Innovative workforce responses to a changing aged care environment
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Acknowledgements

The consultants acknowledge the following people for providing expert advice and assistance: departmental staff, directors of nursing and CEOs of the facilities, and other staff who kindly gave of their time and expertise. We also acknowledge the assistance provided for the initial research by Adriana Tiziani.

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Executive summary

The increasing demand for aged care and predicted nursing workforce shortages requires a major re-think of how care is organised and delivered. This document provides the basis for discussion on innovative workforce responses to a changing residential aged care environment.

The recommended principles aim to reflect contemporary practice, improve quality outcomes for residents and increase staff satisfaction in residential aged care.

The specific objectives were to develop a paper that:

- outlined better practice in the broader residential care sector
- recommended innovative workforce responses for residential aged care facilities (RACFs), with particular emphasis on supporting quality outcomes for residents, improving the attractiveness of RACFs to health care staff and being economically responsible.

Review of better practice

The review includes broad international literature on staffing models, skill mix and associated outcomes. More recently, a formal Cochrane systematic review of the literature on staffing models in aged care has been undertaken (Hodgkinson et al, in press) and a recent issue of Collegian (Buchan, 2009a; Buchan, 2009b; Duffield et al 2009; Potempa et al, 2009; Preston, 2009) is dedicated to workforce issues. From these sources, contemporary better practice was found to be associated with:

- person-centred, interdisciplinary care that supports the resident’s psychosocial and clinical needs
- evidence-based practice (EBP)
- transformational leadership and staff development
- skill mix and staffing levels based on a range of considerations including resident dependency, staff experience and context.

Person-centred, interdisciplinary care is rarely reflected in everyday practice. It requires a whole-of-organisation approach and a major cultural change. System changes are required to demonstrate to staff that the organisation is genuinely committed to person-centred care (PCC); health professionals have to move away from their silos and empires and rather than expect ‘compliance with their orders’ deliver a service to the resident and family.

PCC is not just about the way staff relate to the resident — it is about the culture of the organisation and how management relate to staff as well.

The concept underpinning ‘Edenising’ homes encapsulates the principles of better practice in relation to psychosocial care. The ‘whole person’ is recognised rather than just their medical needs. There is a focus on meeting the person’s psychosocial needs within an environment that reflects normal life as far as possible — rather than providing routinised task-based care in an institutional setting.

Evidence-based practice promotes consistent, quality care and is now expected as part of clinical governance, by government, accreditation and, increasingly, consumers. RACFs are becoming more information technology (IT) savvy and should be able to access the evidence. Examples of websites where evidence can be accessed include: <www.ahrq.gov/clinic/epcix>; <www.nice.org.uk>; <www.joannabriggs.edu.au>; <www.cochrane.org/docs/ebm.htm>; and <www.latrobe.edu.au/acebac>.

There is a growing literature and increasing government support to assist facilities to translate evidence into practice. Major funding has been invested, for example, through the recent Commonwealth government’s Encouraging Best Practice in Residential Aged Care (EBRAC) grants.

Transformational leadership, emotional and social intelligence have all been linked with improved outcomes for consumers and staff. The ‘Magnet’ hospitals provide an example of excellence in leadership, staff recruitment and retention. The main principles drawn on in this paper are those related to better resident outcomes, participatory management, professional practice models with devolved responsibilities, autonomy in decision making and staff development. Defining PCC to include staff is consistent with the Magnet hospital approach.

Quality outcomes are linked to staffing; therefore, significant attention in the systematic review (Hodgkinson et al, in press) was given to staffing issues. The reviewed literature on nurse–patient ratios and skill mix is varied — some studies showed that ratios and higher numbers of Registered Nurses (RN) in the skill mix impacted positively on patient outcomes, while other studies showed no or
negative relationships, regardless of the setting. Some indicated that having generally ‘more’ staff involved in providing care made a greater difference than simply having more RNs. Having ‘enough’ RNs is indisputable, however, how many is enough remains a matter of debate and the determination of staffing should take account of resident mix, environmental design, staff expertise, model of care and other contextual factors that influence care. Two systematic reviews of skill mix in the acute sector (cited in Lang et al, 2004 and Lankshear et al, 2005) and in residential care (cited in Hodgkinson et al (in press)), along with work conducted by Spetz et al (2009), demonstrate a need for further research and highlight the complexity involved in arriving at staffing models. What is clear is that ratios are a very blunt instrument and improving care outcomes for residents and staff satisfaction requires more sophisticated decision making. The systematic review undertaken (Hodgkinson et al in press) found evidence to support a cautious recommendation for a primary nurse model.

A number of authors suggested that using RNs to provide direct patient care may not be the best use of resources, particularly in the current climate of nurse shortages. A more appropriate and sustainable use of expertise is required and various models of care delivery are being trialled and evaluated across the world. In essence, these models have in common: advanced roles for RNs, such as nurse practitioners (NPs); more creative use of skill mix, which includes RNs, enrolled nurses (ENs), personal care attendants (PCAs), activity officers and allied health practitioners; continuity of care; and a resident focus. Balancing clinical and social care in an economically responsible way requires a diverse staff mix that reflects resident need. For the nursing role to remain relevant, it must be flexible enough to accommodate professional consideration of context, educational preparation and competence in the determination of scope of practice. Linked to a less task-focused scope of practice is the need for nurses to understand the principles of safe delegation. Frameworks to assist nurses develop these skills have been trialled and evaluated (for example, by the Australian Nursing and Midwifery Council (ANMC)).

Consultations

Consultations were undertaken in 2004 with 22 residential care managers across Australia from homes that had achieved recognition for commendable practice from the Aged Care Standards and Accreditation Agency. In 2008–09 further consultation was undertaken with another 25 senior managers in rural Victorian health services to explore innovative workforce responses. The information from our consultations was consistent with the literature and indicates that staffing decisions are best based upon a combination of variables, including resident dependency mix, available skill mix, approaches to care, organisational configuration and environmental factors. What is demonstrated is the ability to achieve quality outcomes with a staff mix that includes nurses, unlicensed workers (PCAs), activity coordinators, medical and allied health professionals.

From the literature and the consultations a set of principles was developed that could guide RACFs in developing more innovative responses to workforce shortages.

Principles to guide innovative workforce responses

In developing the principles a number of assumptions were made:

1. The organisational structure of a RACF depends on the following four main factors:
   - the size and physical environment, including location and relationship to other health services
   - the nature of care and the relative dependency of the residents
   - the available funds to run it
   - care standards.

2. Care provision responsibilities of a RACFs can be thought of as:
   - managerial
   - clinical
   - supportive for quality of lifestyle and maintaining community engagement and participation
   - hotel services (such as food, cleaning and supplies)
   - maintenance of the physical environment.
Who discharges these responsibilities may vary according to many factors such as: configuration of care facilities; availability of specific expertise; differing care needs of residents; level of IT development; and how care is organised, for example, task-orientation versus person-centred, or tradition driven versus evidence-based models of care. On the basis of all the evidence, it is recommended that person-centred, interdisciplinary, evidence-based practice replace task-orientated, tradition-driven care if quality outcomes for residents are to be achieved. With this in mind the responsibilities are outlined, rather than ‘roles’, to emphasise that in different contexts these responsibilities may be organised into different roles or position descriptions and undertaken by different staff with the relevant expertise. They are divided above simply for clarity — in practice there will be overlap.

Drawing on better-practice examples and taking account of RACFs’ responsibilities, a principles-based innovative response to changing workforce demands in aged care is provided below.

The principles

1. Staffing decisions will take account of:
   a. resident dependency, needs and accreditation standards
   b. staff experience and competencies and the need to support staff development
   c. preferences of staff as far as possible to ensure reasonable workload, a work–life balance and occupational health and safety (OH&S) standards are met
   d. financial resources
   e. the context and model of care
   f. the need to provide clinical leadership and evidence-based practice
   g. the capacity to share resources across services
   h. assessment of demand — acuity, peaks and troughs and flexibility to ensure adequate coverage of high-demand times (such as sundowning),
   i. availability of different skills.

2. All residents will have access to an RN for assessment, monitoring and, where the complexity/acuity of care requires it, care delivery. This requirement to be determined by an RN or general practitioner (GP) assessment.

3. All high-care residents will be assessed by an RN on admission, on a regular basis and whenever there is a significant change in condition.

4. All high-care facilities will have 24-hour RN coverage, preferably on-site. Where it can be demonstrated that such on-site coverage is impossible because of unavailability of RNs an EN with medication endorsement and appropriate educational preparation, experience and competency will be on-site with ready access to an RN.

5. All RACFs will have a director of nursing (DON) responsible for nursing care; however, the DON may be shared across services and not necessarily be based on-site.

6. Regardless of the model used, nursing will have direct input into budget and other policy and practice decisions impacting on resident outcomes.

7. RACFs’ care teams may include ENs and PCAs with care responsibilities delegated according to their educational preparation and competence.

8. All RACFs will include activity/therapy hours sufficient to ensure resident lifestyle needs are met and accreditation standards achieved.

9. In the absence of more sophisticated data, team size and mix could be decided upon evaluation of care mix based on the preceding 12 months’ data; high care would be expected to have RNs or ENs as team leaders and a higher proportion of qualified staff overall than low care.

10. Where facilities have mainly aged persons mental health (APMH) beds the nurse unit manager (NUM) or DON responsible for the unit should have qualifications in mental health. As has been recommended for other RACFs, high care would be expected to have 24-hour access to on-site RNs with qualifications in mental health, and a higher proportion of qualified staffing than low care.
11 Care managers in low care should have a minimum of Certificate IV in aged care work.

12 Where possible RACFs (and acute care) should include in their staffing hours expert consultants in areas related to aged care, such as continence experts. In time, this role could become that of a NP in aged care (gerontic).

13 Management/hotel/maintenance responsibilities should be treated in the same way as care responsibilities — where location of facilities/IT permits, this could be supported centrally, provided the RACF has direct input into policy development and decision making.

14 Staff will be educationally prepared and competent to undertake the various responsibilities.

15 Specific educational preparation will be provided in the staffing methodology, delegation and leadership.

Conclusion

This paper drew upon the literature and consultations with residential aged care managers to consider how RACFs might respond to the changing aged care/workforce environment. It contends that a more diverse skill mix could achieve quality resident outcomes and, with contemporary leadership and staff development, replace task oriented traditional care with person-centred, interdisciplinary, evidence-based practice. In reviewing the literature on ratios, little evidence could be found to sustain an argument in favour of them. Staffing methodologies are called for that take account of a broad range of variables and contexts.

A set of principles (known as ‘the principles’) is provided that acknowledge the contributions a broader skill mix brings to meeting the clinical and lifestyle needs of residents. The skill mix includes RNs, ENs, PCAs and activity officers, alongside access to medical, allied health and specialist services. Central to the principles is a commitment to PCC, better outcomes for residents/families and higher job satisfaction for staff.
Introduction

The increasing demand for aged care and predicted nursing workforce shortages requires a major re-think of how care is organised and delivered. This document provides the basis for discussion on innovative work-force responses to a changing residential aged care environment.

The specific objectives were to develop a paper that:

1. Outlined better practice in the broader residential care sector.
2. Recommended innovative workforce responses for residential aged care services (RACFs) with particular emphasis on supporting quality outcomes for residents, improving the attractiveness of RACFs to health care staff and being economically responsible.

Background

Australia, like the rest of the world is ageing. By 2036 it is anticipated that approximately 24 per cent of the population will be over the age of 65 (Australian Institute of Health and Welfare (AIHW), 2007 p. 5). The fastest growing cohort is over the age of 85. Although the majority of older people are living in the community and continuing to contribute significantly to the economy and society generally, it is the case that ageing is associated with increased illness and disability. After 65 years of age the risk of entering residential care is 28 per cent for men and 46 per cent for women (Hogan, 2003). The number of residential aged care places increased by 5,401 between June 2007 and June 2008 to a total of 175,472 (AIHW, 2009). In 2007, while approximately 3.6 per cent of Australians aged over 65 years were classified as high dependency (AIHW, 2007 p. 135) within the residential aged care population, 76 per cent were classified as high care and almost 50 per cent had dementia (AIHW, 2009). In Victoria it was estimated that there were 43,893 older people living in Commonwealth-funded RACFs (AIHW, 2008a p. 8).

In addition to residential aged care there are now various options for care available including: community care packages; Extended Aged Care at Home (EACH); Extended Aged Care at Home Dementia (EACHD) packages; and transitional care packages (TCP). Consumer-directed care options, where the consumer purchases the care desired, are developing. These changes demand innovative workforce responses.

Since 1984 federal governments have put in place a number of reforms aimed at improving and monitoring the standards of care older people in residential care receive. Resident rights have been established and there are care standards against which facilities are judged. Facilities must meet the standards in order to receive the Commonwealth funding subsidy. The system of accreditation requires facilities to demonstrate continuous quality improvement across the standards, which comprise four standards in which there are 44 expected outcomes (see <www.accreditation.org.au>). The expected outcomes are organised under the following standards:

- management systems, staffing and organisational development
- health and personal care
- resident lifestyle
- physical environment and safe systems.

These reforms reflect a commitment to the rights of residents and their families and recognition that aged care facilities are the residents’ homes, in which care is provided. This marks a major shift away from the traditional nursing home in which a disease-oriented, hospital model of custodial care prevailed (Nay, 1993). It is expected now that older people and their families will be involved in care planning, that residents will continue to receive high-quality clinical care with access to nursing, medical and allied health expertise as required but, importantly, that their...
social, psychological, emotional and spiritual needs will also be met. The growing expectation that health care will be evidence-based, person-centred and provide a more social model of care means that a balance needs to be achieved between creating a ‘homelike’ environment and an environment that is capable of supporting contemporary, evidence-based clinical practice.

The original aged care reforms in 1986 provided specific funding for staffing, or a ‘care aggregated module’ (CAM) as it was known. In the 1997 reforms this staffing ‘safety net’ was removed, with the expectation that adequate and appropriate staffing would be ensured through focussing on quality outcomes and continuous quality improvement embedded in accreditation. The Aged Care Act 1997 requires that high-care nursing services, initial and ongoing assessment, and planning and management of care for residents are all carried out by an RN.

Recent data (AIHW, 2008b) found that from 2001 until 2005 there had been an increase in the number of employed RNs in Australia; however, the authors warned that some of the data needed to be treated with caution. Internationally, there is recognition that the ‘global shortage of nursing is escalating’ (Potempa et al, 2009 p. 19) and ‘participation in the workforce is still below the numbers predicted to meet future needs’ (Duffield et al, 2009 p. 2).

Significant to future supply also is the age of the workforce. In 2005 the average age of employed nurses in Australia (both registered and enrolled) was 45.1 years, an increase of 2.9 years from 2001 (AIHW, 2008b p. 9). The proportion of nurses who were aged 50 years or older also increased from 24.4 per cent to 35.8 per cent between 2001 and 2005 (AIHW, 2008b p. 9). The ageing of the population overall is predicted to result in a critical workforce shortage unless people can be persuaded to work longer. Access Economics (2001, p.xvii) reported that ‘...the working age population currently grows by 170,000 people a year. But trends already in place will see the working age population grow by just 125,000 for the entire decade of the 2020s’. Unless significant changes are made this will result in a much smaller workforce to support a much larger retired population. To meet these challenge employers will need to explore more flexible work practices that encourage older workers to remain in employment. It can already be seen that older workers are seeking fewer hours. Older nurses can be expected to look for employment that is less physically demanding. Working smarter requires that the knowledge capital of RNs in aged care is directed to clinical decision making and leadership and that work responsibilities be assessed in terms of identifying what can safely be delegated to other staff.

Attracting allied health and medical staff to provide services in residential aged care has always been a challenge for similar reasons as those influencing nurses’ choices of workplace. Nevertheless, residents are entitled to receive medical and allied health care and, while these specialities are not the specific focus of this paper, any staffing principles must take account of these services and allow for their provision within the overall staffing cohort.

Having various levels and types of staff providing care in nursing homes/RACFs is not a new thing. In 1986, for example, Rhys-Hearn (1986) found that approximately 56 per cent of ‘nursing staff’ in non-government nursing homes were unlicensed workers. In 2007, 63.6 per cent of the people (64.1 per cent equivalent full time) working in residential aged care in Australia were personal carers (Martin and King, 2008 p.11).

The current and predicted shortage of RNs may be viewed as a crisis or as an opportunity to develop innovative work practices and staffing models. Governments and peak bodies at all levels have been focusing attention on aged care for quite some time (Senate Community Affairs References Committee, 2002; Heath, 2002; Department of Human Services, 2000; Pearson et al, 2002; Bennett, 2001; Nay and Closs, 1999). Strategies common to all these reports include improving:

- management, practices — to develop leadership and adopt strategies that value staff and accommodate the needs of a mainly female workforce
- image — to promote the positives of working in the field
- models of practice — to move away from task-orientated hierarchical models
- education of staff — to provide career pathways and ongoing staff development
- the evidence-base of practice — to promote implementation of evidence rather than basing practice on tradition.
The issues canvassed above are not unique to Australia and have challenged governments internationally. Significant developments that appear to be at least in some way addressing these challenges are:

- person-centred, interdisciplinary care that supports the resident’s psychosocial and clinical needs
- transformational leadership and staff development
- evidence-based practice
- skill mix and staffing levels based on a range of considerations including resident dependency, staff competencies and scope of practice and care context.

Person-centred, interdisciplinary care that supports the resident’s psychosocial and clinical needs

The development of ‘Edenising’ homes perhaps exemplifies the recognition of resident rights and person-centred care. Dr William Thomas (Thomas, 1996), given the responsibility of providing geriatric services to a nursing home in New York, recognised the over-emphasis on medical treatment and the need for psychosocial care. He developed the ‘Eden alternative’, which focuses on removing helplessness, boredom and loneliness. This approach treats the individual rather than their presenting disease. It recognises the whole person rather than just the physical problem. Attention is given to creating a normal environment and bringing the community into the nursing home. Plants, animals, children and the aroma of fresh baking, for example, are all integral aspects of the Edenising home. Children and animals do not just visit, as occurs in many homes, they live much of their lives in the home. Child care centres are situated within the home. The approach to care and management is participative; all stakeholders are involved in decision making. Research suggests this approach reduces depression in residents and staff satisfaction is increased (Thomas, 1996). The Aged Care Standards and Accreditation Agency (ACSAA) recognises lifestyle as a significant area in aged care against which standards are assessed. While it is not necessary to ‘become an Edenising home’, the principles that underpin this movement are ‘common sense’ and integral to holistic care and quality outcomes for older people. The most recent research, which investigated Edenising, indicates that:

Intensive development and maintenance of social relations as promoted by the Eden Alternative are fruitful because there is a strong correlation between social capital and health.

(Gehmacher, 2009)

Meeting the needs of residents in a holistic way requires staff with different skills to meet the diverse needs of older people. For example, adequate allied health input can maximise functionality, address the foot problems suffered by a majority of older people and reduce malnutrition associated with swallowing problems. Boredom and depression may be alleviated, or at least reduced, by lifestyle coordinators. Regular assessment and treatment by medical and dental practitioners, for example, can prevent exacerbation of existing conditions and/or prevent new occurrences. Nursing and personal care needs will, in some complex/acute cases, require expert RN intervention; in other situations, the skills required will be those of the EN, allied health professional, GP or PCA. Importantly, the overall assessment and coordination of care should be the responsibility of the GP/RN. This does not mean the GP/RN must deliver all care. Just as the RN defers/refers to other professionals when their specific skills are required, so too he/she should delegate care to ENs, PCAs and lifestyle coordinators following assessment of the resident, context and available skills. Importantly, interdisciplinary care means the various disciplines working together to assist the older person to meet their goals.

Evidence-based practice

The need to base practice on the best available evidence has been recognised and increasingly governments, funding bodies and professional organisations are associating EBP with best practice. EBP is:

…the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external evidence from systematic research.

(Sackett et al, 1997, pp. 3–4)
The need to base practice on evidence has also led to a realisation that, in many areas, there is little evidence available. Opportunities exist for researching, developing and modelling best practice related to care issues at all levels in aged care including: skill mix; environmental design; healthy living/retirement; health education and promotion; legal and ethical issues; management; and hospitality. Some RACFs are taking action to implement EBP using partnership models with research institutes.

Transformational leadership and staff development

Teaching nursing homes (TNH)1 (Chilvers and Jones, 1997), originated in the United States (US) in 1963 but gained recognition/funding in the 1980s when Dr Robert Butler who was then the director of the National Institute for Aging established a TNH research program. The TNH were associated with medical schools and focussed on research into the ageing process and disease prevention. Coming under criticism for this medical emphasis, they broadened to affiliate with nursing schools and include education, practice and clinical research in their scope. Clinical schools and practice development units aim to improve resident outcomes through: increased collaboration between universities and industry; supporting relevant research, utilisation and evaluation; and improving student experiences. They also appear to offer partnership models that address the problems of TNH while progressing/promoting more contemporary aged care principles. Indeed, a set of principles has now been developed to improve the experience of students undertaking clinical placement in RACFs as a way of supporting recruitment of graduates (Koch et al (unpublished)).

Again taking an example to demonstrate innovation, the Magnet hospitals arose in response to the 1980s nursing shortage in the US. The focus is on management excellence and staff development as listed in the following key characteristics (Aiken et al, 2000):

**Administration**
- participatory management style
- well-prepared and qualified nurse executives
- decentralised governance
- adequate staffing
- clinical specialists
- flexible working schedules.

**Professional practice**
- professional practice models for delivery of care
- autonomy and responsibility
- availability of specialist advice
- emphasis on teaching responsibilities of staff.

**Professional development**
- planned orientation of staff
- emphasis on continuing education
- competency based clinical ladder
- management development.

Magnet hospitals (Upenieks, 2003; Shobbrook and Fenton, 2002; Stechmiller, 2002; Buchan, 1999) have been successful in improving patient care outcomes, increasing staff qualifications and reducing staff turnover. The principles underlying the success of the Magnet hospitals have been adopted and adapted in other countries with reported success. Australia is just beginning to join ‘the movement’.

In aged care, as elsewhere, staff development will become increasingly integral to retaining older workers while also ensuring residents receive evidence-based, interdisciplinary, PCC. Where staff ‘do what they have always done’ and are not engaged in continuing education they will have reduced job satisfaction and their skills will rapidly become redundant as new research/knowledge confronts old practices. It is more important for resident outcomes that qualified staff have time to access, implement in practice and evaluate the best available evidence than it is that they continue to engage in routine practices that could be undertaken by others.

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1 Australia’s first TNH ‘Chestnut gardens’, a collaboration between Southern Health and Deakin University’s School of Nursing and Midwifery, was opened in April 2009.
Common to all of the developments in better practice has been visionary, innovative leadership. Such leadership requires people and organisations that are prepared to take some risks and move beyond the status quo. This is especially so in the rapidly changing health care context. At all levels of policy, research and education, and especially in aged care, management and practice leadership is vital. The characteristics of good contemporary leaders include:

- interpersonal/communication skills
- creativity and adaptability
- flexibility
- the ability to find and use new ideas and consider original solutions
- vision and the generation of new ideas
- use of democratic, participative approaches to change and management (Covey, 2005; Goleman, 2002; 2006; Mant, 1997; Moiden, 2002; Scoble and Russell, 2003).

**Skill mix and staffing levels**

The need for innovative responses to changing aged care demands has been recognised for a long time (Nay, 1999). In November 2000 the Victorian Association for Health and Extended Care (VAHEC), in collaboration with Rhonda Nay, ran a workshop where participants explored and discussed potential models of care that would address some of the problems inherent in residential aged care. The following specific problems with the current delivery of care were identified at this workshop.

- A medical framework borrowed from the acute sector underpins the current delivery of care and, while clinical care is still required, residential care facilities are people’s homes not hospitals.
- A hierarchical management/practice structure is common and this model disempowers staff and reduces opportunities for skill development.
- The needs of the residents and their families are also often compromised.
- Job satisfaction is lacking in care staff at all levels, as evidenced by staff shortages, sick leave and staff turnover.

The outcome from this and subsequent workshops, seminars and meetings was to develop a set of principles to inform staffing decisions that: reflect the current care context; acknowledge the vital role of ‘unlicensed’ workers in aged care; and aim to build on the principles underpinning the Magnet hospitals, Edenising and person-centred, interdisciplinary, evidence-based practice. Central to any principles is a recognition that the current shortage of nursing staff has to be addressed and that new ways of operating aged care homes that offer rewarding and satisfying careers for staff at all levels and improved care and services for residents has to be found. The principles also have to be fiscally responsible and ensure greater continuity of resident care. It is essential that RNs are able to lead clinical care. Where organisations have a number of facilities and a shortage of RNs, it is essential that the RN focuses on leading ‘nursing’ care. Any new principles need to maximise the skills and availability of the workforce in a strategic and resident-focused fashion.

The discussions with VAHEC and progress regarding a new ‘model’ were diverted by a more urgent debate between all stakeholders around extending the scope of practice of ENs (Nay, 2003). Changing care delivery required extending the scope of practice of ENs and related policy and practice changes around delegation. In Victoria the introduction of ratios in the public sector, the development of the NP roles and debates around medication administration in aged care have all informed considerations around staffing and workforce issues.
The literature on staffing

The literature on current staffing models can be organised under the themes of:

- nurse–patient ratios
- skill mix
- quality indicators and outcomes
- skill mix, outcomes and the residential care setting
- changing models of care.

Nurse–patient ratios

Victoria introduced patient ratios in the public sector in 2001. The ratios were not derived from a strong evidence base but arose out of an Australian Industrial Relations Commission arbitrated decision. While the ratios appear to have been well accepted by nurses, there has been no published evaluation and the international literature that follows provides a confused picture with evidence for and against the use of ratios.

California appears to be the only other place in the world that has legislatively mandated patient-to-nurse ratios for its hospitals, effective from July 2003 (Aiken et al, 2002; Berman, 2002; Bolton et al, 2001; Seago et al, 2003). We could find no evidence of ratios being used in residential aged care. The motivation behind this Californian legislation was said to be to increase quality of patient care (Aiken et al, 2002). The problems were, at that time, perceived to be:

- increased hospital nursing shortages
- low nurse retention rates related to increased workloads
- high levels of job-related burnout
- job dissatisfaction.

A recent review of this system undertaken by Spetz et al (2009) reported that, although the nursing staffing legislation resulted in higher use of registered nurses, in most California hospitals the ratios had no clear impact on nurse-sensitive patient outcomes (such as pressure areas, deep vein thrombosis and postoperative sepsis).

It has also been argued that the introduction of nurse–patient ratios in public sector Victorian health services attracted many nurses back to the system (Parish, 2002). However, the evidence to support this contention has not been well established. It is not known if improvements in remuneration, rostering and management systems without the introduction of ratios would have achieved similar staff returns. The effects of major refresher/re-entry programs and other initiatives introduced concurrently with ratios have similarly not been taken into account.

Aiken et al (2002), in a study of acute hospitals in the state of Pennsylvania, suggested there was a high correlation between nurse–patient ratios and job satisfaction and burnout. That is, burnout was more likely with high patient–nurse ratios and job satisfaction was associated with a lower patient load. Furthermore, she argued that increasing the nurse–patient ratio by one patient increased both patient mortality and deaths associated with complications by seven per cent.

Conversely, Seago et al (2003, p. 70) state that ‘[a]s California implements its minimum staffing legislation, it is more important than ever that researchers continue to examine the relationship between RN staffing and quality of care. It is no longer adequate to conclude that ‘more RN staffing is better’. This would suggest that the link between nurse–patient ratios and quality of patient care may not be clear cut. Indeed, a study conducted by Abt Associates for the US Centres for Medicare and Medicaid Services (2001) concluded that there are thresholds of optimal staffing levels, below which quality of care is compromised and above which there is no significant impact on quality outcomes. It was expressed that this is ‘consistent with the case studies suggesting that above certain levels the ratio of staff to resident days is not the major determinant of whether quality problems will occur, but rather the way in which staff are allocated, trained and supervised in the facility’ (pp. 2–22).

A study in California by Bolton et al (2001) set out to prospectively link patient safety and clinical outcomes (falls and pressure ulcers) with nurse staffing levels. They found no difference in patient falls or the development of hospital-acquired ulcers in units/hospitals where RNs provided less than 50 per cent of patient care compared with hospital/units where RNs provided more than 70 per cent of patient care.

Graf et al (2003) argued that focusing on nurse–patient ratios would not necessarily ensure patients receive appropriate care. They argue that all patients and patient days are not equal, nor is the amount of care required for the entire admission and to focus on nurse–patient ratios is ignoring the differences among patients and their needs for
nursing care. The US Centres for Medicare and Medicaid Services study (2001) found that facility casemix needs to be taken into account when looking at relationships between staffing measures and quality measures. Failing to risk-adjust for casemix differences means that facilities may score worse on quality measures because they have residents with high care needs, and therefore require higher staff input (Wiener, 2003).

Harrington et al (2000) agree that adding more nursing personnel into long-term care facilities would not necessarily ensure an improvement in the quality of care, and that ongoing education is an important factor that contributes to quality of care. For example, in the case of infection, nursing staff with good training and education are more likely to detect early symptoms, such as confusion and agitation, and therefore be better placed to provide quality care by preventing further development of symptoms (US Centres for Medicare and Medicaid Services, 2001). Harrington et al (2000) concur with other researchers that this ongoing education should extend to unlicensed workers so that they can manage residents’ behaviours more effectively. Care delivery in this context would be organised according to care needs and staff level of education and competence.

In summary, the evidence on ratios is inconclusive and a convincing case has not been made that they provide a sustainable and appropriate staffing methodology. There is a need to explore further the impact of context, patient/resident care needs, staff experience and education and skill mix. Quality outcomes can be achieved using a skill mix that includes qualified and unlicensed staff provided all have relevant educational preparation and work within the scope of practice for which they are prepared.

**Skill mix**

Skill mix may be defined as the ‘mix of posts, grades or occupations in an organisation’ (Buchan and Dal Poz, 2002, p. 575). Melberg (1997) argues that a skill mix with higher numbers of RNs allows for greater staff flexibility, whereas low RN skill mix increases costs because there are more people to manage, educate and evaluate, although patient care may not necessarily be improved. This is in keeping with a study by the American Nurses Association (1995, cited in Barkell et al, 2002) that found the higher the percentage of RNs per acuity adjusted day, the better the patient outcome. Aiken et al (2000) found that Magnet hospitals with a higher RN mix had shorter length of stay and less use of intensive care resources, thereby offsetting the costs of the greater number of RNs. Furthermore, these Magnet hospitals also showed greater nurse satisfaction, less turnover and less job-related stress and better nurse-assessed patient outcomes. However, Magnet hospitals also emphasise leadership, staff development, participatory management and professional models of nursing care. The need for a higher proportion of qualified staff in acute hospitals is fairly clear, nevertheless, in the United Kingdom (UK) even in the critical care areas ‘nurses extenders’ (more like PCAs) have been used, apparently without compromising patient outcomes. Precisely how many RNs is sufficient remains unresolved and presumably will continue to rely on professional judgements to a greater or lesser extent. That is, there will be times when care needs are such that one-to-one highly skilled nursing is required. Other situations will demand fewer highly skilled nurses complemented with other levels of nurses and care workers.

Buchan and Dal Poz (2002) suggest that the skill mix needs to be varied because of skill shortages in particular areas and the need to contain costs and improve quality of care. In reviewing the literature, Buchan and Dal Poz (2002) found that: RNs were the key to improving resident outcomes; mortality rates decreased as staffing per occupied bed increased for RNs but increased for licensed practical nurses (LPNs); and that the incidence of adverse events decreased with a higher proportion of RNs. However, closure of nursing homes has been blamed on the use of expensive qualified staff (RN) who were not necessarily needed (Anonymous, 1999) and in one community hospital, RNs working with LPNs dropped costs, raised patient satisfaction levels and maintained quality patient care (Ringerman and Ventura, 2000).

Barkell et al (2002) described a study by Heineman et al (1996) that found a higher level of patient satisfaction but no significant difference in medication errors, falls or intravenous infections when a ‘nurse extender’ (unlicensed worker) under the direction of an RN was utilised.

In summary, varying the skill mix may have improved or reduced outcomes for residents/patients and job satisfaction. Ensuring adequate qualified staff is essential — but defining ‘adequate’ is context dependent.
Skill mix, outcomes and the residential care setting

Porell et al (1998, cited in Dellefield, 2000) found no significant association between staffing levels and resident survival rate although they did find a relationship to improved mental status. Specter and Takada (1991, cited in Dellefield, 2000) found that low overall staffing levels with highly dependent residents were associated with a reduced likelihood of improvement. High-quality facilities (defined as low development of pressure sores by bed-bound residents, low use of restraints and low drug error rate) had more nursing hours than low-quality facilities (Johnson et al, 1996, cited in Dellefield, 2000). Cohen and Spector (1996, cited in Dellefield, 2000) found the skill mix was as important, if not more important, than total nursing staff hours in predicting the quality of care in nursing homes. However, Davis’ (1993, cited in Dellefield, 2000) survey of 209 nursing home facilities found that high RN ratios in for-profit facilities was not related to better quality outcomes.

In reviewing the literature linking skill mix and outcome indicators of quality, Dellefield (2000) found a number of studies with varying results, which included: no relationship between RN staffing and the development of pressure sores but a positive one with LPN staffing (Duffy, 1988, cited in Dellefield, 2000); quality of life was associated positively with licensed staff but not with nursing aides (NAs) (Nyan 1988, cited in Dellefield, 2000); RN hours significantly and inversely related to mortality (Braun, 1991, cited in Dellefield, 2000); no significant relationship between RN staffing and mortality and pressure sores (risk adjusted) (Zinn et al, 1993, cited in Dellefield, 2000); fewer episodes of agitated psychomotor behaviour related to higher ratio of licensed personnel to residents (Kolanowski et al, 1994); number of full-time equivalent staff per 100 residents had a significant effect on mortality and activities of daily living (ADL) outcomes but not pressure ulcers (Cohen and Spector, 1996); and an increased ratio of total licensed hours per resident day was associated with a higher-than-expected prevalence rate of pressure sores.

Dellefield (2000) further suggests that routine, stable and predictable ‘patients’ can be cared for by unlicensed workers and LPNs, leaving the more complex or unstable ‘patients’ to have a greater RN input into their care. She also highlights the importance of orientation, in-service education, improved supervisory skills and better care delivery systems for improved use of unlicensed workers.

Moseley and Jones (2003) examined the relationship between both RN staffing and RN/LPN staff mix and quality of care, quality of life, resident behaviour and facility practices, and resident assessment. They found that facilities having fewer RNs per LPN had greater issues with resident assessment (not comprehensively completed, not completed within 14 days of admission, treatment plans not being comprehensive). Moseley and Jones (2003) also found a negative relationship between RN hours and quality-of-life issues.

Mueller (2000) suggests there are a number of factors that should be taken into account when considering staffing and skill mix. Aside from the actual care requirements, these factors include the purpose of the unit (for example, dementia specific), available supporting services, architectural design and layout and staff competency. Mueller (2000) uses all these factors to develop a framework for nurse staffing in long-term care nursing facilities.

A systematic review of the literature related to estimating size and mix of nursing teams was published by the Nuffield Institute for Health in the UK in 2003 (Hurst, 2003). The author notes that despite an international search, most of the work retrieved was from the UK. Hurst (2003) grouped the main nursing workforce planning systems according to:

1. professional judgement
2. nurses per occupied bed
3. acuity-quality
4. timed-task/activity approaches
5. regression-based systems.

Analysis of the systems (Hurst, 2003) indicated that:
- Professional judgement had ‘stood the test’ of time and was easy to use but disadvantages included the lack of a direct link to quality, the lack of relationship to dependency and the fact that, at times, the wards would be over- or understaffed.
Nurses per occupied bed is simple; staffing and grade mix are empirically derived but the base from which they are derived has problems. Again, staffing formulas are insensitive to dependency changes.

Acuity-quality allows a better measure of dependency and is more flexible. Nurses are matched to peaks and troughs; benchmarks and performance indicators are a spin-off. The downsides include: this method is more complex to use; computer systems are required; acuity levels may be derived from hospitals other than ‘one’s own’; and the link between quality and staffing is uncertain.

Timed-task/activity is seen to be easily computerised and updated and useful in a variety of settings without loss of integrity but adds significantly to nurse workload because of the need to maintain detailed care plans for every patient every shift.

Regression analysis is judged useful in situations where predictions are possible (for example, planned admissions). It is cheaper to update than acuity-quality, staffing recommendations can be easily tested and the method can be used across a variety of settings. Its weaknesses include: complexity that probably requires statistical expertise; transferring staffing formulas across settings is not recommended; data can be distorted by absenteeism and poor-quality care; and nurses can be resentful of this approach because they feel no ownership.

Hurst (2003) does not rank the methodologies but leaves it for the reader to choose which best suits each situation. What the review does demonstrate is the complexity of staffing and the need to consider a range of issues when staffing for quality. One area that is developing, perhaps in response to staffing shortages, greater economic accountability and changing health care demands, is how nurses organise care.

Changing models of care

Barkell et al (2002) describe the differences between two staffing models on cost, length of stay, patient satisfaction, pain scores and number of pain scores entered in the medical record. Model A involved team nursing with PCAs assisting the RN in the delivery of patient care, with the RN overseeing and delegating basic patient care activities. Model B involved the RN being responsible for total patient care, with the PCAs assisting with activities that required two people. Results showed an increase in length of stay and decrease in costs with model B, although neither was statistically significant. Pain scores were higher with model B (although pain was controlled) and there were fewer pain scores documented in the medical notes. Patient satisfaction was not statistically different between the two models.

Bowers et al (2001) found that nurses working in long-term care reported that consistent assignments (continuity of care) reduced the time necessary to complete their work by reducing the number of unanticipated interruptions. Nurses who organised their workload by resident found they were able to talk to the residents while completing work, spent less time going from room to room and increased the interaction time with residents. Nurses who organised themselves by tasks spent less time interacting with individual residents and more time travelling between ‘tasks’ (Bowers et al, 2001).

Watson and Foster (2003) postulate an attending caring nurse model for the acute care setting. However, this model could easily be adapted to the residential care setting. It involves: the establishment and maintenance of a continuous, caring relationship with the patient (resident) and family; assessment of caring needs from the patient’s (resident’s) frame of reference; subjective and objective assessment; creation of a care plan with the patient (resident) and family; overseeing and assuring comprehensive care planning; and, in some instances, directly carrying out care, and creating communication plans.

Goldman (1998) describes a number of staffing models in long term care. They include: the hierarchical model (in which unlicensed workers assist residents with ADLs, LPNs administer medication and treatments, and RNs/LPNs roles include assessment, documentation and care planning); the team-based model (shared responsibility and accountability for a specific group of residents); case management (total care provided for a resident by one nurse per shift but without any 24-hour responsibility); and primary nursing (every patient is assigned an individual nurse who plans, evaluates and administers care). Primary nursing with nursing assistants involves the NAs being the primary caregiver for 7—8 residents with the RN managing the medication and treatments. The NAs do not rotate.
assignments in this model. Primary team nursing involves an LPN and NA working together as a team giving all care for 10—15 residents. The RN functions as an assessment coordinator. Primary nursing with all licensed nursing staff involves the RN being responsible for 6—7 residents for all assessment, care planning ADLs, medications and treatments and overall case management. Goldman (1998) suggests that regardless of which primary nursing model is adopted, it offers greater consistency for the residents and improvement in quality care.

In general, the residents of a nursing home that had changed to primary nursing as its model of care reported no major changes in either their nursing care or relationship with nurses (Laakso and Routasalo, 2001). There were a few residents who felt the nurses paid more attention to them and responded to their needs better than before. Family members, however, reported that nurses were more friendly, smiled more and the atmosphere in the nursing home had become warmer and friendlier. The nurses felt their work had become more rewarding and challenging, and that they spent more time caring for the residents. A number of nurses felt that primary nursing increased workloads. It was suggested by Laakso and Routasalo (2001) that these feelings may have been related to inadequate training and concerns about insufficient knowledge and lack of skills, especially when dealing with families.

McGilton (2002) proposes a model of care to enhance the quality of life for the elderly living in long-term care facilities. The model involves continuity of the care provider, the acquisition of skills and knowledge required to enhance interpersonal relationships and support from nursing supervisors. It is important to note that continuity of care can be challenging at times when particular residents are difficult to be with on a daily basis. In reviewing the literature around continuity of care, McGilton (2002) found it was not just of benefit to the residents (fewer incidences of agitation, improved affect, improved physical integrity, increase in wellbeing) but also of benefit to the care providers (better attitude towards the elderly, less turnover, decreased job-related stress levels and improved perceptions of the work environment, more certainty about interpretation of resident’s behaviours, closer relationship with the residents).

**Changing roles**

Nay and Pearson (2001) and Nay (2004) suggest that a more strategic use of the RN, EN and unlicensed worker could assist in addressing the nursing shortage, make the roles of each level more attractive and be a more appropriate use of resources. All recent reviews and enquiries into nursing education and nursing respectively (Heath, 2002; Senate Community Affairs References Committee, 2002) have recommended advanced roles for RNs and extended scope of practice for ENs to include medication administration.

The advanced nursing role — nurse practitioner — has been approved in Victoria and other parts of Australia. An extended role for ENs has also been developing across Australia with medication administration included in the EN scope of practice. This has rolled out across Australia since the EN scope of practice work (Commonwealth Department of Health and Ageing, 2003). In short, the scope of practice of RNs/ENs and PCAs is, and must be, continually changing to remain relevant to changing health care needs. Although the NPs role in aged care in Victoria is relatively new, groundwork to develop these roles is underway and they offer attractive clinical career options and opportunities to think differently about appropriate use of the nursing/care skill mix for the future. One innovative response to the inability of a rural area to attract a geriatrician has been to support the development of NPs through telehealth and support visits from geriatricians based in Melbourne (Nay et al, 2009 pp. 417–418).

Walker (2002) supports the notion that a proportion of the RN work could be undertaken by another level of nurse or care worker, thereby releasing the RN to pursue care requiring greater knowledge and skills. Walker (2002) describes an alternate model of care (called ‘partner in care’) in which, in the hospital setting, two staff (an RN and EN or PCA) care for a cohort of 12 patients. Integral to the process was everyone understanding their roles and responsibilities and having the skills of safe delegation.

The Queensland Nursing Council (1998) introduced and evaluated a decision-making framework (DMF) to assist nurses to define their scope of practice and to facilitate delegation of care. This innovation has been followed across Australia (Australian Nursing and Midwifery Council (ANMC), 2007).
The DMF, as quoted from the ANMC, is:

Decisions about nursing or midwifery practice in response to the rapid and dynamic changes that are occurring within nursing, midwifery and the environment of practice need to be planned rather than ad hoc. Unplanned responses could result in wide variation in practice between individuals of similar background and experience and between similar settings. Effective decision-making tools provide a framework where quality and safety are central considerations in decisions about nursing or midwifery practice, allowing:

- new services/practices to be introduced safely and in an orderly way
- everyday practice to be undertaken confidently and competently
- delegation decisions to be safe.

These tools have been developed to assist in rational decision-making about nursing or midwifery practice and practice changes. Influences for change in nursing or midwifery practice may arise from, among other factors:

- legislative or technological change
- community expectations, including an increased emphasis on the safety and quality of health care
- professional developments
- work practice changes including:
  - changes in the model of care initiated by organisations or professional groups
  - changes in other health professions
  - the emergence of new health care roles
  - changes in the structure and funding of education
  - resource changes including changes in the numbers of available health care workers, including nurses and midwives, and an ageing workforce.

The ANMC National Competency Standards for the RN, endorsed enrolled nurse, NP, and the Midwife set clear standards of practice regarding scope of practice and delegation.

(ANMC, 2007 p. 6)

Summary of the literature review

The reviewed literature on staffing is varied and most research has been acute-setting focussed. Some studies showed ratios and higher numbers of RNs in the skill mix to impact positively on patient/resident outcomes, while other studies showed no or negative relationships, regardless of the setting. Some indicated that ‘more’ staff to provide care made a greater difference rather than simply having more RNs. Having ‘enough’ RNs is indisputable; however, how many is enough remains a matter of debate and the determination of staffing should take account of resident mix, environmental design, staff expertise, model of care and other contextual factors that influence care. Leadership, participatory management and staff development are clearly linked to quality outcomes and recruitment and retention of staff.

A number of authors suggested that using RNs to provide direct resident/patient care, especially where care needs are neither acute nor complex, may not be the best use of resources, particularly in the current climate of nurse shortages. A more appropriate and sustainable use of expertise is required and various models of care delivery are being trialled and evaluated across the world. In essence, these models have in common:

- advanced roles for RNs
- extended scope of practice for ENs
- a more creative use of skill mix that includes other levels of workers
- continuity of care
- a resident focus.

Balancing clinical and social care in an economically responsible way requires a more diverse staff mix than an all qualified nursing staff. Linked to a less task-focussed scope of practice is the need for nurses to understand the principles of safe delegation. Frameworks to assist nurses develop these skills have been trialled and evaluated.
Consultation results

In 2004 senior managers from 22 RACFs from across Australia were consulted. All facilities represented by these managers had achieved above average on the accreditation standards. In 2008–09 further consultations were undertaken with two groups of senior managers (25) from rural Victorian health services that operate public sector residential aged care services (PSRACS) to test the continuing relevance of the findings of the 2004 consultations.

2004 consultations

Factors that potentially contributed to quality outcomes cited by the senior managers representing facilities that had achieved above average on the accreditation standards, included:

- staff, residents and relatives involved in strategic planning
- ‘quality’ teams including interested staff and residents
- staff empowered to suggest and ‘run’ with projects/encouraging staff ideas
- communication
- staff consultation before new processes/equipment/anything are put into place
- encouraging staff to undertake further education
- multicultural and multilingual staff
- showing staff that they are valued
- ‘open door’ policy and dealing with issues as they arise
- ‘healthy ageing’ program for the residents (money and time devoted to improving or at least maintaining residents health)
- on-site crèche and before/after-school care (children and older people together)
- individual resident focus
- staff retention program.

In summary, organisational structures, management and staffing levels and mix varied significantly in the facilities represented by the managers who attended the 2004 consultations. In common was: the ability to achieve quality outcomes; the fact that all organisations had 24-hour on-site coverage by an RN for high-care facilities and low care had access to an RN although this was not necessarily on-site; supportive staff development programs; participative management styles; and high usage of unlicensed workers and activity hours, including allied health input. Information was not gathered about complexity of care/categories in the represented facilities, so staffing variability may have been explained by different resident mix and rising acuity in some low-care facilities involved in ageing-in-place. What all these facilities had in common was a focus on residents, lifestyle, quality improvement and valuing staff.

2008–09 consultations

The consultations in 2008–09 supported the principles that had been developed in 2004 and strongly argued for more development of the NP role, further extension of the EN role and the introduction of more flexible staffing.

The consultations held both in 2004 and 2008–09 support the literature, which argues for: a skill mix that meets care needs (that is, the use of qualified nurses, unlicensed workers, lifestyle coordinators and allied health professionals) rather than a set ratio; clinical leadership; a balance of social and clinical care; and a commitment to participatory management and staff development. Building the staffing model from the resident need up (rather than management down) was also a feature. Using an agreed measurement of care mix/dependency could better inform staffing decisions and ensure decisions related to staffing reflected care needs. However, this needs to be one variable considered alongside context, organisational configuration, available expertise and so on.
Key points from the literature and consultations

• There is higher acuity and greater complexity in care needs.
• There is a shortage of health professionals generally — GPs, RNs, ENs, allied health, especially those prepared/available to work in aged care.
• The aged care workforce is ageing.
• The nursing aged care workforce is increasingly part time.
• There are highly variable care contexts/configurations.
• There is variability in access to specialists, including allied health, GPs, and NPs.
• Adequate activity/allied health hours are linked to better outcomes.
• There is evidence that ‘adequate’ RN input into care improves quality outcomes.
• There is little international support for ratios as it takes no account of context/qualifications, configurations, experience, building design, staff continuity/turnover and so on.
• There is evidence that quality outcomes can be achieved with a skill mix that includes RNs, ENs and PCAs.
• There is evidence that quality outcomes and staff satisfaction are linked to good leadership, flexibility, devolved managerial responsibilities, staff development and a sense that all stakeholders are being valued and included in decision making.
• There is evidence that a professional decision-making framework regarding scope of practice, rather than a limited, task-focused approach, improves staff satisfaction without compromising public safety.
• There is evidence that NPs can safely undertake some practices traditionally provided by GPs, ENs can safely undertake practices traditionally provided by RNs, and PCAs can safely provide support and care where complexity and acuity are not high. In all cases this assumes staff have appropriate educational preparation and competency.
• There is an opportunity in Victoria to explore new staffing principles that take account of contemporary thinking and practice, maximises resources and results in quality outcomes for residents and job satisfaction for staff.

Before outlining the new staffing principles, the essential structures and responsibilities of a RACF will be discussed.
Structure and necessary responsibilities within a RACF

The organisational structure of a RACF depends on the following four main factors:

- the size and physical environment, including location and relationship to services
- the nature of care and the relative dependency of the residents
- the available funds to run it
- care standards.

The size, location and physical environment of the facility

The size, location and physical environment of a RACF will impact on staffing decisions. With facilities varying in size, geographical location, organisational structure, and staffing and resident acuity, the principles outlined can be accommodated in different ways depending on the context. A ‘one size fits all’ is not appropriate.

The nature of care and the relative dependency of the residents

The current length of stay for residents in an aged care facility is approximately 147.8 weeks (AIHW, 2009). The proportion of high-care residents is increasing, as is the number of residents with dementia. It is obvious that the population residing in an aged care facility is increasingly frail, highly dependent and often quite ill. Because of these characteristics they are at risk of multiple medication interactions, social and emotional alterations that affect health and ultimately needing palliative care. The high level of dementia and depression also call for a greater emphasis on PCC – including lifestyle factors and addressing psychosocial needs.

The funds available

Any staffing models must be economically responsible and take account of current funding streams. RACFs depend largely on the Commonwealth for funding, which is linked to the Aged Care Funding Instrument (ACFI).

Care standards

Accreditation standards have been established against which RACFs are judged. Staffing determinations must start with consideration of resident need and the skills required to ensure care standards are met. Quality care goes beyond compliance and aims for person-centred, interdisciplinary, evidence-based practice.

Basic roles/responsibilities to inform staffing an RACF

Care provision responsibilities of an RACF can be thought of as:

- managerial
- clinical
- supportive for quality of lifestyle and maintaining community engagement and participation
- hotel services (such as food, cleaning and supplies)
- maintenance of the physical environment.

Who discharges these responsibilities may vary according to many factors, such as: configuration of care facilities, availability of specific expertise, differing care needs of residents, level of IT development and how care is organised, for example, task orientation versus professional models of care. On the basis of all the evidence, it can be recommended only that person-centred, interdisciplinary, evidence-based practice replace task orientation if quality outcomes for residents are to be achieved.
The principles

1. Staffing decisions will take account of:
   a. resident dependency, needs and accreditation standards
   b. staff experience and competencies and the need to support staff development
   c. preferences of staff as far as possible to ensure reasonable workload, a work–life balance and occupational health and safety (OH&S) standards are met
   d. financial resources
   e. the context and model of care
   f. the need to provide clinical leadership and EBP
   g. the capacity to share resources across services
   h. assessment of demand — acuity, peaks and troughs and flexibility to ensure adequate coverage of high-demand times (such as sundowning)
   i. availability of different skills.

2. All residents will have access to an RN for assessment, monitoring and, where the complexity/acuity of care requires it, care delivery. This requirement is to be determined by an RN or GP assessment.

3. All high-care residents will be assessed by an RN on admission, on a regular basis and whenever there is a significant change in condition.

4. All high-care facilities will have 24-hour RN coverage, preferably on-site. Where it can be demonstrated that such on-site coverage is impossible because of unavailability of RNs an EN with medication endorsement and appropriate educational preparation, experience and competency will be on-site with ready access to an RN.

5. All RACFs will have a DON responsible for nursing care; however, the DON may be shared across services and not necessarily be based on-site.

6. Regardless of the model used, nursing will have direct input into budget and other policy and practice decisions impacting on resident outcomes.

7. RACFs’ care teams may include ENs and PCAs with care responsibilities delegated according to their educational preparation and competence.

8. All RACFs will include activity/therapy hours sufficient to ensure resident lifestyle needs are met and accreditation standards achieved.

9. In the absence of more sophisticated data, team size and mix could be decided upon evaluation of care mix based on the preceding 12 months’ data; high care would be expected to have RNs or ENs as team leaders and a higher proportion of qualified staff overall than low care.

10. Where facilities have mainly aged persons mental health (APMH) beds the nurse unit manager (NUM) or DON responsible for the unit should have qualifications in mental health. As has been recommended for other RACFs, high care would be expected to have 24-hour access to on-site RNs with qualifications in mental health, and a higher proportion of qualified staffing than low care.

11. Care managers in low care should have a minimum of Certificate IV in aged care work.

12. Where possible, RACFs (and acute care) should include in their staffing hours expert consultants in areas related to aged care, such as continence experts. In time, this role could become that of an NP in aged care (gerontic).

13. Management/hotel/maintenance responsibilities should be treated in the same way as care responsibilities – where location of facilities/IT permits this could be supported centrally, provided the RACFs has direct input into policy development and decision making.

14. Staff will be educationally prepared and competent to undertake the various responsibilities.

15. Specific educational preparation will be provided in the staffing methodology, delegation and leadership.
Description of the principles in action

The proposed staffing principles are based on teams and are not task oriented. It assumes medical and allied health services but focuses on nurses and care staff. Each team has a team leader (EN with extended scope of practice or less experienced RN) and collectively the teams have responsibility for the implementation of the care plan for a designated group of residents. The team includes staff with a mix of skills — for example, GP, RN, EN, PCA, lifestyle coordinator, allied health.

The team approach is resident (not task) focussed and aims for continuity of care and development of expertise. The role of the more experienced RN is to act as clinical care coordinator\(^2\) for a designated group of residents and teams of staff. This involves (but is not constrained by):

- responsibility for maintaining their own knowledge and skills
- provision of education and support to the other team members
- initial assessment of the resident’s needs/goals and development of care plans, ongoing monitoring where care needs change
- provision of clinical expertise and advice regarding best practice
- provision of care in situations where the resident is assessed to require that level of expertise and/or to model appropriate care delivery
- generally support the care delivery teams in the assessment, planning, implementation and evaluation of care for residents.

Where NPs are available they may be employed full time in one facility or they be employed across a number of facilities and consult as required. Depending on the size and configuration of the RACF, a DON/chief executive officer (CEO) or DON and CEO may be based on-site or at another facility and shared across a number of services. Where the DON is based on-site (and depending on bed numbers), he/she may also be the CEO and clinical care coordinator or the CEO and clinical leadership positions may be additional where bed numbers and complexity of care needs support this. Where the DON/CEO has/have responsibility for a number of facilities, processes would be in place to ensure the specific needs of the RACF are understood and addressed. The equivalent of a NUM would be based at the RACF and, as with the DON, may have the responsibilities of clinical leadership as well, depending on context. According to these principles the EN has an extended scope of practice. In the future, the clinical care coordinator may be an NP ‘on-site’ in a large RACF or this expertise may be shared with other facilities.

Transformational leadership and participative management are assumed. As competence and safety permit, decisions are devolved and educational and career pathways mapped with staff. Rosters should take account of resident needs and staff preferences as far as possible.

\(^2\) The term ‘clinical care coordinator’ refers here to the nurse who coordinates the care of residents rather than a specific position defined in any award.
Benefits of the proposed principles

The proposed principles are expected to address many of the problems identified above and specifically to:

- improve the quality of care outcomes for residents
- facilitate effective and successful recruitment and retention
- provide a choice of roles for RNs with a clinical or management pathway
- provide the opportunity to enhance career pathways
- offer more effective use and development of RN, EN and PCA skills and expertise
- increase flexibility in staff deployment across the sector
- increase access to new categories of staff and harness and direct competencies appropriately
- increase the focus on clinical care and quality of life
- introduce the major tenants of PCC, interdisciplinary EBP and transformational leadership into aged care.

Education and training

The proposed principles of care involve an enhanced level of responsibility and professionalism at each of the three levels of nursing/personal care delivery. This can only be achieved with an increased emphasis on support, training and development within the facility and an expansion in appropriate external training options. This recognition of the importance of training and education reiterates the findings of the Nurse Recruitment and Retention Committee that concluded that ‘if the aged care sector is to offer nurses the opportunity to practise quality nursing care, then aged care specific education programs need to be provided, to ensure that nurses employed in these health care facilities maintain their skills and engage in contemporary aged care practices’ (Department of Human Services, 2001, p. 105). A commitment to education and training also recognises that the care needs of residents in aged care facilities are becoming more complex. Leadership/management/delegation training for RNs in aged care is also essential to facilitate transformational leadership and participatory management styles, which are central to the model.
Distinct responsibilities/roles have been identified as central to the proposed principles of care. It is emphasised that how the work is organised in terms of who does it must depend upon all factors already noted. The DON/CEO roles are not described here because they are not new. It is anticipated that the responsibilities will in many cases overlap and one person, for example, may have management, clinical leadership and team leadership responsibilities; another may have team leadership and personal care responsibilities, and yet another may have personal care and lifestyle responsibilities. Where an NP is employed they may assume many of the clinical coordination responsibilities.

Clinical leadership

The clinical leadership responsibilities would be to:

- maintain knowledge and skills for scope of practice
- ensure initial assessments are completed appropriately and determine level of care provided, assist with care planning, manage care where complexity/instability requires it, model and monitor best practice implementation and ensure appropriate care delegation and evaluation
- educate and support staff, residents and families
- promote wellness of residents
- maintain and communicate best practice in the facility (based on evidence and contemporary knowledge)
- ensure liaison and consultation occurs with the care team
- ensure liaison with resident and families is undertaken
- collect and analyse data as a means to informing practice and to ensure quality outcomes are achieved
- establish links with educational providers and lead to the development of a learning organisation
- contribute to (from a clinical care perspective):
  - developing information systems
  - planning regarding capital and recurrent expenditure
  - strategic planning
  - reviewing policies and procedures
- monitor the implementation of the clinical plan for residents.

Team leadership

The team leadership responsibilities would be to:

- guide the daily allocation of work and monitor work practices of team members
- be responsible on a day-to-day basis for the ‘holistic’ needs of a group of residents as identified in any given shift
- coordinate and deliver care to allocated residents
- monitor and support other staff in the team including identifying team learning needs for quality practice
- liaise with:
  - residents
  - the clinical coordinator
  - families
  - food services
  - external health providers
- understand the unit budgetary requirements and purchasing capacity
- undertake documentation — collect, report and maintain data as required
- monitor OH&S and quality, and assist with development and monitoring of policies and procedures
- provide input into staff appraisals
- administer medications (where the team leader is an EN — within agreed limits and protocols and according to assessed competencies).

Management

Management responsibilities include to:

- manage human resources functions, including:
  - rostering and staffing
  - recruitment
  - retention
  - OH&S/WorkCover, including security and emergency procedures
  - employee performance
  - volunteer management
  - complaints management
  - risk management
• lead the planning and coordination of all staff development
• lead planning and implementation of continuous quality improvement/accreditation in collaboration with clinical staff
• coordinate development and maintenance of ‘non-clinical’ facility protocols such as those for admission, relocation, discharge and death
• coordinate ACFI timing schedules and collaborate with clinical staff
• liaise with residents and family regarding management matters
• lead strategic planning
• lead fundraising and community liaison
• be accountable for finance functions, including:
  – budget development and management
  – data management and reporting
  – payroll management and reconciliation
  – accounts payable and receivable
  – purchasing
• manage hospitality and environmental services
• manage external service providers, such as laundry
• manage public relations and marketing.

Personal care
The day-to-day care of residents in terms of daily living operates within the philosophy of care and policies of the RACF. The personal care responsibilities are undertaken with supervision and appropriate delegation as follows:
• participation in care planning and delivery
• maintenance of appropriate documentation required for quality care
• reporting alterations in health status of residents and any other events of concern to supervisory staff
• maintenance of daily hygiene and grooming for residents
• ensuring correct mobility and transfer techniques are practised
• maintenance of nutrition and hydration — providing appropriate assistance with eating and drinking
• responses as per care plan that reduce need-driven behaviour of residents where appropriate
• assessment of daily living skills and health patterns of residents within range of practice skills
• undertaking of delegated clinical care, such as pressure care, pain assessment and management, continence management, skin care, sensory loss management and observation of wounds
• observation and reporting residents’ mood, anxiety, depression, and interaction with others
• support and encouragement of family involvement with care and interaction with resident and others
• maintenance of personal environment that meet residents’ needs for security and personal space
• undertaking of delegated risk management roles, such as falls prevention, safety, participation in minimisation of restraint and minimal/no lifting programs.

Lifestyle coordination/community liaison
The responsibilities of this role are considered crucial to the development of wellbeing and quality of life for each resident in an RACF. The role usually needs further development to properly integrate the community into the life of the RACF. To create meaning and purpose in the day for an older person is more than providing activities for amusement and distraction. This role enables the whole RACF to give attention to self-esteem, worth and dignity until the end of life. Human interaction within an environment often not physically suitable for the purpose of creating a home, and at the same time providing high-quality clinical care, hinges upon the creativity of the staff. Care staff who are involved in providing daily personal and clinical care require assistance to expand the horizons for the residents so they may reach some measure of fulfilment. The responsibilities of lifestyle coordination should take into account the following:
• provision of activities related to resident choices
• involvement of families and the external community within the RACF
• involvement of residents within the external community, such as special events, concerts and meals
• provision of sensory-sensitive services, such as talking books and hearing loops
• involvement of all staff in the life of the RACFs through events and outings
• maintenance of independence of all residents in matching activity with competence
• meeting the special needs of physically and/or mentally compromised residents.

Hotel services
The supportive hotel services required relate to cleaning, provision of food, linen and personal laundry and family involvement in care. These services are undertaken in a variety of ways depending on the size and location of the RACF. Multi-skilling of the workforce has meant that PCAs are often responsible for laundry and food delivery. In some facilities they also engage in cleaning duties. Other RACFs contract external providers to deliver these services. These decisions are made by management according to their determination of best outcomes and cost effectiveness.

The responsibilities of the hotel service system is to:
• ensure compliance with all regulations governing food and laundry services
• ensure services are delivered appropriately and they meet standards
• monitor quality outcomes and demonstrate effectiveness
• meet all requirements established in any appropriate contractual agreements.

Maintenance services
These services may be delivered by a casual contractual basis or by employing designated maintenance personnel. The responsibilities of the maintenance service is to:
• maintain the physical property by preventing damage to walls, doors and so on
• maintain electrical equipment and ensure compliance with regulations
• maintain water flows and cleanliness of tanks where used
• maintain service schedules for all equipment, such as stoves, refrigerators, appliances and ducting systems
• manage waste management systems
• manage maintenance schedules for all movable equipment, such as wheelchairs, bed baths, shower chairs and medication trolleys
• maintain the external parameters of the property and gardens
• manage inventories and budget for capital expenditure as required.

Implementation
Exactly how the principles are implemented would be dependent upon such factors as:
• facility size, location and design
• availability of human resources
• resident mix and care needs
• philosophy of the organisation.
Conclusion

This paper has established the need to explore and evaluate new staffing principles. It has outlined some of the major initiatives (encapsulated in Magnet hospitals, Edenising principles, EBP and contemporary leadership) that reflect contemporary better practice and provide a balance between clinical and social models of care. Evidence has been provided of quality outcomes being achieved with a broader skill mix than is currently used. It has been demonstrated that a more diverse skill mix could achieve quality outcomes, higher overall staffing levels and staff satisfaction. Examples have been provided of factors other than staff ratios that achieve these results. Indeed, in reviewing the literature on ratios, little evidence could be found to sustain an argument in favour of them at this time.

Professional staffing methodologies are called for that take account of a broad range of variables and contexts, such as resident dependency, staff experience, care philosophy, building design, service configuration, achieving continuity of care, staff development and leadership. The principles proposed assume ENs will be medication endorsed. Issues and the various responsibilities that need to be considered in relation to RACFs are outlined. The need to place a greater emphasis on clinical leadership and, where possible, to share management and other services across sites, is emphasised. The principles seek to improve resident outcomes while capitalising on scarce resources and creating greater job satisfaction of staff. Finally, a set of principles that could inform staffing models are provided.
## Glossary/acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACFI</td>
<td>Aged Care Funding Instrument</td>
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<td>ACSAA</td>
<td>Aged Care Standards and Accreditation Agency</td>
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<td>ADL</td>
<td>activities of daily living</td>
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<td>APMH</td>
<td>aged persons mental health</td>
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<td>ANMC</td>
<td>Australian Nursing and Midwifery Council</td>
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<td>CAM</td>
<td>care aggregated module</td>
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<td>CEO</td>
<td>chief executive officer</td>
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<td>DMF</td>
<td>decision-making framework</td>
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<td>DON</td>
<td>director of nursing</td>
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<td>EACH</td>
<td>Extended Aged Care at Home</td>
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<td>EACHD</td>
<td>Extended Aged Care at Home Dementia</td>
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<td>EBP</td>
<td>evidence-based practice</td>
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<td>EBRAC</td>
<td>Encouraging Best Practice in Residential Aged Care</td>
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<td>EN</td>
<td>enrolled nurse/registered nurse division 2 in Victoria</td>
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<tr>
<td>GP</td>
<td>general practitioner</td>
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<td>IT</td>
<td>information technology</td>
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<tr>
<td>LPN</td>
<td>licensed practical nurse</td>
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<td>NA</td>
<td>nursing/nurses aide</td>
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<tr>
<td>NP</td>
<td>nurse practitioner</td>
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<td>NUM</td>
<td>nurse unit manager</td>
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<td>OH&amp;S</td>
<td>occupational health and safety</td>
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<td>PCA</td>
<td>personal care attendant</td>
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<td>PCC</td>
<td>person-centred care</td>
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<td>PSRACS</td>
<td>public sector residential aged care services</td>
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<td>RACF</td>
<td>residential aged care facility</td>
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<td>RN</td>
<td>registered nurse/registered nurse division 1 in Victoria</td>
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<tr>
<td>TNH</td>
<td>teaching nursing home</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>US</td>
<td>United States</td>
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<td>VAHEC</td>
<td>Victorian Association for Health and Extended Care</td>
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References


US Centres for Medicare and Medicaid Services, prepared by Abt Associates Inc. 2001, 


