ACCESS ECONOMICS

# Nurses in residential aged care

November 2009

Report by Access Economics Pty Limited for

The Australian Nursing Federation

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# Glossary and acronyms

| | |
|---|---|
| ABS | Australian Bureau of Statistics |
| ACFI | Aged Care Funding Instrument |
| ACSA | Aged and Community Services Australia |
| AIHW | Australian Institute of Health and Welfare |
| AIN | assistant in nursing |
| ANF | Australian Nursing Federation |
| CAP | Conditional Adjustment Payment |
| COPO | Commonwealth Own Purpose Outlays |
| CPI | Consumer Price Index |
| DEEWR | Department of Education, Employment and Workplace Relations |
| DoHA | Department of Health and Ageing |
| EBA | Enterprise Bargaining Agreement |
| EN | enrolled nurse |
| FTE | full time equivalent |
| GDP | gross domestic product |
| HRSCHA | House of Representatives Standing Committee on Health and Ageing |
| IT | information technology |
| NILS | National Institute of Labour Studies |
| PC | Productivity Commission |
| PD | professional development |
| RAC | residential aged care |
| RN | registered nurse |
| SCAC | Senate Community Affairs Committee |
| SCARC | Senate Community Affairs Reference Committee |
| TAFE | Technical and Further Education |
| VET | Vocational Education and Training |
| WGACWQ | Working Group on Aged Care Worker Qualifications |

## Key findings

- Nurses working in residential aged care (RAC) are paid at least 10% less than their counterparts in acute care – with the wages gap worse in some locations.
- Work intensity for RAC nurses has increased – with 6.7 residents per nurse in 2007 up from 5.2 in just four years, and projected to double to 12.1 in the next decade on current trends.
  - This means each nurse is increasingly required to supervise more residents as well as more staff, sometimes across multiple locations.
  - Moreover, supply projections will not keep pace with demand growth (numbers of residents) to 2020, plus there will be growing complexity of care as the population of residents becomes older with more chronic needs.
- Associated with the changing RAC workforce, quality of care is potentially compromised.
  - In acute care and RAC, the evidence shows that a higher nurse ratio in the staffing mix contributes to better quality outcomes (measured through indicators such as resident satisfaction, resident functionality, ulcers, infections, bleeding, weight loss and death).
  - Better quality of care and health outcomes reflects the level of education, training and ongoing professional development invested in skilling and equipping nurses to meet the challenging and changing needs of aged care – particularly for the now high proportion of residents with dementia.
- The combination of inequitable remuneration, increasing workloads and the frustration of compromised quality outcomes is driving nurses from the sector.
  - The tight market is reflected in recruitment and retention difficulties, rising vacancy rates and exits to acute care or elsewhere.
- There is a pressing need for reform in aged care to address these issues.
  - Wage disparities must be corrected.
  - If stipulated nurse ratios are to be avoided then better quality outcomes should be funded at higher levels, with the nursing requirement – as one evidence-based indicator of quality – linked to the Aged Care Funding Instrument (ACFI).
  - Resident-nurse ratios at each RAC facility should also be required to be regularly made public, so consumers have access to this information in their decision-making between providers.
  - University nursing training should be expanded, as there is excess demand for places together with emerging workforce shortage.
  - RAC providers should be required to provide acquittal of funds against the various funding instruments.
  - Long term RAC financing should be addressed, by streamlining the plethora of current instruments and regulations, and investigating alternative future financing mechanisms, such as the scope for potentially higher quantitative caps or healthy ageing savings mechanisms akin to superannuation provisions for retirement incomes.

# Executive Summary

This report examines changes in the residential aged care (RAC) workforce over recent years and their implications for the future, in terms of the workforce mix, emerging critical shortages and implications for quality of care. A focus is on the importance and benefits of adequate training, staffing strategies that will deliver quality outcomes for residents and financing implications.

### Findings – RAC resident and workforce trends (demand and supply)

Data analysed were mainly from the National Institute of Labour Studies (NILS), the Australian Institute of Health and Welfare (AIHW) and the Productivity Commission (PC). There were around 2,800 RAC facilities operated by accredited providers in June 2008.

**Demand:** At 30 June 2008, there were 160,250 RAC residents in Australia, with around 70% receiving high level care, 55% aged 85 years or older, 71% females and 98% permanent residents. Projecting future RAC residents – based on the current proportions of residents to population by age-gender group, applied to future demographic trends – suggests there will be around 251,254 residents by 2020, up 56.8% on 2008. The strongest growth (9.5% per annum) will be in the most complex needs group (aged 95+). Demand will grow strongly in (older) rural and remote Australia and it will also be important to appropriately cater for the care needs of growing numbers of culturally and linguistically diverse residents.

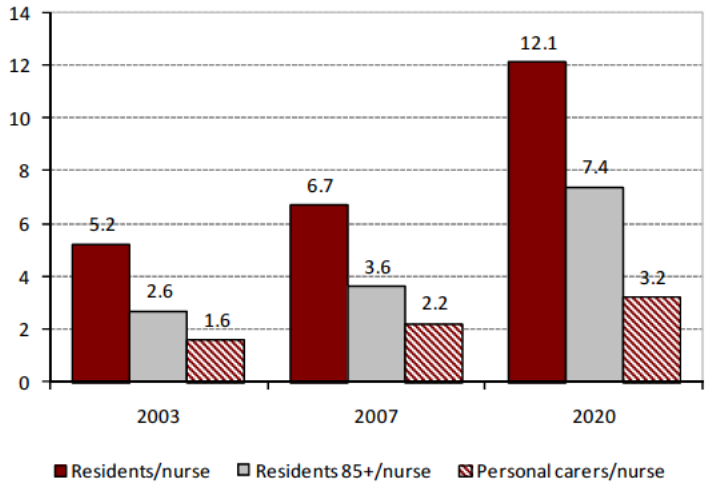
**Supply:** NILS data comparing the RAC workforce in 2007 with 2003 show total workforce growth from 76,006 to 78,849 FTE. Personal carers increased most, from 57% to 64% of FTE; registered nurses (RNs) fell from 21% to 17%; enrolled nurses (ENs) fell from 14% to 12½%; and the remainder (allied health workers) fell from 7.6% to 6.6%. Analysis of newly hired staff suggests these trends will continue, yet the exit of nurses from RAC is in stark contrast to the growth in the acute care nursing workforce. Across Australia, overall nursing supply increased from 1,031 to 1,133 FTE nurses per 100,000 people from 2001 to 2005, reflecting both greater numbers and longer hours on average (the latter reflecting workforce ageing[1]). The contrary decline in nurses per resident in the RAC setting reflects a number of factors.

- The key driver is the wage differential between RAC and other nursing. Aged care nurses are likely to be paid at least 10% less than their peers in the acute care sector for performing similar or equivalent work (PC, 2008). Data from the ANF indicate that the wage gap may be as high as 12-13% in 2009 across Australia, when comparing the aged care enterprise bargaining agreement (EBA) with EBAs in public sector nursing as a whole. (There is a further gap between RAC nurses on EBAs and those on the Award.)
- In order to comply with regulation, including price caps, and with the removal of regulated staffing ratios, RAC providers have tried to control cost growth by increasing the proportion of less qualified care staff (DEST, 2001). However, the PC (2008) notes that this and high capacity utilisation (currently 95%) associated with the bed licensing system means that quality of service can suffer and not meet minimum standards. The PC also notes the inadequacy of indexation of Commonwealth Own Purpose Outlays, which constrains the ability of providers to offer competitive wages to RAC nurses.

[1] The average age of employed nurses increased from 42.2 years in 2001 to 45.1 years in 2005 (AIHW, 2005). RAC nurses are older on average – with the mean age around 50 years (NILS, 2008).

- The tight labour market for RAC nurses (NILS, 2008; DEEWR, 2007) – i.e. difficulty recruiting and retaining staff – is reflected in rising nurse vacancy rates, indicating shortage; similarly high personal carer vacancy rates reflect the greater workforce turnover (NILS, 2008). The existing RAC nursing workforce shortages, financial constraints in the sector and the growing complexity and chronicity of the ageing resident population present challenges in providing adequate care quality and increase stress for the nurses who remain in RAC, exacerbating shortages – creating a vicious circle (Preston, 2006). For RNs in particular, supply shortages intensify staff workloads – leading to a lack of time for professional development (PD) or mentoring and reduced work-life quality. The NILS found that 44% of RAC workers felt their jobs were 'more stressful than ever imagined'; nurses had the highest proportion who agreed with this statement (46.8%).
- Although enrolments and completions for undergraduate nursing courses have increased over the last seven years, there is still a significant degree of unmet demand – the number of eligible potential students who are not offered a place despite targeted programs to increase undergraduate places (eg, aged care nursing scholarships).
- There are limited career path opportunities for RAC nurses– especially RNs, of whom 93% are female and 58% worked part time (ABS, 2006) – compared to growing opportunities for women elsewhere. Workplace flexibility is an important consideration as the feminisation and age structure implies the need to balance work and domestic responsibilities – and survey data suggests that satisfaction with shifts has improved. Improved support services (eg, childcare options, flexible meal breaks) can help too.
- Underutilised capacity in the personal carer workforce, which is largely part-time or casual, provides a potential source of increased labour supply, particularly among new hires, who have a higher willingness to work increased hours; as the tight labour market situation is addressed by utilising this capacity, the share of nurse labour in the RAC workforce may continue to decline.

Projecting supply in the same manner as demand, the total number of RAC staff would increase by around 14.1% to 91,621 FTE by 2020 – in contrast to the 56.8% increase in demand. The proportion of staff older than 45 rises from 22.8% in 2008 to 28.8% in 2020. Moreover, if the decline in nurses as a share of the total continues till 2015 and then halts, by 2020 the ratio of residents per nurse will roughly double (and residents will be older) and nurses will need to supervise 3 rather than 2 personal carers each, on average.



## Quality of care implications

Skills mix issues in the RAC sector include the inability to ensure adequate staffing and inadequate preparation of staff for their roles. A particular problem is the limited availability of specialised nursing care and thus clinical care limitations, which can have serious adverse consequences for the frail aged.

In the acute sector there is evidence that more nursing hours for patients bring quality of care and economic benefits (Duffield, 2008; Needleman et al, 2002; Kane et al, 2007; Aiken et al, 2003) through decreased complications, higher care standards and improved outcomes, measured using various indicators (e.g. behavioural and pain management, sleep, infection control, emotional support and so on). Studies similarly show that care delivered by RNs in RAC settings is strongly related to better resident outcomes (Horn et al, 2005). An implication is that future residents should be made aware of a facility's resident-nurse ratio when considering a place.

Moreover, rationalisation of funding for human resources and administration has led to a reduction in levels of support for nurses (DEST, 2001a). Experienced RNs are spending more time undertaking menial tasks such as answering calls, chasing supplies, entering data and overcoming 'red tape'. The NILS survey found RAC nurses felt like they did not have sufficient time or opportunity to engage in the caring tasks for which they were employed and trained, with adverse impacts on both morale and quality of care.

It is important to view nursing education as an investment, with failure to invest in adequate training and education resulting in patient, economic and social costs. Cost effectiveness of RAC training programs can be measured in terms of workload (efficiency before and after the training), work quality and number of people trained. It will be important to continue to monitor and evaluate the cost effectiveness of skills training and key performance indicators of quality through the RAC sector.

## Conclusions

The current challenges can be addressed in a number of ways.

**Closing the wages gap.** Wages and conditions must improve to attract nurses into the sector. Productivity improvements can help to fill the wages gap, realised through better technology and restructuring activities e.g. more sophisticated monitoring and scheduling systems which can also allow staff to spend more time with residents and increase the quality of care provided. More fundamentally, since there is an evidence base to show that more nurses in the skill mix lead to better health outcomes, the intensity of nursing care requirement could be linked to the ACFI scale and this may assist in achieving adequate provisioning for wages.

**Better education and training**. Enabling career development through continual education and training is a pre-requisite to ensuring the skills mix responds to changing care needs (more high and chronic type care), including more specialised training, such as dementia care programs. Upskilling ENs and personal carers is critical given their share of the RAC workforce. The number of undergraduate nursing places should be increased such that they are adequate to meet future demand, and should emphasise aged care specific places and encourage graduates to enter the aged care sector.

**Improving retention - the workplace environment**. A positive workplace culture where staff feel valued can increase job satisfaction. Addressing excessive workloads, unnecessary documentation and lack of PD opportunities helps improve retention, facilitated through: flexibility in rostering hours, time off to study and financial assistance to cover incurred costs; promoting workplace safety and cultural sensitivity; and encouraging a better work/life balance.

**Broadening staff duties.** Given shortages in the RAC workforce, care delivery can be broadened by extending the scope of practice for various staff. For example, with training, ENs could extend into medication management. However, in some locations duties have already been broadened and there is little scope for further extension. These should be accompanied with mechanisms to ensure quality of care standards are maintained.

**A better regulatory environment**: There is merit in a single, integrated assessment approach for care needs. There also needs to be more choice within the RAC sector and better information on how individuals use aged care services. This would involve lifting the current restrictions on the number of aged care places within a RAC facility. Information on the performance of RAC providers should help ensure residents are able to choose the better providers. The objective is to ensure RAC facilities are highly valued by residents, can increase their placements, and can attract residents from less valued facilities. The regulatory environment would be further improved by a more detailed and transparent acquittal process where RAC providers clearly account for how capital and recurrent funding is spent.

**Promoting optimal levels of nursing care.** The strong links between improved skills, quality of care and resident satisfaction indicates the current decline in the proportion of RNs within RAC facilities should be reversed. If stipulated nurse ratios are to be avoided, then an alternative is directly linking funding with the provision of nursing care, as well as implementing requirements for RN numbers based on the level of care required within a facility (through the ACFI). This would improve both the quality and quantity of care provided.

**Financial reform.** Major reform of financing is needed in the RAC sector. This should cover the patchworked plethora of regulated ways funding is disbursed as well as non-transparent manner in which it is acquitted. There is a need for financial injections to make much-needed capital improvements and free up funds to improve the nursing skills mix and other factors associated with better quality of care. One option to achieve this, for investigation, could be the removal of government legislated fee caps. RAC facilities would then also have greater capacity to fund accommodation costs from accommodation charges, thereby reducing the need to cross subsidise with funds hypothecated to operational costs.

**Improving the capacity of residents to meet future RAC costs.** As aged care needs burgeon in future, support for RAC facilities will place significant stress on the federal government budget. It will become increasingly important that aged care costs are borne by individuals who have the capacity to pay, allowing the government to continue providing a safety net for those without the financial means to cover their RAC costs. Private sector capacity to pay must be increased and one option is the incremental transition towards introduce Healthy Ageing Savings Accounts (HASAs) to enable those with adequate means to gradually provision for their future health and aged care needs. This would provide an incentive for individuals to save for their more predictable health and aged care needs and increase the capacity to pay for RAC charges, while providing greater flexibility for RAC facilities to meet the individual needs of residents.

**Access Economics**

# 1 Introduction

The Australian Nursing Federation (ANF) is currently investigating issues in residential aged care (RAC) including workforce, financing options, and quality of care services – in the context of the campaign, '*Because we care - quality care for older Australians*'.

Of people admitted to nursing homes, the majority require high levels of care including for chronic conditions such as dementia.

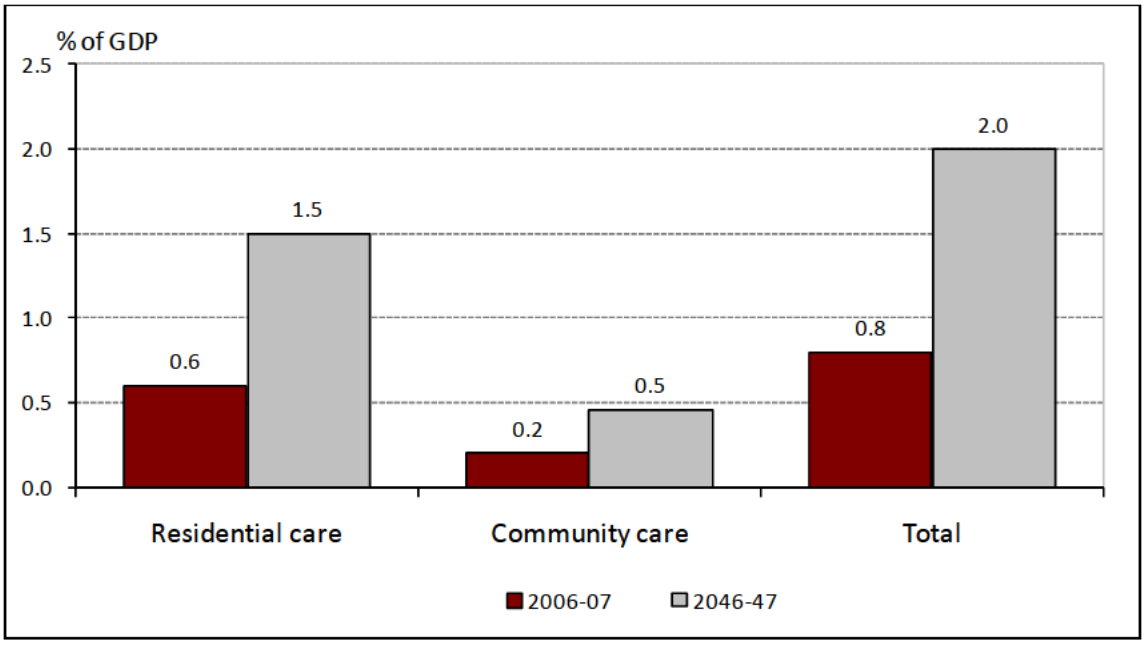
- The aged care workforce has changed in recent years, with fewer registered nurses (RNs) and more personal carers, including assistants in nursing (AINs).
- The average age of aged care nurses is around 50 years and recruitment is problematic (NILS, 2008).
- In the acute sector there is evidence that more nursing hours for patients bring economic benefits through decreased complications, higher care standards and improved outcomes.
- Training and education have been found in acute and RAC contexts to enhance quality of care and health outcomes (Duffield, 2008).
- With demographic ageing, there will be more Australians requiring aged care in future, which raises issues of sustainable long term financing mechanisms (public and private).

The aged care sector makes up around 1.1% of the Australian economy or Gross Domestic Product (GDP) (Treasury, 2007). This includes Commonwealth Government funding as well as contributions from state and territory governments and individuals receiving care.

- The 2007 Intergenerational Report (Treasury, 2007) stated that Commonwealth Government spending on aged care will increase as a proportion of Gross Domestic Product (GDP), from 0.8% in 2006-07 to 2.0% in 2046-47 (Chart 1.1).
- The projected growth is largely driven by increases in spending on RAC (as opposed to community care). RAC spending is projected to rise from 0.6% of GDP to 1.5% of GDP in 2046-47.
- Similarly, the AIHW estimated that the high-care portion of residential aged care (which dominated overall RAC spending) is projected to increase by 295% from $7.5 billion in 2002-03 to $29.7 billion by 2032-33 (AIHW, 2008a). Expenditure on RAC is dominated by dementia, which is projected to have a large increase due to the ageing of the population.

These projections raise issues of sustainable long term financing mechanisms (both from public and private sources) and have implications for workforce and quality of care.

**Chart 1.1: Projected Australian Government aged care spending**




Source: Treasury, 2007.

The aim of this report is to provide analysis in relation to these issues as follows.

1. Provide a picture of the changes in the aged care workforce over recent years (the shift towards personal carers and AINs), turnover rates and average wage costs and qualitative evidence of impacts on workforce including workplace stressors and the need for adequate skills and training.
2. Review evidence from the acute care and RAC sectors of the importance and benefits of adequate training of nursing staff, and the applicability of lessons from acute care to RAC.
3. Discuss staffing strategies that will assist in developing innovative models of care that deliver quality outcomes for residents.
4. Draw conclusions that emphasise that effective RAC workforce approaches require adequate skills to ensure quality of outcomes, and that such skills training is thus imperative. These skills are delivered through nursing qualifications and ongoing professional development (PD). The financing implications of quality care and potential mixed financing solutions are also noted.

# 2 Overview of residential aged care

This chapter reviews the profiles of RAC residents and workforce, which respectively give an overview of demand and supply for nurses.

- Section 2.1 provides definitions and data sources;
- Section 2.2 provides an overview of RAC residents and recent changes in composition, noting the increased share of residents with more complex chronic care needs;
- Section 2.3 projects the RAC resident population, highlighting impacts of further ageing on demand;
- Section 2.4 provides a snapshot of the current RAC workforce, with a focus on nurses;
- Section 2.5 reviews recent changes in the workforce including regulatory impacts, the shift towards personal carers and assistants in nursing (AINs), turnover rates and average wage costs; and
- Section 2.6 projects the workforce to 2020, drawing out implications.

## 2.1 Definitions and methodological issues

It is important initially to define the key concepts that will be discussed, as well as some data and methodological issues.

### Defining the RAC workforce

The National Institute of Labour Studies (NILS, 2004 and 2008) carried out studies in the years 2003 and 2007, commissioned by the Australian Government Department of Health and Ageing (DoHA). These provided estimates of the number of direct care workers employed in aged care facilities in the years 2003 and 2007, by means of surveys of all aged care facilities in Australia. The NILS broke up the RAC direct care workforce into four main occupational groups:

- registered nurses (RNs);
- enrolled nurses (ENs);
- personal carers such as AINs; and
- allied health workers.

According to a review into aged care services carried out by the Productivity Commission (PC, 2008) the NILS research is the most reliable and comprehensive survey of the formal paid workforce in residential settings. As such, this report draws on the findings of the NILS studies particularly for classification and data issues regarding the RAC workforce.

### Registered nurse (RN)

A RN is a nurse who is on the register maintained by the nurses and midwives board or council in each state or territory. The minimum educational requirement for a RN is a three-year degree from a higher education institution or equivalent from a recognised hospital-based program. To maintain registration, nurses must have practised for a specified minimum period in the previous five years (referred to as 'recency of practice') with the actual requirements depending on the registration board (AIHW, 2008b). RNs are a crucial component of the aged

care workforce. They manage teams of care staff and provide specialist skills, including complex medication and care tasks (PC, 2008).

### Enrolled nurse (EN)

An EN is a nurse who is on the roll maintained by the nursing registration board in each state and territory. The minimum educational requirement for an EN is a one-year diploma from a Vocational Education and Training (VET) provider, or equivalent from a recognised hospital-based program e.g. Technical and Further Education (TAFE) Certificate Level IV. To maintain enrolment nurses must have 'recency of practice' (ie have practised for a specified minimum period in the previous five years, with the requirements depending on the registration board). ENs usually work with RNs to provide patients with basic nursing care, undertaking less complex procedures than RNs. They may undertake more complex tasks than personal carers including medication management and client monitoring.

### Personal carer

Personal carers or AINs comprise well over half of the RAC workforce and generally train at TAFEs to Certificate Level III in nursing. Personal carers are unlicensed workers who generally have vocational qualifications and undertake routine tasks in the provision of services to assist clients in their daily living activities.

### Allied health professionals and others

The remainder of the RAC workforce is comprised of allied health workers (such as diversional therapists and recreation officers) and non-direct care staff (such as cooks, cleaners and administrators). Doctors and other allied health professionals (such as occupational therapists, dentists, physiotherapists, podiatrists and pharmacists) also contribute to the care of residents but are not currently considered to be part of the dedicated aged care workforce. This report will only focus on the direct care RAC workforce – thus excluding non-direct care staff, doctors, and other allied health professionals not dedicated to RAC.

### Full-time equivalent (FTE)

FTE measures the number of standard-hour workloads worked by employed nurses and others. This provides a useful measure of supply as it takes into account both the number of people who are working, and the hours that they work.

FTE for nurses is calculated by: 'the number of employed nurses in a particular category' multiplied by 'the average hours worked by employed nurses in the category' divided by 'the standard working week hours' (usually 35 or more) (PC, 2008).

This report will make use of the concept of FTE when examining the RAC workforce, while also reporting the absolute numbers. The latter is important also in relation to estimating training places as well as various cost overheads, such as payroll overheads which tend to correlate better with absolute numbers rather than FTE. It should be further noted that the standard week in the health and aged care sector (including RAC) is usually longer than 35 hours and is more like 38 hours – meaning that the data from NILS may overstate the FTE staff numbers as it is based on a standard working week being 35 hours or more.

### Data on RAC residents

In addition to the NILS data, the report also utilises AIHW data on the RAC sector in Australia, the most recent edition being for the 2007–08 financial year (AIHW, 2009). This provides a statistical overview of the entire sector with a focus on RAC residents.

## 2.2 Population of RAC residents

Older people with physical, medical, psychological or social care needs that cannot be practically met in the community are eligible for RAC. There are two main classes of residential care.

- Low level care covers the provision of suitable accommodation and related living services (such as cleaning, laundry and meals), as well as personal care services (such as help with dressing, eating and toileting).
- High level care covers accommodation and related living services, personal care, nursing care and palliative care within a fulltime supervised framework.

At 30 June 2008, there were around 160,000 RAC residents in Australia (AIHW, 2009), with around 70% receiving high level care (Table 2.1) (PC, 2008). Around 55% of recipients were aged 85 years or older and by far the greater number (71%) were females.

**Table 2.1: All residents in RAC by age and gender, as at 30 June 2008**

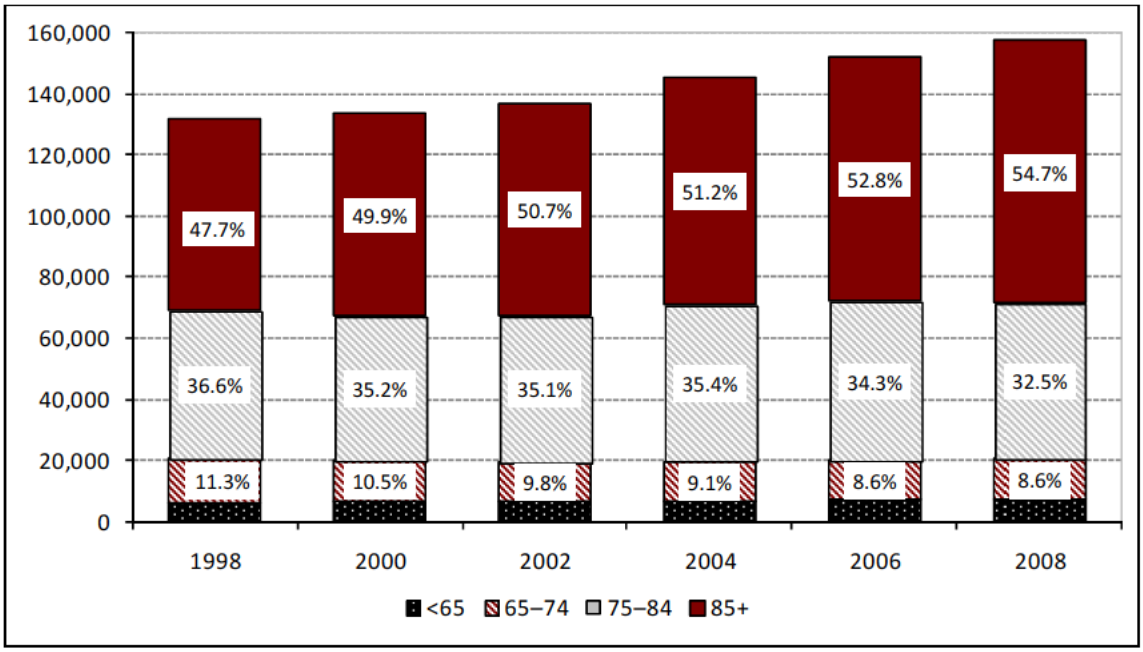
| | Females | % | Males | % | Persons | % |
|---|---|---|---|---|---|---|
| < 65 | 3,108 | 2.7 | 3,644 | 7.8 | 6,752 | 4.2 |
| 65–69 | 2,465 | 2.2 | 2,593 | 5.6 | 5,058 | 3.2 |
| 70–74 | 4,694 | 4.1 | 4,129 | 8.9 | 8,823 | 5.5 |
| 75–79 | 11,311 | 10.0 | 6,905 | 14.8 | 18,216 | 11.4 |
| 80–84 | 23,597 | 20.8 | 10,405 | 22.3 | 34,002 | 21.2 |
| 85–89 | 33,079 | 29.1 | 10,749 | 23.0 | 43,828 | 27.3 |
| 90–94 | 24,699 | 21.7 | 6,263 | 13.4 | 30,962 | 19.3 |
| 95+ | 10,643 | 9.4 | 1,966 | 4.2 | 12,609 | 7.9 |
| **Total** | **113,596** | **100.0** | **46,654** | **100.0** | **160,250** | **100.0** |

Source: AIHW, 2009.

The RAC population is made up of permanent and temporary residents, of which the permanent cohort makes up the vast majority (98%).

Looking at permanent aged care residents since 1998, a key feature is that the age profile has steadily become older. For example, the proportion of residents aged 85 and over increased from 47.7% of the total RAC population in 1998 to 54.7% by 2008 (Chart 2.1). This development poses challenges in providing the appropriate amount of quality care as older residents are likely to have greater and more complex needs compared to those who are relatively younger.

**Chart 2.1: Permanent aged care residents, by age group**




Source: AIHW, 2009 and Access Economics.

There were around 2,800 RAC facilities operated by accredited providers as at June 2008 (Table 2.2). Private organisations owned 88.7% of these facilities with most being not-for-profit organisations such as religious, community based and charitable organisations. Around 65% of all residential facilities offer less than 60 places while around 10% offer over 100 places (PC, 2008).

**Table 2.2: Number of facilities (%) by organisation type at 30 June 2008**

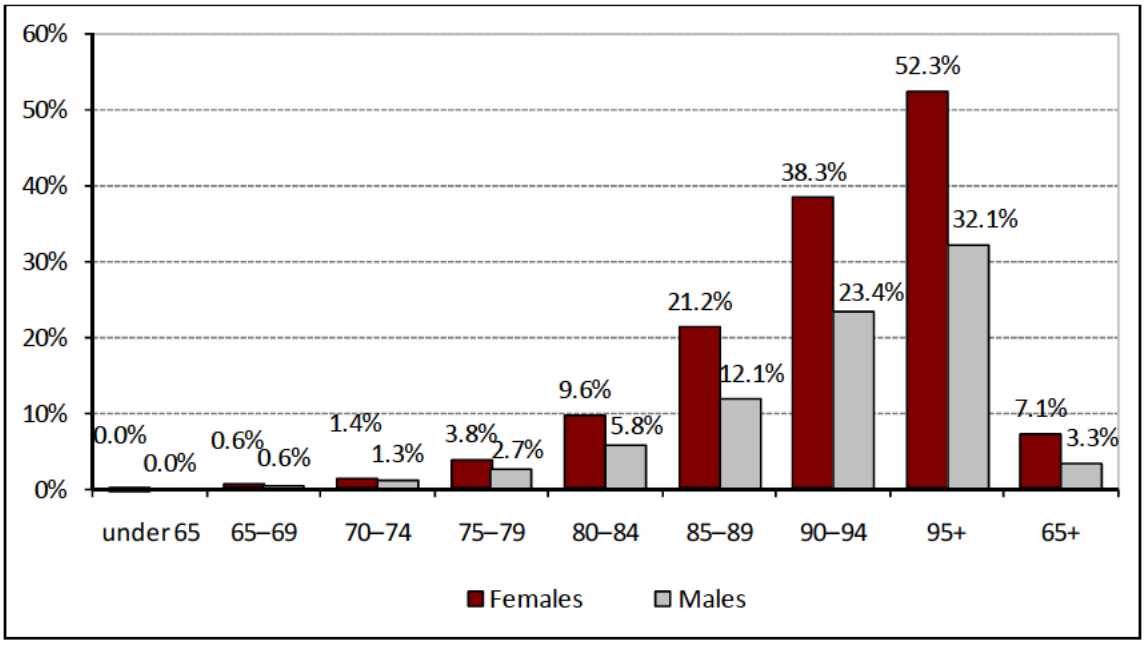
| Organisation type | Number | % |
|---|---|---|
| **Private not for profit** | **1,722** | **60.8%** |
| Religious | 807 | 28.5% |
| Community based | 476 | 16.8% |
| Charitable | 439 | 15.5% |
| **Private for profit** | **789** | **27.9%** |
| **Government** | **319** | **11.3%** |
| Local government | 65 | 2.3% |
| State government | 254 | 9.0% |
| **Total** | **2,830** | **100.0%** |

Source: AIHW, 2009.

## 2.3 Projections of RAC residents to 2020

Projections regarding the future make-up of the RAC residential population can be based on data from Table 2.1, by calculating the proportion of RAC residents relative to the general Australian population by age-gender cohort. There is naturally a strong age correlation. For example, females in RAC only comprise 0.6% of the general population aged 65 to 69 in 2008. However this share rises to 52.3% for female RAC residents aged 95 and over (Chart 2.2).

**Chart 2.2: RAC residents by age and gender (% of population) in 2008**




Source: AIHW, 2009 and Access Economics.

Holding these proportions constant and applying them to population projections to 2020 from the Access Economics Demographic Model (which are broadly consistent with those produced by the ABS) enables RAC population projections that are '*ceteris paribus*' i.e. they keep all factors constant except demographic ageing. Results are shown below in Table 2.3.

In reality factors other than demographic ageing are likely to change. For example:

- the percentage in the oldest age group may increase as longevity increases;
- the percentage in the younger age groups may decrease if there are RAC supply constraints and community care is available; or
- the percentage in all age groups may increase if there are fewer informal carers willing to provide care in the community and supply constraints on RAC are removed.

However, it is unclear what the overall direction of impact would be, and since magnitudes of difference are likely to be relatively small over a single decade, the *ceteris paribus* assumption remains sensible as a base case.

Australia's projected ageing population will have a significant impact on the number of residents in RAC facilities (Table 2.3; Chart 2.3).

- The total number of RAC residents is projected to increase by 56.8% from 160,250 in 2008 to 251,254 by 2020 – i.e. by 3.8% per annum on average, nearly four times all-age population growth.
- There will also be a drift toward older and older age cohorts. The largest growth will occur in the 95+ age cohort – which will more than double for females, rising to an estimated 28,980 people in 2020 and more than quadruple for males, growing to 8,227 people by 2020. Overall the 95+ cohort will grow 9.5% per annum on average.

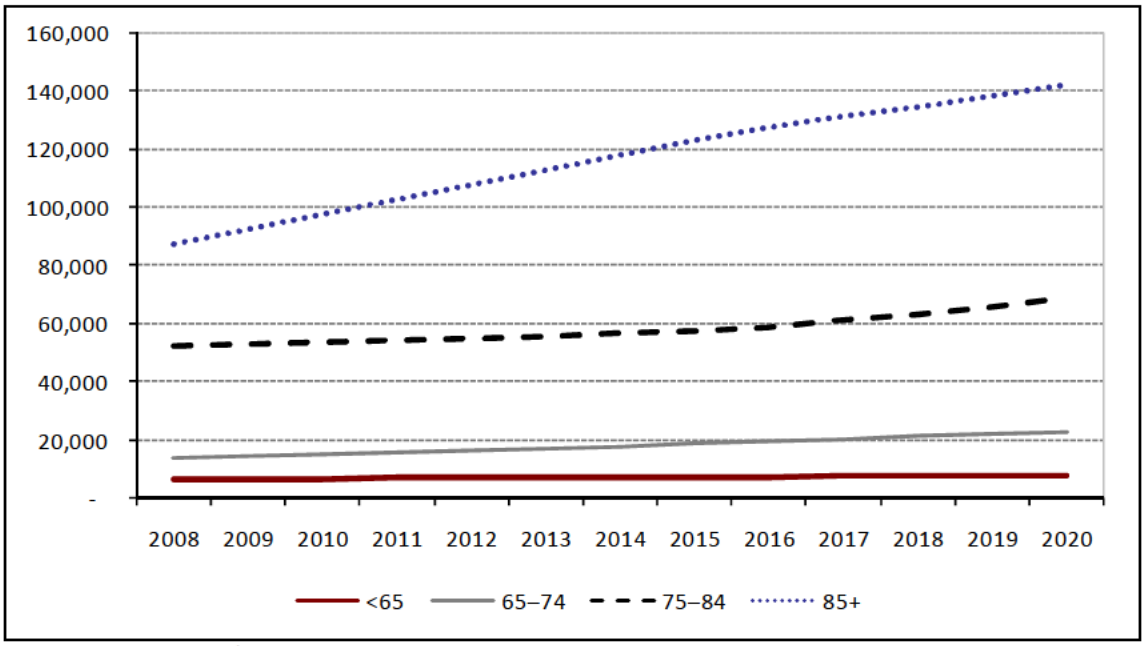
- The nature of our ageing population will also mean that, while females still make up the projected majority of RAC residents, their share will fall slightly from 70.9% in 2008 to 68.4% in 2020.

**Table 2.3: Projections of RAC resident numbers by age and gender**

| Age group | 2010 | 2020 |
|---|---|---|
| **Females** | | |
| <65 | 3,191 | 3,484 |
| 65–69 | 2,700 | 3,825 |
| 70–74 | 5,007 | 7,847 |
| 75–79 | 11,264 | 15,636 |
| 80–84 | 24,093 | 28,250 |
| 85–89 | 35,739 | 40,791 |
| 90–94 | 27,215 | 43,059 |
| 95+ | 13,273 | 28,980 |
| **Total females** | **122,481** | **171,872** |
| **Males** | | |
| <65 | 3,749 | 4,137 |
| 65–69 | 2,840 | 3,908 |
| 70–74 | 4,441 | 7,005 |
| 75–79 | 6,959 | 10,058 |
| 80–84 | 11,042 | 14,040 |
| 85–89 | 12,016 | 16,494 |
| 90–94 | 7,545 | 15,514 |
| 95+ | 2,684 | 8,227 |
| **Total males** | **51,274** | **79,382** |
| **Total Persons** | **173,755** | **251,254** |

Source: AIHW (2009) and Access Economics calculations.

**Chart 2.3: Projections of RAC resident numbers by age group**




Source: AIHW, 2009 and Access Economics.

These projections indicate significant future demand for services in the Australian RAC sector – some 4% annual average volume growth to 2020, with strongest growth in the most complex services provided to the oldest old (aged 95+).

## 2.4 Snapshot of the Australian RAC workforce

The NILS study (NILS, 2008) estimated that there were 133,314 direct care RAC employees in 2007 (Table 2.4). Of these, there were 22,399 RNs, 16,293 ENs, 84,746 personal carers and 9,875 allied health workers.

**Table 2.4: Estimated employment in RAC by number and FTE**

| | All employees (number) | Direct care employees (number) | Direct care employees (FTE) | Ratio (number / FTE) |
|---|---|---|---|---|
| 2003 | 156,823 | 115,660 | 76,006 | 1.52 |
| 2007 | 174,866 | 133,314 | 78,849 | 1.69 |
| % change | 11.5% | 15.3% | 3.7% | |

Source: NILS, 2008.

There was a 15.3% increase in the number of direct care RAC workers between 2003 and 2007, slightly higher than the overall 11.5% rise in employment when non-care employees are included. The result is that the proportion of direct care RAC employees rose slightly from 73.8% in 2003 to 76.2% in 2007. However, the increase in FTE direct care employees was about 3.4%, substantially less than the rise in actual employees, as a result of fewer hours worked per employee on average (reflected in the rise in the ratio of the number to FTE of direct care employees in Table 2.4).

Between 2003 and 2007, the number of RAC places rose by about 12.5%, quite close to the growth rate of direct care employment numbers, but much higher than the rise in direct care FTE employment (NILS, 2008).

Available ABS data broadly confirms the NILS census findings.

- The ABS Census of Population and Housing (ABS, 2006) presented estimates of 219,788 overall people working as nurses (including RAC nurses) at the time of the Census in 2005. Around 78% were RNs, 9% were ENs, 6% were midwives, and 5% were nurse managers. The remainder were a mix of nurse educators, researchers, practitioners and mothercraft nurses.
- ABS (2006) further reported that there were 25,069 RNs in aged care in 2005. Only 6.6% were male, 58% worked part time and 12.2% were aged 60 or more.

The AIHW (2005) reported that the average age of all nurses in Australia was approximately 45.1 years in 2005, and the proportion of nurses aged over 55 years was 35.8%. The NILS (2008) reported that the average age of the RAC workforce was around 50 years in 2007.

According to the NILS (2008), RAC continues to be a female dominated profession, with an estimated 93% of workers being female. Approximately two thirds of RAC workers were reported to be part-time employees in 2007.

Table 2.5 shows the RAC workforce by its occupational composition. Relative to 2003, in 2007 personal carers continued to constitute the single largest and fastest growing occupational group among direct care RAC workers.

**Table 2.5: Size and occupation of RAC workforce**

| Occupation | 2003 | | 2007 | |
|---|---|---|---|---|
| | Number of persons | FTE | Number of persons | FTE |
| RNs | 24,019 | 16,265 | 22,399 | 13,247 |
| (%) | (21.0) | (21.4) | (16.8) | (16.8) |
| ENs | 15,604 | 10,945 | 16,293 | 9,856 |
| (%) | (13.1) | (14.4) | (12.2) | (12.5) |
| Personal Carers | 67,143 | 42,943 | 84,746 | 50,542 |
| (%) | (58.5) | (56.5) | (63.6) | (64.1) |
| Allied Health | 8,895 | 5,776 | 9,875 | 5,204 |
| (%) | (7.4) | (7.6) | (7.4) | (6.6) |
| **Total** | **115,660** | **76,006** | **133,314** | **78,849** |

Note: For 2003, the reported sum of the FTE occupation sub components (75,929) does not equal the reported total number of FTE staff (76,006). The difference is minor and has not been used in the calculations in this report.
Source: NILS, 2008.

In 2003, personal carers comprised about 59% of employee numbers and 57% of FTE staff. By 2007, both these figures had risen to about 64%, indicating that nearly two thirds of RAC direct care workers are now personal carers. In absolute numbers, employment of personal carers rose by 17,500 over the four years, to approximately 85,000.

In contrast, the proportion of direct care FTE employees who are nurses declined significantly from about 36% to about 29%, with the shares of both RNs and ENs declining. Employment of RNs fell by approximately 1,600 to 22,400. Numbers of ENs increased slightly to 16,000 but, like RNs, fell in FTE terms.

Allied health workers retained their share of RAC direct care worker numbers (7.4%) but fell from 7.6% to 6.6% in FTE terms. As shown in Table 2.5, between 2003 and 2007, there was an increase in total employment for direct care RAC employees of about 17,000 (from 116,000 in 2003 to 133,000 persons) although the FTE rise was under 3,000FTE (from 76,006 to 78,849 FTE staff).

Overall, and as noted by the NILS (2008), these figures suggest significant restructuring in the RAC workforce from 2003 to 2007, with more care now provided by personal carers and less by nurses. These patterns are consistent with trend indications from the 2003 survey, which indicated that a greater proportion of newly hired staff were personal carers. Further, a relatively higher percentage of newly hired staff continue to be personal carers, suggesting that the trend towards increased use of personal carers will continue.

Of RAC workers, 20% of direct care staff hold no post-school qualifications (NILS, 2008). The number of vacancies for direct care RAC workers varies by occupational group, with relatively more vacancies for RNs than other occupations (NILS, 2008) indicating a relative shortage of more qualified staff such as RNs.

## 2.5 Analysis of recent changes in the RAC workforce

### 2.5.1 Regulatory changes

The RAC sector has undergone a number of recent regulatory changes which could have flow-on effects for the RAC workforce.

The Productivity Commission (2008) outlined that governments of different levels have modified the aged care regulatory and financing arrangements over the past 12 years with the aim of improving interfaces between aged care and broader health and community welfare systems.

The *Aged Care Act 1997* provided for the creation of a unified RAC system covering low and high care services, by restructuring the funding and administration of hostels and nursing homes under one system. Similarly, '*A New Strategy for Community Care: The Way Forward'* (DoHA, 2004) aimed to improve the provision of community care by:

- addressing gaps and overlaps in service delivery;
- providing easier access to services;
- enhancing service management;
- streamlining Australian government programs; and
- adopting a partnership approach.

A number of joint initiatives across the Australian, state and territory governments have aimed to strengthen linkages between the aged care system and health and community services through, for example, the Transition Care and Multipurpose Services programs. Other changes have sought to rebalance public and private financing of aged care services by requiring those people who can afford to make a contribution towards the cost of their care to do so to a greater extent, although this is less evident in high care RAC than in low care or community care. The residential care income test has been simplified and broadened; the resident classification scale was replaced with a new funding arrangement (the Aged Care Funding Instrument, ACFI); and *eBusiness* was introduced to the aged care sector.

Finally, examples of initiatives to address aged care service gaps and meet emerging challenges include measures to improve care for the growing number of older Australians with dementia and funding for nursing education and training places (see below for further discussion).

### 2.5.2 Size and compositional changes

AIHW (2008b) summarises the overall Australian nurse and midwifery labour force in 2005, which shows growth in size and hours worked. This is in stark contrast to the subset of nurses who work in RAC, outlined above in Section 2.4.

The total number of nurses identified by the census carried out by the AIHW was estimated at 285,619, comprising 230,578 RNs and 55,042 ENs. The overall number of RNs and ENs increased by 9.8% between 2001 and 2005. An increase of 7.1% was also found in the number of nurses actually employed in nursing (as opposed to, for example, managerial and research positions), along with an increase in the average weekly hours worked by nurses and midwives (30.7 hours in 2001 to 33.0 hours in 2005).

Overall, the AIHW (2008b) noted an increase in nursing supply by 9.9% between 2001 and 2005, from 1,031 FTE nurses per 100,000 people to 1,133 FTE nurses per 100,000 people. This was attributed both to the rise in the number of employed nurses and the increase in the average number of hours they worked.

A report by the Council of Deans of Nursing and Midwifery (Preston, 2006) attributed an earlier increase in RN staff levels to the changing age profile of staff. Preston (2006) notes a relationship between RN hours worked and the age of RNs. The peak in the RN age profile was in the early 40s, an age where working hours are low due to family responsibilities. With the increased age profile between 1999 and 2003, RNs were *on average* working longer hours.

Comparison of the 2003 and 2007 NILS studies paints a different picture for RAC nurses than the AIHW's analysis of the total nursing workforce (Section 2.4). The Department of Education, Science and Training (DEST, 2001) stated that reductions in the number of RNs and the proportion of qualified nurses in the nursing skill mix were introduced initially to control the rising cost of health and aged care.

The Productivity Commission (2008) partly attributes the substitution from RNs to personal carers to changes in RAC regulations prescribing staff numbers, and work practices relating to how providers meet standards of care and resident needs. In particular, high capacity utilisation (currently 95%) associated with the bed licensing system means that quality of service can suffer and not meet minimum standards (PC, 2008). With the current system structure, providers not meeting minimum standards are unlikely to be forced out because of a shortage of available facilities for residents to move into. As such, a substitution from RNs to personal carers might have arisen out of inability to enforce minimum service standards.

The NILS (2004, 2008) has noted the issue of a tight labour market in the past. In 2004, it identified the difficulty of recruiting RNs as the dominant source of stress in the RAC labour market. In its 2007 study, the NILS contended that there had been a further tightening in the labour market since the previous study. Results of the more recent NILS study indicated that the difficulties of recruiting RNs in RAC had increased considerably. This finding was consistent with the Department of Education, Employment and Workplace Relations (DEEWR, 2007) view of a nursing shortage. The shift toward using a greater proportion of personal carers may thus reflect this difficulty in the RAC labour market (noting that the AIHW data show it does not occur in the acute care and other sectors where nursing supply is growing).

In summary, the tightening RAC labour market has been the result of difficulties in attracting and maintaining a sufficient supply of aged care nurses (particularly RNs). Future demographic ageing is expected to further intensify the tight labour market for RAC nurses. Section 2.3 noted the growth in residents to 2020, and the 2007 Intergenerational Report (Treasury, 2007) projected that the proportion of Australia's population aged 65 years and over will continue to increase thereafter – from 13% today to 17% by 2020 and to over 25% by 2047.

Nursing shortages of varying severity have been present in Australia in the past. However, Preston (2006) noted that some jurisdictions had surpluses in the early to mid 1990s. Surpluses mean that graduates and re-entrants can have trouble securing jobs, discouraging potential entrants to the profession. Workforce shortages, on the other hand, present challenges in terms of providing adequate care quality and in terms of increased stress for those nurses who remain in RAC. Thus recruitment and retention problems are *further* exacerbated during shortages – creating a vicious circle (Preston, 2006).

The NILS studies highlighted vacancy levels in the RAC workforce, with levels rising slightly between the 2003 and 2007 studies. Given that aged care staff have high turnover (NILS, 2008), vacancy levels for personal carers were consistent with a functioning labour market, while levels for RNs were indicative of recruitment difficulties (particularly as the number of RNs employed fell). Other evidence suggestive of RN recruitment difficulties was the noted long time period in filling RN positions, as compared to personal carers.

State and regional variations exist in recruitment difficulties for aged care staff, with Queensland and Western Australia facing greater difficulties than employers in other regions (NILS, 2008). This is likely to be a reflection of differing population characteristics, employment policies, standards and roles of workers across jurisdictions.

Part-time work continued to constitute the majority of employment in the RAC direct care workforce in 2007, with two-thirds of workers being part-time employed (NILS, 2008). Part-time employment was less common among RNs. The recent NILS study (2008) also indicated a slight increase in the proportion of casual workers since 2003, and a decrease in the proportion of permanent full-time workers. Significantly, the NILS surveys of RAC workers in both 2003 and 2008 indicated that there was a significant group of workers prepared to work longer hours than their current arrangements. In 2003, 28% of the workers surveyed indicated that they wanted to work longer hours (NILS, 2008).

The trend toward casualisation and part-time, together with many workers wanting to work longer hours, is consistent with the increase in personal carers relative to nursing staff in RAC. In the context of the recent global financial slowdown, which has seen an increase in part-time jobs at the expense of full-time jobs in Australia, underemployment could remain a future issue for personal carers in the RAC labour market. Importantly, unused capacity represents a potential source of increased labour supply, particularly among new hires, who have a higher willingness to work increased hours. If these trends continue, and the tight labour market situation is addressed by utilising this capacity, the share of nurse labour in the RAC workforce may continue to decline.

### 2.5.3 Worker characteristics

The AIHW (2005) noted an 'ageing' of the overall Australian nursing workforce between 2001 and 2005. The average age of employed nurses increased from 42.2 years in 2001 to 45.1 years in 2005. Over this period, it was also found that the proportion of nurses aged 50 years and over increased from 24.4% to 35.8%.

The NILS (2008) stated that its research in 2003 demonstrated that the aged care workforce was significantly older than the overall workforce (Table 2.6). The RN occupational group, in particular, was older than the other groups. The 2007 study found that the direct care RAC workforce had a slightly older age profile in 2007 than in 2003, although this coincided with an overall ageing of the Australian workforce over this period.

In 2003, the NILS found that 16.7% of the RAC direct care workers in the survey were 55 or older, while in 2007, the proportion had increased to 22.5%. All RAC occupational groups aged over this period, with RNs aged 55 or more increasing from 24% to 32%, ENs from 11% to 17% and personal carers 15% to 20%. However, the ageing preserved the tendency for RNs to be older than personal carers and ENs, with ENs having the youngest age structure.

**Table 2.6: Age composition of RAC workforce, recent hires and the Australian workforce (%)**

| Age | RAC workforce | | RAC recent hires | | Australia | |
|---|---|---|---|---|---|---|
| | 2003 | 2007 | 2003 | 2007 | 2003 | 2007 |
| 16-24 | 6.0 | 6.1 | 11.8 | 14.8 | 19.5 | 18.9 |
| 25-34 | 12.4 | 11.4 | 17.1 | 18.8 | 23.6 | 21.1 |
| 35-44 | 25.5 | 22.3 | 28.6 | 24.4 | 23.6 | 23.3 |
| 45-54 | 39.2 | 37.6 | 31.6 | 26.9 | 21.3 | 23.2 |
| 55-64 | 16.1 | 20.8 | 10.4 | 14.3 | 10.4 | 11.8 |
| >65 | 0.8 | 1.7 | 0.5 | 0.8 | 1.5 | 1.7 |
| **Total** | **100** | **100** | **100** | **100** | **100** | **100** |

Source: NILS, 2008.

Ageing of the RAC workforce is consistent with the overall ageing of the Australian population. However, the older age structure of the RAC workforce and particularly RNs is an important issue, particularly if it is an indication of recruitment difficulties. Comparing the age distribution of recent hires between the 2003 and 2007 NILS studies reveals that there was a move toward hiring at the upper and lower ends of the age distribution. An older age structure could pose the problem of high future retirement rates, although this may not necessarily be the case if the pattern is for nurses to work in other areas and switch to RAC as they age – but this is inconsistent with the NILS upper-lower hiring pattern. Future strategies to attract younger workers are needed.

RAC nursing continues to be a female-dominated profession. The NILS (2008) reported that 93% of RAC workers in 2007 were female. With growing opportunities and choices for women in the workforce, the recruitment pool for RAC nurses continues to shrink (DEST, 2001). Thus, a future recruitment possibility may be to encourage more males into nursing through new policies and incentives.

Given the feminisation of the RAC workforce, the high proportion of part-time jobs may reflect female workers needing to balance work and domestic responsibilities. Thus, their flexibility in being able to fit work around other responsibilities may be an important factor in their choice of whether to work in aged care (NILS, 2008). Workplace flexibility is a particularly important consideration in terms of future recruitment and retainment of workers, if the current gender composition in the workforce persists. Even with more males, younger workers of both sexes may place more importance on work-life balance than their older counterparts, so employers in the future may need to accommodate shift arrangements and hours of work to assist workers to balance work and home responsibilities, and to support job satisfaction.

The NILS (2008) notes that a large majority of surveyed RAC workers (more than 90%) were satisfied with their shift arrangements in 2007. This is in sharp contrast to workers surveyed in 2003, with 40% of nurses and 55% of personal carers wanting to change their shift arrangements. As noted by the NILS, these changes may be a reflection of a tighter labour market and the growing acceptance of the need for greater workplace flexibility, with employers more willing to accede to employees' shift preferences.

### 2.5.4 Education and training

The NILS study (2008) reported on the qualifications of the RAC workforce. While stating that most staff held the requisite qualifications, 20% of direct care staff hold no post-school qualifications. Given the often complex care needs, this indicates that a significant proportion of the RAC workforce may be under-qualified for the required tasks. This situation is likely to worsen in future if the current trend toward semi and low qualified staff continues.

From comparison of the two NILS studies in 2003 and 2008, it appears that the proportion of workers with post-school qualifications fell. In 2003, it was estimated that 13% of workers held no post-school qualification (as compared to 20% in 2007). The NILS states that some of this could be attributed to a change in the structure of the survey question.

In relation to personal carers specifically, it was found that there was no decline in the proportion of personal carers with qualifications relevant to their jobs, at a level appropriate to their jobs (NILS, 2008). However, the proportion of personal carers with no post-school qualifications rose from 16.4% in 2003 to 23.7% in 2007.

In the nurses group, which comprises both RNs and ENS, there was an increase in those holding a bachelor degree in nursing (23.6% in 2003 to 28.3% in 2007), as well as an increase in those holding a Certificate IV/diploma in enrolled nursing (rising from 26.6% in 2003 to 35.1% in 2007). The change in the distribution of such post-school qualifications was attributed to two trends:

- a gradual succession of younger, degree-trained RNs into positions previously held by older workers, leading to a rise in the proportion of nurses with bachelor degrees; and
- a rising proportion of nurses in RAC being ENs rather than RNs, leading to a rise in the proportion with enrolled nursing qualifications.

In recent years, there have been a number of Government education and training-related initiatives. Since the National Review of Nursing Education (DEST, 2001a) highlighted a shortage of 10,000 RNs, the Australian Government recognised a need to fund an expanded number of undergraduate places (PC, 2008). Provision has been made to increase the number of places by 10,141 (43%) between 2003 and 2011. However, as noted by the Productivity Commission (2008), aged care specific places only constitute 11% of the increased places, and there is no requirement for graduates to enter the aged care sector.

Additionally, specific scholarship programs have also been developed to encourage RNs into aged care settings. Funding was provided for up to 2000 aged care scholarships over eight years from 2003 (PC, 2008). Preference has been given to existing ENs and personal carers, especially in rural and remote areas.

The Productivity Commission (2008) notes that although enrolments and completions for undergraduate nursing courses have increased over the last seven years, there is still a significant degree of unmet demand – the number of eligible potential students who are not offered a place. However, targeted programs to increase undergraduate places have decreased unmet demand from its peak in 2003 (PC, 2008).

The Australian Government has also recently introduced a number of initiatives to strengthen the workforce of ENs and personal carers to tackle potential future shortages, including (PC, 2008):

- four-year vocational education training for more than 24,000 personal carers to gain basic skills to a Certificate III level, in response to the Hogan Review (Hogan, 2004);
- 6,000 ENs to increase scope of practice by undertaking medication management training to reduce burden on RNs, in response to the Hogan Review (Hogan, 2004); and
- an additional 50,000 vocational training places over the three years from July 2008 to address the current health workforce crisis, with ENs and allied health assistants being two of the priority areas.

Assessment of the effects of such initiatives can be undertaken in future years. Relevant issues associated with education and training initiatives include (Preston, 2006):

- ensuring a sufficient supply of appropriately qualified staff to cater to increased student numbers, especially in the face of increasing academic retirements (this has been a significant issue in the United States); and
- attracting and maintaining adequate student interest in the new places. However, this has not been a problem in Australia with national student demand keeping pace with the expansion of nursing education places.

### 2.5.5 Wage costs and work practices

Wage or labour costs dominate the cost of aged care – representing around three-quarters of total residential costs and a slightly higher proportion of the cost of community care services (Hogan, 2004).

The 2007 Intergenerational Report (Treasury, 2007) stated that upward pressures on wages in this sector reflect a shortage of nurses in general and aged care workers in particular. The report assumed that real unit costs have grown and will continue to grow in aged care, reflecting quality improvements, increasing frailty and wage pressures, counterbalanced by improvements in productivity in the sector. Real unit costs were assumed to grow at 1.75% per year to 2047.

Research as part of NILS (2008) indicated that nurses are much more likely than other workers to be in the upper pay brackets within the RAC workforce. Indeed, nearly all those earning over $1,000 per week in 2007 were nurses (Table 2.7). Two-thirds of personal carers earned between $500 and $1,000 per week, while just over half of allied health workers earned this much. Only the nurses had any numbers earning over $1,000 per week.

The wages reported below are determined by both the workers' hourly pay and their weekly hours worked. It is very likely that the relatively high proportion of allied health workers who have a weekly wage between $1 and $500 is the result of low hours worked.

**Table 2.7: Composition (%) of RAC workers in different wage brackets**

| Weekly wage ($) | Nurses | Personal carers | Allied health | Total |
|---|---|---|---|---|
| 1-500 | 14.3 | 31.4 | 40.4 | 27.1 |
| 501-1000 | 57.4 | 67.3 | 56.4 | 63.7 |

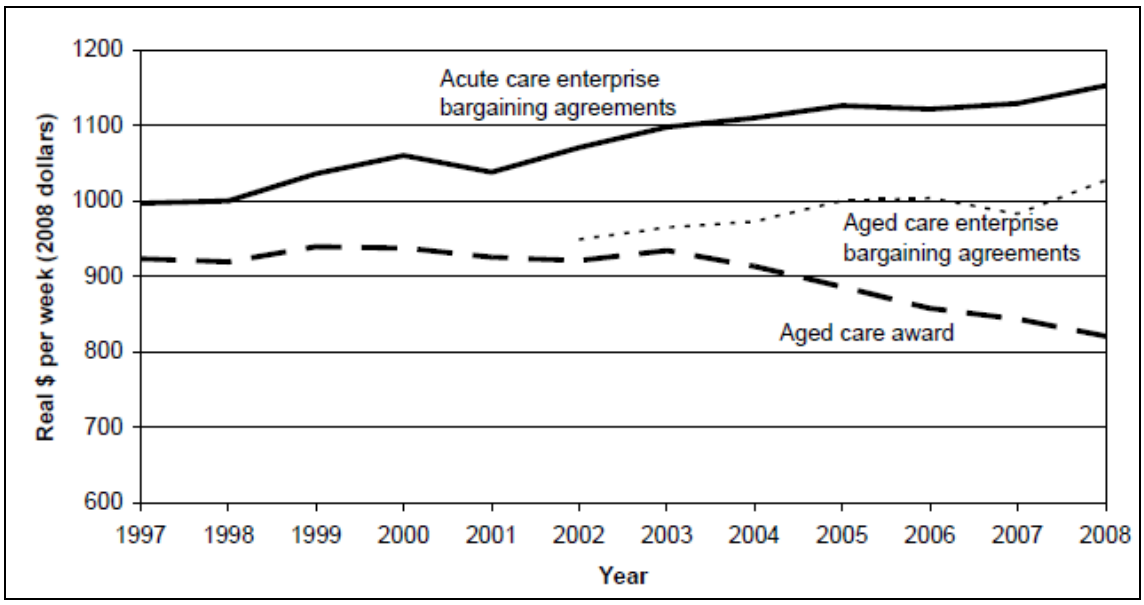
| Weekly wage ($) | Nurses | Personal carers | Allied health | Total |
|---|---|---|---|---|
| 1001-1500 | 24.4 | 1.2 | 3.1 | 8.0 |
| 1501-2000 | 3.7 | 0.1 | 0.0 | 0.1 |
| 2000+ | 0.2 | 0.0 | 0.0 | 0.1 |
| **Total** | **100** | **100** | **100** | **100** |

Source: NILS (2008).

A question that rated aspects of job satisfaction was posed to survey respondents in the 2003 and 2007 NILS studies. An important finding in both years was a lack of satisfaction with pay, as compared to other job aspects. There was a very slight improvement in pay satisfaction between the years 2003 and 2007 (NILS, 2008).

According to the Productivity Commission (2008), the most commonly cited reason for aged care employers to experience recruitment and retention difficulties is the substantially lower remuneration of employees compared to similar settings. Aged care nurses are likely to be paid at least 10% less than their peers in the acute care sector for performing similar or equivalent work (Chart 2.4). The median real wage gap between aged care nurses on enterprise based agreements (EBAs) and those working under the aged care award has continued since 2005, noting the less frequent use of the award.

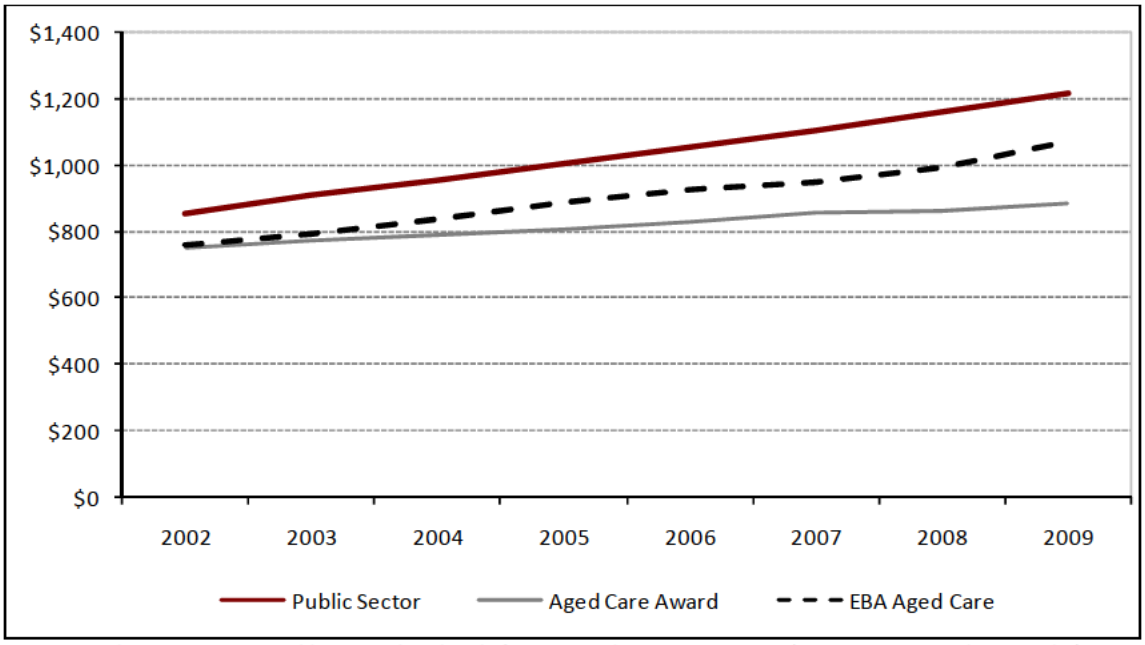
**Chart 2.4: Comparison of RN remuneration***




* Median national RN (Level 1, year 8) wage in January of each year, adjusted using the GDP deflator.
Source: PC (2008).

Data from the ANF confirm this and indicate that this wage gap may even be as high as 12-13% in 2009 across Australia, when comparing the aged care EBA with EBAs in public sector nursing as a whole (Chart 2.5). As a result of the comparatively low wages in aged care, RNs and ENs continue to be attracted to other parts of the health and community care sectors.

**Chart 2.5: Nursing wage disparity 2002-2009 public sector and aged care, Australia**




Note: Based on minimum weekly rate salary levels for RN Level 1 Top increment (Victorian RN Grade 2 Level 8) as published in *ANF Nurses PayCheck*.
Source: ANF, 2009.

Most nurses have moved away from award structures over the past decade, and adopted collective/enterprise and individual employment agreements. Although the extent of efficiency gains is not easily measured, some providers indicate gains in operational efficiencies in areas such as staff deployment and greater flexibility in service delivery.

Research reported by the Productivity Commission (PC, 2008) indicates that while enterprise bargaining agreements (EBAs) have enabled improvements to cost structures and service quality, the main improvements have been in relation to flexibility of service delivery. These efficiency gains can then be used to provide more competitive (higher) wages – which in turn enhances the ability of aged care prodders to retain valuable employees and decreases staff turnover.

Improved support services for employees could also lead to additional improvements in operational efficiency (PC, 2008). Examples of such initiatives include child minding, flexible meal breaks that provide opportunities to attend to family responsibilities and offering casual relief work to employees on long term unpaid leave (Office of Industrial Relations NSW, 2004). Enhanced flexibility of this nature can reduce the need to employ agency staff and lessen staff turnover and absenteeism, resulting in cost savings and improvements in the continuity of care. However, the scope for further productivity gains from these sorts of sources may be limited, as so much has been adopted already.

In spite of these measures, low wages still appear to be an important factor in explaining problems with recruitment and retention of nurses in aged care, with RNs and ENs likely to be attracted to other areas of health and community care.

The current funding arrangements for aged care can constrain the capacity of providers to offer competitive wages to staff (PC, 2008). Adjustments to recurrent aged care funding are determined according to movements in the Commonwealth Own Purpose Outlays (COPO)

index (PC, 2008). The COPO reflects changes in the Safety Net Adjustment (the determined minimum wage) as well as the Consumer Price Index (CPI). The Productivity Commission (2008) notes how the funding formulae behind this might not reflect real costs or be directly related to the costs of providing care.

There have been some government initiatives to enhance RAC capacity in paying competitive wages relative to acute care (PC, 2008). For example, the 2002-03 Budget allocated $211 million over four years. Also, the Conditional Adjustment Payment (CAP) provided a further $877.8 million over four years from 2004-05. This represented an annual increase of 1.75% above the basic care subsidy and formed part of the *Investing in Australia's Aged Care: More Places, Better Care* package. The package aimed to encourage residential care providers to pay competitive wages.

Nonetheless, there has not been a narrowing of the wage gap between aged care and acute care sectors (PC, 2008). This is due to similar funding increases being applied to acute care and because of the absence of any requirement to direct extra funding to higher wages.

A NILS analysis (2005) of nurses and personal carers' wage levels showed that both groups have compressed wage distributions, with nurses experiencing some wage premium from increased education and experience. It was found that personal carers did not receive such premiums, somewhat limiting financial incentives to complete aged care qualifications. Without policy changes, these wage pressures are likely to increase in future years given the existing staff retention issues and the ageing nature of the RAC workforce.

### 2.5.6 Retention and turnover rates

As highlighted earlier, the NILS (2008) found high and increasing level of RN vacancies, with a fall in employed RNs. Recruitment and retention of RAC RNs is problematic due to relatively low wages compared to acute care, and has resulted in an older age demographic of RNs compared to other RAC workers.

The NILS (2004) noted relatively high turnover (corresponding to job tenure) in RAC in 2003 at 23% per annum. Personal carers had the shortest job tenure of the main RAC direct care occupations. A slight increase in turnover was observed in the 2007 NILS study, particularly for ENs and personal carers (NILS, 2008).

When analysing retention and recruitment in RAC, it is important to look at workforce stressors, job characteristics, as well as job satisfaction levels. For RNs in particular, supply shortages intensify staff workloads, with RNs sometimes stretched across a number of RAC facilities. This can mean a lack of time for mentoring colleagues, PD and personal time to cope with the stresses of nursing and midwifery (Preston, 2006). With increased stress and decreased work life quality, recruitment and retention problems can eventuate.

Data on job satisfaction of different RAC occupational groups can prove insightful in assessing recruitment and retention difficulties. The NILS 2003 and 2007 studies compared levels of overall job satisfaction, wage satisfaction and stress perceptions among RAC survey respondents. It was found that 44% of RAC workers felt that their jobs were 'more stressful than ever imagined'. Among groups, nurses had the highest proportion who agreed with this statement (46.8%).

A number of studies have examined factors relating to employee retention, turnover, incentives to work and labour supply in nursing.

- Persson et al (1993) conducted a Swedish study of factors related to nursing as a profession that caused nursing departure. The most influential factors were found to be difficulties in implementing changes; lack of influence; poor recognition; the psychological burden of care giving; low salary; and evening/weekend working hours.
- Mosely and Paterson (2008) conducted a literature review exploring the factors that influence the early retirement of older nurses. Factors identified included the need to respect/recognise achievements; managerial characteristics; empowerment/autonomy; importance of education/peer development; work demands; and financial reimbursement.
- Wiek et al (2009) recommended strategies to improve nurse retention based on findings of their study. These included the provision of nurse-specific stress intervention programs, addressing problems related to job stress and nursing input into organisational decisions.

In terms of overall job satisfaction, the 2007 NILS study found that most RAC workers express job satisfaction (ranked 7.29 on a scale of 10). There were negligible changes since 2003 with only nurses showing a real shift (small increase) in satisfaction levels. The NILS (2005) reported that a number of the factors influencing the job satisfaction of aged care workers lie in the control of employers. These include direct work experiences (hours spent providing direct care), whether skills are used on the job, autonomy in work decisions and pressure to work harder. Furthermore, the dominant factors affecting employees' expectations about remaining in the aged care sector include how well work arrangements fit with preferences and how they experience work (recall previous sections on work-life balance and wage dissatisfaction).

It has generally been found that the higher the level of skill/qualification required for an occupation, the lower the rate of occupational turnover (ABS Labour Mobility Survey, 2008). Another possibility may also be that groups with lower skill levels are more sensitive to pay and work conditions (due to less of a lock-in cost associated with devoting time and money to education), and thus turnover is higher for this group. These workers make up a majority of the RAC workforce. With continuing future substitution from RNs to personal carers, pay and work conditions might therefore become even more of an important consideration in ensuring sufficient workforce supply.

### 2.5.7 Resident needs

As noted above, Australia's future demographic ageing will mean a larger proportion of the population will be in older age groups. Particular importance should be given to the effects of population ageing on the demand for different aged care services and on government expenditure, with no current policy actions. Treasury projections have suggested strong growth in high care residential places relative to low care residential places (Treasury, 2007). Ergas (2006) states that the traditional transition spectrum from home to low level care to high level care may not apply any more. Instead, a pattern may emerge whereby concentration occurs at the two ends of the spectrum.

With a higher proportion of people in older age groups, the prevalence and incidence of age-related conditions such as dementia is expected to rise. Access Economics (2009) estimates

that the prevalence of dementia among Australians will rise to 1.1 million by 2050 (2.7% of the total population) from an estimated level of 227,350 in 2008 of whom 90,168 require residential aged care.

With a larger number of people with dementia in RAC in the future, care needs will need to incorporate more skills training and staff time to manage behaviours of concern, as well as facility capital aspects such as safe 'pacing' areas and security to prevent wandering. Care would also need to be adaptable to cater for the various stages of dementia, which is a progressive, debilitating condition. Such considerations will need to be incorporated into future planning.

The Productivity Commission (PC, 2005) further highlights how the burden of disease will shift toward increased chronic disease incidence. Apart from the rise of dementia and other neurodegenerative disease, it is expected that:

- type 2 diabetes will become the second most common condition affecting males;
- vision and hearing loss will increase substantially for those aged 65 and older;
- more people will survive heart attacks and live with chronic heart failure; and
- the population prevalence of arthritis and incidence of osteoporotic fractures will rise.

## 2.6 Projections of the RAC workforce to 2020

This section takes the recent changes in the RAC workforce and uses them to project a picture of trends going forward. Table 2.5 above presented an overview of the occupational structure of the RAC workforce, while Table 2.6 outlined the RAC workforce age structure. Together these data enable estimation of RAC workforce FTE in 2007 (78,849 persons) by age, as shown in Table 2.8 below, and as a share of total population. For example, the 45 to 54 age cohort of 29,647 RAC FTE staff comprises 1.0% of all Australians aged 45-54.

**Table 2.8: RAC FTE workforce as a proportion of the total Australian population, 2007**

| 2007 | FTE | % of population |
|---|---|---|
| 16-24 | 4,810 | 0.2% |
| 25-34 | 9,068 | 0.3% |
| 35-44 | 17,583 | 0.6% |
| 45-54 | 29,647 | 1.0% |
| 55-64 | 16,401 | 0.7% |
| >65 | 1,340 | 0.0% |
| **Total** | **78,849** | **0.5%** |

Source: NILS (2008) and Access Economics calculations.

As with the RAC residents on the demand side, to project supply these proportions are held constant and applied to Access Economics Demographic Model population projections to 2020. Table 2.9 presents the findings for the RAC FTE workforce projections to 2020 in a *ceteris paribus* setting (i.e. all factors other than demographic ageing held constant). While this is does not include projections of new recruits or people exiting the RAC workforce, it is useful to compare the demographics-driven increase in supply with that for demand.

**Table 2.9: Projections of RAC workforce by age group (FTE)**

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|
| 16-24 | 4,891 | 5,034 | 5,121 | 5,164 | 5,177 | 5,182 | 5,175 |
| 25-34 | 9,237 | 9,613 | 9,986 | 10,364 | 10,701 | 10,928 | 11,108 |
| 35-44 | 17,709 | 17,905 | 18,102 | 18,251 | 18,345 | 18,647 | 19,238 |
| 45-54 | 30,143 | 30,941 | 31,311 | 31,708 | 32,262 | 32,679 | 32,952 |
| 55-64 | 16,949 | 17,842 | 18,448 | 19,067 | 19,788 | 20,525 | 21,067 |
| >65 | 1,373 | 1,463 | 1,580 | 1,701 | 1,826 | 1,952 | 2,081 |
| **Total** | **80,302** | **82,798** | **84,547** | **86,255** | **88,099** | **89,913** | **91,621** |

Source: NILS (2008) and Access Economics calculations.

Table 2.9 suggests the total number of RAC staff would increase by around 14.1% to 91,621 FTE by 2020 – in contrast to the 56.8% increase in demand projected in Section 2.3. There is also a further shift toward older cohorts, with the proportion of staff older than 45 rising from 22.8% in 2008 to 28.8% in 2020.

The future composition of the RAC workforce can also be examined by occupation – making different assumptions about future trends in order to construct two different scenarios.

**Scenario 1: Assume the occupational shares of the RAC workforce in 2007 hold until 2020**.

Under this scenario, RNs will make up 16.8% of the FTE workforce; ENs 12.5%; personal carers (or AINs) 64.1%; and allied health workers the remaining 6.6% (as per Table 2.5 above). These occupational proportions can then be used to apportion the projected RAC workforce numbers to 2020 (Table 2.10). Population ageing alone will simply mean that more workers from each occupation will be required in future years. This is the simplest projection and implicitly assumes that the move away from RAC nurses does not continue in the future.

**Table 2.10: Projections of RAC workforce by occupation – fixed shares, 2008 to 2020 (FTE)**

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|
| RN | 13,491 | 13,910 | 14,204 | 14,491 | 14,801 | 15,105 | 15,392 |
| EN | 10,038 | 10,350 | 10,568 | 10,782 | 11,012 | 11,239 | 11,453 |
| Personal carer | 51,474 | 53,073 | 54,195 | 55,289 | 56,471 | 57,634 | 58,729 |
| Allied health | 5,300 | 5,465 | 5,580 | 5,693 | 5,815 | 5,934 | 6,047 |
| **Total** | **80,302** | **82,798** | **84,547** | **86,255** | **88,099** | **89,913** | **91,621** |

Source: NILS (2008) and Access Economics calculations.

However, even 'freezing' the nurse RAC workforce shares, population ageing in the RAC resident population as outlined in Section 2.3 will mean a rising ratio of RAC residents per worker and notably, per nurse. For example, in 2008 there were an estimated 13,491 FTE RNs to cover 160,250 RAC residents – a ratio of around 12 RAC residents per RN. By 2020 this would increase to around 16 RAC residents per RN (15,392 FTE RNs to cover 251,254 RAC residents) in this scenario. The full results are presented in Table 2.11 below and indicate greater stress levels on the RAC workforce in future years.

**Table 2.11: RAC residents per FTE worker – fixed RAC workforce shares scenario**

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|
| **Total RAC residents per worker** | **2.0** | **2.1** | **2.2** | **2.3** | **2.5** | **2.6** | **2.7** |
| RAC residents per RN | 12 | 12 | 13 | 14 | 15 | 16 | 16 |
| RAC residents per EN | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| RAC residents per personal carer | 3.1 | 3.3 | 3.5 | 3.7 | 3.9 | 4.1 | 4.3 |
| RAC residents per allied health worker | 30 | 32 | 34 | 36 | 38 | 39 | 42 |

Source: Access Economics calculations.

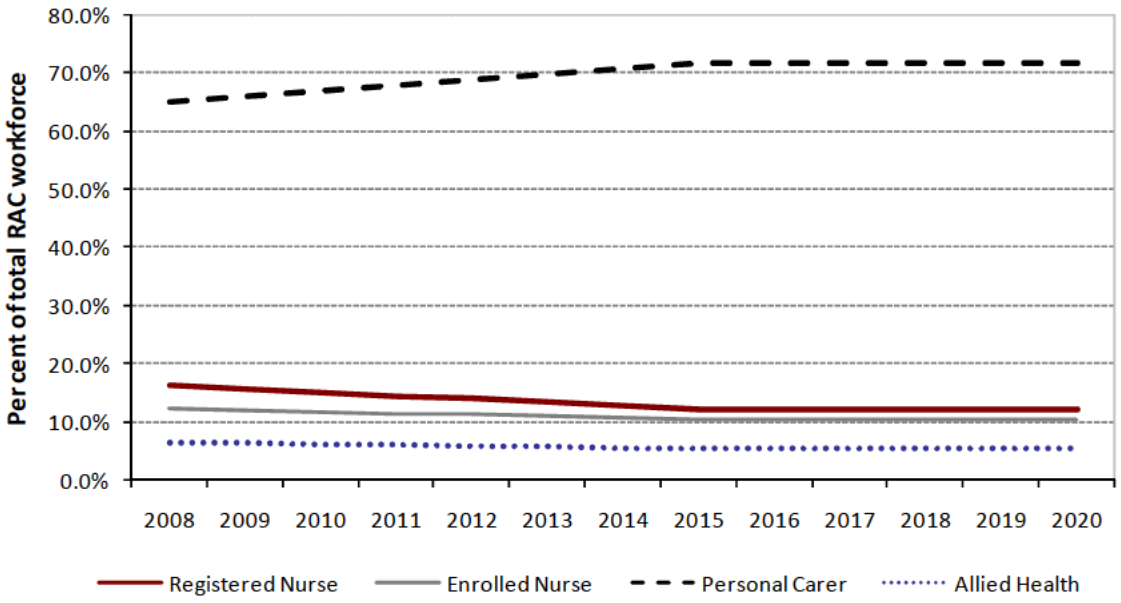
**Scenario 2: Assume the continuation of the current trend towards personal carers and AINs and away from RNs till 2015, and then hold them constant.**

When looking at the FTE staff numbers, there was a 4.6% decline in RNs between 2003 and 2007. There was also a 2.0% decrease in ENs and a 1.0% drop in allied health workers between 2003 and 2007. Conversely, there was a 7.6% increase in personal carers (or AINs) (Table 2.5).

This second scenario assumes that this trend continues over the coming years such that there is a similar shift by 2015 – smoothly apportioned year by year and slower than historically due to there being six years till 2015 and only four years 2003 to 2007. For example, RNs fall by another 4.6% by 2015 to be 12.2% of the RAC workforce. After this time the shares are assumed to be constant.

Overall, this scenario presents a contrived assumption of the changes in occupational shares over time. It presumes that it will become harder for personal carers to substitute duties performed by nurses so RNs will not disappear altogether from the RAC workforce. The results of these shifts in occupational shares are presented in Chart 2.6.

**Chart 2.6: Assumed changes in occupational shares to 2020**




Source: Access Economics calculations.

Under these assumptions, personal carers grow to 71.7% of the RAC workforce, while RNs decline to 12.2%, ENs to 10.5%, and allied health workers to 5.6% - by the year 2020. When population ageing is added to the mix, the results can be seen in Table 2.12. While the overall totals remain the same, there is a marked redistribution in FTE staff numbers between the occupations.

**Table 2.12: Projections of RAC workforce by occupation – variable shares (FTE)**

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|
| RN | 13,029 | 12,482 | 11,773 | 11,019 | 10,748 | 10,969 | 11,178 |
| EN | 9,837 | 9,729 | 9,512 | 9,272 | 9,250 | 9,441 | 9,620 |
| Personal carer | 52,236 | 55,433 | 58,211 | 61,025 | 63,167 | 64,468 | 65,692 |
| Allied health | 5,200 | 5,154 | 5,052 | 4,938 | 4,934 | 5,035 | 5,131 |
| **Total** | **80,302** | **82,798** | **84,547** | **86,255** | **88,099** | **89,913** | **91,621** |

Source: NILS (2008) and Access Economics calculations.

There is a 14.2% decline in RNs between 2008 and 2020. There are also smaller declines in ENs (2.2%) and allied health workers (1.3%). These groups effectively represent the more qualified part of the RAC workforce. On the other hand, personal carers (or AINs) grow by 25.8% between 2008 and 2020. Such a fall in qualified staff may result in a reduction in RAC standards. It is dubious that this occupational composition will be able to cope with the demands from an ageing RAC resident population with increasingly complex needs.

The assumed shifts in composition will also have an impact on the ratio of RAC residents per worker. Under this scenario, RNs will be looking after even more RAC residents than under the first scenario, with the RAC residents per RN rising from 12 in 2008 to 22 in 2020. ENs will be in a similar situation, as will allied health workers (Table 2.13).

**Table 2.13: RAC residents per FTE worker – variable shares**

| | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|---|---|---|---|---|---|---|---|
| **Total RAC residents per worker** | **2.0** | **2.1** | **2.2** | **2.3** | **2.5** | **2.6** | **2.7** |
| RAC residents per RN | 12 | 14 | 16 | 18 | 20 | 21 | 22 |
| RAC residents per EN | 16 | 18 | 20 | 22 | 24 | 25 | 26 |
| RAC residents per personal carer | 3.1 | 3.1 | 3.2 | 3.3 | 3.5 | 3.6 | 3.8 |
| RAC residents per allied health worker | 31 | 34 | 37 | 41 | 44 | 47 | 49 |

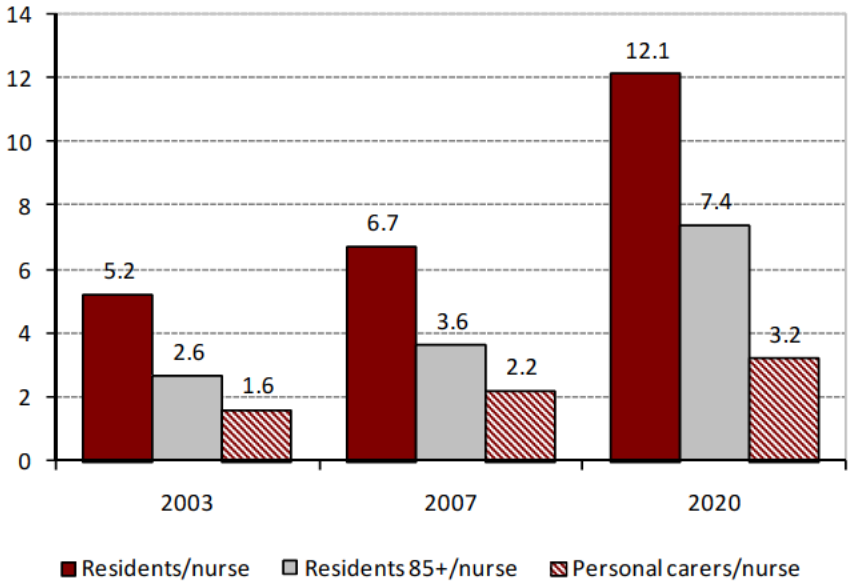
Source: Access Economics calculations.

The differences between the two scenarios underscore the need for:

- an overall increase in the RAC workforce if supply is to meet demand; and

- measures to slow the rate of decline in nursing staff if historical trends are to be reversed at some point. If the decline continues till 2015, the ratio of residents per nurse will roughly double by 2020 (and residents will be older) and nurses will need to supervise 3 rather than 2 personal carers each, on average (Chart 2.7).

**Chart 2.7: Trends in residents, aged residents and personal carers per RAC nurse**




Source: Access Economics estimates.

# 3 The importance of adequate training for quality care

Education and training of the RAC workforce is vital for quality services, with acute care and RAC studies showing a strong link between patient outcomes and the skill mix of the workforce. Additionally, skill mix may also influence patient satisfaction with care. Given the shift in the RAC workforce from RNs to personal carers, and the importance of quality in care, these links are further investigated.

## 3.1 Key (quality) indicators in health, aged care and nursing

When examining the benefits of training and education in nursing, it is important to define the types of patient outcomes that can potentially be improved via training.

The National Review of Nursing Education defined nurse related patient outcomes as the end result of treatment or care delivery that capture nursing's unique contribution (DEST, 2001b). Increased attention has been placed on the identification and measurement of these outcomes over recent years. In particular, there has been recognition that a broader range of outcomes than just health is required, and there must also be specific measures for local level evaluation of outcomes (NHHRC, 2009).

The most commonly used outcome measures in nursing are quality indicators found in clinical management and administrative data systems, such as cost-related data and adverse events (e.g. infections, deaths and falls). Less commonly used indicators are positive mental and functional status, capacity to engage in daily activities, understanding of treatments and likelihood of adherence to regimens. In aged care, nursing is often focused on management and relief of age-related conditions and delivering a comfortable environment. Such outcomes are more related to the *process* of care delivery (e.g. meeting appropriate nutrition and personal care standards, medications and other health actions as scheduled, and so on).

The NSW Department of Health (DoH, 2000) has undertaken initiatives to identify broad quality indicators for health services in NSW within a 'Quality Framework'. For example, the 'Quality Framework' organises outcomes under various domains, including:

- safety – falls;
- effectiveness – mortality;
- appropriateness – utilisation rates for certain complaint area procedures;
- efficiency – average length of stay (not translatable into a RAC context);
- access – distance travelled; and
- continuity of care.

Any performance indicator used to measure quality in aged care would also need to include confounding factors that are likely to impact health and satisfaction outcomes (e.g. the specific nature of a condition – in a degenerative condition it would be difficult to maintain previous activities of daily living).

Nakrem et al (2008) conducted an international review of nursing related quality indicators for RAC. The study found that, within its countries of investigation, the United States was the only

country to have systematically developed quality indicators on the basis of resident assessments. Nakrem et al (2008) found that there remain considerable issues around the validity and reliability of quality indicators currently for RAC. Extensive empirical testing of indicators and a sound development process was suggested for future examination. Some of the indicators identified as being used in Australia include:

- behavioural management;
- pain management;
- sleep;
- infection control;
- 'standardised needs assessment' as basis for care plan; and
- emotional support.

The NHHRC has recently recommended the development and conduct of regular national patient experience surveys and reporting on patient outcome measures (NHHRC, 2009). There has been considerable development in outcome measures capturing quality of life impacts in Australia. The NHHRC also notes the importance of patient experience of the health system and how patients value outcomes. This relates back to the idea of focusing not only on specific medical outcomes, but also service delivery and patient satisfaction, particularly in the aged care context.

There have been limited studies in this area and more research is required. Schmidt (2004) noted the importance of a patient-centric and consumer-oriented approach to evaluating nursing care. In this study, patient perceptions of nurse staffing ratios were measured using a five-item scale. Patient perceptions of quality of nursing care were measured using the Schmidt Perception of Nursing Care Survey, another empirically derived measure. The author noted the value of such tools in capturing the contribution of nursing care to a patient's care experience. Schmidt (2004) concluded that nursing contribution to care cannot be encompassed by methods which simply report objective, clinical management-style indicators.

## 3.2 Current nursing and RAC worker education

### 3.2.1 Historical context

Australia's nursing education system has changed considerably over the past few decades. Before the Sax Report of 1974, most RN preparation was undertaken via hospitals, although university courses also existed (DEST, 2001a). Between 1974 and 1983, a range of national pilot programs commenced in NSW for the education of RNs in tertiary education settings.

The Australian Tertiary Education Commission 'Committee of Inquiry into Nurse Education and Training' in 1978 further facilitated a shift away from hospital-based training. Some reasons included a rapid expansion of knowledge and technology, changes in healthcare needs and systems, and perceived inadequacy of traditional hospital programs in meeting society's health care needs and the educational needs of students (DEST, 2001a).

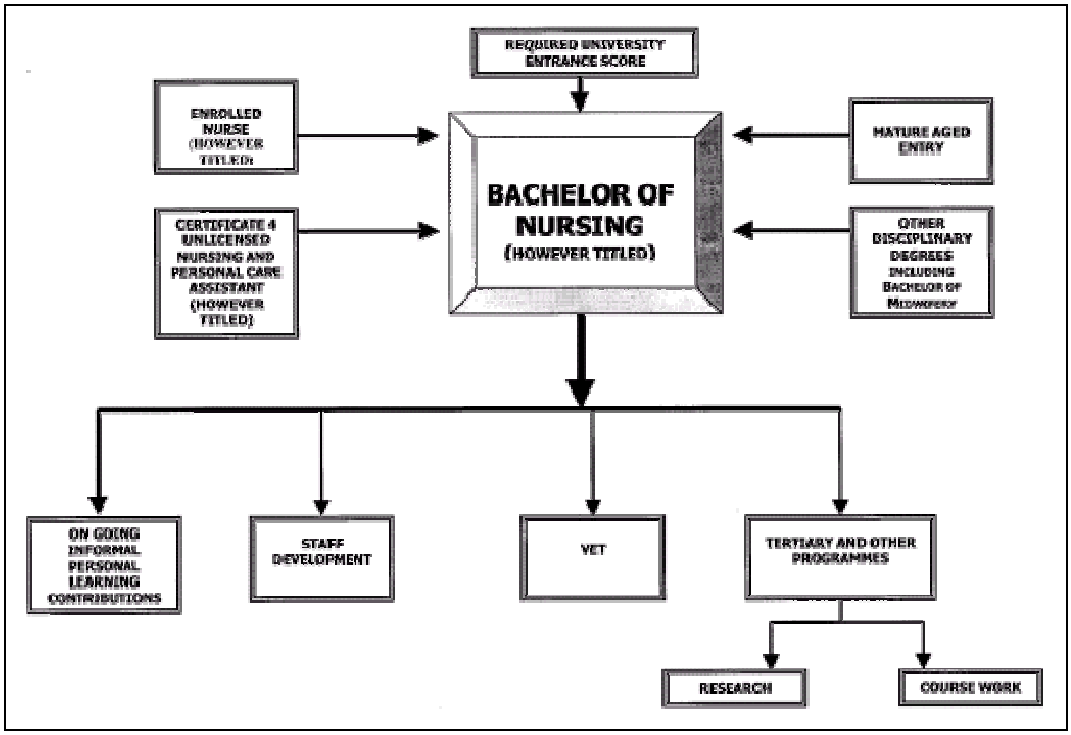
Currently, ongoing learning options for nurses include professional development (PD) courses conducted by professional nursing organisations and employers, personal ongoing learning contributions from nurses, vocational educational and tertiary educational options (DEST, 2001c). Qualifications held by RNs may allow the option to undertake postgraduate education

in the form of postgraduate certificates, postgraduate diplomas, Masters or Postdoctoral (PhD) degrees. ENs may also undertake further education via an Advanced Diploma.

In addition to formal education, ongoing RAC training is available through the '*Aged Care Channel*' which was launched in 2003 by the federal government (PC, 2008). This channel uses satellite technology to deliver live, interactional, educational programming to RAC facilities. These are designed to play a complementary role to formal training, and around one third of RAC facilities are members.

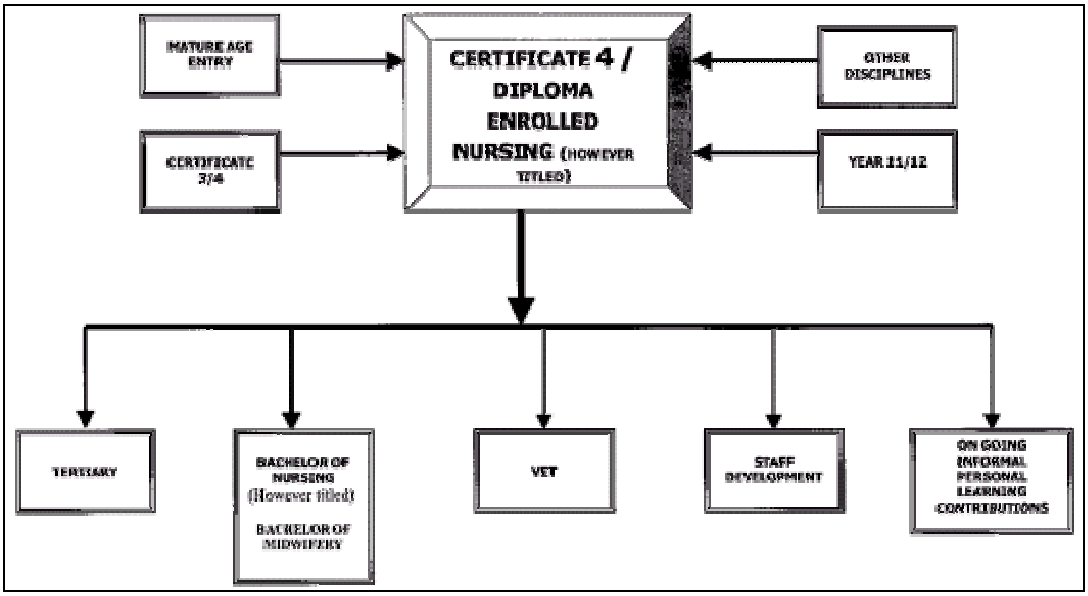
Figure 3.1 and Figure 3.2 broadly summarises entry points and learning options for RNs and ENs (DEST, 2001c)

**Figure 3.1: Entry points and learning options for RNs**




Source: DEST, 2001c.

**Figure 3.2: Entry points and learning options for ENs**




Source: DEST, 2001c.

### 3.2.2 Nurse and personal carer training and PD

Nurses have training prior to joining the workforce, via vocational education, training and professional placements. In contrast, personal carers develop training on the job. Prior to workforce entry, personal carers may have no caring skills or training and it can take some time to acquire such skills. Hence there can be a period where the carer is working at a low skill level, which has the potential to influence care outcomes.

The importance of continuing PD has been noted in recent reports. DEST (2001c) acknowledges that the continuance of PD may be a key factor in further developing career options and retaining employees within the RAC sector. DEST also suggests that PD is essential to ensure that nursing practice is congruent with the health needs of society. PD can allow nurses and others to update their skills to cater to technological advances and to changes in best practice management.

Currently, there is no mandatory requirement for continuing engagement in PD activities. Nonetheless, incentives to undertake training can be created via requirements to maintain a certain quality of care for ongoing RAC accreditation. If increased training leads to increased wages, this can act as a powerful individual incentive to upskill. The incentive for RAC nurses to be offered PD is muted by the limited surplus that can be generated from better quality of care (due to RAC pricing restrictions imposed by the federal government). Furthermore, there is no guarantee that RAC facilities will capture many benefits as the individual is free to move within the labour market (as with most employer-provided PD).

Rationalisation of funding for human resources and administration has led to a reduction in levels of support for nurses (DEST, 2001a). Experienced RNs are spending more time undertaking menial tasks such as answering calls, chasing supplies and entering data. The NILS survey found RAC nurses felt like they did not have sufficient time or opportunity to engage in the caring tasks for which they were employed and trained (NILS 2004; 2008). In the 2008 survey, 58% of nurses felt they were unable to spend enough time with residents (NILS, 2008).

Since nurses derive job satisfaction from providing care, concern should be given to the appropriate allocation of tasks within a RAC facility (NILS, 2008). If nurses are limited in providing care, this could reduce the value in undertaking high level nursing education and training, and thus potentially reduce incentives for individuals to invest in a RN or EN career in the RAC sector, particularly if care opportunities are better in the acute sector or elsewhere.

### 3.2.3 RAC worker perceptions of their skills

Over 90% of RAC workers across all occupational groups feel that they had the relevant skills to perform their jobs (NILS, 2008), including 96.1% of nurses and 93.4% of personal carers. Almost the same proportion of RAC workers overall felt their skills were being used on the job (NILS, 2008). Although around 5.5% of nurses disagreed, this was down from 10% in 2003. This may be a reflection of the increasing scarcity of nurse skills in RAC. However, it must be remembered that these figures reflect perceptions, and thus are not systematically defined indicators of worker qualifications and skills.

## 3.3 Nursing workforce and education issues

A National Review of Nursing Education identified a number of nursing workforce and education issues (DEST, 2001a). This section draws on findings from the Review as well as other literature studies to identify relevant issues for Australian nursing education.

### 3.3.1 Key findings

The perception of aged care nursing as a study option and career path is crucial to attracting students to pursue a career in this field. Happell (1999) undertook a study of nursing students' preferences for areas of nursing at the commencement of undergraduate studies. It was found that students displayed little interest in aged care. Happell concluded that nursing education should play an active role in seeking to portray the equal importance of all areas of nursing. A Swedish study by Fagerberg et al (2000) also found that, overall, aged care was a low status subject.

Aday and Campbell (1995) found that appropriate development and implementation of a tertiary curriculum can positively influence students' approach to aged care careers. They investigated changes in tertiary nursing students' attitudes after the completion of a gerontology curriculum and found there were significant positive changes in student perceptions of ageing and aged care. It was concluded that education has the ability to change pre-conceptions about aged care, and that aged care oriented education can influence prospective students to choose aged care careers. This suggests that further tailoring of programs toward aged care or increased availability of aged care units could attract students to the aged care workforce.

The National Review of Nursing Education highlighted the area of specialised learning needs of aged care nurses (DEST, 2001a). It was suggested that one strategy to improve education and training of aged care nurses is to further develop collaboration between educational institutions and RAC facilities. A number of possible benefits were highlighted, including:

- development of further professional input for nursing curricula (Joy et al, 2000);
- improved opportunities for quality clinical experiences for nursing students in a range of aged care facilities and improved recruitment; and

- a means of raising the profile and improving the quality of aged care (Chilvers and Jones, 1997; Upex, 2000).

The National Review of Nursing Education identified the need for flexible learning options as a key issue in the successful provision of aged care education. This is particularly relevant given the higher age, female-dominated nature of the RAC workforce, who might face tension between domestic, work and educational needs. Flexible options, such as interactive learning can also help to alleviate problems of access to aged care education for nurses in rural and remote areas (further detailed in Section 3.3.4).

The need for flexible delivery of training and specialised aged care training has been highlighted by the NHHRC (NHHRC, 2009). They suggest the development of specialised training units to improve flexibility in study options and reduce training costs.

Re-entry and refresher training development has also been recognised as improving recruitment and retention (Pearson et al, 2000). A study in the US indicated that re-entry programs generate a greater proportion of nurses returning to the workforce (Damukaitis and Schirm, 1989). Additionally, programs could be influential in changing nurse perceptions of some as being 'too old', and can encourage them to return to or remain in the workforce (Nagy, 1991) – which can thereby enhance continuity of care.

### 3.3.2 Cost effectiveness of training programs

Cost effectiveness of RAC training programs can be measured in terms of workload (efficiency before and after the training), work quality and number of people trained. Access Economics (2009b) measured the cost effectiveness of a program delivered to aged care workers training them in dementia care areas such as:

- person-centred care and effective communication;
- nature of dementia and its impacts;
- effective responses to behaviours of concern;
- activities to promote wellbeing; and
- workplace issues, community support and available services.

The program was found to be both cost-saving and quality enhancing. Workload and quality outcomes were assessed by training recipients at completion. Notably, there was over a 10% improvement in workload management efficiency from the training program in the first year and a 9% improvement in work quality. Although benefits are not sustained indefinitely, improvement in work quality was estimated as around 3% per worker based on three years of linearly declining benefit.

These findings are particularly relevant to RAC given Australia's future demographic ageing and sharp projected rise in dementia prevalence. Similar training programs may need to be developed with regards to other chronic and high care needs within RAC facilities.

### 3.3.3 Government initiatives

In the last decade the Australian Government has funded an expanded number of undergraduate places for RNs and introduced initiatives to strengthen the personal carer and

EN workforce via increased funding (PC, 2008). However, there remain problems of unmet demand for nursing degrees. Furthermore, recent initiatives are unlikely to satisfy expected future RN demand, due to the higher age demographic and future expected retirements (PC, 2008).

Simply increasing education and training funding is not a sufficient solution to meet the long term needs of the aged care workforce. Changes in required skills due to increasing prevalence and incidence of chronic diseases will impact on training requirements (PC, 2008). With a move toward high skill, acute style services, education and training will need to sufficiently equip nurses with more sophisticated skills.

### 3.3.4 Rural and remote areas

Rural and remote areas tend to have higher costs of education due to limited local infrastructure and the need to replace workers while they travel to obtain training (PC, 2008). The expansion of distance education degrees for ENs and the 'Aged Care Channel' program may help to alleviate such challenges.

In an Australian survey of 1,874 nurses working in rural areas, it was found that 64.7% of nurses worked regularly with older people, although only 41% received education specific to aged care (Orb, 1996). Moreover, nurses working on a casual or part-time basis had a greater preference for interactive learning, with full time nurses tending to prefer text-based learning. Given that a large proportion of the RAC workforce is employed on a part-time basis, there appears to be substantial scope to implement further interactive learning.

The National Review of Nursing Education (DEST, 2001d) identified the importance of PD for rural area aged care nurses, which involves more than just the provision of education. Rural nurses identified the need for ongoing opportunities to enhance skills. Huntley (1995) stated that 71% of rural nurses surveyed indicated a lack of access to continuing education. The DEST (2001d) found that rural nurses were disadvantaged in this aspect. Important factors are the flexibility of education delivery, increased opportunities for PD and the suitability of education to rural areas.

## 3.4 Skill mix, patient outcomes and costs

A focus on health outcomes and rewarding workers for improved levels of patient satisfaction are themes noted throughout the recent NHHRC final report (NHHRC, 2009). Indeed, it is important to analyse the benefits of RAC education and training with regards to evidence of improved outcomes.

It is important to view nursing education as an investment, with failure to invest in adequate training and education resulting in patient, economic and social costs. Conversely, returns from an investment in nursing education can include better health care outcomes, greater satisfaction with the RAC sector, and better use of scarce health care resources.

### 3.4.1 Skills mix and RAC outcomes

Skills mix issues in the RAC sector include the inability to ensure adequate staffing and inadequate preparation of staff for their roles. Without appropriate staffing responses, this is likely to be exacerbated due to demographic ageing and the expected increase in the

prevalence of chronic disease. A particular problem is the limited availability of specialised nursing care and thus clinical care limitations. This can adversely impact on the elderly.

Nursing research has demonstrated links between nurse staffing and the quality of RAC. Horn et al (2005) found that care delivered by RNs in RAC settings was strongly related to better resident outcomes, including:

- fewer pressure ulcers;
- fewer hospitalisations;
- lower incidence of urinary tract infections;
- less weight loss; and
- a lower risk of deterioration in resident's ability to perform daily living activities.

Studies on RAC skill mix outcomes are less common than acute care studies. However, findings within the acute care setting can provide a guide to the RAC setting due to the increasing number of 'high-care' type patients in RAC facilities. For example, around 70% of RAC residents require some form of high level care as assessed by the Aged Care Funding Instrument (ACFI) (PC, 2008).

A recent study in Australia found skill mix to be a significant predictor of patient outcomes within an acute care setting (Duffield, 2008). A skill mix with a higher proportion of RNs was found to significantly decrease rates of negative patient outcomes such as gastrointestinal bleeding, sepsis, shock, ulcers, physiological/metabolic derangement, pulmonary failure and failure to rescue.

Needleman et al (2002) found that a higher proportion of RNs was associated with lower rates of failure to prevent clinical deterioration from an underlying illness, leading to permanent disability or death. A reduced incidence of death was found from life threatening complications such as pneumonia, shock, cardiac arrest, sepsis, upper gastrointestinal bleeding and deep vein thrombosis.

The US Agency for Health Research and Quality (AHRQ) has also called for an increase in RN staffing as a way to improve acute care patient outcomes. Kane et al (2007) noted that every additional RN FTE per patient per day was associated with a relative risk reduction in hospital related mortality of 10% in intensive care units, and 16% in surgical patients. Additionally, AHRQ estimates also indicate that an increase by one RN FTE per patient day would lead to five lives saved per 1,000 medical patients, and six per 1,000 surgical patients.

Aiken et al (2003) carried out cross sectional analysis of outcomes data for 232,342 general, orthopaedic and vascular surgery patients discharged from 168 Pennsylvania hospitals between 1998 and 1999. The proportions of hospital RNs holding a bachelor's degree or higher qualification ranged from 0% to 77% across hospitals. After adjustments for patient characteristics, hospital structural characteristics and nurse staffing and experience, it was found that a 10% increase in the proportion of nurses holding a bachelor's degree was associated with a 5% decrease in both the likelihood of patient mortality within 30 days of admission and the odds of failure to rescue.

Given the strong link between the number of RNs within an acute care facility and outcomes, it is expected that a similar relationship would exist between the number of RNs within RAC

facilities and resident health outcomes, and greater satisfaction with care. An implication is that future residents should be made aware of a facility's resident-nurse ratio when considering a place.

# 4 Optimal workforce strategies for RAC nursing

This chapter examines those factors that can affect a nurse's decision to enter, or remain in the RAC sector, and outlines some possible strategies to arrest the declining numbers of RNs within RAC. The chapter also discusses frameworks for determining an optimal nursing mix and an alternative funding model to ensure this mix occurs.

## 4.1 Addressing the wage differential

Remuneration is a significant factor affecting the ability to attract and retain quality staff in the RAC sector. Research by the Australian Nursing Federation (ANF) suggests that the cost of achieving wage parity between the RAC and acute care sectors has been estimated at around $450 million in 2008 (ANF, 2008). Additional amounts of around $100 million in subsequent years would be necessary to maintain wage parity under the Commonwealth Own Purpose Outlays adjustment arrangements. Therefore, the capacity of the sector to recruit and retain staff depends, in part, on aged care providers' ability to offer comparable wages and conditions with other types of health care facilities (DoHA, 2005).

Given the current and future care needs of RAC residents, and the existing staffing shortages, there is likely to be pressure on RAC facilities to improve wages and conditions. Adding to these pressures will be greater competition for workers across the economy as a result of slower workforce growth arising from overall population ageing. These pressures, however, may be moderated somewhat through productivity improvements linked to the wider use of information and assistive technologies and the application of changed workplace practices (PC, 2008). Productivity growth in aged care can help decrease the unit cost of providing services and improve service quality. This can also reduce pressure on public expenditures. However, it can be difficult to measure productivity growth due to limited data and difficulties in comparing like with like services.

### 4.1.1 Aged care providers and improving productivity

In 2003 the Centre for Efficiency and Productivity Analysis (CEPA) suggested that if all Australian RAC facilities were to operate on a notional best practice frontier, and restructuring occurred to realise opportunities for improved economies of scale, there could be efficiency gains of around $1.6 billion (in 2002-03 dollars) (CEPA, 2003). However, it was recognised that realising all of these gains would not be possible as some differences in efficiency are due to factors beyond the control of RAC facilities (e.g. remoteness).

Moreover, in 2009, the scope to keep realising efficiency gains adequate to fund wages growth is becoming ever more limited. PC (2008) nonetheless suggests that further opportunities to further improve productivity in the aged care sector may result from:

- extending better practices in enterprise bargaining across the sector;
- improving the use of information and assistive technologies to lessen costs;
- additional restructuring of activities; and
- removing regulation that unnecessarily raises the cost of providing services and impairs competition and other incentives for enhancing efficiency.

While it may not always be easy to improve productivity, continued innovation can create new best practice benchmarks. RAC facilities can achieve this by adopting innovative technologies, which can improve the marginal productivity of labour and ease the care burden on the workforce. Some innovative practices are outlined below.

#### 4.1.1.1 Information technology

Information technology (IT) can contribute to productivity gains by allowing for more efficient data capture, storage and access. It can also enhance productivity gains arising from greater use of other initiatives and technologies. The NHHRC favours the use of data, information and communication in improving the quality, safety and efficiency of health care (NHHRC, 2009).

Specifically within the RAC sector, productivity could be improved by better integrating patient records across staff working in all health and residential aged care disciplines. For example, digitally recording clinical assessments and other data, and transferring data using broadband and wireless technology within a facility, can facilitate clear and concise communication between staff.

Such initiatives have already been introduced by some RAC facilities. For example, IBIS Care has put in place a computerised management system into all of its facilities which has reduced documentation and paperwork, increased the capacity of nurses and personal carers to provide better care to residents, and reduced administration of reporting systems and collection of data. The system allows the IBIS Care head office to access each facility from a central location and if a problem is identified such as a resident complaint or significant event, head office staff can easily access the records to provide advice and assistance to facility staff and management rather than wait for the information to be collated and faxed (IBIS Care, 2007). These systems can also reduce the likelihood of duplicate records and mistakes caused by transcribing information (DoHA, 2005).

Integrated IT could also reduce the likelihood of medication and other errors that occur when clients are transferred between aged care facilities and health care providers such as hospitals and general practitioners (DoHA, 2005). This is likely to improve the quality of care, reduce management and administration costs, and reduce pressure experienced by some nurses.

> Given the capacity for productivity improvements associated with improved IT, and the expected increase in the quality of care, cost-effective IT solutions specifically related to RAC should be explored by the government.

#### 4.1.1.2 Assistive technologies

Assistive technologies can improve productivity by allowing individuals to perform tasks that they would otherwise be unable to do, or increase the ease and safety with which tasks may be performed. This has the potential to ease the pressure on RAC staff.

Assistive technologies include the use of portable aids (such as canes, walkers and lifting devices), structural modifications (such as grab bars and ramps) and other devices (such as medication reminders and dispensers, emergency call devices and global positioning system bracelets). Such technologies may reduce the amount of supervision needed in RAC and in community care settings (PC, 2008).

More sophisticated monitoring and scheduling systems can also allow staff to spend more time with residents and increase the quality of care provided (ACSA, 2007). For example, centralised networks can monitor client movements and activities remotely and allow routine tasks, such as controlling air conditioning, lighting and opening and closing doors, to be performed more efficiently (PC, 2008). This can also reduce injury among RAC staff caused by moving clients in aged care settings. The installation and proper use of lifting devices throughout community and residential settings could reduce the number and duration of worker compensation claims (PC, 2008).

### 4.1.2 Other options for improving wages

Productivity growth in RAC to date has not been sufficient to prevent a wages gap from emerging and is unlikely on its own to close the gap. There is debate about the extent to which it is possible for providers to improve remuneration and conditions while remaining viable.

An example is provided by the Industrial Relations Commission of New South Wales[2] which agreed to increase nursing wages by 5% in August 2004. The employers contended, however, they did not have the capacity to meet the cost of the further 16.5% wage increases sought for retrospectivity. They instead proposed 5% in August 2005 and 6% in August 2006 increases instead for nurses. The amounts proposed by the employers were submitted as being appropriate increases (and timing of increases) given the industry's capacity to pay. The NSW Nursing Association responded with a strong case that the providers did have capacity to pay and that the RAC sector was fundamentally profitable and healthy. The conclusion (para 219) of the Commission was that: "nothing the employers have put regarding their capacity to pay would prevent an increase in wages for nurses in the aged care industry that achieves fair and reasonable pay rates that properly reflect the work value of nurses." The Commission thus directed an increase of 6% in March 2005 and a further 6% in March 2006, together with other improvements in conditions of service.

The case is interesting in its determination regarding capacity to pay and, as a consequence there is a smaller wage gap in NSW than in other locations such as Western Australia. However, this and other assessments note that due to the heterogeneity of the sector, capacity to pay may be an issue for some providers and in some locations. Moreover, a core issue is ensuring that funding increases are adequate to keep pace with wages growth in order to preserve quality of care outcomes going forward.

> Since there is an evidence base to show that more nurses in the skill mix lead to better health outcomes, the intensity of nursing care requirement could be linked to the ACFI scale and this may assist in achieving adequate provisioning for wages.

It is beyond the scope of this paper to recommend the specifics of the linking mechanism – but suffice it to say that nursing requirements are likely greater for residents with high ACFI scores

[2] file:///C:/Documents%20and%20Settings/lynne.pezzullo.ACCESS/Local%20Settings/Temporary%20Internet%20Files/Content.Outlook/TDGQ981N/Nursing%20Homes%20c_%20Nurses%27%20(State)%20Award%20Re%20(No%204)%202005%20NSWIRComm%2088.htm

(particularly for ACFI 11 and 12) than for residents with low scores and quantification of the difference deserves investigation.

## 4.2 Improving education and training

To ensure care quality meets the care needs of residents now and in the future there must be an appropriate number of workers who are equipped with the requisite skills and competencies.

> The number of undergraduate nursing places should be increased such that they are adequate to meet future demand, and should emphasise aged care specific places and encourage graduates to enter the aged care sector.

Enabling career development through continual education and training is an absolute pre-requisite to ensuring the skills mix responds to changing care needs. With patient needs evolving to more high-level and chronic-type care, training and education needs to be sufficiently flexible to accommodate such demands. More specialised training, such as the Dementia Care Essentials program, could also be offered if appropriate care is to be delivered to residents with special needs.

Flexible training options such as specialised modules can increase specialist skills and lower training costs. Additionally, interactive learning methods can alleviate rural and remote access problems, and assist a predominantly female, part-time workforce in accommodating a balance between work and life activities.

It is also important to continually train ENs and personal carers given their importance in the RAC workforce. Focus should be given to adapting RAC education and nursing skill mix to meet future health needs. This will help establish a sustainable and competent workforce, better equipped to deal with the coming pressures on RAC services.

## 4.3 Examining staff retention, turnover and the workplace environment

The capacity of RAC facilities to retain nursing staff is a serious issue facing the sector. There are concerns about unfavourable working conditions, including excessive documentation and workloads, lack of education and training opportunities and the perception of a poor public image associated with RAC (PC, 2008). There is also concern regarding the availability of suitable workers in rural and remote communities as well as the handling of the needs of culturally and linguistically diverse clients.

The Senate Community Affairs Committee noted *before* the deterioration observed in the 2003 to 2007 NILS data that:

> *… the shortage of qualified staff (in aged care) has now reached a crisis point … There needs to be a concerted and sustained effort to act and ensure that … aged care nurses receive working conditions, remuneration and recognition commensurate with their training and professionalism (SCAC, 2002, p.158).*

Occupational health and safety issues associated with managing challenging behaviours, lifting associated with frailty, and longer working hours to cover staff absences, all contribute to workforce shortages (HRSCHA, 2005).

The University of Southern Queensland together with the Queensland Nurses' Union, conducted surveys of the attitudes of RNs, ENs and personal carers in acute and aged care workplaces during 2001 and 2004. They noted that RAC nurses:

- were more likely to report that nursing work is emotionally challenging and physically demanding and that the workload is heavy;
- believe there is seldom sufficient staff employed to meet resident needs, with half of the aged care sector nurses observing that morale was low and further deteriorating; and
- report the highest levels of workplace stress, and were most dissatisfied with their remuneration (Hegney et al, 2005).

The NSW Nurses' Association conducted a survey of registered and ENs in aged care to investigate the use of unlicensed workers in medication management as well as broader workplace issues (Fethney et al, 2007). Respondents noted the most important issues to be addressed were:

- excessive and unreasonable workloads;
- wage parity;
- protection of working conditions;
- inadequate staffing levels;
- training and education of unlicensed workers; and
- excessive documentation and increased funding.

### 4.3.1 Creating a better workplace environment

RAC facilities that establish a positive workplace culture can increase job satisfaction and improve the attractiveness of working in an aged care setting. According to the Department of Education, Science and Training this can be achieved by:

- creating a positive work environment in which staff feel valued and are able to make a full contribution;
- encouraging PD through flexibility in rostering hours, time off to study and financial assistance to cover incurred costs;
- promoting workplace safety and cultural sensitivity; and
- encouraging a better work/life balance (DEST, 2002).

A contributing factor to low morale in RAC nurses compared to nurses working in alternative care settings is the level of abuse and violence received from clients and their families (Hegney et al, 2005). This can lead to a considerable level of workforce turnover and workforce shortages in RAC facilities. Occupational health and safety is therefore a major concern among

RAC workers. This is heightened by the relatively high levels of physical injury arising from excessive workloads and the need to move patients (SCAC 2002; SCARC 2005).

### 4.3.2 Broadening staff duties

Given the shortages in the RAC workforce, there may be some ways to broaden care delivery by extending the scope of practice for various staff. However, in some locations duties have already been broadened and there is little scope for further extension. These should be accompanied with mechanisms to ensure quality of care standards are maintained.

For example, RNs scope of practice could be extended to include prescribing particular medications, referring patients to other health care professionals and ordering particular diagnostic investigations in accordance with clinical guidelines (ACT Health, 2006).

The scope of practice of ENs could also be extended, especially in medication management (WGACWQ 2001; DEST 2002). The previous Australian Government supported training for ENs in aged care settings to undertake courses in medication management in an attempt to ease workforce shortages (Bishop, 2004). However, extending the scope in this manner needs to be done carefully to ensure that standards and quality of care are maintained.

Flexible work practices and innovation in job design could serve to improve job satisfaction. Allowing workers with appropriate training and qualifications to provide services in more flexible ways may make the RAC sector more attractive to current and prospective workers and help to lessen workforce shortages.

## 4.4 A better regulatory environment

Regulation of the aged care sector aims to ensure the provision of quality services, equity of access, and efficiency in service delivery. However, the amount of regulation in the RAC sector has been described as too onerous and detracting from the primary care of RAC residents. For example, research suggests some workers feel they are forced to perform unpaid overtime to complete their work. Others claim they reduce the amount of nursing care provided so they can complete the necessary documentation. For many, the documentary requirements are seen as reducing the time available for staff to provide services that enhance the quality of life and care of residents (NILS, 2004; Hegney et al, 2005; Fethney et al, 2007).

The Aged Care Funding Instrument (ACFI), implemented in March 2008, aims to lessen the documentary burden through the introduction of a paperless (electronic) system. The ACFI does not require ongoing care documentation to support funding claims. It is only necessary to perform an assessment when a client requires a significant change in their underlying care needs, necessitating a movement between funding categories (DoHA, 2007). As such, the ACFI aims to focus only on essential documentation related to resident care.

Any further regulatory reform needs to consider the effectiveness of the existing regulatory regime in addressing these objectives and the scope for changes to this regime to secure more cost effective outcomes (PC, 2008). Industry representatives, providers and analysts maintain that the current regulatory regime weakens incentives for providers to invest in ways that could potentially enhance their productivity (PC, 2008).

The need for further regulatory reform in aged care has been noted by the NHHRC (NHHRC, 2009). They recommended that, regardless of whether people are assessed as needing Home and Community Care services, community based aged care services or residential aged care services – there is a single, common integrated assessment approach, with simple assessments for low levels of support at home, through to more rigorous assessment to determine eligibility for higher levels of community and residential care.

The NHHRC also recommended that there be more choice in how individuals use aged care services. This would involve lifting the current restrictions on the number of aged care places within a RAC facility. The objective is to ensure RAC facilities highly valued by residents can increase their placements, and attract residents from less valued facilities. The increased competition for residents is expected to lift the overall quality of care throughout the RAC sector.

To facilitate competition, the NHHRC also recommended greater transparency in the quality of services delivered through RAC facilities. It was suggested that this could be achieved making standardised information available on service quality and quality of life issues, so that potential residents and their families can make meaningful comparisons in choosing between aged care services. This would also facilitate better choice between whether a person receives care in the community or in a RAC facility. While people with the most complex needs (e.g. people with advanced dementia) may be best served by a RAC facility, there may still be scope for consumer directed care within that facility. The aim of such recommendations is to improve the quality of care including in the RAC sector. The flow on effect for the RAC workforce could be similarly improved conditions including more competitive remuneration.

Another issue is the nature of the funding provision and acquittal process. Currently funding is provided very specifically – for capital needs, for operations (care) and with a variety of special purpose and top-up aspects that have arisen historically – leading to a fairly ad hoc patchwork of mechanisms. There is a need to replace this plethora of arrangements with a more simple consolidated mechanism, appropriately indexed, with accountability in terms of acquittal of funds.

> The regulatory environment would be improved by a more detailed and transparent acquittal process where RAC providers clearly account for how capital and recurrent funds are spent. Standardised accounting practices across RAC providers would help with this.

## 4.5 A framework to promote an optimal level of nursing care

The principal regulatory instrument of the federal government for aged care services is the *Aged Care Act 1997*. There are several objectives within the Act that relate to providing government funding to aged care service providers based on the needs of the population. These include:

- to provide funding that takes account of the quality, type and level of care;
- to ensure that funding for aged care services is targeted towards people and areas with greatest needs; and
- to encourage services that are diverse, flexible and responsive to individual needs (PC, 2008).

The low staffing levels of RNs and the desire for more qualified staff within aged care facilities (Access Economics, 2009), suggests the funding model used in the past was falling short in meeting these objectives. Indeed, the introduction of the ACFI in 2008 was a direct response to funding and quality issues highlighted in the resident classification scale review (DoHA, 2003a) and the review of pricing arrangements in residential aged care (Hogan 2004, 2007).

Under ACFI arrangements, the federal government allocates annual funds in line with the expected needs of a target population. This is supplemented by long term Australia wide goals of achieving specific ratios of places-to-people (aged 70 years and older), including 113 total places per 1,000 people by 2011 – comprising 88 residential places per 1,000 people and 25 community care packages per 1,000 people. Of the residential places, the aim is to supply 44 high care places per 1,000 people and 44 low care places per 1,000 people by 2011 (PC,2008).

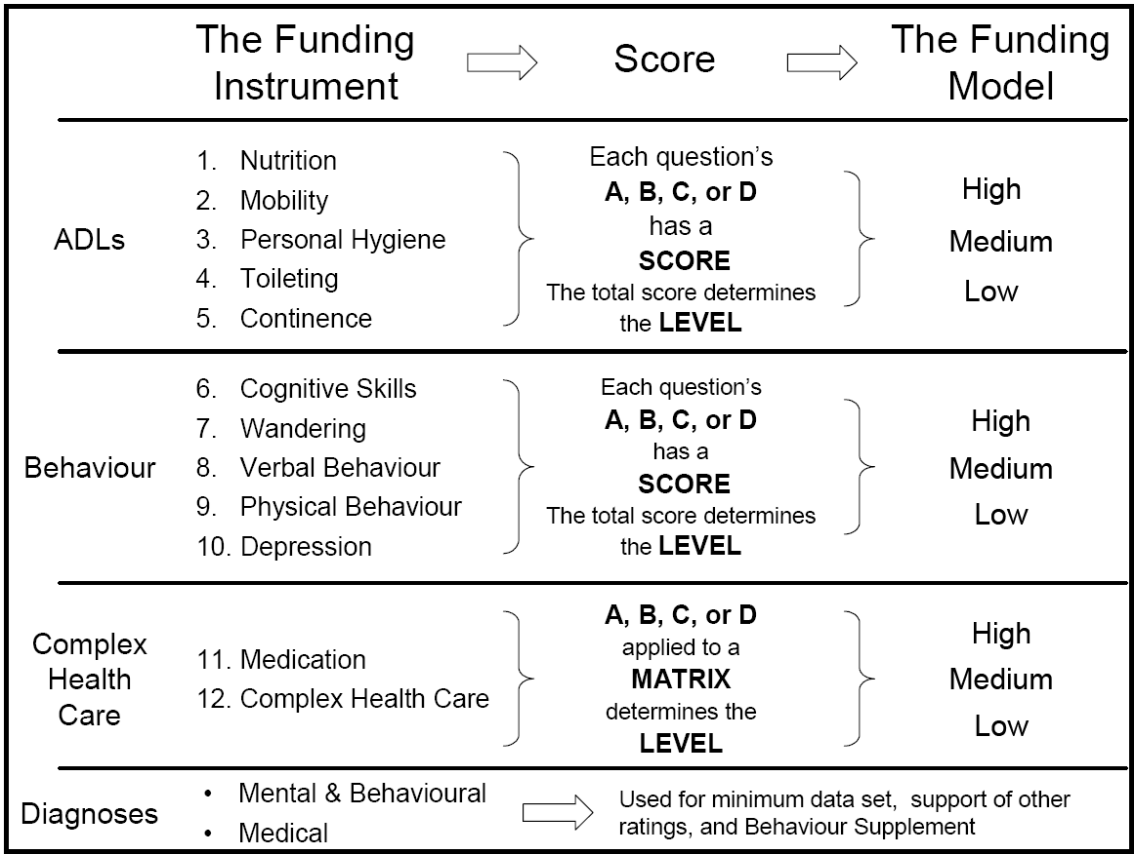
The Secretary of DoHA allocates places to each aged care planning region within each state and territory. Any new places within each region are distributed through an open tender to approved providers.

The ACFI provides a framework for assessing the individual care needs of a resident, based on three broad categories containing 12 questions in total and two categories of diagnosis, including:

- activities of daily living such as nutrition, mobility, personal hygiene, toileting, and continence;
- behaviour of the individual, such as cognitive skills, wandering, verbal behaviour, physical behaviour, and depression;
- complex health care needs, such as medication and specialised care; and
- diagnosis, such as mental and behavioural, and medical.

The resident is assessed as needing low, medium or high care within a RAC facility, with the level of federal funding based on these categories. The relationship between the funding instrument and the funding model is shown in Figure 4.1 and Table 4.1.

**Figure 4.1: Relationship between the ACFI and funding**




Source: DoHA (2009).

**Table 4.1: Daily ACFI subsidy rates[a]**

| Level | ADL | BEH | CHC |
|---|---|---|---|
| Low | 29.78 | 6.81 | 13.40 |
| Medium | 64.86 | 14.11 | 38.17 |
| High | 89.85 | 29.72 | 55.12 |

Note: (a) Applicable from 1 July 2009 to 30 June 2010. ADL = Activities of daily living, BEH = Behaviour supplement, CHC = Complex health care supplement.
Source: DoHA (2009a).

The maximum daily subsidy payable under the ACFI arrangements is $148.11 for the 2009-10 financial year. The daily subsidy paid for a resident is the lesser of the maximum amount and the amounts payable for the three care domains presented in Table 4.1. The federal government also provides subsidy supplements to RAC providers in order to generate greater quality in the delivery of services and encourage equity of access (DoHA, 2009a).

Providers can supplement federal government subsidies through three primary channels, including:

- a basic daily fee as contribution towards accommodation costs and living expenses, capped at 85% of the annual single basic age pension;

- accommodation charges to those with sufficient assets (also capped), with a lower level allowed to be charged to residents in RAC facilities that do not meet the 1999 fire and safety and 2008 privacy and space requirements; and
- accommodation bonds for up to five years, depending on the level of care received and whether extra services are provided (DoHA, 2009b).

Subsidies from the federal government and funds derived from resident charges are used by providers to cover operational costs (with the major cost being labour), and capital costs. Although accommodation bonds were introduced to cover a proportion of capital costs, government regulation limits their use, especially in high care facilities where they are only allowed to be charged to individuals who obtain care on an extra service basis.[3]

Due to the restrictions on the use of accommodation bonds, and the legislated maximum accommodation charge imposed by the federal government, funds from these two instruments can fall short of the necessary capital funding requirements for some providers (Access Economics, 2009c). This means some providers may cross subsidise capital with funds hypothecated for operational costs, including the nursing workforce.

### 4.5.2 Nursing requirements and government subsidies

Federal government subsidies provided to RAC facilities for each resident are based on the expected level of care required for that individual resident. Thus, payments generally follow the consumer of aged care services, which is essential for matching the demand and payment of services with the supply of those services.

The use of government subsidies, the basic daily fee, accommodation bonds, and accommodation charges is at the discretion of the provider. Although higher levels of federal government subsidies are meant for higher levels of care, there are no formal stipulations imposed on RAC facilities that are associated with these subsidies. While this provides greater flexibility to RAC facilities in determining their optimal capital and labour mix in delivering services, it lacks transparency and accountability for funds use.

However, providers are required to adhere to the 'Quality of Care Principles' (as outlined in the *Aged Care Act 1997*) when providing services to residents. These Principles outline standards regarding health and personal care, resident lifestyle, physical environment and safe systems. They also provide guidance on nursing services required for RAC facilities accommodating high level care residents, which includes:

- initial and on-going assessment, planning and management of care for residents carried out by a RN; and
- high care services carried out by a RN or other professional appropriate to the services. Services may include (but are not limited to):
  - establishment and supervision of a complex pain management or palliative care program;
  - insertion, care and maintenance of tubes;
  - establishing and reviewing a catheter care program;

[3] Accommodation bonds can also be charged to high care residents if they are transferred from another RAC facility to which a bond has already been paid.

- establishing and reviewing a stoma care program;
- complex wound management;
- insertion of suppositories;
- risk management procedures relating to acute or chronic infectious conditions;
- suction of airways;
- tracheostomy care;
- enema administration;
- oxygen therapy; and
- dialysis treatment.

The Principles also call for management and staff to have appropriate knowledge and skills to perform their roles effectively. This is to ensure services are delivered in accordance with the broader standards of care. They explicitly focus on the quality of care provided to residents, rather than the quantity of care, although quantity is implicit within quality.

The Principles are enforced by the government through an independent auditing program undertaken by the Aged Care Standards and Accreditation Agency. This includes unannounced and announced visits to RAC facilities, and follow-up action. During 2007-08, there was an average of 1.8 visits per RAC facility, with all facilities receiving at least one unannounced visit (DoHA, 2008).

### 4.5.3 Towards an optimal nursing mix

Positive outcomes for residents of RAC facilities are directly related to the quality and quantity of care. High quality care is a function of skills and training associated with those providing care, and the amount of care provided.

However, more nurses with improved skills may not be the answer for all RAC facilities. Each facility has its own mix of resident types (low, medium, and high care), so a 'one size fits all' approach will reduce flexibility and lead to an inefficient allocation of resources. An optimal nursing mix would appropriately match nursing skills to resident care needs.

The required number of nurses and nursing skills will be different for each facility as they will depend on the complexity and intensity of care required by residents and the number of residents within the facility. For example, a RAC facility where the majority of residents are low care is expected to require less RNs than a facility where the majority of residents are high care, or require specialised care.

The current ACFI does not provide any guidance on the most appropriate nursing mix within a facility. This is problematic because respondents assessed as needing the same level of care may require different types of nurses to administer that care. Thus a mismatch between funding and the cost of care can occur, leading to an inappropriate allocation of resources.

For example, a respondent assessed as needing high care through activities of daily living may only require an EN and personal carer to help with mobility and toileting. A resident assessed as high care through complex health care needs is likely to require a RN to undertake more complicated nursing tasks. Furthermore, residents with dementia, or those from cultural and linguistically diverse backgrounds, will require specialised nursing skills for their care.

Consequently, there is currently a disconnect between the level of funding provided through the AFCI funding model and the actual funding required to employ the required skill mix to deliver assessed care. This disconnect introduces perverse incentives that can discourage RAC facilities to provide an optimal nursing mix.

> However, the current ACFI framework lends itself to an easy transition from the needs of residents to the demand and funding of nurses. With small adjustments, the AFCI assessment process could be used to assess care needs in terms of the best type of skills required to provide those services. Each resident would not only be assessed in terms of low, medium or high care, but also on the needs of the different types of services provided by RNs, ENs and personal carers.
>
> A 'nursing assessment' could develop a nursing score for each resident on the expected number of nursing hours per day that would be required from each type of nurse. For example, a resident that requires a high level of care through pain management would be assigned an estimated number of hours per day from a RN that is required to appropriately manage that pain. Similarly, the estimated number of hours required from an EN and a personal carer would also be estimated, based on the nursing assessment process used within the ACFI.

The total number of full time equivalent RNs, ENs and personal carers required to provide appropriate care to residents of a facility could be calculated based on the number of hours and types of skills required to deliver appropriate care to each resident.[4] This could be supplemented by an estimated labour requirement for duties that do not relate specifically to providing care to residents, such as administrative tasks, teaching responsibilities, and decision making. These could also be estimated based on the most suited type of nurse to undertake these activities.

An approach similar to the one presented above is currently used within the UK aged care framework (Masterson, 2004). The development and application of this type of optimal nursing mix calculation should be further investigated within the Australian context. It is presented here as more of a high level approach to address the current mismatch between ACFI and the major operational costs of RAC facilities, namely the nursing workforce.

However, a commitment to appropriate nursing requirements using this type of tool will also need to be linked to a robust regulatory and compliance regime. It would also require appropriate funding arrangements to ensure providers can meet the nursing requirements. This latter point is further discussed in the next section.

## 4.6 An alternative funding approach

The current and expected shortage in the supply of RNs, and the strong links between improved skills, quality of care and resident satisfaction, means the current decline in the proportion of RNs within RAC facilities must be reversed. However, there are several barriers to an optimal care mix that currently exist within the RAC funding framework and need to first be addressed.

[4] Calculations would have to account for paid annual leave and sick leave, public holidays, maternity leave and study leave.

Funding for alternative levels of care are not linked to associated nursing requirements. This provides scope for RAC facilities to cross-subsidise capital costs with funds hypothecated for nursing requirements. Under this scenario, there may be either an associated decrease in the level of nursing care provided to a resident, or further stress placed on the workforce to deliver the same level of care but with reduced funds.

There is a need for financial injections to make much-needed capital improvements and ensure quality of care. Currently, Government legislated caps on basic service fees and accommodation charges reduce the capacity of RAC facilities to meet the capital and care needs of residents. If, for example, caps were increased or removed on these fees, then RAC facilities would have a greater capacity to pay higher wages to attract nursing staff. They would also have greater capacity to fund accommodation costs from accommodation charges, thereby reducing the need to cross-subsidise with funds hypothecated to operational costs.

The increase or removal of government legislated caps is also expected to increase competition within the RAC sector. This would include competition for RAC residents through improvements in the quality of care, and competition for nursing staff through improvements to wages and working conditions. RAC facilities would also have a greater capacity to respond to individual resident and workforce needs. However, it would naturally be important to ensure that the needs of the most disadvantaged are met and equity considerations are upheld in any potential change to caps.

The NHHRC (2009) recently mooted the idea that allowing accommodation bonds to be charged to high care residents could potentially increase funds for capital improvements and free up funds to improve the nursing skills mix and other factors associated with better quality of care. However, accommodation bonds may not be suitable or applicable for all aged care residents – especially where the need for RAC has arisen rapidly as a result of an accident resulting in hospitalisation and then transfer to RAC, as opposed to a chronic disease where the resident and their family have more opportunity to plan ahead.

Deregulation of RAC charges has been recognised by the NHHRC as a key feature to ensuring greater choice and responsiveness for residents and creating a robust and sustainable aged care sector (NHHRC, 2009).

> Major reform of financing is needed in the RAC sector.

### 4.6.1 Improving the capacity of residents to meet future RAC costs

As aged care needs burgeon in the future, support for RAC facilities will place significant stress on the federal government budget. It will become increasingly important for people with the capacity to pay (through accumulated wealth or high incomes) to do so, allowing the government to continue providing a safety net for those without the financial means to cover their RAC costs.

There are five options the federal government has to reduce this expected budgetary pressure, including:

- higher taxation (debt is not a long term option);
- rationing of publically funded RAC facilities

- increased efficiency in service delivery;
- greater funding participation from the private sector; or
- a combination of the above.

Higher taxation will be feasible only if society is willing to pay more for health care through this means. Increasing taxes comes with its own set of problems and deadweight inefficiency losses. Further rationing is politically challenging, unlikely to be socially optimal, and unlikely to be sustainable in the long term. Increased efficiency in service delivery and greater funding participation from the private sector seem to play the most important part as options.

To increase greater funding participation from the private sector, the capacity to pay must also be increased. Currently, superannuation funds could be used to meet increased funding needs from the private sector. However, government subsidies to ensure equal access to RAC facilities, even though there is unequal wealth within society, provides an incentive for individuals to spend their superannuation funds on other activities, such as leisure.

One option to meet expected increases in RAC expenditure is to introduce dedicated savings accounts for health care and aged care expenditure. These types of funding vehicles are generally known as health savings accounts (HSAs), although extending to the aged care sector suggests a more appropriate term is healthy ageing savings accounts (HASAs).

The creation of HASAs build on the success of superannuation to specifically provide for the more predictable financing needs of healthy ageing (hospital services, residential and community aged care services), as well as out of pocket expenses, deductibles, preventive health and other approved items. Individuals would contribute income to the account throughout their life at a reduced tax rate to encourage savings. Funds would be restricted by the government to expenditure on items associated with health care needs and aged care needs.

The introduction of HASAs would provide an incentive for individuals to save for their more predictable health and aged care needs. This would increase the capacity to pay for RAC charges in the future, while providing greater flexibility for RAC facilities to meet the individual needs of residents.

# 5 Conclusions

It is important that everyone, including older people living in RAC facilities, be given the opportunity to achieve their maximum health potential. This report has highlighted a number of issues within the current RAC nursing workforce that has reduced the opportunity of RAC residents to achieve this goal.

- There is a significant wage differential between RAC nurses and their colleagues in other care settings (for example, acute care). The adverse effects of this wage differential are reflected in the other concerns facing the RAC workforce.
  - **Falling quality of care:** Relative shortages of adequately trained nursing staff make it difficult to maintain quality of care standards. These shortages are more pronounced in the aged care sector compared to other areas of the health system.
  - **Retention issues.** There are problems with nurse retention and turnover rates in RAC facilities. RAC has become stressful for nurses, with growing and more complex needs by an increasingly ageing population of RAC residents.
  - **Changing work focus for nurses.** Nurses in RAC are often required to deal with supervision, overlapping and changing regulatory environments and general 'red tape' rather than 'doing what they love' (clinical care). In turn, this can once again affect the amount of direct care provided to RAC residents by nurses, and thus the quality of overall care.

These issues can affect a worker's decisions to enter, or remain in the RAC sector. The current challenges can be addressed in a number of ways outlined below.

## Closing the wages gap

Given the current and future care needs of RAC residents, and the existing staffing shortages, there is likely to be pressure on RAC facilities to improve wages and conditions in order to attract nurses into the sector.

Improvements in productivity can help address wage pressures. Productivity improvements have been realised by some RAC facilities in recent years through the use of flexible workplace agreements, investing in better technology and restructuring their activities.

Given the capacity for productivity improvements associated with improved information technology (IT), and the associated increase in the quality of care, cost-effective IT solutions specifically related to RAC should be explored by the government. More sophisticated monitoring and scheduling systems can also allow staff to spend more time with residents and increase the quality of care provided.

**However, productivity gains alone cannot close the wages gap – and since there is an evidence base to show that more nurses in the skill mix lead to better health outcomes, the intensity of nursing care requirement could be linked to the ACFI scale and this may assist in achieving adequate provisioning for wages.**

### Better education and training

Enabling career development through continual education and training is an absolute pre-requisite to ensuring the skills mix responds to changing care needs.

With patient needs evolving to more high and chronic type care, training and education must be flexible to accommodate these demands. More specialised training, such as the Dementia Care Essentials (DCE) program, should also be offered if appropriate care is to be delivered.

It is also important to continually train ENs and personal carers given their importance in the RAC workforce. Focus should be given to adapting RAC education and nursing skill mix to meet future health needs.

**Provisions to increase the number of undergraduate nursing places should be adequate to meet future demand, should emphasise aged care specific places and should encourage graduates to enter the aged care sector.**

### Improving staff retention - the workplace environment

**Addressing excessive workloads, unnecessary documentation and a lack of education and training opportunities should help improve staff retention.**

There is also concern regarding the availability of suitable workers in rural and remote communities and the handling of care needs associated with culturally and linguistically diverse residents.

RAC facilities that establish a positive workplace culture can increase job satisfaction and improve the attractiveness of working in an aged care setting. This can be achieved by:

- creating a positive work environment in which staff feel valued and are able to make a full contribution;
- encouraging PD through flexibility in rostering hours, time off to study and financial assistance to cover incurred costs;
- promoting workplace safety and cultural sensitivity; and
- encouraging a better work/life balance.

### Broadening staff duties

Given the shortages in the RAC workforce, there is an opportunity to broaden care delivery by extending the scope of practice for various staff. For example, the scope of practice of ENs could be extended, especially in medication management. However, in some locations duties have already been broadened and there is little scope for further extension.

**Extending scope of duties needs to ensure standards and quality of care are maintained.**

### A better regulatory environment

There is merit in a single, integrated assessment approach for care needs.

There also needs to be more choice within the RAC sector and better information on how individuals use aged care services. This would involve lifting the current restrictions on the

number of aged care places within a RAC facility. The objective is to ensure RAC facilities are highly valued by residents, can increase their placements, and can attract residents from less valued facilities.

**The regulatory environment would be further improved by a more detailed and transparent acquittal process where RAC providers clearly account where capital and recurrent funds are spent.**

### Promoting optimal levels of nursing care

The strong links between improved skills, quality of care and resident satisfaction indicates the current decline in the proportion of RNs within RAC facilities should be reversed.

**Directly linking funding with the provision of nursing care, as well as implementing requirements for RN numbers based on the level of care required within a facility, would improve both the quality and quantity of care provided.**

If stipulated nurse ratios are to be avoided, then an alternative is directly linking funding with the provision of nursing care, as well as implementing requirements for RN numbers based on the level of care required within a facility (through the ACFI).

### Financial reform

**There is a need for comprehensive reform of financing in the RAC sector.**

There is a need for financial injections to make much-needed capital improvements and free up funds to improve the nursing skills mix and other factors associated with better quality of care. One option to achieve this, for investigation, could be the removal of government legislated fee caps. RAC facilities would then also have greater capacity to fund accommodation costs from accommodation charges, thereby reducing the need to cross subsidise with funds hypothecated to operational costs.

### Improving the capacity of residents to meet future RAC costs

As aged care needs burgeon in the future, support for RAC facilities will place significant stress on the federal government budget. It will become increasingly important that aged care costs are borne by individuals who have the capacity to pay, allowing the government to continue providing a safety net for those without the financial means to cover their RAC costs.

To increase greater funding participation from the private sector, the capacity to pay must also be increased. Superannuation funds could be used to meet increased funding needs from the private sector. However, government subsidies to ensure equal access to RAC facilities introduce perverse incentives for individuals to spend their superannuation funds on other activities, such as leisure.

**One option is the incremental transition towards introduce Healthy Ageing Savings Accounts (HASAs) to enable those with adequate means to gradually provision for their future health and aged care needs.**

HASAs provide an incentive for individuals to save for their more predictable health and aged care needs and increase the capacity to pay for RAC charges, while providing greater flexibility for RAC facilities to meet the individual needs of residents.

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