Australian Nursing and Midwifery Federation submission to the consultation on the development of Star Ratings for Residential Aged Care

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Introduction

The Australian Nursing and Midwifery Federation (ANMF) is Australia's largest national union and professional nursing and midwifery organisation. In collaboration with the ANMF's eight state and territory branches, we represent the professional, industrial and political interests of more than 300,000 nurses, midwives and carers across the country.

Our members work in the public and private health, aged care and disability sectors across a wide variety of urban, rural and remote locations. We work with them to improve their ability to deliver safe and best practice care in each and every one of these settings, fulfil their professional goals and achieve a healthy work/life balance.

Our strong and growing membership and integrated role as both a professional and industrial organisation provide us with a complete understanding of all aspects of the nursing and midwifery professions and see us uniquely placed to defend and advance our professions.

Through our work with members we aim to strengthen the contribution of nursing and midwifery to improving Australia's health and aged care systems, and the health of our national and global communities.

With regard to care of older people, ANMF members work across all settings in which aged care is delivered, including over 45,000 members who are currently employed directly in the aged care sector. Many more of our members are involved in the provision of health care for older persons who move across sectors (acute, residential, community and in-home care), depending on their health needs. Being at the forefront of aged care, and caring for older people over the twenty-four hour period in acute care, residential facilities and the community, our members are in a prime position to make clear recommendations to improve legislation that seeks to enhance the quality and safety of Australia's aged care system.

The ANMF welcomes the opportunity to provide feedback on the development of Star Ratings for Residential Aged Care – December 2021.

The ANMF's position is that the Centers for Medicare and Medicaid Services (CMS) Nursing Home Compare system (NHC), would not ensure safe staffing in Australian residential aged care. The following provides a detailed analysis of why the ANMF considers this to be the case.

It should be noted at the outset that the CMS NHC system did not build its staffing profiles based on an assessment of needs, but rather on analysis of supply against outcomes. Harrington and colleagues argue that the staffing levels in many United States (US) facilities are dangerously low and that enforcement of the existing standards is weak despite state-based minimum staffing standards that are higher than the federal minimum (Harrington et al. 2016). That review also states that higher state standards than the federal standards, have been demonstrated to have significant positive effects on staffing levels and quality outcomes.

As alluded to above, the CMS NHC system operates in the context of (state- based) mandated minimum staffing requirements. Such a position is consistent with the ANMF's proposals.

The purpose of the CMS NHC system is to rate relative performance of each facility against benchmark criteria, rather than to determine and allocate actual staffing levels and mix in that environment at facility level.

The operation of a case-mix and quality reporting system such as that proposed by the study and in the CMS NHC system does not serve to invalidate the case for mandatory safe staffing levels and skills mix. Both the US nursing homes system and the Australian acute care system have components within them that reflect the relative cost weights that reflect the nursing costs relative to the episode of care. However in both cases there are mandatory staffing standards that operate as a function of state determinations and statutes or as mandatory and enforceable standards within industrial agreements that bind employers to minimum staffing levels and mix.

Staff hours per resident per day may not reflect actual or direct care

Staff (registered nurse, licensed practical nurse/licensed vocational nurse, and certified nursing assistant) hours per resident per day are calculated based upon data collected quarterly via the Payroll Based Journal (PJB) system.[1] Data regarding residents is also derived from daily resident census from Minimum Data Set, Version 3.0 (MDS 3.0) assessments, and are case-mix adjusted based on the distribution of MDS 3.0 assessments by Resource Utilization Groups, version IV (RUG-IV group). Not all states use the RUGS-IV system so there are inconsistencies across the US for classification system used to allocate funding. The staffing hours reported through PBJ and the daily MDS census are both summed across the quarterly reporting period. The quarterly reported staffing hours per resident per day (HRD) are then calculated by dividing the aggregate reported hours by the aggregate resident census.[2]

The number of hours each type of staff worked each day in this period, inclusive of administrative time, is divided by the number of residents at the facility. This approach does not account for the actual direct care hours that staff spent with residents. There is considerable evidence indicating that due to factors such as low staff numbers and administrative demands, staff may spend considerable amounts of time undertaking non-direct care tasks. There is also evidence that administration of the system, coding and assessment, and administrative work for care staff, increased workload demands by 5-10%. Simply counting the number of hours different staffing groups worked during a reporting period is unlikely to provide a realistic picture of the actual hours these staff spend providing direct resident care or the needs of the residents concerned.

The NHC rating system does not address issues with over-reliance on temporary agency staff

[1] Facilities are required to submit this data by Section 6106 of the Affordable Care Act (ACA). These data are submitted quarterly and are due 45 days after the end of each reporting period. Only data submitted and accepted by the deadline are used by CMS for staffing calculations and in the Five-Star Rating System.

[2] Only days that have at least one resident are included in the calculations. There are also a set of exclusion criteria that exclude facilities with improbably high or low staffing or care hours per day.

While it is understood that residential aged care facilities (RACFs) may be required to employ temporary or agency staff to provide adequate staffing for their residents' needs where permanent staff are not available, over-reliance upon this temporary workforce who may not be as familiar with other staff, local processes, or the residents and their families is not desirable or in line with best-practice care. The NHC PBJ staffing data includes both facility employees (full-time and part-time) and individuals under an organisation (agency) contract or an individual contract. This means that under an NHC system, temporary and agency staff can be used to boost a facility's staffing profiles and ratings. Such a system would not be desirable in Australia.

A similar rating system may be useful in the Australian context

Acknowledging the stated purpose of the NHC rating system, a similar rating system may be useful within the Australian context to allow improved public reporting and provider transparency regarding the quality of care along with consideration of the staffing levels and skills mixes supplied at the facility level (as well as other indicators as reported by the NHC rating system in the US). There is evidence to suggest that despite some confusion regarding the relationship between the specific domains measured by the system and a desire for greater information regarding data sources, consumers find the NHC rating system helpful for decision-making (Schapira, Shea et al. 2016).

A similar rating system, if adopted in Australia, may result in changes in consumer decision-making regarding the selection of residential aged care providers and corresponding improvements to provider quality as they move to improve ratings to attract greater consumer market share (Werner, Stuart et al. 2010). There is evidence that suggests that lower-rated facilities can experience reductions in market share in compassion to higher-rated facilities which may increase market share (Cornell, Grabowski et al. 2019).

Such a system, however, could not be relied upon to ensure that aged care providers would appropriately or safely staff RACFs. There is evidence demonstrating that even within the context of the US NHC system, considerable daily staffing fluctuations, low weekend staffing, and daily staffing levels that are often below the CMS expectations still occur (Geng, Stevenson et al. 2019). While an element of competition and public responsibility may be engendered through the mechanism of a transparent and public staffing rating system, evidence suggests that public reporting may also inadvertently result in a growing divide between high- and low-rated providers (Werner, Konetzka et al. 2009), and disincentivise the provision of care for sicker clients who require higher levels of care and staffing (Tamara Konetzka, Grabowski et al. 2015). Furthermore, the proposition that informed consumer choice is a significant and practical element in addressing shortcomings in the aged care system ignores the heavily circumscribed character of that choice (not least because of geographic and resource reasons.)

A suitable public reporting system for RACF staffing could be based upon the RUCS and legislation requiring publication of staffing levels and skills mixes.

A possible public reporting system comparable to the US NHC rating system could be established in Australia based upon legislated requirements for residential aged care facilities similar to those proposed by the Private Members Bill - Aged Care Amendment (Staffing Ratio Disclosure) Bill 2018. The proposed Resource Utilisation and Classification Study/ Australian National - Aged Care Classification (RUCS/AN-ACC) aged care funding model, which is a case-mix model, which as the CHSD report highlights, groups

aged care consumers with similar levels of complexity and care needs which, in turn, can be used to explain the relationship between care need, activity and cost, may be a useful platform upon which to base a Australian public reporting system. As the CHSD report notes:

> *"Where staff ratios have been implemented internationally, the aged care system has been funded using a case-mix model that classifies residents according to their clinical need and associated resource utilisation and that is adjusted for contextual factors."*

Briefly, RUCS/AN-ACC is designed to identify the case mix of each Australian RACF, and if implemented as proposed, would ensure that facilities' case mixes are updated regularly. These case-mixes, which define government funding thresholds, and which are also (initially) separate from staffing and care planning could be used to guide recommended staffing levels and skills mixes to provide the required care. Providers could then be required to publish their staffing and skills mixes and demonstrate how they have aligned these with the changing needs of their residents. If this occurred in the context of mandated minimum staffing levels and skills mixes, the public would then be informed of where providers were understaffing in relation to their residents' needs.

An additional requirement that is recommended would be to hold providers accountable to the allocation of government funding that is provided upon the basis of RUCS/AN-ACC assessments. Briefly, under RUCS/AN-ACC proposes that a baseline 50% of government funding would be provided to cover the shared care needs of residents. Additional funding that would be designed to cover the individual care needs of residents would also be provided based on the results of external assessments of individual residents. It would be desirable for providers to publicly and transparently demonstrate how this funding is used to deliver both shared and individual care to residents in part by ensuring best-practice staffing levels that align to the needs of residents.

Mandated minimum staffing ratios and skills mixes would ensure an appropriate and flexible level and skills mix of staffing

While a public-reported rating system could be useful to inform members of the public and consumers regarding the staffing levels and skills mixes of RACFs in Australia, mandated minimum staffing and skills mix ratios would set a 'floor' to what Australian providers would be legally able to staff. Our calculations indicate that only a facility that would receive a 5-star rating for staffing under the NHC system where staffing is able to provide 78 minutes of registered nurse (RN) care time and 258 minutes of overall staff care time is able to ensure that residents receive the recommended average of 4.3 hours of care per day from a skills mix of 30% RNs, 20% enrolled nurses (ENs), and 50% care workers not counting the time needed for other direct-care staff (e.g. allied health, specialists, medical doctors) to provide care.

While in some cases, 3-star and 4-star staffing may be able to ensure appropriate levels of staff to provide care, this could exclusively occur only when care is provided at the highest end of the ranges stipulated and/or when the residents being cared for have the lowest care needs. This is discussed in further depth below and presented in Figures 1 and 2. Based upon the evidence, we know that most residents of RACFs tend to have higher care needs and that these care needs increase over time.(AIHW, 2018) Mandated minimum staffing levels and skills mixes for registered nurses, enrolled nurses, and care workers (plus the necessary additional direct care staff from allied health, specialist care, and medicine) would ensure

that there are enough of the right kind of staff available at any one time to; proactively provide best-practice care to all residents,[3] respond to accidents, emergencies, and sudden increases in care needs,[4] ensure that RACF residents and their families receive a desired amount of face-to-face time with staff,[5] and ensure that RACFs are staffed in a manner that would enable improved attraction and retention of qualified and experienced staff.[6]

There is no causal relationship between the CMS rating system and better quality or improved resident outcomes

The CMS system should not be thought of as a direct intervention designed to improve the quality of resident care or RACF staffing levels. As explicitly a *rating system*, CMS is neither designed to nor effective in improving resident outcomes. A study examined all 16,623 United States nursing homes included in public reporting between 2000 and 2009 in OSCAR and the nursing home Minimum Data Set. This study evaluated the extent to which improvements in outcomes of care could be explained by changes in nursing home processes(Werner, Konetzka et al. 2013). Of five selected outcome measures, only the percentage of residents experiencing moderate or severe pain appeared to be associated, in part, with changes to RACF care processes. Overall, most improvements in resident outcomes were not found to be associated with changes in measured processes of care. This suggests that processes of care typically measured in RACFs do little to improve performance on outcome measures. The authors highlighted that they did not observe changes in factors such as RACF organisational culture, staff structure, satisfaction, assignments, quality, or training that could result in improvements in clinical outcomes. The authors called for the development of quality measures that are related to improved resident outcomes as a necessary step to improving care quality.

Research has also found that public reporting in the setting of post-acute care can have mixed effects on areas without public reporting (Werner, Konetzka et al. 2009). Improvements in unreported care were particularly large among facilities with high scores or that significantly improved on reported measures, whereas low-scoring facilities experienced no change or worsening of their unreported quality of care. While the benefits of public reporting may theoretically extend beyond areas that are being directly measured, pubic reporting initiatives may also widen the gap between high-rated and low-rated facilities as consumers may tend to select high-rated providers which increases their market share and revenue.

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[3] Poor staffing and skills mixes are associated with reduced ability to provide personal and clinical care to residents (See 2019 ANMF National Aged Care Survey available at: http://anmf.org.au/documents/reports/ANMF_Aged_Care_Survey_Report_2019.pdf).

[4] Poor staffing and skill mixes are associated with reduced ability for staff to respond to sudden increases in care needs or unexpected incidents (See 2019 ANMF National Aged Care Survey available at: http://anmf.org.au/documents/reports/ANMF_Aged_Care_Survey_Report_2019.pdf).

[5] Poor staffing and skill mixes are associated with a lack of time for staff to spend with residents and their families which is desired by both staff, residents, and their families. (See 2019 ANMF National Aged Care Survey available at: http://anmf.org.au/documents/reports/ANMF_Aged_Care_Survey_Report_2019.pdf).

[6] Poor staffing and skill mixes are associated with staff not wishing to work in aged care due to lack of support, lack of training (e.g. during clinical placements), and supervision. (See 2019 ANMF National Aged Care Survey available at: http://anmf.org.au/documents/reports/ANMF_Aged_Care_Survey_Report_2019.pdf).

Similar conclusions were also indicated in another study which found that while when CMS was introduced, US 'dual eligibles' (residents dually enrolled in Medicare and Medicaid) chose higher-rated RACFs initially, over time, the increased likelihood of choosing the highest-rated homes was substantially smaller for dual eligibles than for non–dual eligibles (Tamara Konetzka, Grabowski et al. 2015). This indicates that more vulnerable consumers with fewer resources may have been priced-out of higher-rated facilities. Furthermore, the benefit of the five-star system to dual eligibles was largely due to providers' improving their ratings, not to consumers' choosing different providers. Evidence appeared to suggest that supply constraints played a role in limiting dual eligibles' responses to quality ratings, as high-quality providers tended to be located closer to relatively affluent areas.

Consumer ability to pay may drive higher staffing and higher ratings

Based on the findings of research described above (Werner, Konetzka et al. 2009) (Cornell, Grabowski et al. 2019) consumer ability to pay may drive higher facility ratings but also greater divides between high- and low-rated facilities. In an even playing field where all RACFs facilities are appropriately maximising their RUCS/AN-ACC derived government subsidies and implementing care plans with the correct staffing requirements, all facilities should hypothetically attract the same star rating. That is, residents' needs, as assessed in line with the process proposed by RUCS/AN-ACC, would align to care plans and staffing resulting in each resident receiving a necessary amount of care.[7]

In this situation, market competition between providers could be expected to be driven by a desire for a higher star rating to attract a higher revenue. Providers that can afford to staff their facilities to levels exceeding what is supported by government subsidies provided via the proposed RUCS/AN-ACC system (i.e. 'premium facilities') would then attract higher ratings – this would be likely to occur in areas where consumers are able to pay more (i.e. more affluent areas).

The above situation becomes an issue if the 'average' government subsidised and staffed facility which does not charge consumers significant amounts on top of government funding is not providing an appropriate or safe level of staffing. The nature of market competition may result in facilities that can't afford to occupy the higher star rating space due to lower revenue move towards occupying lower-rating tiers with potentially lower/unsafe staffing.

Australia's aged care sector should aim to deliver 'best practice' care – only 5-stars will do

According to the UoW report, a facility that delivers 'three-star' staffing would be considered to be providing an 'acceptable' level of staffing, while 'four-stars' would be considered 'good', and 'five- stars' would be 'best practice'. According to our calculations derived from mapping the results of the ANMF Staffing and Skills mix project onto the NHC data presented in the NHC study (see Figures 1 and 2),[8]

[7] As highlighted within the RUCS/AN-ACC report, payments under the system would be determined by the government using National Weighted Activity Units (NWAUs) which must be calculated correctly to ensure reasonable funding levels for base care tariffs, variable components, and entry adjustment period payments.

[8] The staff timing brackets/ranges presented in the NHC rating system are described as being based upon the results of the 'STRIVE Study', however based on our assessment to date, we have not yet been able to clearly interpret exactly how the ranges have been calculated. As such, different brackets/ranges could result in different rating categories.

residents would not be acceptably served by a 'three-star-staffed' facility (Willis, Price et al. 2016). This is because in most instances, facilities are able to achieve a three-star rating for staffing due to higher overall staffing but in the absence of sufficient registered nurse staffing per resident.

The ANMF's evidence supports the delivery of an average of 4.3 hours of care (or 4 hours, eighteen minutes) per day for each resident delivered by workforce comprised of 30% registered nurses, 20% enrolled nurses, and 50% care workers. Added to this average care time is the time required by other direct-care staff including allied health care professionals, specialists, and medical doctors which as yet has not been factored into the ANMF's recommendations. Further, our calculations are based on the skills mix project table which did not include the extra 30-minutes recommended by expert focus group members and based on the results of the MISSCARE Study. Without the additional 30-minutes added to the care times stipulated in the staffing and skills mix table, some 3- and 4-star rated staffing timings are appropriate to some resident profiles, but when the extra 30-minutes is included, only staffing that would receive a 5-star rating would be expected to provide sufficient care time for residents.

Resident Profile	RCHPD	Total Residential and Personal Care Minutes Per Day	RN (min)	EN (min)	PCW (min)
1	2.5	150	45	30	75
2	3	180	54	36	90
3	3.5	210	63	42	105
4	4	240	72	48	120
5	4.5	270	81	54	135
6	5	300	90	60	150

Figure 1: Nursing and personal care hours/ resident/ day pre-focus groups and MISSCARE survey (Willis, Price et al. 2016).[9]

Only total staff care timing and registered nurse care timing have been used from the ANMF study (highlighted in Figure 1). Colour coding has been added to Figure 1 above to clearly identify how resident profiles from the ANMF study have been mapped to the NHC staffing rating groups in Figure 2 below. ANMF Study resident profiles have been assigned the same colour (e.g. profiles 1 & 2 are blue) where mapping to the NHC rating system would appear to allocate those profiles to the same star rating in terms of the care times they would require.

[9] The values in Figure 1 above do not include a recommended additional 30-minutes of care per day as recommended by focus groups and results of the MISSCARE survey within the report

RN Rating and Minutes		Total nurse staffing rating and minutes (RN, LPN and nurse aide)				
		1	2	3	4	5
		<186	186 - 215	215 - 242	242 - 264	≥ 264*
1	< 19	★	★	★★	★★	★★★
2	19 - 30	★★	★★	★★	★★★	★★★
3	30 - 44	★★	★★★	★★★	★★★	★★★★
4	44 - 63	★★★	★★★^	★★★★^	★★★★^	★★★★^
5	≥ 63*	★★★	★★★★	★★★★	★★★★★	★★★★★

Figure Legend

- Values provided by CHSD Report, interpreted as >63 / >264 to maintain mutual exclusivity. Where Resident Profile 3 requires 63 minutes of RN staffing per day, different interpretations of ≥ 63 / ≥ 264 rate Resident Profile 3 significantly differently.

^ Resident Profile 3 is only allocated this star rating where RN Staffing is maximised within the category (i.e. 63 minutes), if not maximising RN staffing in this scenario (i.e. <63 minutes) then ^ indicates star ratings that would not be appropriate for Resident Profile 3.

▧ Cross-hatched cells indicate where an ANMF resident profile staffing requirement is exceeded either by additional RN minutes or additional total staff minutes.

– – Broken-outline cells indicate a rating required to deliver minimum best-quality care (inclusive of the additional recommended 30-minutes of care) as determined by the ANMF Study.

Figure 2: Table adapted from the UoW Report (originally adapted from the CMS Technical Users' Guide April 2019) with ANMF Study resident profiles mapped onto NHC staff ratings.

Mapping resident profiles of the 2016 ANMF Study and associated minimum staffing requirements to the NHC rating system for staffing indicates that the highest 5-star ratings attainable (Cells 5/4 and 5/5) are the minimum star-ratings that would be required to meet the minimum staffing requirement (including the extra 30-minutes) as recommended by the ANMF.

If the additional recommended 30-minutes is not included, other NHC rating system staffing timings could be considered to adequately satisfy ANMF profile requirements:

- Resident Profiles 1 and 2 would require at a minimum the second highest 3-star rating (Cell 4/1).
- Resident Profile 3 would require at a minimum 3-star rating (Cell 4/2). For Resident Profile 3 to be appropriate to this star rating, then a facility must maximise their RN minutes for that category (i.e. 63 mins/resident/day).
- Resident Profile 4 would require at a minimum the highest attainable 4-star rating (Cell 5/3).

- Resident Profile 5 would require at a minimum the highest attainable 5-star ranking within the CMS system (Cell 5/5).
- The total staffing requirement for Resident Profile 6 (as indicated by the ANMF Skills mix project) is only satisfied where a facility staffs 300 total care minutes and 90 RN care minutes per-day, this staffing requirement significantly exceeds the 264 total care minutes and 63 RN minutes required to achieve the highest 5-star best-practice ranking (Cell 5/5) as determined by the NHC rating system.

The calculations above highlight that if the additional recommended 30 minutes is included with 4.3 hours (on average) of care provided per resident per day, facilities would need to staff to what would be a minimum 5-star staffing rating to be considered as delivering the minimum requirement for best quality care. Of the two 5-star ratings attainable (Cells 5/4 and 5/5), a facility must staff above 258 minutes/resident/day to ensure an appropriate level of care is being delivered in line with evidence-based ANMF recommendations. As such, at the 'lower end' of the 5-star rating in Cell 4/5 would not meet requirements for best-practice care.

In Australia, we should be striving to achieve 'best-practice' care rather than 'acceptable' or 'good' practice staffing, as illustrated above, for many residents, 'acceptable' and 'good' practice staffing would be neither safe nor adequate for their needs. As the UoW report highlights, more than half of all Australian aged care residents (57.6%) are in homes that according to the CMS system would be allocated 1- or 2-star staffing levels. This staffing level is unacceptable for the vast majority of residents and should not be tolerated.

Of the remaining 42.4% of Australian residents, currently 27.0% would be classified as residing in homes that would achieve a 3-star staffing rating, 14.1% of residents are in homes that would receive a 4-star staffing rating, and 1.3% of residents are in homes that would receive a 5-star staffing rating. The ANMF contends that only the highest-end of what would be classed by the NHC rating system as 5-stars could be considered for 'acceptable' practice.

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Appendices

The ANMF has published extensively regarding the proposed reforms to aged care including a rating system. The following peer reviewed journal articles are relevant to this consultation:

1. Peters MDJ, Marnie C, Butler A. Delivering, funding, and rating safe staffing levels and skills mix in aged care. *Int J Nurs Stud*. 2021; 119:103943. https://doi.org/10.1016/j.ijnurstu.2021.103943
2. Bonner R, Peters MDJ, Butler A. Workforce—The Bedrock of Aged Care Reform. The *Aust Econ Rev.* 2021; 54:285-293. https://doi.org/10.1111/1467-8462.12427
3. Peters MDJ, Marnie C. Human costs of aged care productivity: Innovation versus staffing and skills mix. *Collegian*. 2021; 28(3):351-5. https://doi.org/10.1016/j.colegn.2020.11.002
4. Peters MDJ, Marnie C, Butler A. Royal Commission into Aged Care recommendations on minimum staff time standard for nursing homes. *Aust Health Rev*. 2021; Nov 9. https://doi.org/10.1071/AH21283

Appendix 1

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Delivering, funding, and rating safe staffing levels and skills mix in aged care

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ABSTRACT

Background: Staffing levels and skill mix are critical issues within residential aged care. The positive impact of a sufficient number and skills mix of staff is upheld by abundant evidence within and beyond the sector. While being able to determine suitable staffing levels and skills mix to provide care to nursing home residents is vital, having an appropriate approach to funding the delivery of care is also critical. Beyond determining staffing levels and skills mix and funding care delivery, transparently rating the adequacy of staffing is also important to enable informed decision-making amongst consumers, policy makers, staff, and other stakeholders. There are existing tools for determining nursing home staffing levels and skills mix, funding care, and rating and reporting staffing, however there appears to be ongoing confusion regarding how these different tools might work together to achieve different things in order to ensure safe, quality care.

Objectives: In order to explain the importance of ensuring at least a minimum number (staffing level) of the right kind of staff (skills mix) to provide care to nursing home residents, in this paper we briefly explain key differences and interrelationships between three tools; one for determining staffing and skills mix, one for determining funding, and one for rating and reporting the level of staffing within a facility as a measure of quality.

Results: Our explanation of the three existing tools has resulted in the development of a conceptual model for how minimum staffing levels and skills mix supports the delivery of safe, quality care and how this can be understood in relation to determining, funding, and rating staffing levels and skills mix.

Conclusions: Our conceptual model of how determining, funding, and rating staffing levels and skills mix relate to one another and fulfil different but related purposes can be used to demonstrate how minimum staffing levels and skills mix can be understood as foundational to ensuring respectful, safe, quality care.

What is already known

- Higher nurse staffing and skills mix is one important factor that appears to be related to better outcomes for aged care recipients.
- There are persistent challenges regarding the safety and quality of residential aged care with many jurisdictions facing issues of low staffing levels and skills mix (determining staffing requirements to provide care), funding problems (funding care), and inadequate consumer choice and ability to navigate the system (rating and reporting).
- There are differing views regarding whether ensuring minimum staffing levels and skills mixes would be effective in terms of improving safety and quality in aged care.
- There appears to be some confusion regarding what tools/approaches can or should be used to determine, fund, and rate/report on staffing in nursing homes with conflicting views regarding whether e.g. a rating system from one national context could be used to determine staffing requirements in another.

What this paper adds

- Three distinct but related tools for determining, funding, and rating/reporting direct-care staffing in nursing homes are explained and conceptually brought together to show how while they are similar, they each fulfil different functions and should not be substituted for one another.

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- A conceptual model for delivering safe, quality care is proposed based on the fundamental importance of ensuring at least the right number of the right kinds of staff are present to deliver care to nursing home residents, that care is funded transparently and accountably, and that the public and other stakeholders should have access to useful reporting and ratings to underpin decision making.

1. Background

The relationship between staffing levels and skills mix and safety and quality outcomes in residential aged care (also known as nursing homes and long-term care facilities) and hospitals has been extensively studied and debated (Harrington et al., 2000; Castle and Engberg, 2007; Spilsbury et al., 2011; Backhaus et al., 2014; Dellefield et al., 2015; Griffiths et al., 2018; Cho et al., 2020; Bostick et al., 2006; Ball et al., 2018; Bridges et al., 2019). The nature of this relationship and the relative contribution of different interrelated factors is however complex and not thoroughly understood (Spilsbury et al., 2011; Backhaus et al., 2014). Around the world, nurse staffing levels in residential aged care is a common focus (Dellefield et al., 2015; Shin, 2019; Harrington et al., 2012), often highly varied, and in many contexts, lower than what experts recommend (Harrington et al., 2012). 'Quality' has also been demonstrated to be a tricky concept to define and directly measure in this field, with quantifiable clinical outcomes for residents being a common focus in many studies (Spilsbury et al., 2011). Further, beyond staffing levels and skills mix, there is a need to consider other factors and elements of quality including staff turnover, agency staff use, resident- and family member-relevant quality indicators and experiences, and facility size and ownership (Castle, 2012; Spangler et al., 2019; Huang and Bowblis, 2019).

While some jurisdictions including California, Canada, Germany, Japan, and Government facilities in the Australian States of Victoria and Queensland have mandated a minimum number of staff in proportion to those being cared for (staffing levels), and a minimum ratio of staff within that cohort who hold different qualifications (skills mix) in nursing homes, in many contexts problems with staffing and the safety and quality of care persist.

The safety and quality of the Australian aged care sector has been examined for many years as the focus of multiple inquiries and investigations. Many have reported very similar findings including issues of low staffing and skills mix, demand, funding, and consumer choice. In 2009, the Parliament of Australia completed its enquiry into residential and community care with witnesses reporting that the sector was in crisis due to insufficient funding in relation to demand, a reduction in the quality of services, widespread challenges regarding recruitment and retention of skilled nursing and aged care staff, and the erosion of higher staffing levels and skills mix in favour of less skilled workers (Senate Standing Committee on Finance and Public Administration, 2009). In 2011, the Australian Government's Productivity Commission reviewed a range of issues regarding structural reform of the aged care system concluding that more staff would be required to care for Australia's ageing population and that key weaknesses included lack of skilled staff, workforce shortages, difficulties for consumers in terms of choice and ability to navigate the system, and variable quality across providers (Productivity Commission, 2011). Relative inaction by successive governments could be argued to have resulted in many of the same issues and weaknesses – now further amplified - being revealed in a subsequent report published in 2018 by Australia's Aged Care Workforce Strategy Taskforce (Aged Care Workforce Strategy Taskforce, 2018).

The most recent and extensive enquiry into Australian aged care - the Australian Royal Commission into Quality and Safety in Aged Care - has identified staffing issues as amongst the most common concerns expressed by those that have submitted evidence to date (Royal Commission into Aged Care Quality and Safety 2020a). Staffing and associated issues have received considerable attention both prior to and throughout the Commission's National enquiry, with their interim report clearly identifying that inadequate staffing levels and insufficient skills mix has serious, negative impacts upon both aged care residents and staff (Royal Commission into Aged Care Quality and Safety, 2019). Indeed recent research revealed that almost 58 percent of Australian nursing home residents are in homes that could be deemed as being staffed to an unacceptably low standard when staffing levels and skills mixes are mapped onto the Nursing Home Compare rating system used by the United States' Centers for Medicare and Medicaid Services (Eagar et al., 2019). The SARS-CoV-2/COVID-19 outbreak in Australia also posed many challenges in Australian nursing homes including those that did not experience any cases at all. The Royal Commission's special hearing into the aged care sector's repose to COVID-19 found that pre-existing and ongoing staffing and skills mix shortages were fundamental to both failures in some home's handling of outbreaks and other's ability to provide quality care despite having no cases, for instance in terms of enabling visitor access to isolated and vulnerable family members (Royal Commission into Aged Care Quality and Safety 2020b).

As the Royal Commission and previous inquiries have found, persistent challenges regarding ensuring; enough of the right kind of staff to provide care, suitability of funding, and that consumers are able to make choices regarding the care they need and want to receive while navigating the system are ongoing. During their enquiry, the Commission has received evidence in relation to each of these interrelated issues including proposals for how to address them. In this paper we briefly explain three of the tools currently before the Commission; a tool proposed for determining appropriate staffing levels and skills mixes, a tool for funding the delivery of care, and a tool for rating and reporting the quality of care based on staffing levels and skills mix. Each of these tools can be used to fulfil distinct but interrelated functions with the aim of providing safe quality care for residents. Finally, we propose a conceptual model to depict how ensuring at least enough of the right kinds of staff, when funded appropriately, and transparently reported to ensure consumer choice and public accountability can enhance the delivery of safe, quality care.

1.1. Delivering staffing levels and skills mix in aged care

Based upon the building evidence base before us, we believe that mandating minimum staffing levels and skills mix in aged care is the lynchpin of a necessary raft of reforms required to improve aged care quality and safety. While complex and interrelated factors including but not limited to education, training, attitude, and experience contribute significantly to the delivery of safe, quality care, the number and skills mix of staff is a more critical factor (Harrington et al., 2016; Harrington et al., 2020). Simply put, without at least enough of the right kinds of staff safe, quality care cannot be assured. While there is no question that attention must be concentrated on the multiplicity of factors that impact upon care quality, our primary focus here is upon staffing and skills mix. Determining effective staffing levels and skills mix in nursing homes is a focus for aged care sector reform (Harrington et al., 2020), but debate continues regarding how staffing levels and skills mix should be determined. While many international experts, professional associations, workers unions, employees, and consumers support the implementation of mandated minimum staffing levels and skills mix in nursing homes as one type approach, there are others who insist that this would be ineffective (House of Representatives Standing Committee on Health et al., 2018; Senate Community Affairs References Committee; Hodgson, 2014).

Table 1
Six typical resident profiles from the Staffing and Skills Mix Study (Willis et al., 2016).

Profile	Registered nurse care (mins)	Enrolled nurse care (mins)	Personal care worker care (mins)	Total nursing and personal care minutes per resident/ day (mins)	Recommended resident nursing and personal care hours per day (mins/ hours)*
1. 'Voula'	45	30	75	150	180 (3 h)
2. 'Gwen'	54	36	90	180	210 (3.5 h)
3. 'George'	63	42	105	210	240 (4 h)
4. 'Walter'	72	48	120	240	270 (4.5 h)
5. 'Sarah'	81	54	135	270	300 (5 h)
6. 'Norma'	90	60	150	300	360 (6 h)rs)^

* Including the extra 30-mins per resident per day for indirect care recommended by the focus group.
^ Including an additional recommended 30-mins due to palliative care needs.

Due to the complex and sometimes equivocal nature of the evidence regarding staffing levels and skills mix in and beyond aged care (and likely due to the reticence of providers and governments to implement potentially costly solutions despite widespread assertions of substandard safety, quality, and outcomes) (Harrington and Edelman, 2018), ensuing the presence of a minimum number of care staff remains a challenge (District of Columbia Hospital Association DCHA, 2016). There are also still knowledge gaps regarding the use and effectiveness of different staffing tools. This means that while we know there are benefits for increasing staffing - particularly nurses - variability in reporting on existing tools and a lack of evidence regarding how best to use them continues to impede progress (Griffiths et al., 2020). Further work has been recommended that focusses on learning more about existing staffing tools as opposed to developing new ones.

There are different types of tools for determining nursing home staffing needs. One existing staffing tool was developed using a two-part, mixed-methods study that collected and analysed a range of evidence and expert opinion (via a Delphi survey) (Willis et al., 2016). One part of the study involved presenting focus groups with six exemplar nursing home resident profiles. These profiles were informed by a desktop modelling methodology for staffing from 200 care plans which determined the percentage of nursing and personal care time needed for each resident profile based on the interventions that should be completed over a 24-hour period and the time taken to complete those interventions inclusive of time for indirect and other tasks (see Table 1) (Willis et al., 2016). An expert focus group recommended an additional 30 min of time per resident per day to provide additional indirect care for all residents and 30 extra minutes per day for palliative care needs.

The purpose of identifying six discrete resident profiles was neither to quantify care needs in terms of explicit timings nor suggest that every person's individual care requirements and preferences would neatly correspond with the care that the study described, but to provide six illustrative or 'typical' profiles based on an understanding of the needs of residents with the acknowledgement that every individual has different and unique needs and preferences for care that should underpin and direct person-centred, relationship-focussed care.

The profiles illustrate how different residents have different care requirements and that with increasing clinical acuity, personal care needs, and need for assistance with activities of daily living, staff need to devote longer periods of time to each resident to ensure that high quality, person-centred, best-practice care is provided safely and appropriately. This was expressed in terms of resident nursing and personal care hours per day. It is important to note that the resident care hours per day (RCHPD) for each typical resident profile is also likely to be understated, as not all care tasks were included in the calculations (e.g. counselling and emotional support for loved ones, comfort and hygiene care, pain assessment and relief) (Willis et al., 2016).

Based on the results of the study, a methodology for determining overall staffing levels in nursing homes based on a case mix was proposed (see Fig. 1). This resulted in the recommendation that nursing home residents should receive on average 4.3 h (four hours and 18 min) of care per day provided by a staffing and skills mix of 30 percent registered nurses (RNs), 20 percent enroled nurses (ENs), and 50 percent personal care workers (PCWs). Having enough of the right kinds of staff to provide care according to the case mix of residents and this ratio means that staff are less likely to need to rush care or between residents, miss care, or be solely task orientated – there are enough staff to provide for those with higher and lower care needs and to spend the necessary time it takes to provide respectful, dignified care and build mutually valued relationships.

Some limitations exist regarding this tool; it has not been implemented and tested in practice but suggests timings based on existing evidence and expert opinion. That these timings (i.e. total staff care time and the time apportioned to different skills mixes) map neatly onto the rating system described below, however suggest that they are likely to be appropriate. Further, the experiences of residents and family/loved ones has not been investigated in relation to the tool which might reveal different perspectives regarding what staffing levels and skills mixes may be needed to provide the desired care. Also, implementation of mandated minimum staffing levels and skills mix across all settings would necessarily need to be carefully phased in, which while recognised by its proponents will also be complex in relation to variations in terms of resource availability, funding, and the capacity to educate, train, and retain the necessary staff.

In this paper we argue that this staffing and skills mix ratio and average resident care hours per day would be effective in ensuring that respectful, safe, quality care could be flexible enough to be provided for different case mixes in all nursing homes and would set a minimum benchmark that would enable and support benefits from other initiatives such as enhancing the education levels of staff, supporting good attitudes towards care, and the utilisation of new technological innovations.

1.2. Rating staffing and skills mix in aged care

Separate from but related to determining staffing levels and skills mix is the issue of ensuring transparent reporting of staffing levels to support informed decision making, comparison between individual nursing homes, and oversight to ensure staffing levels and skills mixes meet a desired standard. Different settings internationally have approached reporting upon staffing levels and skills mix in nursing homes both with and without mandated staffing levels and skills mixes (Eagar et al., 2019). The United States' Nursing Home Compare five star rating system (which has now been merged with the Centers for Medicare & Medicaid Services other seven compare tools as of December 1 2020) is one way of publicly reporting and rating nursing homes in terms of three specific

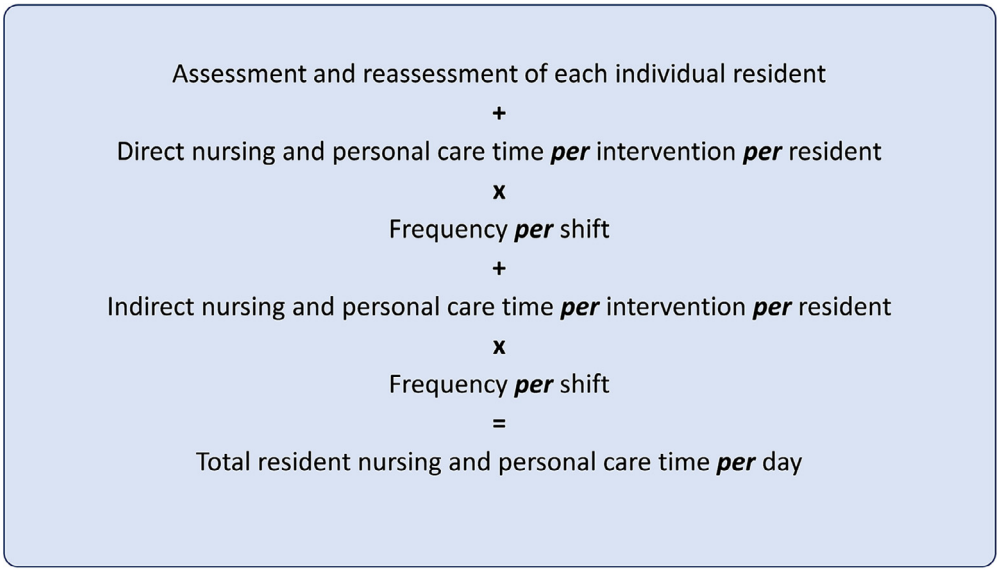

Fig. 1. Proposed methodology for determining staffing levels in nursing homes (emphasis in original) (Willis et al., 2016).

Table 2
Staffing and Skills Mix study typical resident profiles (Willis et al., 2016) mapped onto the Nursing Home Compare Rating System. (Centers for Medicare and Medicaid Services CMS, 2020).

RN Rating and Minutes		Total nurse staffing rating and minutes (RN, LPN and nurse aide)				
		1	2	3	4	5
		<186	186 - 215	215 - 242	242 - 264	≥ 264*
1	< 19	★	★	★★	★★	★★★
2	19 - 30	★★	★★	★★	★★★	★★★
3	30 - 44	★★	★★★	★★★	★★★	★★★★
4	44 - 63	★★★	★★★	★★★★	★★★★	★★★★
5	≥ 63*	★★★	★★★★	★★★★	★★★★★	★★★★★

domains; staffing and skills mix (care minutes provided by both RNs uniquely, and RNs, licenced practical nurses, and nurse aids combined), health inspection results, and selected quality measures (Centers for Medicare and Medicaid Services CMS, 2020). In contrast to the US, in Australia there is no requirement for nursing homes to make their staffing levels and skill mixes known to the public.

The Nursing Home Compare's 'one- to five-star rating' approach uses information derived from the Centers for Medicare and Medicaid Services health inspection database, a national database of resident clinical data known as the Minimum Data Set, and Medicare claims data in an accessible format so that it is clear how a nursing home is performing. In regard to the staffing component of the rating system, the overall staffing rating is based on two quantitative measures; RN hours per resident per day (due to the widely recognised importance of specifically RN-delivered care for better resident outcomes), and; 'total staffing' hours per resident per day including RN, Licensed Practical Nurses/Licensed Vocational Nurses, and Certified Nursing Aides time (See Table 2) (Centers for Medicare and Medicaid Services CMS, 2020). Other staff (e.g. allied health, doctors, diversion therapists) are not included. This information is submitted by providers quarterly and is auditable. It is important to note that because both direct care hours and other staff time (e.g. administrative duties) are collected, the times do not reflect the actual direct care time that staff deliver to residents. There is considerable evidence indicating that due to factors such as low staff numbers and administrative demands, staff may spend considerable amounts of time undertaking non-direct care tasks. Simply counting the number of hours different staffing groups worked during a reporting period is unlikely to provide a realistic picture of the actual hours that staff spend providing direct resident care, the needs of the residents, or the actual quality or experience of that care. It should be noted that the rating system has not built its ratings/staffing profiles based on the assessment of resident needs and preferences, but rather on analysis of supply against outcomes. As noted earlier, another limitation is that staffing and care minutes per resident per day are but two factors linked to care quality. Further, the rating system also includes temporary and/or agency staff hours which could misleadingly boost a nursing home's staffing profile and rating.

The CMS adjusts the reported staffing ratios for the needs of a nursing home's residents using the Resource Utilization Group (RUG-IV) case mix system. The Staff Time Resource Intensity Verification (STRIVE) study is then utilised to provide the average number of RN, Licensed Practical Nurses/Licensed Vocational Nurses, and Certified Nursing Aides minutes associated with each RUG-IV case mix group. These ratings are then combined to assign an overall staffing rating. For RN staffing and total staffing, a one- to five-star rating is assigned according to thresholds established for each rating category. A nursing home may be assigned a one-star rating

if they do not have an RN onsite every day, do not submit staffing data, or where nursing home data cannot be verified.

The thresholds or cut-off points between star ratings for both RNs and 'total staffing' are periodically updated in consideration of the clinical evidence for the relationship between staffing and quality of care. 'Total staffing' scores are also rounded towards the RN staffing rating due to the recognition of the importance of RN-delivered care. Eagar and colleagues have suggested that one and two star ratings could be understood to represent 'unacceptable' levels of staffing, three stars is 'acceptable', four stars is 'good', and five stars is 'best practice' (Eagar et al., 2019).

It is also important to highlight that there are multiple combinations to achieve particular ratings (i.e. increasing RN employment hours and/or increasing total staff hours). Indeed, while there are five overall star ratings there are in-fact 25 possible ratings. We argue that this may result in residents not getting the kind of care they need from the right kind of staff as, for example, there are six possible four-star combinations each with different RN and total staff time brackets. This may also not be clear or immediately understandable to members of the public.

In Table 2 above, the green cells denote the only two possible star ratings (both five-stars/ 'best practice') where the recommended average of 4.3 h per resident is reflected according to the NHC rating system. Note that for cell 5–4, 4.3 h of care is only provided where there is greater than a total of 258 min of care.

It has been suggested to the Royal Commission that the NHC rating tool could be used to underpin staffing decisions in Australia, first by increasing nursing home staffing levels to correspond to at least one of the three-star ratings according to the NHC rating system from mid-2022. This move that would require an average staffing increase of just over 37 percent for nursing homes that would currently be rated one or two stars (adjusted according to resident case mix) (Eagar et al., 2020a). Requirements would then increase to a minimum of one of two four-star ratings in mid-2024 (Royal Commission into Aged Care Quality and Safety 2020c).

We highlight that star ratings of between one and four stars (and at the lowest end of five-stars) do not reflect that an average of 4.3 h of care per resident per day would be delivered. Further, determining Australian minimum staffing levels and skill mix requirements based on the US's public rating system is neither what the tool was designed for nor an appropriate transfer and implementation of evidence between dissimilar contexts.

1.3. Funding aged care

Associated with both the need to determine minimum acceptable staffing levels and skills mix and to measure and transparently report the relative quality and performance of nursing homes in a meaningful way, another key issue regarding staffing in aged care is to ensure that an effective model provides funding for an acceptable standard of care (Dyer et al., 2019). Australia's current aged care funding model – the Aged Care Funding Instrument (ACFI) is widely regarded to be no longer fit for purpose, and a new Australian National Aged Care Classification (AN-ACC) approach has been developed as a potential replacement with early indications of support from both the Royal Commission and Government (Eagar et al., 2020b). This tool is designed to identify the case mix of each Australian nursing home and would ensure that facilities' case mixes are updated regularly as the needs of individuals and cohorts change. This case mix funding tool suggests dividing the funding that a provider would receive to deliver care as the authors found that staff spend close to equal time on individual and shared care activities. The nursing home would receive a fixed per diem funding amount for each resident to cover care that is shared between residents (e.g. assisting with bathing and mealtimes) and a variable portion of funding per day that is provided to meet an individual's care needs. Unlike the ACFI instrument, assessment for care planning is proposed to be independent of the assessment for funding. This is so that needs assessments for care planning are not perversely influenced by access to greater funding.

Without going into the full complexities of the tool, the new approach would rely upon periodic and independent external assessment of individual resident's care needs according to a suite of tools to allocate them to one of 13 funding categories (Eagar et al., 2020b). The categories explain 50 per cent of the variance in individual costs for care, carry different cost weightings with a fivefold variation in cost between the least and most expensive category, and were developed based upon an analysis of the core attributes that underpin care costs across four key domains; function cognition and behaviour, wound management, end of life care, and technical nursing care. The cost variability between the 13 classes suggests strong differentiation between individuals with different needs. The assessment tool is based upon data gathered through conversation with the resident and key informants (e.g. direct care staff, family/loved ones, external health care providers, observation, and document review. The development team have also completed a technical mapping exercise to create a casemix-adjusted indicator ('casemix index') for nursing homes that appropriately reflects the relative care needs of residents (Kobel and Eagar, 2020). This work provides useful information regarding how to map from one funding model (ACFI) to another (AN-ACC) and may help to inform the transition from one to the other which appears likely to occur.

While the tool assigns a funding category to the person, it does not stipulate how much funding each category attracts. Instead, the tool's authors recommend that a suitable nationally efficient price would need to be determined to ensure that the care needs of residents can be appropriately funded. This is similar to how hospital costs for care services in Australia are calculated by the Independent Hospital Pricing Authority. The nationally efficient price would need to be sensitive to the differences in the costs of care between different regions, facility sizes, and populations (e.g. people who experiences homelessness, Aboriginal and Torres Strait Islander people) but is partly addressed in that these factors were included in the analysis of fixed/shared costs.

It is important to highlight that the Australian National Aged Care Classification system was neither designed to nor suitable for determining the required staffing levels and skills mix for nursing homes, but to ensure that residents are independently assessed regarding their care needs for the purposes of funding that care and that an appropriate proportion of funding be directed to shared care costs. The proposed funding system (when implemented together with an appropriately determined and suitable nationally efficient price which reflects a fair subsidy for the provision of care tasks) could however be implemented to fund the necessary staffing and skills mix to provide care. We argue that the tool will not provide for staff allocation at a facility level on a daily or weekly basis as would be achieved by a mandated minimum staffing level and skills mix. In any case, we argue any funds provided to nursing homes should also be supported by a legal requirement on the part of the nursing home operators to demonstrate transparently that all funds received for the provision of care are used accordingly and accountably.

1.4. Delivering, rating, and funding staffing in aged care

Above we have introduced three tools before Australia's Royal Commission in relation to nursing home staffing; the Staffing and Skills Mix tool (Willis et al., 2016), the Australian National Aged Care Classification funding system (Eagar et al., 2020b), and the Nursing Home Compare rating system (Centers for Medicare and Medicaid Services CMS, 2020). We now bring each of these tools

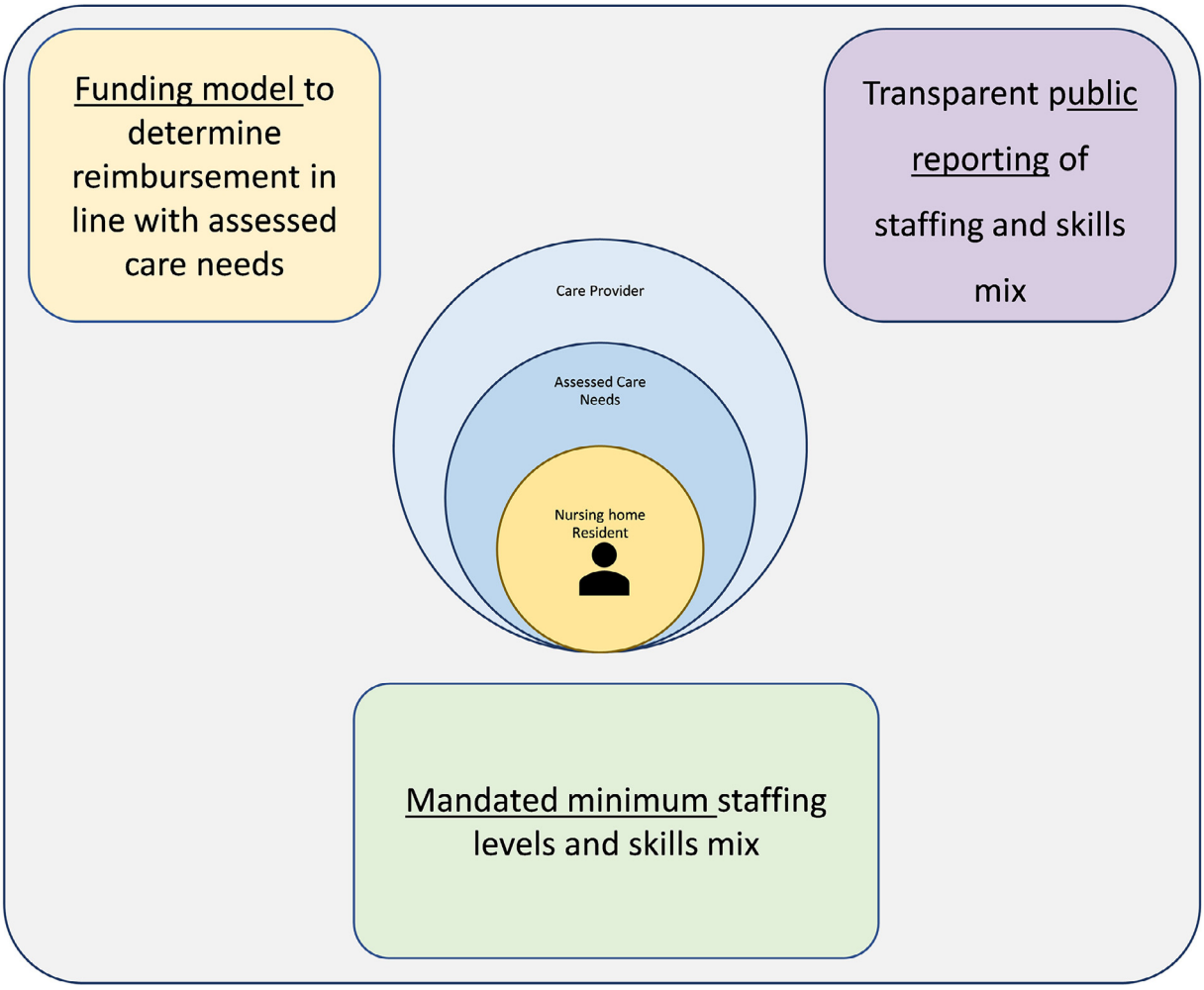

Fig. 2. Understanding the relationship between a staffing and skills mix, funding model, and rating system (simplified).

together conceptually to demonstrate how each performs related but different functions (see Fig. 2). The rationale for this is not to suggest that all three tools should be combined or would seamlessly operate together, but to explicate that each was designed differently to perform a different function. This is due to ongoing suggestions such as that a tool for rating nursing homes could be used to determine staffing requirements (Royal Commission into Aged Care Quality and Safety 2020c). Based on the evidence before the Commission including Counsel Assisting and Government submissions, it appears to us that it is likely that the Royal Commission and Australian government will be supportive of the transition to the new funding tool as well as a system for rating and reporting staffing levels and skills mixes. Mandating minimum staffing levels however continues to be a contentious issue which we believe based on the wealth of evidence to support them should be implemented.

In Fig. 2, a mandated minimum number and skills mix of care staff determined using the Staffing and Skills Mix tool provide an average of 4.3 h of care per day to residents. As noted above, this could be understood to represent 'best practice'. This care could be funded appropriately based on their independently assessed care needs across the 13 Australian National Aged Care Classification categories. Finally, a nursing home's staffing levels and skills mix could be monitored and transparently rated and reported through a rating system similar to the Nursing Home Compare rating system.

We contend that minimum staffing levels and skills mix should be mandated by legislation to negate perverse incentives to intentionally understaff or to employ inappropriate skills mixes to decrease costs and attract greater profits at the expense of safe, quality care. We also recommend that any publicly transparent rating system should reflect the degree to which nursing homes are providing best-practice care in the context of mandated minimum staffing levels and skills mixes as opposed to reflecting a simplistic quantification of varying combinations of staffing levels and skills mixes where multiple combinations may receive the same rating. Further, such a rating system should only be adopted if based on locally relevant data rather than simply applying one country's system to another. Such a system would allow the public to consider and compare how nursing homes are staffing their facilities and whether or not they are doing so to an acceptable standard in line with legal requirements and best practice.

1.5. Relationship between the three tools

In Fig. 3 below, we show how the tools might theoretically relate to one another to further demonstrate the differences in purpose and function. On the Y-axis, the six typical resident profiles developed for the Staffing and Skills mix study are listed in ascending order in relation to the intensity of care each resident would require. On the X-axis, the 13 Australian National Aged Care Classification funding categories are listed in a sequential order demon-

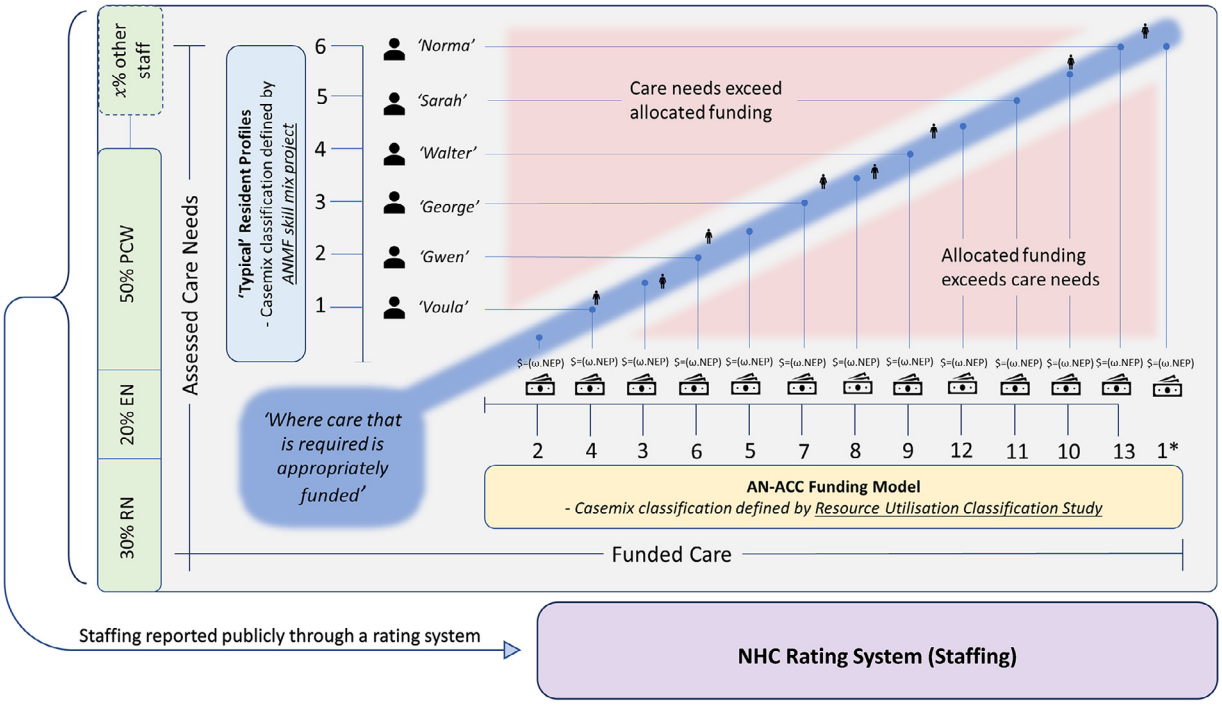

Fig. 3. Schematic of the ANMF Staffing and Skills Mix resident profiles, Australian National Aged Care Classification Funding Model, and an adapted Nursing Home Compare Rating System. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

strating how each category would receive increased funding compared to the preceding category. For the purposes of this paper, the 13 Australian National Aged Care Classification categories are depicted in an illustrative fashion only; the proposed differences between the funding that each category would attract is not equal (i.e. a resident in Category 4 does not attract twice the funding of Category 2). In the Australian National Aged Care Classification system, Category 1* represents people who have been admitted to a nursing home for palliative care. These people are known to require additional funding corresponding with their increased care needs.

In Fig. 3 the people who are plotted within the blue band are those whose required care plan is appropriately funded by a suitable Australian National Aged Care Classification funding category. This represents an ideal situation - where the required care is appropriately (neither over- nor under-) funded; care subsidies are fair and sufficient to allow the provision of safe, quality care by providers, and the funded care is being accordingly supplied to residents in line with their independently assessed care needs, and is flexible as their care needs change.

It is important to note that wherever a person's care requirements sit on the Y-axis, a care plan should be designed accordingly to ensure that the necessary care is provided safely, effectively, and in a person-centred manner. Mandated minimum staffing levels and skills mix would support the flexible delivery of a care plan for each person provided by RNs, ENs, and PCWs, with additional care provided by other staff (e.g. allied health, medical doctors, therapists) as required. It is important to note that as yet, there is no empirical evidence underpinning the staffing and skills mix required for these other staff, nor how much care time is required by residents with differing care needs.

Where a person sits in the schematic in relation to their required care/ staffing and skills mix profile, does not determine where they would be categorised in terms of the Australian National Aged Care Classification funding tool. As highlighted, the Australian National Aged Care Classification system is a funding tool not a staffing tool and is not designed to contribute to the development and delivery of care plans.

Fig. 3 also depicts how an adapted version of the US's Nursing Home Compare Rating System for staffing could relate to both an approach to determining staffing and skills mix and a funding tool. A staffing rating system such as that of the Nursing Home Compare does not inform staffing and does not dictate funding. Rather, the rating system simply informs consumers and other interested stakeholders about the average RN and total staffing time each resident *may* receive in a given nursing home in relation to rating brackets that have been developed based on the system's underpinning study data. As noted earlier, the RN and total staff time incorporates administrative duties and non-direct care tasks, therefore the Nursing Home Compare rating system does not provide a true reflection of *actual* care time residents receive.

If a similar rating system were to be adopted elsewhere, it should ensure that stakeholders are informed regarding the degree to which residents are *actually* receiving the care that they require in line with their personalised care plan. To support this, an important element of a proposed rating system could be to transparently report to consumers the actual staffing and skills mix of each nursing home. We also argue that beyond just staffing and skills mix, stakeholders must also have access to transparent information on the quality of care provided in nursing homes in a way that is both comparable and meaningful. This may include information regarding staff turnover, complaints, serious incident reports, and consumer experience reports as recommended to the Royal Commission (Royal Commission into Aged Care Quality and Safety 2020c).

2. Discussion

2.1. Minimum staffing levels and skills mix are the foundation for adequate care

We argue that mandated minimum staffing levels and skill mix is the necessary foundation for the provision of adequate care in

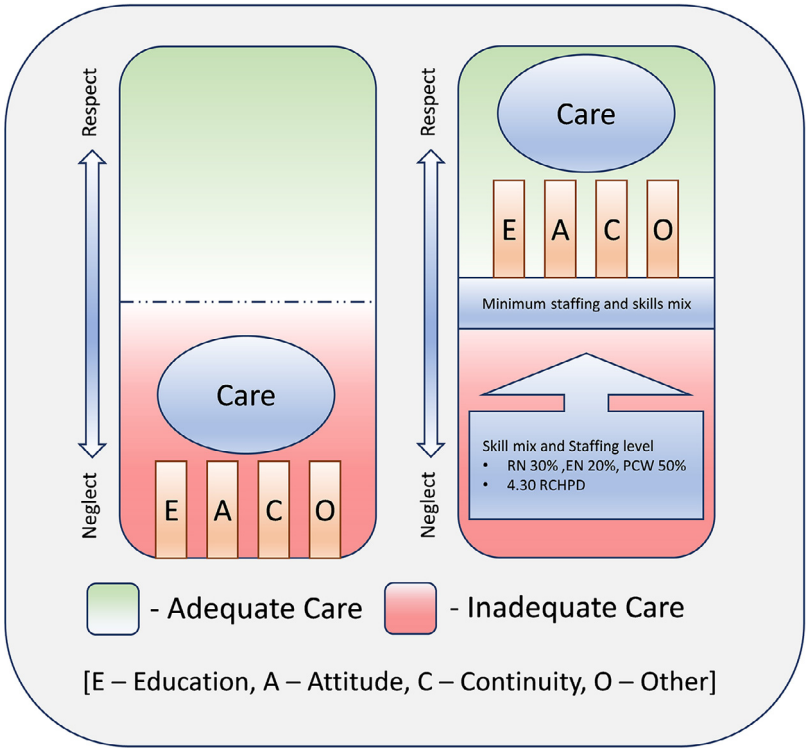

Fig. 4. The provision of adequate care is founded on *at least* the right number of the right kind of staff.

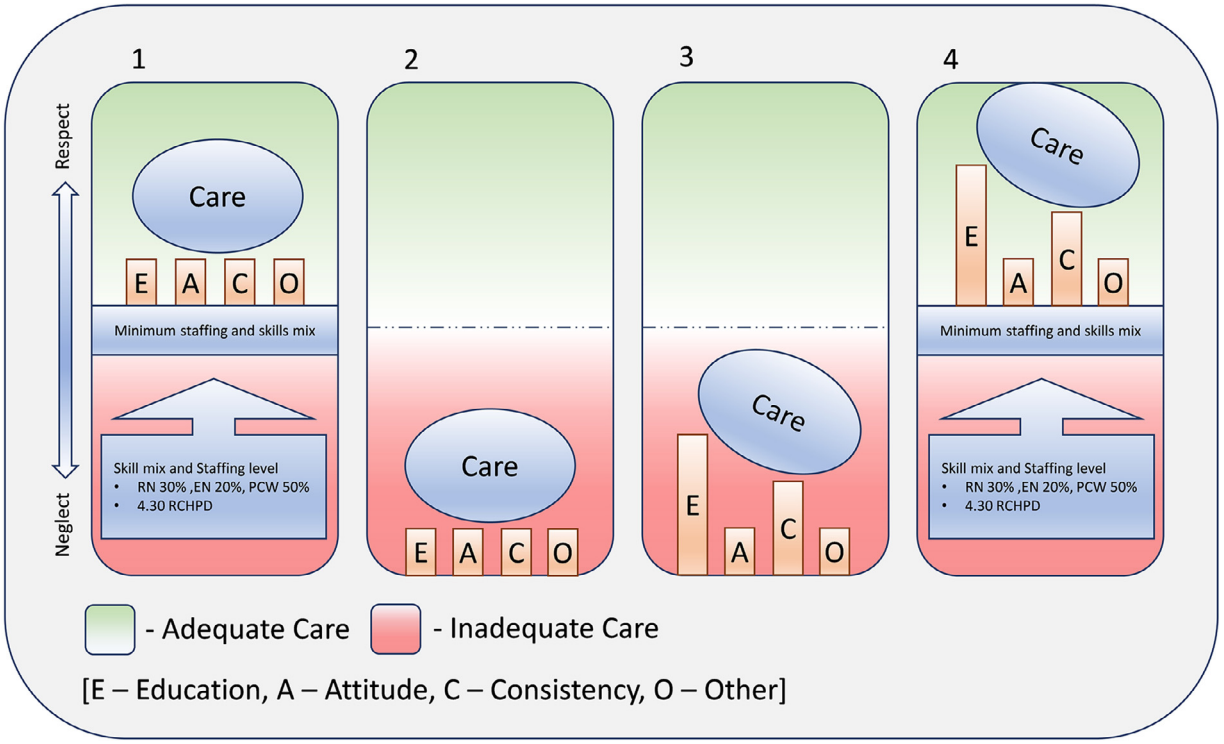

Fig. 5. Mandated minimum staffing levels and skills mix (‘*the right number*’) ensures safe, quality care.

nursing homes. This is not because other factors do not matter, but because having enough of the right kinds of staff onsite and available to provide care may be understood as a prerequisite to ensuring other activities to enhance the safety, quality, and appropriateness of care are effective and sustainable. Fig. 4 below illustrates how this might be visualised.

We propose that nursing homes that do not adhere to mandated minimum staffing levels and skills mix should not receive a rating. This circumvents the potential for homes to intentionally staff to a lower standard to cut costs rather than aiming to achieve better staffing levels and likely higher quality care. This concern is also based on findings that suggest rating systems can exacer-

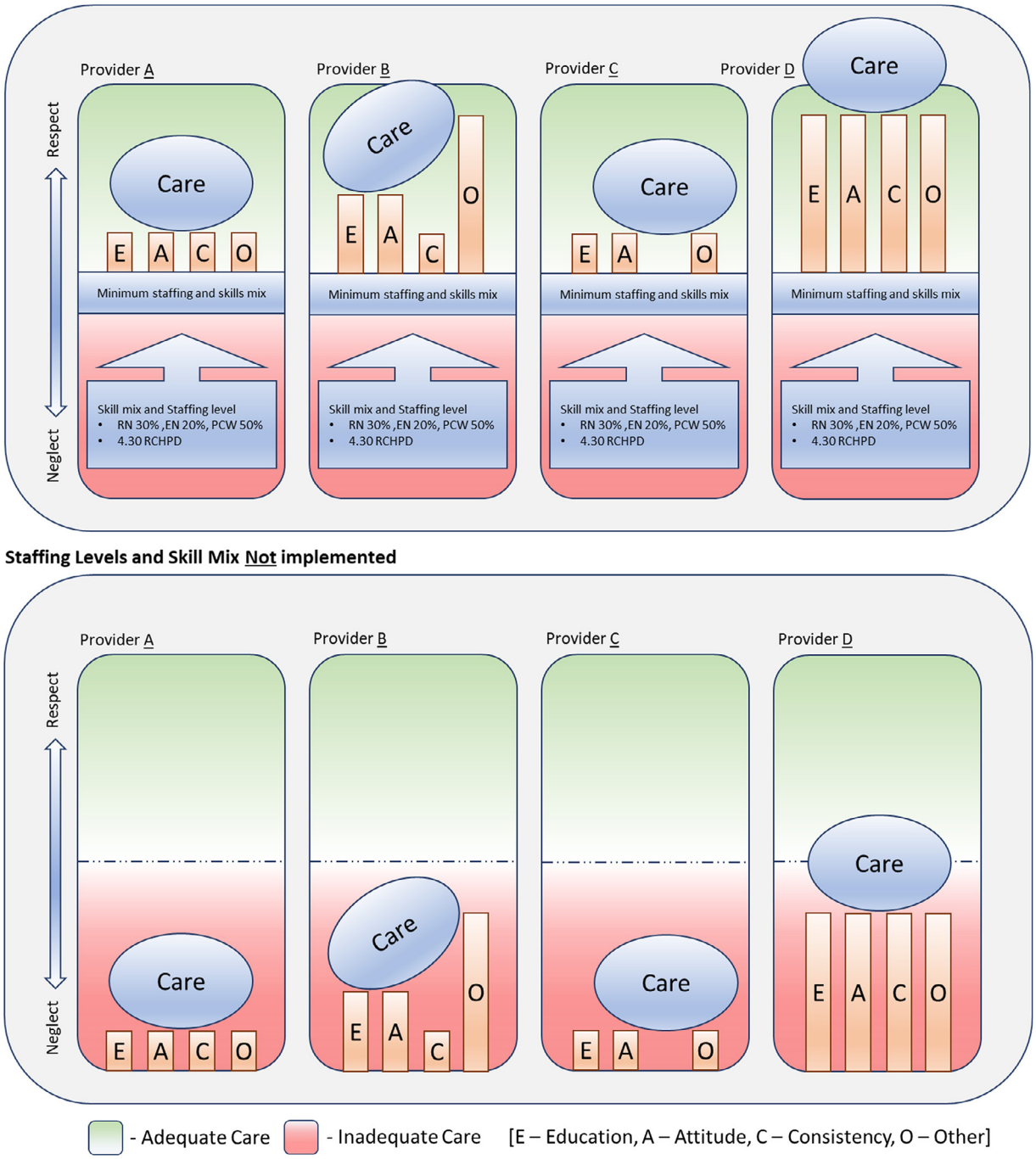

Fig. 6. Providing safe, quality care is ensured by the right number of the right kind of staff.

bate disparities where higher rated homes appear to be located in relatively more affluent areas and more disadvantaged populations may not enjoy equitable access (Konetzka et al., 2015; Yuan et al., 2018). These findings also highlight issues of labour market disparities where nursing homes located in different areas (i.e. regional and/or less affluent areas) may be less able to staff to higher standards.

We suggest that mandated minimum staffing levels and skills mix should operate as a baseline to help to ensure provision of safe quality care, with important additional factors such as education (E), attitude (A), continuity of care (C), and other factors e.g. interfaces with health and social services (O), enhancing care in an additive manner. In this way, 'best practice' care becomes the standard rather than the exception to the norm.

With such a system, genuine competition can also occur between providers that does not result in inequitable care and outcomes for residents than cannot afford to or do not have access to what the NHC rating system would rank as the highest-starred facilities. People receiving care in any home can be confident that there are at least enough of the right kinds of staff to provide care and nursing homes can focus on utilising innovative models of care, technology, and ensuring a well-trained and educated staff with the right attitudes towards care within the context of a sufficiently sized and skilled workforce.

Fig. 5 above illustrates how mandated minimum staffing levels and skills mix can be understood to underpin the provision of safe, quality care by enforcing a 'baseline' that ensures there are always

the right number of the right kinds of staff available to provide the care that residents need. It is important to highlight too, that mandated minimum staffing levels and skills mix *alone* cannot be successful in ensuring safe, quality care, but that without these, it cannot be guaranteed and other approaches may be ineffective. The figure shows that factors like education and training, the attitude of staff, and providing continuity of care are also important factors, but that these on their own – particularly without at least enough of the right kinds of staff – cannot be relied upon to ensure respectful, safe, quality care. For example; further education and training for staff cannot be relied upon to ensure adequate care in the absence of enough of the right kinds of staff to deliver the care.

To illustrate the point further, in Fig. 6 below several alternative examples are provided to show that while different factors can be improved, it is mandated minimum staffing levels and skills mix that ensures best-practice care is possible.

The figure also highlights how implementation of a rating system would not ensure safe, quality care as a rating system is designed to convey staffing information to the public not underpin staffing and care planning or delivery.

Because of the known importance of staffing and skills mix, safe, quality care can be more readily achieved through the implementation of mandated staffing levels and skills mix. In the top row where mandated minimum staffing levels and skills mix has been implemented, the right number of the right staff are guaranteed. Each of these nursing homes could achieve five-star quality if five-star quality meant that every resident would receive the care they need from a mandated staffing level and skills mix of nurses and carers, plus all care required from other staff (e.g. allied health and doctors etc.), and that care plans and staffing flexes with the case mix as residents' needs change. The other factors that influence the safety and quality of care enhance the overall effectiveness and appropriateness of care.

In the bottom row, nursing homes are illustrated where mandated minimum staffing levels and skills mix have not been met. Here, residents fall through the cracks when a rating system is implemented without the support of mandated minimum staffing and skills mix to ensure the right number of the right kinds of staff. This is where residents experience *neglect* – which is sadly the current situation for many people in nursing homes. In this bottom row, even with the 'right people' with adequate education, attitudes, continuity of care, and all the other factors necessary to provide safe, quality care (i.e. 'Provider D'), there is simply no way of ensuring at least a minimum number of the right kind of staff to provide the care that residents require. A workforce, regardless of their expertise, training, experience, and attitude cannot deliver appropriate care if they do not have the time or co-worker support to physically meet the needs of residents.

3. Conclusion

This paper has briefly introduced three tools related to staffing levels and skill mix determination, reporting, and funding. We have shown how such tools can be theoretically related to one another and could interact to enhance the implementation, funding, and rating/reporting of staffing and skills mix in aged care. It is important that the implementation of tools from other settings isn't simply whole-scale and that adjustments would be required to make the Nursing Home Compare rating system suitable for a different context. Further, it is important that a rating system doesn't itself direct staffing levels and skills mix; something that it's not designed to do.

Regarding funding, it is important that a nationally efficient price is determined that ensures that funding is sufficient to enable safe, quality care, and that a funding system that calculates the amount of funding that is required does so separately from care planning and staffing decisions. It is also important to recognise that the amount and mechanism of funding is integral to the provision of care; without sufficient funding safe, or if received funds are not appropriately used to provide care, quality care is at risk. This is why we also argue that nursing homes should be required to transparently account for and report their use of funding for care.

Staffing and skills mix should be determined separately from rating and funding and instead based on resident need and the nursing home's intent to provide safe, quality care. Mandated minimum staffing levels and skills mix can underpin decisions regarding the number and type of staff that are required to meet the assessed care needs of residents. We acknowledge that achieving minimum staffing levels and skills mixes in all nursing homes may be challenging and that wider reforms are also urgently required. Homes in regional and/or less wealthy locations may have trouble recruiting or retaining a suitably sized workforce, and labour market factors such as supply of qualified staff, remuneration, training and education opportunities also impact provider's abilities to staff their facilities. This means that a gradual phased approach will be necessary to enable nursing homes to move towards achieving a mandated minimum level of staff and skills mix while also aiming to address potential issues with staff training, attitudes, working conditions, and interfaces with the wider health and social services sectors.

Ultimately, we suggest that any reforms in aged care designed to support the delivery of safe, quality, respectful care must be underpinned by having at least the right number of the right staff to do the work. Without this, older people in nursing homes with insufficient staffing levels and skills mixes will continue to suffer the same neglect they have for far too long.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Micah Peters declares that he is an Associate Editor of the International Journal of Nursing Studies but will have no involvement in the editorial or review process for this manuscript.

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Appendix 2

THE AUSTRALIAN ECONOMIC REVIEW

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Workforce—The Bedrock of Aged Care Reform

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Abstract

The Australian Royal Commission into Aged Care Quality and Safety made 148 recommendations to reform Australian aged care. The recommendations concerning the sector's workforce are integral to ensuring that the widespread neglect and failures characterising the sector be addressed and prevented. This paper discusses several of the Commission's recommendations in relation to issues that we see as foundational for ensuring sustained success of urgent sector-wide reform. We focus on mandated staffing levels and skills mix, attraction and retention, education and training, staff registration, and funding transparency and accountability.

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1. Introduction

The Royal Commission into Aged Care Quality and Safety (the Commission) submitted its final report on 26 February 2021. This report is the latest in a long history of major inquiries and reports regarding the current and future delivery of aged care services to the around 1.2 million people who access care in residential care facilities (nursing homes) and private homes in the community (home care) (Australian Institute of Health and Welfare 2019). Following a distressingly, but accurately titled interim report called simply 'Neglect' (Royal Commission into Aged Care Quality and Safety 2019), the Commission's final report 'Care, Dignity, and Respect' is an aspirational report focused on what can be done to improve a sector that has systematically failed some of Australia's most vulnerable.

The Commission's wide-ranging report includes 148 recommendations, many of which are constituted by several detailed sub-recommendations or specifications. While these recommendations are clearly vital for enhancing the sector, it is the reforms that concern (either directly or indirectly) the workforce that we focus on in this paper. As the Commission (2021, p. 124) states: 'A highly skilled, well rewarded and valued aged care workforce is vital to the success of any future aged care system'.

In this paper we focus on several interlinked issues that we see as fundamental to ensuring the urgently needed, sector-wide reform put forward by the Commission. We contend that without fundamental,

wide-ranging change to the Australian aged care workforce there will be no sustained improvement to the safety and quality of service and care within the sector. The Commission has seen the need for workforce reform across a range of domains including, but not limited to, staffing levels and skills mix, attraction and retention, education and training, registration of staff, and transparency and accountability for funding received by approved aged care providers to pay staff wages. While the Australian Government has responded to the recommendations of the Royal Commission in the 2021/22 budget, as anticipated, its response to many workforce issues were not supported as a consequence of wider political settings. This is particularly the case in relation to staffing and wages settings that are discussed in this article.

2. Staffing Levels and Skills Mix

The current *Aged Care Act 1997* (Cth) does not legislate for approved aged care providers to staff their facilities with a minimum number or skills mix of employees. While in Victoria, and more recently Queensland, minimum staff ratios have been adopted in government-run facilities, the Commission noted that many nursing homes do not have enough staff to provide safe, quality care to residents. The commencement of the Royal Commission saw legislated regulation of staffing levels and the mix of workers as a highly contested space. Many employers and some large consumer organisations vehemently opposed mandated minimum staffing levels and skills mix as counter-productive and stifling innovation, despite an increasing body of evidence pointing to the links between staffing and better outcomes both within and beyond aged care and widespread accounts of the inadequacy of current staffing arrangements leading to missed care, neglect and death (Peters and Marnie 2020).

At its conclusion, the Commission proposed mandating a minimum staffing levels and skills mix (*Recommendation 86*) which included several sub-recommendations for how they would be implemented in policy and practice (Royal Commission into Aged Care Quality and Safety 2021). The Commission's recommended improvements to staffing are based on the United States Centers for Medicare & Medicaid Services (CMS) Rating System and in the first instance aim to impose a minimum standard that would achieve equivalent to a CMS three-star rating from 1 July 2022. This appears to have arisen from Eagar and colleagues' work comparing Australian and international staffing levels (Eagar et al. 2019). According to their recommendation, a minimum staff time standard would require 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. From 1 July 2024, the minimum standard would then be raised to the equivalent of a CMS four-star rating (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). While some modest improvements in staffing and skills mix would be delivered that could lead to better care for some, we know from previous research (Willis et al. 2016), that the Commission's proposed staffing improvements will be inadequate in meeting the needs of many residents now and in the future when care needs are expected to grow. The Commission's recommended minimum staffing levels are below what the Australian Nursing and Midwifery Federation (ANMF) has recommended based on an Australian study that suggested an average of 4.3 hours (258 minutes) per day per resident where 77 minutes is care from registered nurses, 52 minutes from enrolled nurses and 129 minutes from personal care workers (Willis et al. 2016). Importantly, the Commission's recommendations do not require the 24-hour presence of at least one registered nurse until mid-2024 and only mandate at least one registered nurse on site per residential aged care facility for morning and afternoon shifts (16 hours per day). This difference will mean that residents will continue to

experience the missed and rushed care that has been evident throughout the Commission's hearings.

We advance that the recommendations put forward by the Commission do not go far enough to ensure safe, quality care, especially for residents with complex, changing and considerable health and supportive care needs. Likewise, as has been argued elsewhere, unproblematic adoption of staffing levels based on a (flawed) rating system developed in the dissimilar context of the United States, is unlikely to be suitable for the current and future Australian sector (Peters, Marnie and Butler 2021; Silver-Greenberg and Gebeloff 2021). While we recognise that improving minimum staffing levels and skills mix cannot be achieved instantaneously, by drawing out the requirements for so long, we will continue to see sub-optimal care in nursing homes for a further 3 or more years.

With the Commission's acknowledgement of the growing needs of nursing home residents, particularly in terms of dementia, restorative care and palliative/end of life care, the absence of proper improvements to skills mixes can only result in a persistent shortfall in the workforce's ability to meet the needs of those under their care. The need for better clinical governance has also been recognised by the Commission throughout many of its recommendations. Ensuring suitable staffing levels and skills mix—particularly that ensure the presence of a sufficient number of registered nurses—will be vital to supporting clinical governance at the point of care.

Another issue within the Commission's recommendation is the conflation of care time provided by personal care workers and enrolled nurses. Principally, this risks engendering a false equivalence between two distinct, equally important groups of direct care staff, both with differing qualifications, roles and scopes of practice.

Conflating the roles of enrolled nurses and personal care workers overlooks two vital issues. First, in the United States, state licensing arrangements often stipulate rules that affect the mix of the equivalent work roles in nursing homes. Such state-based laws do not apply in Australia, meaning that there is no minimum mix of enrolled nurses/personal care workers under the proposed system. Second, the evidence is clear that the overall available skills mix in nursing homes must be improved. The new proposed standards would result in a mix of around 30 per cent registered nurses to 70 per cent of enrolled nurses and personal care workers. This is not a meaningful improvement from current staffing levels of around 15 per cent registered nurses, 11 per cent enrolled nurses and 74 per cent personal care workers (National Institute of Labour Studies 2017), and does not require providers to improve enrolled nurse numbers.

The Commission has recommended that nursing home staffing standards should be reviewed by the Safety and Quality Commission at least every 5 years. We agree that this is clearly necessary but suggest that transparent criteria and processes for such a review be established based on up-to-date Australian evidence and that assessment be continuous rather than periodic. Indeed, the CMS Rating System, the studies underpinning the Australian Resource Use Classification Study (RUCS) (Australian Health Services Research Institute 2019), and our own staffing and skills mix research (Willis et al. 2016) should each be revisited and repeated to ensure that the care needs of residents are adequately and appropriately met by a suitable number and skills mix of staff.

3. Workforce Attraction and Retention

Linked to the need to drastically improve staffing levels and skills mixes in Australian nursing homes and underpin these improvements with a mandated minimum is the need to improve workforce attraction and retention in the aged care sector. We believe that these reforms—to lift wages and working conditions for workforce of predominantly (89 per cent) women (National Institute of Labour Studies 2017)—will be some of the most challenging to realise. As with previous reviews (Aged Care Workforce Strategy Taskforce 2018), the Commission has

recognised that Australia's aged care workforce is undervalued and underpaid for the work they do. The Commission has recommended that the Federal Government collaborate with employers and unions to run a special case before the Fair Work Commission to bring wages into line with comparable groups (*Recommendations 84 and 85*).

The Commission suggests that a central consideration regarding future aged care funding will be to ensure that funds are available to keep wages at levels that are competitive with other similar sectors (i.e., health care) and attractive. How it will be ensured that these funds find their way into workers' pay packets is left open, but one mechanism that has been suggested in the past is a greater role for sector-wide bargaining—at least on wage levels and core conditions—with the funders at the bargaining table to ensure both the adequacy of funding and how it is being utilised (Aged Care Workforce Taskforce Technical Advisory Group 2018).

Whilst welcoming the Commission's support for addressing long-standing and sector-wide underpayment of aged care staff, the Commission, perhaps realistically, has avoided calling on government to rethink the application of enterprise-based bargaining as the vehicle to deal with wages and working conditions into the future. The fact that there are two separate awards (the Aged Care Award and the Nurses Award) will create some technical and logistical challenges. The very fact that there are existing enterprise agreements affecting numbers of employees in the sector, many of them with comparably low but above award rates, could also be obstacles to such determinations. However, as is the case with any such special adjustments, the underlying issue is how can we work to preserve any gains made over time.

The proposed funding model (case mix) is a bundled approach to system funding that does not permit direct line of sight into the relative adjustments to pricing directed towards staffing levels or staff attraction and retention. We see a risk to this approach, as the funds provided to attract and remunerate staff could be readily diverted and used by providers for other purposes. While the Commission has proposed measures to mitigate this risk, including regular reports on actual staffing numbers and a requirement that providers cooperate and participate in Pricing Authority activities, a recent investigation into the CMS Rating System showed that some of these same measures, such as accurate reporting on care staff hours, were failing to meet their objectives as a result of provider abuse (Silver-Greenberg and Gebeloff 2021).

Another risk to workforce attraction and retention may exist in the potential misuse of consumer directed budget held care. Here, while consumer choice and control are important, individualised employment arrangements may result in untenable rostering and working conditions that leave staff vulnerable and fatigued. Employment arrangements must be developed that will facilitate real consumer control and choice whilst at the same time creating and sustaining sound work arrangements and career development for the staff. We suggest that a more imaginative solution for the longer term could be found in sector-wide bargaining on leading issues (wages and major wage-related conditions) involving unions, employer organisations and the system funders, in order to ensure that the intended results be enforced through industry-wide, legally binding agreements on the big employment issues, especially those related to salaries.

Beyond increasing workforce attraction and retention by sustainably lifting wages, employment conditions within aged care will continue to be a significant challenge. As well as higher wages, staffing levels and skills mix, for any changes to be sustainable and effective, working conditions need to be extensively improved so that aged care becomes comparable with leading health care settings. The aged care workforce is overly casualised with a high prevalence of insecure work; almost 90 per cent of the direct care workforce is employed part-time or on casual or temporary contracts (National Institute of Labour Studies 2017; Aged Care Workforce Strategy Taskforce 2018). Beyond

management roles, full-time work in the sector is difficult to find and often paid maternity leave and sick leave relies heavily on minimum standards. Further, as the Commission has recognised, there is a lack of opportunity for career progression or pathways for advancement. Combined, this makes it extremely difficult to attract and retain new graduates and younger nurses to the sector.

4. Education and Training

In a sector that clearly must attract and retain a larger workforce of more qualified staff, education and training will become an increasingly important concern. The sheer size of the issue to be confronted is challenge enough; around 30 per cent of the existing personal care worker workforce do not hold a Certificate III in Individual Support/Aged Care (the recommended minimum qualification proposed by the Commission at *Recommendations 77 and 78*). Further, the recommendation to provide around 80,000 additional home care packages by the end of 2021 will see a massive spike in the number of workers needed and drive further demand for education and training both for personal care worker qualifications and university degrees with a focus on care for older adults and specialist issues such as dementia, palliative care and end of life care. The absence of a comprehensive workforce plan creates a further complication for undertaking the necessary growth and reform within the timeframes established by the Commission.

Several issues associated with the development of the personal care workforce were focused on by the Commission in their final report and recommendations, including volume, the nature and content of the qualifications, and variability of the quality of delivery. Variability in the quality of the delivery of training in the sector has been known for some time (Australian Skills Quality Authority 2013, 2017).

If the Commission's recommendations for enhancing the minimum qualification standards for personal care workers are acted upon by the Government, there is potential for the relevant licensing Board established within the Australian Health Practitioner Regulation Agency (AHPRA) to ensure that systems are in place to meet training quality requirements, just as is the case for the Boards relevant to nursing and other licensed occupations. Organisations such as the Australian Nursing and Midwifery Accreditation Council (ANMAC) play such a role, with its relevant professional groups augmenting the minimum accreditation requirements of the Australian Skills Quality Authority (ASQA) through imposing additional standards and processes on top of the performance of training and education bodies under their purview. Further, the prohibition and limitations within training packages on matters such as work or clinical placements, volumes of learning and curriculum specification are strengthened through the co-regulation by the Council under its charter from the National Board.

While we expect that there will be opposition from some registered training organisations, particularly due to concerns with red tape and over-regulation, self-regulation and quality improvement have not led to the necessary and lasting reforms required for ensuring the quality delivery of these qualifications. We argue that it is time for externally driven compliance to drive out underperforming providers.

The Aged Care Industry Reference Committee (ACIRC) was established by the Australian Industry and Skills Committee as a result of recommendations by the Aged Care Workforce Strategy Committee Report in 2018 (Aged Care Workforce Strategy Taskforce 2018). The ACIRC has been funded to lead a review of aged care qualifications within the Community Services Training Package. The entry-level qualification in that package has been the Certificate III in Individual Support (Aged Care) with other specialisations in the base qualification in Disability Support and Home Care. Earlier this year, the redrafted Certificate III and early drafts of the Certificate IV qualification were released for industry feedback. The proposed qualification has been tightened to ensure that elective units (up to two in addition to the core

and mandatory aged care 'electives') are more relevant and applicable to the job roles. It has also been suggested that there will be an effort in finalising the qualifications to map their content to other (higher) industry relevant qualifications, for example allied health assistant, diversional therapy and nursing to assist in the pursuit of implementing improved career pathways in the sector.

The absence of clear pathways for workers to develop their knowledge and skills and advance within the sector has been acknowledged by the Commission, which has called for a multi-party approach to the development of skill-based pathways. The underlying issue here is not an absence of ambition within the workforce, but a lack of recognition and reward for enhanced capacity gained through study and professional growth. The new qualifications growing out of the work of the Aged Care Industry Reference committee is designed to enhance the way the training packages respond to the need for pathways. However, the industrial barriers will be more difficult to overcome.

Unions are still often required to take enforcement action with employers not paying their care staff rates that recognise possession of both the Certificate III, as well as higher qualifications. Conflation of enrolled nurse roles with personal care workers, as we explained above, is also a risk to ensuring suitable career pathways for personal care workers.

One of the most difficult issues that will need to be addressed regarding education and training is enhancing opportunities for the sector to provide student placements—particularly for third-year nursing students who tend to choose clinical placements in health care rather than aged care. Current staffing arrangements that lack a sufficient number and skills mix of registered nurses make supervision, mentoring and clinical teaching for new nursing students difficult if not impossible in many settings. Difficulty in finding placements then inhibits the development of the skills that the sector so badly requires and the ability of the sector to attract high-quality candidates from undergraduate degrees. With the Commission's recommended staffing levels and skills mix minimums not to be achieved until mid-2024, creative solutions are needed to overcome the known barriers to placements. These may include additional training subsidies that will provide external support and supervision of students, funding for workplace mentoring and teaching in high performing workplaces (with the requisite accountability and transparency around the use of such funds), and the increased use of paid traineeships and similar programs (e.g., Victoria's Registered Undergraduate Student of Nursing/RUSON program).

The longer term requires the sector to invest in the development of skills and capacity in the same way as does every other industry. Again, the challenge will be to ensure that funding for this purpose is used for workforce development. One way of achieving that end would be through implementation of an acquittal process that would be undertaken annually by each provider, with any funds unspent on approved workforce development purposes used to support additional activity within other providers' services who are more heavily committed to training.

5. Staff Registration

The ANMF has campaigned for registration of personal care workers for over two decades. This campaign has been based on the fact that personal care workers deliver aspects of basic nursing care delegated to them from a care plan created by a registered nurse and in an environment where risk to resident's health and wellbeing is created by any failure of competence or misconduct. It is this level of risk to the public that is at the heart of statutory regulation and licensing of health professionals; health professionals are licensed to prevent harm to the public.

The fact that the Commission has recommended not just registration, but a system of regulation similar to that applied to health professionals, to be administered by AHPRA (*Recommendation 77*), creates the potential for a number of benefits to the community and

to the workforce. As we explained above, minimum qualifications and improvements in education and training will improve care. By establishing mandated Codes of Conduct there will be a shift to the application of relevant professional codes as part of the licensing system. This will have a profound impact in broadening the regulatory framework beyond its present over-reliance on police checks. The Codes will work on the basis that the intent is to ensure the protection of the public (from incompetence or misconduct). This in turn will provide the regulator with an enhanced capacity for oversight. Workers will also be better informed about public expectations through explicit frameworks established to guide their work, behaviour and decision making in practice. A formal registration system will also result in greater clarity around personal care worker scope of practice and the systems of delegation and supervision from other health professionals (such as registered nurses or specialists) who have devised and are ultimately responsible for the care of residents. While the Nursing and Midwifery Board of Australia (NMBA) has a framework for the delegation of aspects of nursing care, at present this is directed only to the registered nurses delegating such care to (currently) unlicensed staff. The regulation of personal care workers would create potential for improved regulation,n as both delegator and delegate would be covered.

6. Funding Transparency and Accountability

We argued before the Royal Commission that there must be greater transparency and accountability for the use of funds provided to the sector in the face of experience over many years that additional funds to address workforce issues have often been misdirected and do not necessarily result in a sufficiently sized or remunerated workforce. We welcome the Commission's understanding of the links between funding and workforce outcomes but worry that the Federal Government may hold back on imposing the necessary regulations for the use of funds by an increasing number of large for-profit corporations.

Failure to do so risks a repetition of earlier experiences where funding provision has not resulted in the reforms for which the additional allocations were intended and to further misdirection.

7. Discussion

The relationship between each of the above issues and others within the Commission's findings and recommendations cannot be underscored too highly. These workforce reforms and recommendations are a fundamental enabler to others. Without the sound and sustained implementation of recommendations that intrinsically impact upon the aged care sector's workforce, we are concerned that the implementation of other recommendations will be unsustainable and ineffective. For example, improved care for people with dementia will largely be achieved through changes in patterns of care implemented by workers with more knowledge and skills and in greater numbers than are available at present.

In the same way the recommendations regarding workforce are interwoven and mutually dependant; without overcoming the structural obstacles to fair and equitable pay rates and working conditions, no amount of positive spin will help with attraction and retention of workers to the sector. The cases already underway before the Fair Work Commission mean that the Commonwealth Government must immediately declare its commitment to stamp out the chronic undervaluation of work in the sector. It must, as the primary funder and sponsor of the aged care sector, commit itself to providing the money required to address the current pay gaps and inadequacies. Improved pay rates, whilst critical, are not enough on their own—mandated minimum staffing levels and skills mixes are required to ensure that staff are not rushed and overworked, and that they are supported by one another safely and effectively to deliver dignified person-centred care. Addressing both the extrinsic and intrinsic

motivators that impact on attraction and retention mean that we must mandate staffing levels and skills mix to a sufficient minimum standard acceptable for the Australian context. Respectful and person-centred evidenced-based care is at the heart of why people want to work in the sector.

There is also a need to lift the minimum education and training required to work in aged care. Mandatory entry-level qualifications are long overdue and will help, but only if the qualifications are relevant, address the required content of aged care roles, and are delivered by organisations that meet the best possible standards for delivery. Issues of regulatory oversight and compliance are again necessary, in this case in education and training systems. The proposed registration measures for personal care workers will provide an architecture that is capable of providing compliance systems both for the workers involved and their employers. To be successful, we recommend that the tried and proven model of AHPRHA/NMBA be the template and that we are not driven to adopt a lesser framework for workers in this vital sector. Finally, all earlier attempts at 'fixing aged care' have failed due to the absence of accountability and transparency in funding. There is an absolute need to ensure that funds arrive in the pay packets of workers in the sector and put towards actual care, not squandered by unscrupulous providers.

8. Conclusion

It is not possible to provide best-practice care to all residents in aged care without addressing staffing levels and skills mix, underpinned by a mandated or statutory scheme. Achievement and maintenance of the mandated levels requires significant action to address attraction and retention factors inhibiting workforce development in the sector.

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Appendix 3

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Human costs of aged care productivity: Innovation versus staffing and skills mix

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ABSTRACT

Problem: There is ongoing debate regarding the impact of, and relationship between, technological innovation and staffing levels and skills mix in aged care. Some commentators suggest that mandating minimum staffing levels and skills mix will undermine the sector's ability to increase productivity via technological innovations.
Aim: This paper aims to stimulate scholarly debate regarding staffing levels, skills mix, and technological innovation in aged care.
Methods: As a discussion paper providing a scholarly and political critique of current policy issues affecting nurses and aged care, no reporting guideline has been followed.
Findings: Staffing and skills mix in aged care has risen as a prominent, divisive issue. Some commentators suggest that productivity is hampered by mandating minimum staffing levels and skills mix by interfering with the uptake of innovation and technology. While technological innovation has led to many opportunities for better outcomes, we argue that without at least enough of the right kind of staff in aged care, technology and innovation alone cannot be relied upon to facilitate the dignified, person-centred care that older people deserve.
Discussion: We argue that staffing levels and skills mix need not be opposed to the implementation of innovations in aged care and that a focus on productivity and efficiency risks dehumanising the sector even further.
Conclusion: By maximising labour potential in aged care, and enabling a sector that supports a suitably sized and skilled workforce to care for older people, we are supporting a workforce that is ready and able to leverage opportunities offered by innovations in ways that do not dehumanise our older people.

Summary of Relevance
Problem or Issue
There is ongoing debate regarding the impact of, and relationship between, innovation and staffing levels and skills mix in aged care. Some commentators suggest that mandating minimum staffing levels and skills mix will undermine the sector's ability to increase productivity via technological innovations while others highlight the need for greater human contact and greater size and skills mix of staff.
What is Already Known
Both technological innovation and the impact of staffing levels and skills mix have clear benefits to the provision of care and beneficial outcomes.
What this Paper Adds
Technological innovation in aged care can be supported and facilitated in contexts that have mandated minimum staffing levels and skills mixes. Overreliance on technology may undermine the clear need and desire for a sector that prioritises human contact and relationships.

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1. Introduction

The Royal Commission into Aged Care Quality and Safety (the Royal Commission) commenced in 2018 as the latest of a string of Australian inquiries aimed at improving the sector. One of the matters the Commission is inquiring into is how to best sustainably deliver aged care services including through the increased use of technological innovations (Royal Commission into Aged Care Quality and Safety, 2019). By no means a new focus in the plethora of inquiries into aged care both nationally and abroad, technological innovation naturally and deservedly is looked to as a promising (and often proven) means of improving efficiency, health, and wellbeing outcomes. In aged care, there are a variety of technological innovations including those that are designed to; facilitate improved access to the sector and services (e.g. web-based platforms, tele-/video-health), improve health outcomes (e.g. mobility aids, pressure injury alerts), and support better wellbeing (e.g. novel technologies to enhance engagement for people with dementia). While this paper cannot go into detail regarding the full range and nature of technological innovations used in aged care, a selection of examples is provided. In many cases, technological innovations are adopted to increase automation and therefore the efficiency and productivity of work by minimising the need for human engagement and effort. This paper uses several examples of the types of technological innovations noted above to discuss and problematise the notion that technological innovations in aged care reduce or even preclude the need to ensure a sufficient number and skills mix of staff.

In discussing the importance of technological innovation in aged care, some commentators draw a contrast between technological interventions with others such as mandating minimum staffing levels and skills mixes, suggesting that the two are diametrically opposed and that increasing the number and skills mix of staff in aged care has little benefit to residents while risking stifling innovation and increasing staffing costs (House of Representatives Standing Committee on Health, Aged Care and Sport, 2018; Usher, 2019).

This paper is not an argument against technological innovation, nor a critique that seeks to downplay its benefits in aged care and beyond. Instead, in this paper we discuss the argument put forward by some during the Royal Commission, that investment and support for the aged care workforce via mandating minimum safe staffing levels and skills mix risks undermining the capacity for technological innovations to increase productivity in the sector (Rooney, 2019, page 14, para 120):

> "...[S]taff-to-resident ratios may limit the ability of providers to efficiently deliver appropriate care (including through the use of innovative care models and technology) by setting rigid, centrally determined constraints on the allocation resources."

While Mr Rooney did also highlight that Leading Age Services Australia (LASA) – the organisation of which Mr Rooney is Chief Executive Officer – supports increasing the hours of care received by residents in the same witness statement, the opposition posed between mandated minimum staff ratios and technological innovation is clear.

Technological innovations have the potential for greatly benefiting people who receive aged care and can also assist nurses and other aged care staff to do their jobs. As the Commission has heard, assistive technologies including hearing aids and improvements to beds and chairs are already widely present in aged care and are successful in reducing dependency on many services (Royal Commission into Aged Care Quality and Safety, 2019). Our argument is not that technological innovation does not have an important place in aged care, but that an unswerving focus on technology rather than upon the people at the centre of aged care risks losing sight of the importance of human relationships, respect, dignity, and compassion so vital to a safe, quality aged care system.

As another argument for the importance of human engagement and contact, there is increasing evidence supporting smaller sized, public aged care services in terms of better care, better outcomes for residents, and improved work satisfaction for staff, due to the greater potential for human interaction and resident choice (Baldwin et al., 2017; Barron and West, 2017; Spangler et al., 2019; Winblad et al., 2017). Loneliness and social isolation is already prevalent in the aged care sector (Barbosa Neves et al., 2019), and further limiting social interaction risks increasing this further.

2. Workforce pressures in aged care

Aged care staff, and residents most of all, suffer from the ongoing degradation of the workforce's ability to provide safe, quality care (Hodgkin et al., 2017). This is not because staff do not want to, but often because they simply do not have the numbers, resources, time, and support to do their jobs well (Australian Nursing and Midwifery Federation (ANMF, 2019). This fact appears to be well understood by the Royal Commission, whose overall impression of the sector is one 'that is failing' where good staff and providers succeed 'despite the aged care system in which they operate rather than because of it' (Royal Commission into Aged Care Quality and Safety, 2019, pg. 9). Indeed, the sector is beset by challenges with recruitment and retention, themselves caused and magnified by poor working conditions and support, inadequacy of remuneration, limited opportunities for career progression, and a top-down culture of 'do better and faster with less' (Royal Commission into Aged Care Quality and Safety, 2019).

Observations of the pressure that staff are under to provide genuine, compassionate care are not new. In a submission to the 2011 Productivity Commission inquiry into aged care, Associate Professor Yun-Hee Jeon submitted the following:

> "In the context of a shortage of skilled practitioners, and a poor skill mix (too few skilled staff relative to less skilled staff), nurses are obliged to spend their work time on tasks for which only they are qualified. In this task oriented aged care work environment, nurses are no longer able to provide "care" that they want to and have been taught to give (holistic and humanistic care). Instead, they have become conditioned to work as part of a production line (e.g., doing 'pills', documenting, dressing wounds). As a result, the culture of nursing care in the aged care sector is no longer conducive to or supportive of person centred approaches to care, which require time with care recipients and flexibility in work organisation to enable care to be more tailored to individual needs." (Jeon, 2011, pg.1)

In a sector where residents (Mitchell, 2019), family members (Eastman, 2019), consumer advocates (Yates, 2019), staff (Nobes, 2019), and experts (Bartone, 2019), call for the right numbers of well-trained and experienced staff with the right skills and right attitudes to provide safe, compassionate care, does technological innovation a feasible, appropriate solution that does not rely on having enough of the right kinds of staff?

"It's plain common sense, really, that you can't provide aged care without a suitably numerous and skilled workforce." (Gray, 2019, pg.6588)

3. Technology for increasing productivity

Technology is often a catalyst for increasing productivity, but is 'productivity' the right word to use when we are talking about caring for vulnerable and often chronically or acutely unwell older people in a safe, compassionate, and meaningful way?

Productivity is an economic term that can be understood as simply referring to the relationship between inputs and outputs of

production where the goal is often to improve production efficiency and volume of output through reducing the cost of production and inputs. But what are the outputs or products of aged care when the central focus of the sector could largely be explained to be providing safe, effective, meaningful, and sustainable quality care to older people often as they enter the later years of their lives? Without downplaying the significance of aged care in the context of the national economy – particularly in terms of the size of its workforce and capacity for employing and directly and indirectly supporting a range of workers and businesses - aged care is not an industry that seeks to produce a product, but rather provide a service. However, for some, such as those providers whose focus is clearly upon profit and cost minimisation, (Centre for International Corporate Tax Accountablity and Research, 2020; Tax Justice Network – Australia and Centre for International Corporate Tax Accountablity and Research, 2019; Tax Justice Network Australia, 2018) aged care appears to be seen as an opportunity for profit and shareholder benefit rather than an important right of all older Australians to grow old as comfortably and happily as possible in safe, supportive environments of their own choice with access to quality health and personal care that meets their needs and preferences.

The Productivity Commission, the Australian Government's independent research and advisory body that focusses 'on ways of achieving a more productive and efficient economy' led an 2011 inquiry into aged care, and while many of the recommendations resulting from the enquiry were to be commended (Productivity Commission, 2011), many have criticised the lack of genuine engagement or solutions to critical workforce issues that plagued the sector almost a decade ago (Australian Nursing Federation (ANF, 2011). Many of findings and assertions made in the Commission's report continue to influence positions on ongoing matters today, such as the association between technological innovation and mandated minimum staffing levels and skills mix (Productivity Commission, 2011). Criticism has also been levelled at the Commission's general goal of advocating for the marketisation of aged care and perspective that greater competition in the sector would sufficiently enable advances in quality of care (Hughes, 2011). In terms of technological innovation, the Productivity Commission recognised that while better use of technology, among a range of initiatives, would be necessary to improve productivity, aged care will continue to be labour-intensive and necessarily dependent upon a sufficient number of appropriately trained and experienced staff (Productivity Commission, 2011). The Commission however, was critical of mandating minimum staffing ratios and highlighted the concern that especially for smaller providers, implementation of ratios could create operational difficulties (Productivity Commission, 2011). This point was picked up by Mr Rooney (and others) who have echoed the Commission's assertion that staff ratios are a 'blunt instrument' that may limit the ability of providers to deliver care.

We contend that without a sufficient number of the right kinds of staff, technological innovations on their own are not the answer to the systemic problems within the aged care sector, and that overreliance on technology and assumptions that technology can effectively and meaningfully replace real person-to-person contact distracts from the central premise that aged care must focus on dignity, respect, compassion, and the person.

4. Technology for ease of access

Technological innovations are not unproblematically adopted in aged care. While the Internet offers an unprecedented level of connectivity and access to information, many older people may not be familiar or able to efficiently use or access web-based services such as those designed to facilitate access to aged care (Royal Commission into Aged Care Quality and Safety, 2019). While many older people are willing and able to develop greater skills with the internet, even carers who are often lead- or co-decision makers regarding aged care services have reported negative experiences with using aged care websites (Royal Commission into Aged Care Quality and Safety, 2019). Further, information and communication technologies may also not be well utilised by staff themselves due to lack of training, skills, and computer literacy (Adebayo et al., 2017).

Here, real human interrelationships and face-to-face contact is clearly needed for many people to be able to effectively and comfortably access the aged care services they need and want. Telehealth – including videolink - is one innovation that does have immense promise in enabling greater connection and access for people with aged care services, but clearly one that is contingent upon a skilled workforce for implementation (Koivunen and Saranto, 2018). Dehumanising the sector also has the potential to erode human contact and relationships if relied upon exclusively (Botrugno, 2019; Loh et al., 2009).

5. Technology for health improvements

Beyond access and information, technological innovations offer many opportunities for health benefit and better outcomes including through exercise (Valenzuela et al., 2018), falls prevention (Vandenberg et al., 2017), medication administration (Gnjidic et al., 2018), and more.

Adherence to pressure ulcer prevention and documentation in nursing homes can be suboptimal and lead to higher avoidable morbidity and mortality (Hansen and Fossum, 2016). Various innovations have been developed to enhance pressure ulcer prevention and include resident monitoring technology (Yap et al., 2019), powered hybrid air surfaces (Shi et al., 2018), and self-monitoring technologies that support risk assessment and selfcare (Patton et al., 2018). Studies have shown that many technological innovations in aged care may be acceptable and feasibly implemented from the perspectives of both residents and staff (Khosravi and Ghapanchi, 2016), however it is important to acknowledge the potential and often overlooked risks and unforeseen outcomes that may accompany the adoption of new technologies designed to replace activities traditionally carried out by staff (Chen and Schulz, 2016).

For example, while resident monitoring technology may effectively alert staff as to when repositioning may be required and contribute to more time and resource efficient practice, despite being acceptable for both residents and staff, there is a risk that a human element of care is removed (Chamanga and Butcher, 2016). By only notifying staff when repositioning is required – or even other technologies that use air to redistribute the resident's weight automatically without staff involvement – it could be that less and less actual person-to-person care occurs. Clinical experience, judgement, and holistic and person-centred assessment of needs and preferences is required. It is when staff have the time to engage with residents and not simply focus on the task at hand that meaningful social relationships are formed and maintained (Houghton et al., 2016; Oppert et al., 2018). Rushed, purely task-oriented work, and automation of resident monitoring may also result in potential instances of missed care where either the device fails to work properly, or when staff only have time to focus on certain aspects of care while missing others. Another risk that remains little explored in the literature is the question of whether technologies may result in the further erosion of staffing numbers and skills mix by automating work traditionally carried out by humans.

6. Technology to improve wellbeing

We argue that safe staffing levels and skill mix facilitates the uptake and success of technological innovations that are designed

to improve the wellbeing of residents. Simply bringing a new technological innovation into a nursing home is no guarantee of its successful adoption, use, and impact. 'Paro' a seal-like robot that has gained widespread attention as an innovative technology to improve dementia care for older people, has been little studied in terms of how older people experience using it and factors that underpin effective use (Hung et al., 2019). In fact; it appears that most research on Paro is researcher directed and focussed and does not examine the needs or experiences of older people or seek to identify and address barriers to successful and appropriate implementation (Hung et al., 2019). One recent study has also found clear discrepancies between what older people value in relation to companion robots (including Paro) and what roboticists who develop the devices value, highlighting the need for better user-centred design (Bradwell et al., 2019).

Technologies that are designed to improve quality of life by enhancing older peoples' engagement in physical and social activities, while effective, may not be a suitable substitute for real person-to-person relationships which themselves partially underpin the success or failure of the technology. Without meaningful social engagement between staff and residents, an otherwise effective technological device such as an interactive touchscreen-facilitated activity intervention may fail (Juul et al., 2019). Without integration of the technology into existing daily routine, management support for staff to engage with the technology together with the residents, and ongoing positive social interaction between staff and residents, innovations will fall flat. In this study, job and time constraints hindered the staff's capacity and willingness to use the device with residents which in turn was found to reduce resident engagement (Juul et al., 2019). Staff were worried that management did not consider interacting with the device with residents a good use of their time and in turn, management confirmed that the funding model governing care did not acknowledge the provision of social care as something that was either unimportant or was expected to occur naturally (Juul et al., 2019). Based on these observations, we can reflect that nursing homes where there are insufficient numbers of the right kind of staff to provide safe effective care in a manner where there is time left over for valuable social interaction with residents technological innovations designed to enhance older peoples' quality of life and engagement are likely to fail.

7. Discussion

In this article we have explored several different types of technological innovations in aged care and problematised the notion that minimum staffing levels and skills mixes would necessarily undermine the ability of providers to deliver care though the utilisation of technological innovations. Technological innovation has a clear place in the future of aged care, but hopefully not one that limits the importance of and opportunities for human contact and interaction.

Robotics are emerging as some of the most advanced innovations in health and aged care (Bradwell et al., 2020; García-Soler et al., 2018). Debate is rich in this space (Vandemeulebroucke et al., 2018), but some authors have commented that despite the promising capabilities of robots to take on some service roles in the aged-care, economic pressures would guarantee that reduction in the amount and quality of human contact would occur with great detriment to experiences and wellbeing (Rubeis, 2020; Sparrow and Sparrow, 2006). The dehumanisation of aged care through technology implemented to enhance only productivity and profitability is a real risk for a sector that already faces a lack of opportunities for sustained and compassionate care due to lack of staff. We therefore agree with those who suggest that nurses should oversee the introduction of technological innovations and ensure human contact and relationships continue in tandem with a technologically advancing developing sector (Pepito and Locsin, 2019).

'Dehumanising' is one of the many criticisms of the Australian aged care sector. The sector itself, when it loses sight of the people that it exists for and because of, is dehumanising. Where providers put profits before people and efficiency of production before compassion, the sector fails those it is meant to care for and support - those whose lives and livelihoods depend on a sector that sees, listens to, and understands them. Older people are dehumanised when restrictive practices are used often simply because there are not enough staff or too few qualified staff present onsite (Castle and Fogel, 1998; Staggs et al., 2017).

8. Conclusion

Technological innovation offers numerous and varied opportunities for improving Australia's aged care sector for older people, their loved ones, and workers, but technology does not exist in a vacuum. Reliance on technology when it is to the detriment of the older person – be that through limiting opportunities for human contact or the number or type of staff available to provide care risks further dehumanisation of the sector. People created technology and people in aged care are needed to employ it effectively alongside and intertwined with genuine, physical and interpersonal contact and care. As with all other reforms necessary to address the systemic problems in Australia's aged care sector, at least enough of the right number of the right kind of staff are urgently required as the keystone upon which these other reforms depend. By maximising labour potential in aged care and enabling a sector that supports a suitably sized and skilled workforce to care for older people we are supporting a workforce that is ready and able to leverage the opportunities offered by technological innovations in ways that do not dehumanise our older people.

9. Ethical statement

The attached manuscript is the authors' original work, has not been published previously, and is not under consideration for publication elsewhere. As a discussion paper, research ethics approval was not required. All authors have seen and approved the manuscript being submitted and we agree to abide by the copyright terms and conditions of Elsevier and the Australian College of Nursing.

Conflict of interest

The attached manuscript is the authors' original work, has not been published previously, and is not under consideration for publication elsewhere. All authors have seen and approved the manuscript being submitted and we agree to abide by the copyright terms and conditions of Elsevier and the Australian College of Nursing.

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CRediT authorship contribution statement

The paper properly credits the meaningful contributions of co-authors and co-researchers.

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Appendix 4

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Perspective

Royal Commission into Aged Care recommendations on minimum staff time standard for nursing homes

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Abstract. The Royal Commission's recommendation for nursing home minimum time standards and the Australian Government's response do not support best practice resident care. We recommend that higher mandated minimum staffing levels and skills mix should be phased in by mid-2026.

What is known about the topic? The Australian Government has not committed to fully implementing the Commission's recommendations for mandated minimum staff time standards.
What does this paper add? We highlight issues with the Commission's recommendations and the Australian Government's response where they do not support sufficient minimum time to provide best practice care.
What are the implications for practitioners? Mandated evidence-based minimum staffing levels and skills mix should be phased in by mid-2026 to support best practice care.

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Introduction

A lack in sufficient numbers, as well as in the skills mix, of staff in Australian nursing homes causes neglect and harm. The Australian Royal Commission into Aged Care Quality and Safety's final report contained long overdue recommendations for legislated minimum staff time standards in nursing homes.[1] The size and composition of the nursing home workforce was central to the Commission's inquiry,[1] with extensive evidence linking higher staffing levels and skills mix to improved clinical and workforce outcomes.[2–5] The Commission sought to determine the amount of staff time required for safe, dignified care and investigated international examples, including the Nursing Home Compare's Five-Star Quality Rating System in the US.[6] Using that rating system, the Commission heard that almost 60% of Australian nursing homes have unacceptably low staffing levels (one- or two-star ratings),[6] that a three-star rating supports 'acceptable' care and that five stars reflects 'best practice'.[6] A three-star rating can be achieved with as low as 264 min of care per resident per day provided by registered nurses (RNs), enrolled nurses (ENs) and personal care workers (PCWs), where <19 min is from RNs. Approximately 73% of Australian nursing homes have staffing levels and skills mixes rated between one and three stars.[6] The Commission used this rating system to underpin recommendations for Australian minimum staff time standards.[1]

The Commission recommended that from 1 July 2021 nursing homes should engage staff so RNs, ENs and PCWs combined could provide a minimum of 200 min of care, including at least 40 min of RN care; a three-star equivalent (Fig. 1).[1,6] The Commission recommended this increase to at least 215 min, including at least 44 min RN time, from 1 July 2024, which equates to four stars.[1,6] The Australian Government agreed to legislate the ≥200/≥40 min standard delayed to 1 October 2023, with no clear commitment to requiring improvements beyond then (Fig. 1).[7] Although the Commission recommended 16 h day^{-1} RN staffing from mid-2022 and 24/7 RN staffing from 1 July 2024, the Australian Government only agreed to 16/7 RN staffing from October 2023.[1,7] We see critical problems with the Commission's recommendations and the Australian Government's response:

- 'average resident' is undefined
- the standards are based on the US rating system designed to inform consumers, not a contextually appropriate (i.e. Australian) assessment of residents' staffing needs

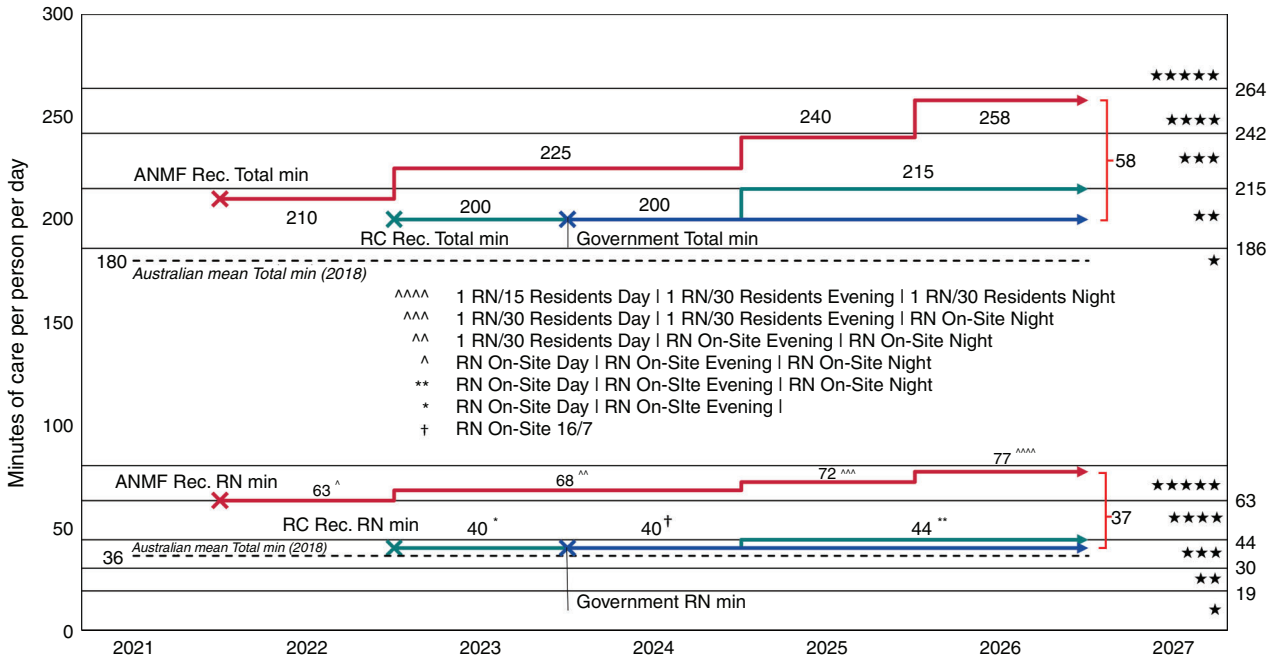

Fig. 1. The Australian Nursing and Midwifery Federation's (ANMF) recommended implementation schedule (red line) compared with the Royal Commission's recommendations (RC Rec.; green line) and the Australian Government's recommendations (blue line), plotted against the US Nursing Home Compare's Five-Star Quality Rating System (right).

- whether minutes relate to staff being 'engaged by the provider' (as worded) or to provide actual resident care is unspecified
- the Australian Government rejected 24/7 RN staffing
- the lack of distinction between EN and PCW roles disincentivises the employment of ENs and devalues EN contributions
- the temporary exemptions to skill mix requirements, but not staff numbers, risks erosion of RN and EN roles, particularly in regional and remote areas
- providers are permitted to select a skills mix appropriate to the home's model of care but without requirements that this model of care be evidence based or suitable for residents' needs
- aspiring to below best practice perpetuates the ethos of 'good enough', which contradicts the Commission's aims.

The Commission's recommendation for minimum time standards and the Australian Government's limited response do not go far enough and are not implemented soon enough. On average, Australian residents currently receive 180 min of care, including 36 min from RNs.[6] The Commission's recommendations add only 20 min more of care, including 4 min of RN care. Although the Commission's standards may meet the needs of residents with below-average needs, because there are more residents with highly complex care needs,[4,8–10] we argue that their care would be rushed or missed, leading to worse outcomes.[5,11,12] The objective of staffing nursing homes appropriately should not be to achieve 'absolute efficiency', but to ensure that staff work safely, provide person-centred care, develop meaningful relationships with residents and can provide unrushed, dignified care. Although the Commission specified that homes with residents with greater needs would need to staff accordingly, the recommendations do not provide a roadmap to best practice care.

The Commission's recommendations and the Australian Government's response are not the transformative reforms that Australia's nursing home residents and staff deserve. Numerous widespread reforms are necessary, and were recommended by the Commission, but a suitably sized workforce with an appropriate skills mix is foundational to the effectiveness and sustainability of any reforms.[13] Although ensuring that Australia's workforce can meet the staffing and skills mix necessary to deliver best practice care cannot be achieved immediately due to workforce shortages (particularly RNs),[14] attraction and retention challenges[15] and funding model deficiencies,[16] the absence of future planning towards a best practice minimum standard contradicts the Commission's aims.[17] We recommend that the minimum time standard must be higher and be gradually raised so that by mid-2026 close to the equivalent of a best practice five-star rating is achieved (Fig. 1). From mid-2026, Australian nursing homes should staff so an average of ≥258 min of care per day can be provided by a skills mix of 30% RNs, 20% ENs and 50% PCWs.[5,11,17] This way, on average, each resident could receive at least 77 min of care per day from RNs, at least 52 min from ENs and at least 129 min from PCWs. This, as well as immediate implementation of 24/7 RN presence, which also should be gradually enhanced by improving RN to resident ratios, would support safe, effective, dignified care for all residents.[5] These staffing levels and skills mix should be calculated across the home, not by individual units/wings, to ensure flexibility to respond to changing resident care needs. These reforms would underpin improved system and staff outcomes, such as improved recruitment and retention, workplace

safety and staff satisfaction by ensuring time to provide respectful, person-centred care.

Data availability

The data that support this study will be shared upon reasonable request to the corresponding author.

Competing interests

The authors declare no competing interests.

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