	<p>EN scope of practice is determined by their foundational and ongoing education, training and competence (refer EN Standards for Practice), the regulations that govern medication administration, their job description, and the protocols at their aged care home (Nursing and Midwifery Board of Australia 2016a, 2022b).</p> <p>ENs are accountable in providing nursing care that has been delegated to them by an RN or NP, according to the health needs of the person, and that is within their competence (Nursing and Midwifery Board of Australia 2022). ENs provide nursing care as part of a team, contribute to the development of plans of care while working under the supervision (direct or indirect) of an RN or NP.</p>	<p>RN scope of practice is determined by their foundational and ongoing education, training and competence (refer RN Standards for Practice), the regulations that govern medication administration, their job description, and the protocols at their aged care home (Nursing and Midwifery Board of Australia 2016b, 2022b).</p> <p>RNs are accountable for the management of people in their care. They conduct comprehensive assessments, develop care plans and coordinate other health workers and resources to provide nursing care (Nursing and Midwifery Board of Australia 2022). RNs provide information and education to enable people to make decisions and take action in relation to their health and well-being. RNs supervise, and when appropriate, delegate care to ENs, student nurses and other care workers.</p>

residents' health and wellbeing and perform tasks as delegated by nurses via the resident care plan.	Not all ENs are authorised to administer medications (see Medication Administration section).	<p>In aged care RNs typically (Department of Health and Aged Care 2023):</p> <ul style="list-style-type: none"> Manage the provision of nursing and personal care in the aged care home, including medications Conduct comprehensive health and cultural assessments of residents Plan and delegate care tasks Also have non-care related responsibilities such as rostering/scheduling, training etc.
Standards of Practice (NMBA)		
N/A	<p>EN practice is governed by ten practice standards (Nursing and Midwifery Board of Australia 2016a):</p> <ol style="list-style-type: none"> functions in accordance with the law, policies, and procedures affecting EN practice; practices nursing in a way that ensures the rights, confidentiality, dignity and respect of people are upheld; accepts accountability and responsibility for their own actions; interprets information from a range of sources in order to contribute to planning appropriate care; collaborates with the RN, the person receiving care and the health care team when developing plans of care; provides skilled and timely care to people whilst promoting their independence and involvement in care-decision-making; 	<p>RN practice is governed by the seven practice standards (Nursing and Midwifery Board of Australia 2016b):</p> <ol style="list-style-type: none"> thinks critically and analyses nursing practice; engages in therapeutic and professional relationships; maintains the capability for practice; comprehensively conducts assessments; develops a plan for nursing practice; provides safe, appropriate and responsive quality nursing practice; and evaluates outcomes to inform nursing practice.

	<ol style="list-style-type: none"> 7. communicates and uses documentation to inform and report care; 8. provides nursing care that is informed by research and evidence; 9. practises within safety and quality improvement guidelines and standards; and 10. engages in ongoing development of self as a professional. 	
Medication administration		
<p>The guiding principles for medication management in aged care outlines that PCW/AINs can only support residents to self-administer their medications (Care 2022). This may include reminding them to take the medication or taking the screw-cap lid off a bottle.</p>	<p>All ENs may administer medicines, except for those who have a notation on the register against their name that reads, 'Does not hold Board-approved qualification in administration of medicines.' This indicates that they have not completed the required training to administer medications (Australia 2022)</p> <p>Regulation varies by state and territory but typically ENs can administer Schedule 2 and 3 medications.</p>	<p>RNs are qualified and legally authorised to administer medicines (Nursing and Midwifery Board of Australia 2022). Unlike ENs and unregulated care workers they are able to (Nursing and Midwifery Board of Australia 2022):</p> <ul style="list-style-type: none"> ▪ conduct formal medication related assessments (including risk assessments) and reviews (e.g. BPMH, medication reconciliation, update records) ▪ access and administer nurse-initiated medicines and emergency stocks for urgent treatment (including Schedule 4 and 8 medicines, PRN medicines) <p>A review of state and territory regulation in 2020, identified 28 variants in how RNs are authorised to work with medicines (Pennington et al. 2020). Nationally, RNs are consistently authorised to administer Schedule 4 and 8 medicines (Pennington et al. 2020). However, provisions regarding vaccines (which fall under Schedule 4 medicines) and the conditions under which an RN can supply and/or administer medicines varied considerably.</p>
Opportunities to expand qualifications and competencies		

<p>Attainment of Vocational Education and Training (VET) qualifications. Fee Free TAFE.</p> <p>Support to undertake continuing professional development. Equip Aged Care Learning Packages.</p>	<p>ENs wishing to remove the notation 'Does not hold Board-approved qualification in administration of medicines' must complete the unit of study 'Administer and Monitor Medicines and Intravenous Therapy – HLTENN040 (previous course code HLTENN007)' which is provided within an NMBA-approved Diploma of Nursing.</p> <p>Support to undertake continuing professional development. Equip Aged Care Learning Packages</p>	<p>Support to undertake continuing professional development. Equip Aged Care Learning Packages.</p>
---	--	---

1 Australian Qualifications Framework (AQF) is the national policy for regulated qualifications in Australian education and training.

2 Equip Aged Care Learning Packages – provides free, easily accessible and short online learning modules to support direct care workers enhance their knowledge on key aspects of aged care and keep up to date with current practices.

3 Aged Care Transition to Practice Program – provides specialist training in aged care nursing and mentoring for new RNs and ENs, and RNs transitioning into aged care.

4 "Indirect supervision is when the supervisor works in the same service or organisation as the supervised person but does not constantly observe their activities. The supervisor must be available for reasonable access. What is reasonable will depend on the context, the needs of the resident receiving care and the needs of the person who is being supervised" (Nursing and Midwifery Board of Australia 2016a).

Appendix 8: Activity-based funding

The Australian National Aged Care Classification (AN-ACC) is the funding model for residential aged care. It is used to provide subsidies to aged care providers which are based on the care needs of the residents and the service type (accommodation costs are not funded by AN-ACC). The AN-ACC is a 'casemix' system, which is similar to activity-based funding used for hospitals in Australia and internationally. Casemix classifications are developed through a process of identifying and understanding the drivers of service delivery costs, which is informed in consultation with experts in the sector and analysis of activity and cost data. Activity-based funding systems have the following key characteristics:

- Classes that describe the characteristics of those receiving care and are both meaningful and relevant to its users and resource homogeneous;
- A transparent payment model in which there is an explicit relationship between cost and price informed by regular costing studies;
- National weighted activity units (NWAUs) for all classes based on cost relativities between classes and a single price across all care activities.

Importantly, in the context of residential aged care around half of all care costs relate to services which everyone in the RACF shares equally, with the other half delivered to meet the care needs of individual resident. Therefore, the AN-ACC funding model comprises two main components:

- Base care tariff: fixed component to cover the costs of ensuring capacity and providing the care that all residents receive equally;
- AN-ACC classification subsidy: variable component based on the individual care needs of residents. The subsidy accounts for the volume and mix of residents and is based on the AN-ACC class assigned to each resident following an independent care needs assessment;

The AN-ACC funding model has six base care tariffs based on unavoidable characteristics of the RACF, location and specialisation (Aboriginal and Torres Strait Islander and homelessness) and 13 resident classes (defined by resident characteristics such as level of mobility, cognitive ability, and level of function).¹⁵

NWAUs are applied to each funding component using a standard national AN-ACC price of a unit of care, or 1.00 NWAU. The AN-ACC price for the 2023-24 financial year is \$243.10 per day (Independent Health and Aged Care Pricing Authority 2023). The weightings reflect the variations in the costs of the care being provided. The AN-ACC price weights (measured in NWAU) that are applied to each component were determined in the Resource Utilisation and Classification Study (RUCS), a major research project that was undertaken by the University of Wollongong to develop the AN-ACC.

The AN-ACC funding model is designed to cover all care staff costs, including the salaries of care managers, RNs, ENs, PCWs, allied health, lifestyle, agency staff, and chaplaincy/pastoral care and quality/education as well as any other care related expenses.

In activity-based funding, annual costing studies are undertaken to routinely recalibrate the relative cost weights (NWAUs) so that changes in the average cost of delivering care can be incorporated into the price. Importantly, for our considerations, the current NWAUs for base care tariffs and AN-ACC classes are based on RUCS and the subsequent AN-ACC Trial. IHACPA is currently undertaking the Residential Aged Care Costing Study which may lead to updated NWAUs.

¹⁵ There is also a third component which is a one-off adjustment payment for when a resident initially enters a service as a permanent resident.

Appendix 9: Draft Provider Reporting Template

#	Information	Comments
1	Approved Provider details	
	National Approved Provider System (NAPS) ID Approved Provider name Key personnel contact details	Document changes to key personnel within reporting period
2	Residential care service details	
	Service NAPS/RACS ID Service name Physical address of service Key personnel contact details Number of operational places at service	Document changes to key personnel within reporting period
3	Resident profile	
	Number of care recipients receiving high level complex clinical care Type of high level complex clinical care required Case-mix profile – distribution of resident AN-ACC scores across the RACF Resident and/or family consent re alternative arrangements	e.g., Schedule 8 medications, complex wound management, blood or IV infusions, palliative
4	Roster details	
	Clinical and allied health care staff employed at the service Alternative arrangements in place to deliver complex clinical care	Current roster, at least one month duration e.g., On-site staff, on-call clinical arrangements e.g., Registered Nurse (RN), General Practitioner (GP), Nurse Practitioner (NP) Roster changes e.g., split or 12-hour shifts
5	On-call clinician arrangements	
	Local health service On-call RN (external or contractual) On-call GP or NP	For each arrangement, include: Evidence to support arrangements (e.g., Memorandum of Understanding, contract)

#	Information	Comments
	On-call specialist telehealth services Other arrangements	Contact information to confirm details; Mode: on-call telephone/video, on-call in person attendance Timeframe: ongoing or fixed term, end date Duration of travel: for on-call in-person arrangements
6	Protocols and procedures	
	<p>Protocols, policies and/or procedures for escalation of clinical issues (including end of life care) in the absence of an RN on-site and on duty.</p> <p>On-call staff are familiar with residents' complex clinical care needs and with operational processes within the RACF, including medication management, clinical records, documentation, hand-over</p> <p>Contingency arrangements if nominated on-call clinician is unavailable</p> <p>Arrangements for escalation of clinical care needs and access to emergency services</p> <p>Links and pathways to local clinical care providers or services</p>	<p>Maintain central record of all relevant documentation</p> <p>Maintain central records providing evidence that all potential on-call personnel are familiar with operational processes, protocols and procedures</p>
7	Services provided by alternative clinical arrangements	
	<p>Name/type of alternative arrangement utilised</p> <p>Resident need: Routine care; unexpected deterioration/incident; specialization required</p> <p>Resident outcomes: Usual care; Resolution of clinical concern; Transfer to hospital/ambulance; Death; Other</p> <p>Associated costs with providing alternative arrangements</p> <p>Unexpected consequences for resident, staff and/or alternative health provider</p>	<p>Maintain central record of all incoming visiting personnel, including residents seen, date and time, purpose and outcomes</p>
8	Workforce capability, training and management	

#	Information	Comments
	<p>All care and clinical personnel (on-site, on-call and agency) understand on-call processes and escalation procedures and are competent utilising remote communication devices to support clinical care delivery e.g., videoconference</p> <p>Current and prospective workforce recruitment strategies to meet legislated staffing responsibilities</p> <p>Development opportunities provided to support capacity building for employees (staff, management) and governance bodies</p> <p>Government workforce initiatives accessed in past 12 months</p>	<p>Maintain central record of activities undertaken to support recruitment and staff development</p> <p>e.g., Rural Locum Assistance Program; Workforce Advisory Service; Business Advisory Service</p>