SUPPORT DOCUMENT

Responding to health skills shortages: Innovative directions from vocational education and training: Support document

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This document was produced by the authors based on their research for the report *Responding to health skills shortages: Innovative directions from vocational education and training* and is an added resource for further information. The report is available on NCVER's website: <http://www.ncver.edu.au/publications/1833.html>

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Introduction

According to the National and State Skill Shortage List 2004 (Department of Employment and Workplace Relations 2004), of the 16 professions with skill shortages, 11 were in health. Recently released figures (Department of Employment and Workplace Relations 2005a) indicate shortages in all States and Territories of general and specialist registered nurses and most allied health specialists, as well as shortages or recruitment difficulties relating to enrolled nurses in most States/Territories. In Western Australia and New South Wales enrolled nurse shortages are particularly evident in the aged care sector.

Skills shortages exist when employers are unable to fill or have considerable difficulty filling vacancies for an occupation (or specialised skill needs in the occupation) at current levels of remuneration and employment conditions, and reasonable location (Department of Employment and Workplace Relations 2005b; Richardson 2005). However, the concepts of demand, supply and prevailing conditions are not straightforward (Richardson 2005, p.3), and may be viewed differently by stakeholders such as employers, worker unions, governments, and training institutions.

This report begins with an overview of available statistics on shortages within the health workforce. Selection of material for presentation was informed by Richardson (2005, p.24), who suggests constructing an index that incorporates some of the following indicators of labour shortage:

- Rising wages
- Low employment
- High or persistent vacancies
- Increasing use of overtime (paid or unpaid)
- Increasing use of temporary workers
- Improving terms of employment
- Low rate of redundancy/dismissal of workers and high rates of resignations
- People who are being employed have lower than average levels of formal qualifications and/or experience
- Increasing employment of 'non-traditional' types of workers, e.g. women, older workers, recent migrants
- Mismatch and gap of skills in the technology of work; substitution of capital and new technology to economise on the shortage of skills.

For the purposes of this study, skill shortages are conceived broadly to include task shifting from health professional roles, as well as issues related to the age and gender participation of the health workforce. A shortage of health professionals has resulted in pressures for vocational education and training (VET) workers to perform some of the tasks traditionally undertaken by professionals. The study considers how the problem of health skills shortages requires a multi-faceted approach from government and industry, drawing on the recent Productivity Commission (2005) report on Australia's Health Workforce, and foreshadows the sorts of

innovative solutions that have been developed to address local shortages of health professionals. These include upskilling paraprofessionals, and adoption of a skills ecosystem approach (ANTA 2005). Rural and remote areas in particular, have become home to a set of innovative service delivery models, such as multiskilling allied health assistants to work across several areas (Goodale & Lin 2005), as well as a range of community-based solutions (Cunliffe 2004). A number of models, encompassing local, regional and State responses, will be explored in further detail.

The purpose of this study is to locate, analyse and make accessible innovative models of health training and service delivery that have been developed in response to a shortage of skill. The characteristics of and demand for health workers will be mapped to establish the current and projected skill shortage contexts to which the models could be applied or adapted.

Scope of the project

The project concentrates on VET trained workers in the health sector of the health and community services industry, and includes workers in mainstream health as well as special needs areas (Indigenous health, aged care, disability and mental health services). However, some statistics and information on tertiary-trained health professionals are also included for comparative purposes and to provide a context for considering the role of VET in addressing skills shortages in the health sector.

There appear to be some inconsistencies across different agencies as to whether certain occupations are classified as health or community service occupations, most notably in the special needs areas listed above. For example, preparation of Indigenous mental health workers requires completion of a Certificate IV specialist community services qualification in non clinical mental health work.

For the purposes of this study the focus will be largely on the following specific occupational groups, in both mainstream and special need health areas: Aboriginal and Torres Strait Islander health workers; enrolled nurses; personal care and nursing assistants, and special care workers (allied health assistants, residential care assistants, aged or disabled carers). These occupations are identified in the Australian Standard Classification of Occupations (ABS 1997), Categories 3 and 6. They may be referred to by different names depending on State/Territory and sector (see Glossary). Other VET trained health and community service occupations will be referred to within the report largely for purposes of comparison with the selected occupations listed. The study will not consider other support areas related to the health workforce, such as clerical, food handling and laundry.

The selected occupations are linked to VET qualifications which form part of the Australian Qualifications Framework, with a focus on Certificates II to IV. Some of the most commonly recognised training qualifications required for these occupations are listed below. A number are currently under review or development, as part of the national Health Industry Training Package HLT02 Review, to conclude in June 2006.

Job classification	Most common training qualifications
Aboriginal and Torres Strait Islander health worker (and mental health worker)	Certificate II in Community Services Work (pathway qualification), Certificate III in Community Services Work, Certificate IV in Mental Health Work (non clinical) These qualifications currently under review
Enrolled nurse	Certificate IV in Nursing (Enrolled Nurse), Certificate IV in Health (Nursing), Diploma of Nursing (pre-enrolment), Advanced Diploma of Nursing

Personal care assistant	Certificate III in Aged Care Work, Certificate III in Home and Community Care, Certificate III in Disability Work, Certificate IV in Aged Care Work Could also undertake Certificate III in Health Service Assistance (Client/Patient Services) – this qualification is well suited to New Apprenticeships pathways
Nursing assistant	Certificate III in Aged Care Work, Certificate III in Home and Community Care, Certificate III in Disability Work, Certificate III Health Service Assistance
Special care worker Aged and disabled carers	Certificate II in Community Services Support Work, Certificate II in Community Services (Disability Work), Certificate III in Aged Care Work, Certificate III in Home and Community Care, Certificate III in Disability Work
Allied health assistant	Certificate III Allied Health Assistance – this qualification is well suited to New Apprenticeships pathways, Certificate IV Allied Health Assistance

Descriptive statistical indications of skills shortages in the health workforce

This section will provide contextual information for identifying and analysing the current and likely future structure of the national health labour force and potential future health skill shortages. It is based on the following sources of publicly available statistics:

- Australia Bureau of Statistics, 2001 Census (ABS 2001a)
- Health and Communities Services Labour Force 2001 (Australian Institute of Health and Welfare 2003 and 2004)
- National Centre for Vocational Education Research (NCVER)
- Department of Education, Science and Training (2001) report Job growth and replacement needs in nursing occupations
- Community Services and Health Industry Skills Council (2005a) report, May 2005.

According to the Australian Institute of Health and Welfare report (2003, p. xiv), in 2001 there were 798,295 people employed in health and community services industries in Australia, of whom 450,792 people worked in health occupations and 237,055 were employed in community services occupations (representing growth of 11.4% and 26.8% respectively, since 1996).

The largest occupational groups in health were nursing workers (244,473 or 54% of those employed) and medical workers (51.809 or 11.5%), and in community services occupations the largest group was aged/disabled carers (51,790 or 21.8%) (Australian Institute of Health and Welfare 2003, Tables A.14 and A.15).

There has been an adjustment of the mix of occupations in the provision of personal care work, from nursing toward lower paid occupations. In addition, the Productivity Commission (2005) notes that the increasing shift to community-based care in the provision of aged, mental health and disability services, has implications in terms of the sorts of workers required, and training and remuneration issues. The workforce employed in health and community services occupations increased by 16.3% between 1996 and 2001 (see **Table 1** in Appendix), whereas the number of registered nurses increased 6.2%, registered mental health nurses increased 7.5% and registered

midwives increased 6.8%. According to the Australian Institute of Health and Welfare (2003 p.10), there was an increase in registered nurses that kept pace with the general population increase.

Significantly for the VET sector, the number of enrolled nurses decreased by 20.7% (ABS 2001a). The national shortage of enrolled nurses is confirmed by the State Skills in Demand Lists (Department of Employment and Workplace Relations 2005a). At the same time, personal carers and nursing assistants, occupations that are lower paid than enrolled nurses, increased by 20.3%, apparently substituting for enrolled nurses or taking over some of the less skilled tasks of registered or enrolled nurses, (Australian Institute of Health and Welfare 2003, Tables A.20 & A.24). The Productivity Commission (2005) note that personal care workers now comprise the bulk of the workforce in the aged care sector.

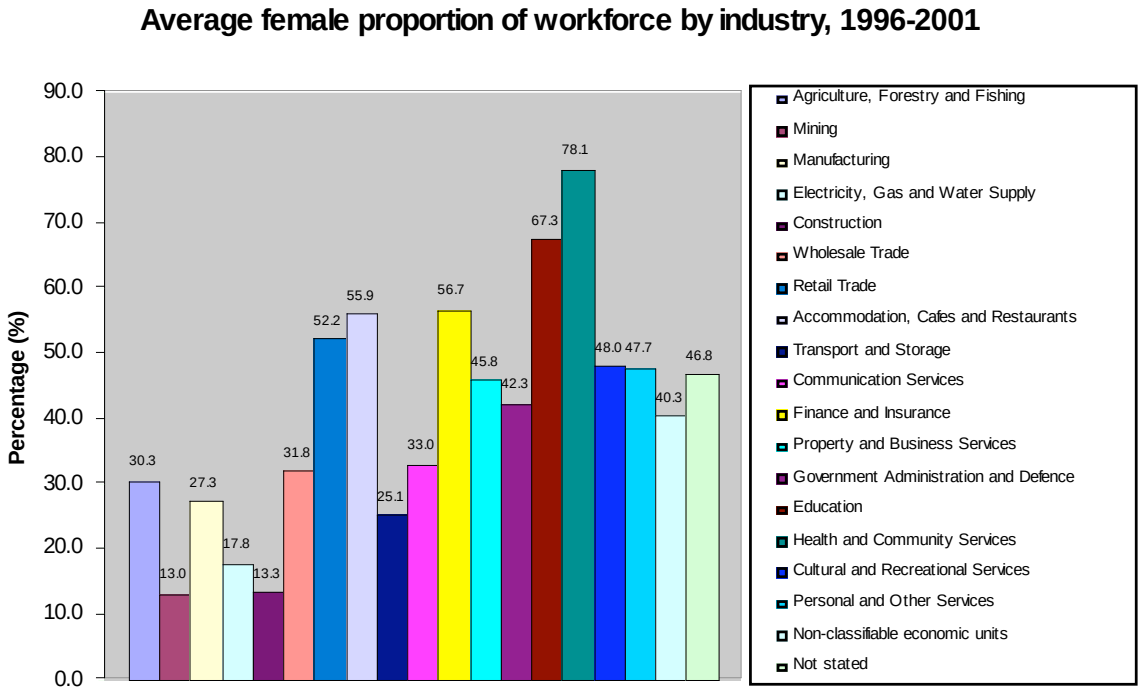
Table 1 (see Appendix) also highlights another area of increasing significance for the health workforce, in terms of allied health workers. Although statistics (Department of Employment and Workplace Relations 2004, cited in Community Services and Health Industry Skills Council 2005a) report skill shortages in this area, Table 1 shows that the number of allied health assistants has almost doubled in the five year period from 1996 to 2001.

The current structure of the national health and community services workforce has several characteristics that differentiate it from other industries' labour forces. These include the following:

High female proportion in the health workforce

Workers were predominantly female in the health and community services occupations, making up 78.1% of the workforce (see Figure 1), the highest proportion of all industries.

Figure 1: Average female proportion of workforce by industry



Source: Australian Bureau of Statistics, 2001 Census of Population and Housing - T15 Industry by sex (excluding overseas visitors)

Some health and community services occupations have a particularly high proportion of women: registered midwives (98.9%), dental assistants (98.69%), enrolled nurses (91.31%), registered nurses (92.37%), nursing assistants (86.59%), and aged/disabled person carers (84.8%) (see **Table 2** in Appendix).

According to the Australian Institute of Health and Welfare (2003, p. 15), male workers in health and community services tended to be concentrated in high-income occupations, while a much lower proportion of females, who comprised the vast majority of the workforce, had weekly incomes of $1000 or more. This is partly explained by men being more likely to work full-time and stay longer in the workforce (see later section on hours worked). The predominantly male occupations tended to have much lower proportions of part-time workers than those with a high proportion of females (see **Table 3** in Appendix).

The high female presentation in the health and community services workforce may affect supply of health professionals to accommodate the increasing demand of health and community services due to gender stereotyping, which discourages prospective male workers (McQuaid et al. 2004; Miller et al. 2004).

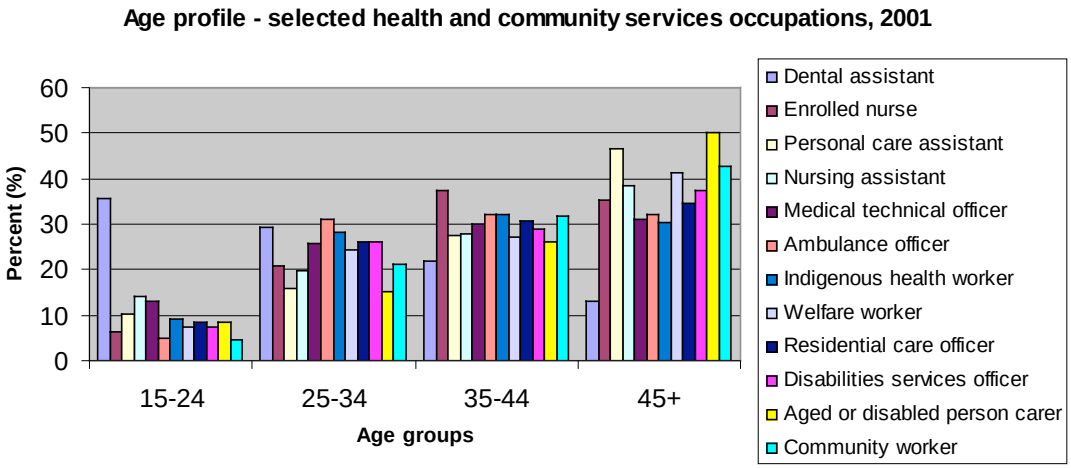
Ageing health workforce

Between 1996 and 2001, Australia's population increased from 18.3 million to 19.4 million (up 6.0%) and the median age rose from 34 years to 35 years. The proportion of the population aged 65 years and over increased from 12.1% in 1996 to 12.6% in 2001. These trends are projected to continue, increasing the demand for health services (Australian Institute of Health and Welfare 2004, p. 259). At the same time, Australia has an ageing health workforce (Productivity Commission 2005). For example, in 1984 when the average age of all Australian workers was 35.8 years, the average age of workers in the health and community services sector was 36.3 years. By 2004, the gap between the two had increased (38.6 years and 41.7 years respectively) (Department of Parliamentary Services 2005).

Within the health and community services labour force, 37.67% (Australian Institute of Health and Welfare 2003, calculations from Tables A.14 & A.15) of workers are aged 45 years and over. The fastest ageing occupations (those with the largest increases in the proportion of workers aged 45 years and over) were nurse managers (51.25%), aged/disabled carers (50.13%), personal care assistants (46.57%), medical practitioners (46.32%), mental health nurses (44.18%), disability workers (43.68%), community workers (42.54%) and registered nurses (40.35%) (see **Table 2** in Appendix). Figure 2 on the following page focuses specifically on the age profile of a range of VET-trained health and community services workers. The statistics suggest that replacement demand in occupations with an ageing workforce will be significant.

Table 2 also indicated a low proportion of young people aged between 15 and 24 (9.84%), especially amongst mental health nurses (2.43%), aged and disabled carers (8.58%), enrolled nurses (6.20%), medical practitioners (1.26%), and dentists (1.82%). The relatively low number of Indigenous health workers aged 15–24 (9.18%) supports findings from the Productivity Commission (2005) regarding increasing difficulties in recruiting younger, Indigenous people to the health workforce. The length of training or experience that is required for entry to some health professions (such as medicine, dentistry) contributes to increase the average age of those professionals relative to other occupations. The lower proportion of young people in the health and community services workforce also reflects an overall trend towards fewer young people in Australia's total workforce, from 23.1% of the total full-time labour force in 1984 compared with only 13.6% in 2004 (Department of Parliamentary Services 2005).

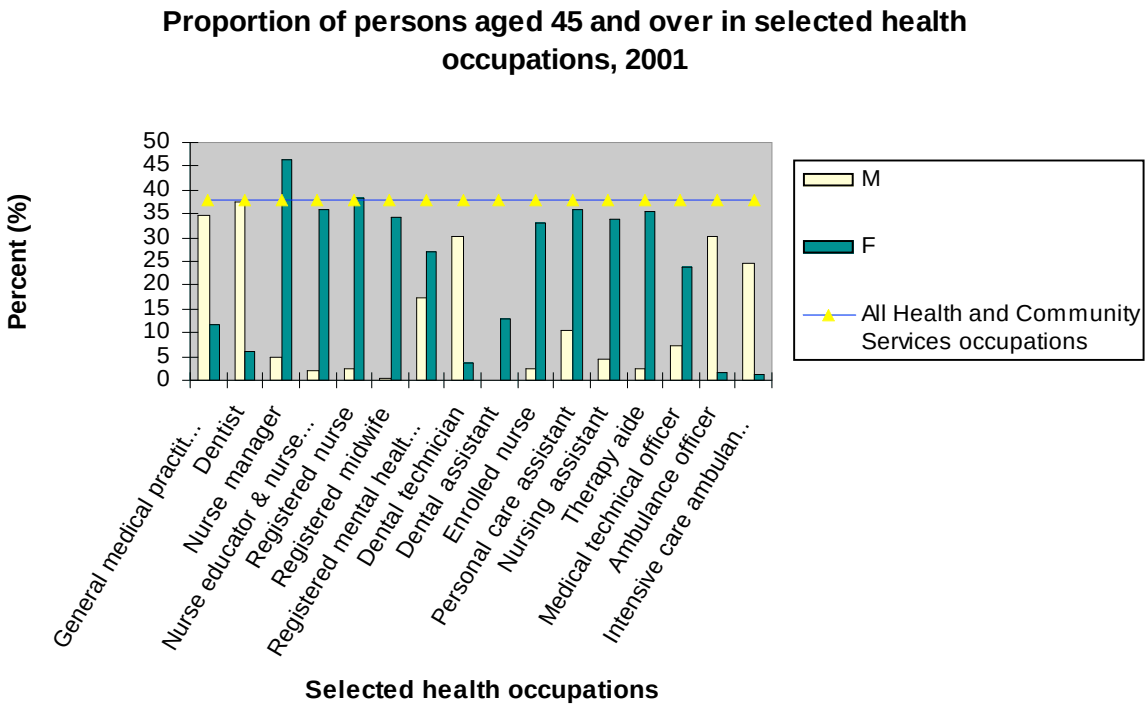
Figure 2: Age profile – Selected Health and Community Services occupations, 2001



Source: ABS, Census of Population and Housing, 2001 and Australian Institute of Health and Welfare 2003: Health and Community Services Labour Force 2001 (Tables A14 & A15).

As indicated in Figure 3 which follows, nursing workers, of whom the majority are females, have a high proportion of older workers, whereas other health occupations have a low or below average proportion of older workers (that is, below 37.97%).

Figure 3: Employees aged 45 and over in selected health occupations



Source: ABS, Census of Population and Housing, 2001 and Australian Institute of Health and Welfare 2003: Health and Community Services Labour Force 2001 (Tables A14 & A15).

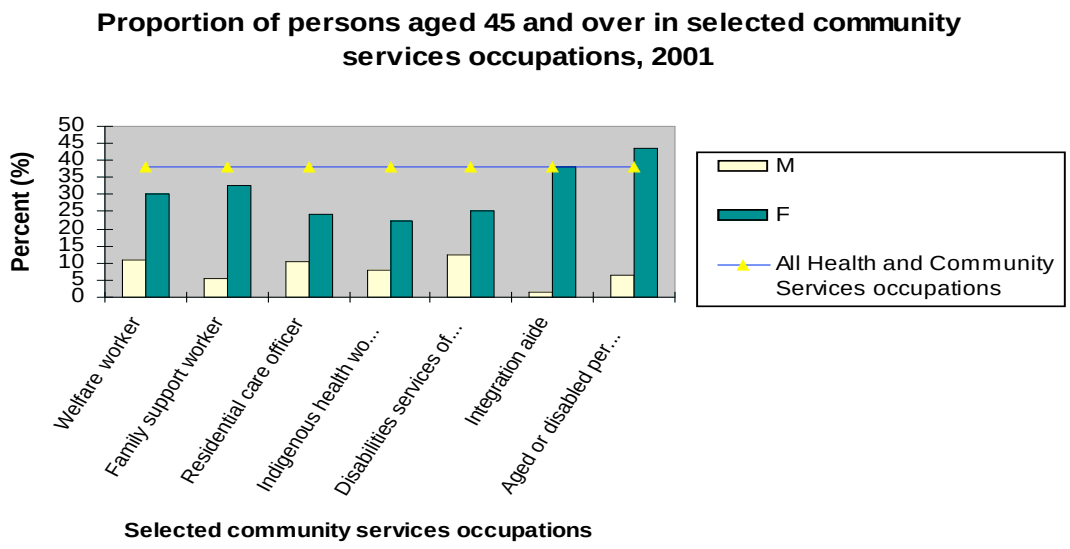
Similarly, in Figure 4 (next page), in the community services area, the largely female integration aides and aged/disabled personal carers have a high proportion of older workers (39.62% and

50.13% respectively), with 37.96% and 43.66% females respectively, whereas other community services workers have a low or below average proportion of older workers (37.97%).

The increased participation of female workers 45 years and over in the health workforce is also part of an overall pattern of increased workforce participation within Australia by females in this age group (Department of Parliamentary Services 2005).

A likely decline in the number of health and community services workers as older workers retire, and an increase in the number of older people in the population, places pressure on the capacity of the health labour force.

Figure 4: Employees aged 45 and over in selected community services occupations



Source: ABS, Census of Population and Housing, 2001 and Australian Institute of Health and Welfare 2003: Health and Community Services Labour Force 2001 (A14 & A15).

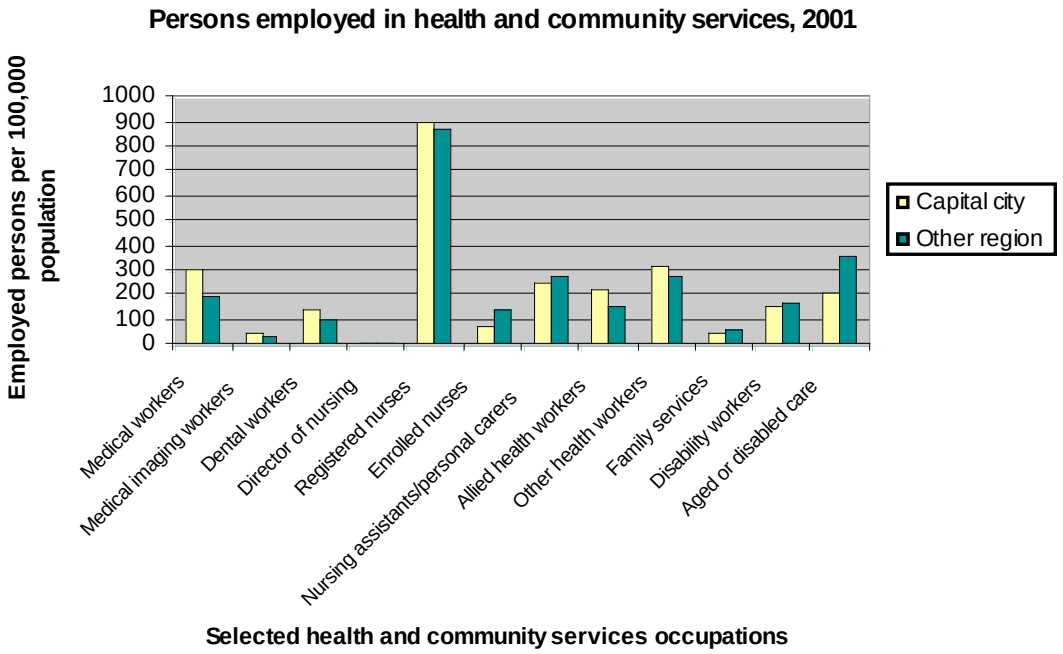
Geographical location of the health workforce

The provision of health and community services outside the main population centres has been subject to increasing attention over recent years. However, access to a wide range of health and community services workers, particularly medical specialists and other services relying on infrastructure and services of hospitals, may be limited in rural and remote areas (Australian Institute of Health and Welfare 2004, p 262). This finding is supported by the Productivity Commission (2005), who express particular concern over the lack of access to health workers by Indigenous communities. As indicated in Table 4 (see Appendix), the majority of health workers work in capital cities. Figure 5 (below) shows that there are more registered nurses per 100,000 of population than other health occupations, with 911 per 100,000 population in capital cities and 874 in other regions.

The ratio is reversed for aged/disabled personal carers and enrolled nurses and. For example, 363 per 100,000 population of aged/disabled personal carers were employed in other regions compared with capital cities (209 per 100,000 population); and 151 per 100,000 population enrolled nurses were employed in other regions compared with 74 per 100,000 population in capital cities, (Australian Institute of Health and Welfare 2004, pp. 262–263). This suggests substitution of lower qualified workers for professionals may be taking place in rural and regional areas. When coupled with the decline in enrolled nurse numbers and the ageing of the workforce

noted earlier, this also suggests a need for investment in VET sector training in rural and regional Australia.

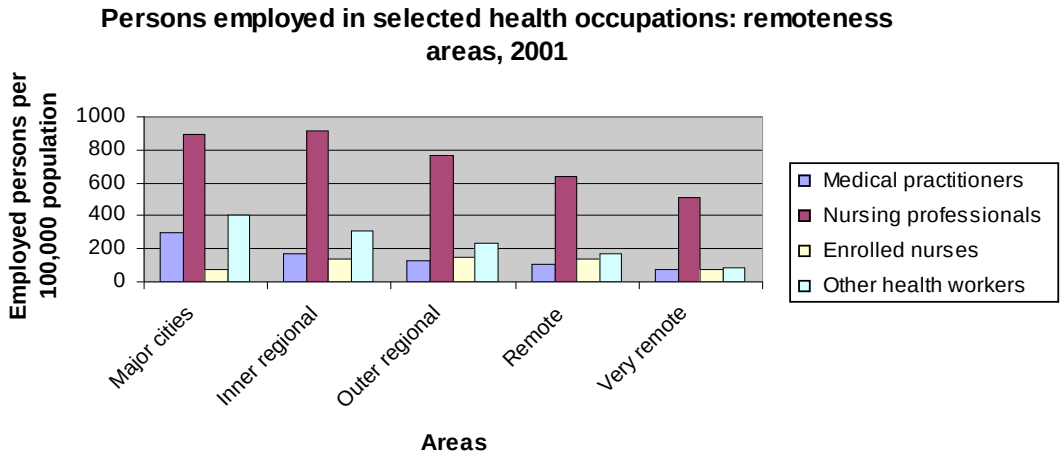
Figure 5: Persons employed in health and community services occupations: capital and other region, Australia 2001



Source: Health and Community Services Labour Force 2001 (A.29) from ABS and Australian Institute of Health and Welfare 2004

Statistics indicate that the rate of health workers per 100,000 population decreased with increasing remoteness (see Figure 6 below). This issue will also have an impact on the provision of health services for people in rural and remote areas.

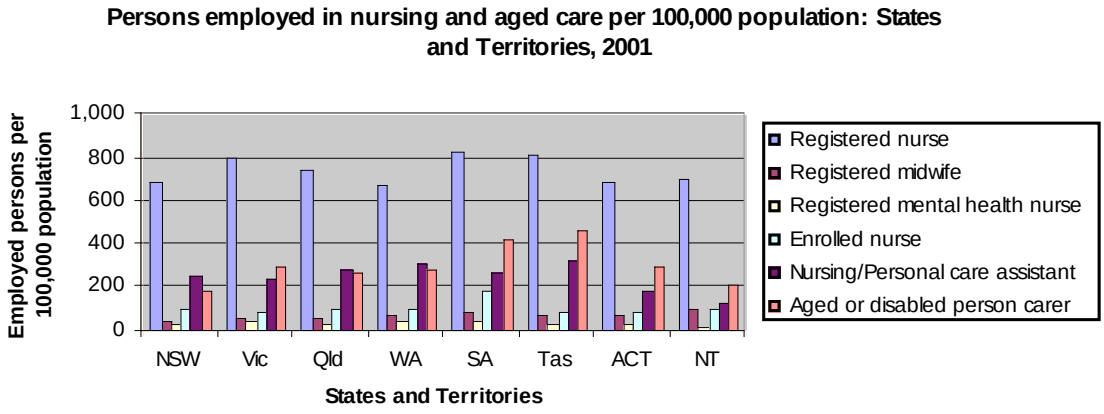
Figure 6: Persons employed in selected health occupations: remoteness areas, 2001



Source: ABS Census of Population and Housing, 2001 & Australian Institute of Health and Welfare 2003 (p. 263)
Note 1: Remoteness determined using Australian Standard Geographic Classification Remoteness Areas
Note 2: Other health workers include dental practitioners, pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors/osteopaths and podiatrists.

From a State/Territory perspective, Figure 7 (below) shows that Tasmania had the highest numbers of aged/disabled person carers per 100,000 of population, followed by South Australia. This reflects the older population in these two states.

Figure 7: Persons employed in nursing and aged/disabled care per 100,000 population, 2001



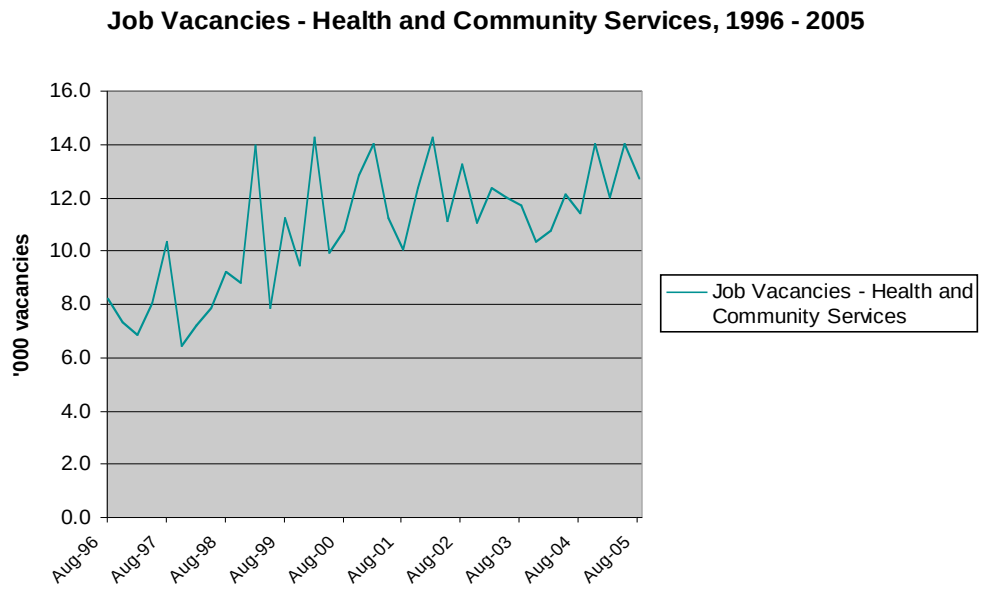
Source: ABS Census of Population and Housing, 2001 & Australian Institute of Health and Welfare 2003 (Table A.12)

In summary, there are proportionately fewer health workers to serve the population living in rural and remote areas. VET qualified workers make up a larger proportion of the rural and remote health workforce. This suggests that these workers are more likely to be working in situations with less ready access to health professionals, which may have implications for their skills needs (Productivity Commission 2005).

Persistent job vacancies and hours worked

The health and community services industry has experienced ongoing recruitment difficulties. Vacancy levels have increased over the last five years as indicated in Figure 8 below.

Figure 8: Job vacancies in all health and community services occupations 1996–2005



Source: ABS Job Vacancies, 2005 (Cat. 6354.0)

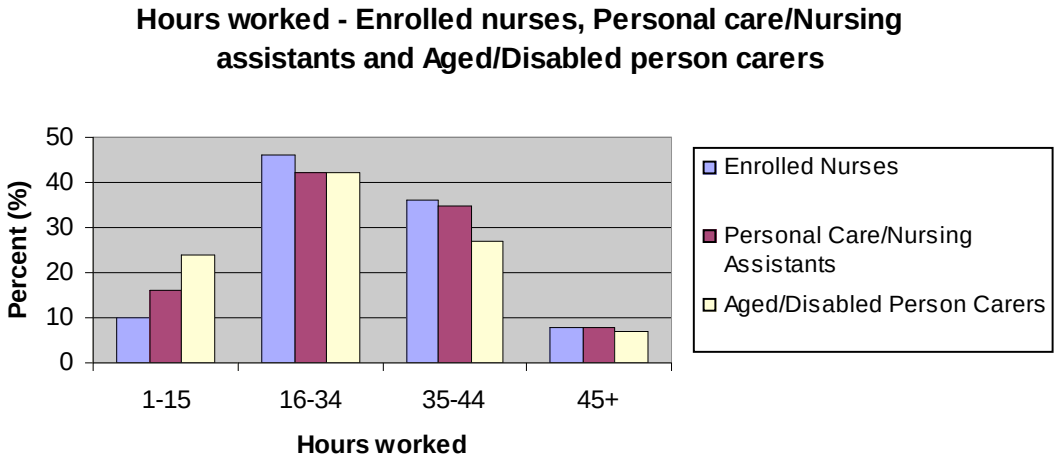
The increase in job vacancies can be explained in terms of factors such as the expansion of the workforce, career change, and early retirement. It can be interpreted as an indication of an imbalance between job availability and skills shortages.

In reference to job growth and employment vacancies statistics, the Department of Employment and Workplace Relations (2004, cited in Community Services and Health Industry Skills Council 2005a) has identified the widespread health skills shortages particularly for registered nurses (unemployment rate low; vacancies are 29.1% of the number employed), enrolled nurses (unemployment rate below average; 29.8% of those employed), medical practitioners (unemployment rate low; 36.1% of those employed), Indigenous health workers (unemployment rate low; 32.1% of those employed) and most of the allied health workers (including physiotherapists, dentists and medical imaging professionals). In rural and remote areas these shortages, particularly in the allied health area, are of increasing concern (Productivity Commission 2005). The rapid increase in the number of allied health assistants noted in Table 1 (see Appendix) suggests this may be a response to the job vacancies amongst allied health professionals.

Many of these occupations have traditionally had high vacancy rates, which have been attributed to the high level of female participation, as female workers tended to work part-time, often due to family commitments (Community Services and Health Industry Skills Council 2005a, p. 48). The full-time share of employment of registered nurses, enrolled nurses, and nursing/personal care assistants are respectively 52.6%, 56.1%, 47.6% (Department of Employment and Workplace Relations 2004, cited in Community Services and Health Industry Skills Council 2005a). Skill shortages are difficult to predict for some areas which are highly dependent on the participation of female workers, as many of those qualified tend to work part-time (Australian Institute of Health and Welfare 2003, p.12).

The trend towards working shorter hours for certain groups within the health and community services workforce such as enrolled nurses, personal care/nursing assistants, and aged/disabled person carers is evident in Figure 9 below. This reflects the casualisation of work opportunities for `these groups. The proportion working 16–34 hours has increased since 1987 whilst those working very long or short hours has gone down. Overall two out of every three workers worked part-time in 2001 (Department of Education, Science and Training 2001).

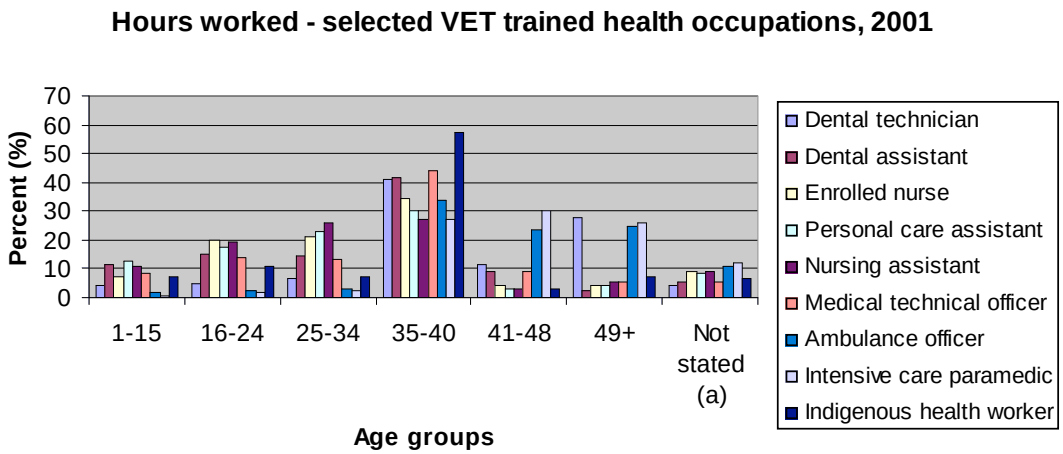
Figure 9: Enrolled nurses, personal care/nursing assistants and aged/disabled carers: hours worked 2001



Source: Data derived from Department of Education, Science and Training report 2001

In contrast to the large numbers of part-time workers in the female dominated occupations, over a quarter of ambulance officers, dental technicians, and intensive care paramedics worked more than 49 and over hours per week (see Figure 10 below).

Figure 10: Persons employed in selected VET trained health occupations: hours worked, 2001



Source: Health and Community Services Labour force 2001 (Table A.16 and A17), Australian Institute of Health and Welfare 2003

Among health professionals, there were also indications of long working hours. For example, 41.74% of medical practitioners and 43.96% of radiologists worked 49 and over hours per week (Australian Institute of Health and Welfare 2004, p. 261). The long working hours indicate that there is a strong demand for highly qualified professionals. There may be scope to upskill workers with lower qualifications to take on some of the tasks currently being undertaken by health professionals.

Poor retention and pay rates

Poor retention in some health occupations can be a significant factor causing workforce shortages, compounding the shortages related to the low full-time participation rate. At any point in time there will be just over half of the eligible nursing workforce active in nursing, either full or part-time. Further, many nurses are working outside the profession: in 2001 the number of employed persons who have a nursing qualification was 230,184 (Australian Institute of Health and Welfare 2003, Table A.9) and the numbers employed in the profession was 191,116 (171,615 registered nurses and 19,510 enrolled nurses) (Australian Institute of Health and Welfare 2003, Table A.6). This indicates that there are around 40,000 employed persons with a nursing qualification who are not employed in nursing. In the area of mental health, extremely high turnover rates have been noted (Community Services and Health Industry Skills Council 2005a, p. 54). Poor retention may be due to unsatisfactory working hours, relatively low remuneration, poor working conditions, structural constraints and highly specialised skills needs (Community Services and Health Industry Skills Council 2005a). Professional isolation, including the lack of ready access to support in day-to-day work and lack of professional development opportunities, is identified as an issue for health professionals (Heartfield et al. 2005), and may also contribute to poor retention of health workers.

Like many areas in the workforce, earnings play an important part in attracting and keeping workers in the health profession. In 2001, mean weekly full-time employee earnings in the health and community services were $792, below the all industry average of $881 (ABS 2001c). Full-time enrolled nurses receive $720 in average weekly earnings, well below the all industry average of $881 (Community Services and Health Industry Skills Council 2005a).

According to Richardson and Martin (2004), there are a few signs that the residential aged care labour market is in crisis, or even under serious stress, including difficulties in the recruitment of nurses. The study also found that registered nurses (who constitute more than 20% of the total) were less satisfied and older than other workers, and therefore were a vulnerable component of the workforce. The recruitment of skilled nursing staff in residential care services is even more problematic than for mainstream health services. Problems come from a lack of wage parity with the acute care sector, poorer working conditions, lack of educational opportunities and a clear career path, and the poor public image of aged care compared to acute care nursing. Retaining personal care workers in the aged care sector is also a potential problem, with low remuneration a factor—care workers and aides receive $582 per week. Richardson and Martin (2004) report that one in four personal care workers and one in five nurses employed in residential aged care have to be replaced each year, by their current employer or by the industry.

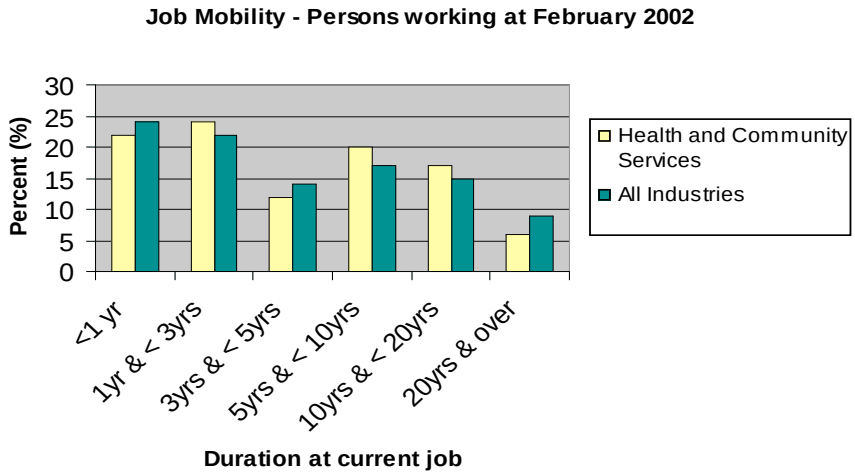
The Productivity Commission (2005) has identified a similar set of concerns for the other special needs health areas (mental health and disability services, Indigenous health workers), requiring targeted responses in terms of education and training, job design, career pathways, and the need to address workplace environment and remuneration factors that impact on recruitment and retention of staff. They also identify low training wages for Indigenous health workers, compared income support arrangements for this group, as an area requiring greater policy attention.

Labour mobility

The ABS labour mobility surveys (see **Table 5** in Appendix) report that 20 to 24-year-olds are the most job-mobile age group for both genders.

In 2004, 41% of employed people had been in their current job for more than five years and 24% for more than 10 years (ABS 2004). As Richardson (2005) notes, job mobility impacts on the worker's future wage path. A worker's decision to accept employment will be based not only on current wage, but on future job prospects. This means that jobs in expanding industries are more attractive than those in declining industries. Figure 11 indicates employee mobility in the health and community services industries compared to the average across all industries. The larger proportion of the health workforce who have been in their current job between five and 20 years is a reflection of the older age profile of the health workforce.

Figure 11: Persons working at current job, Feb 2002



Sources: ABS Labour Mobility, Australia, February 2002 (Cat. no. [6]209.0) cited in Community Services and Health Industry Skills Council report 2005a, p. 48)

Overall, there is insufficient data available on mobility and career change patterns within the health and community services sector, supporting the Productivity Commission's (2005) call for a comprehensive and consistent information base including contemporary and projected information on workforce entrants and exits.

Findings from the Productivity Commission (2005) report that health workers and health professionals who are recruited from rural and remote areas, and/or who undertake training in these areas, are more likely to remain in or return to rural and remote areas for work. Anecdotal evidence suggests that VET health workers, in particular, tend to stay in rural and remote areas whereas health professionals tend to be more mobile. This means that VET workers are a constant in many rural and remote health services, providing contextual information to new health professionals and acting as custodians of the local culture. The key implication of this for the health sector is the need to ensure VET health workers are adequately trained and supported to cope with their role in providing continuity at the local level.

Education and training

Entry to the health and community services workforce

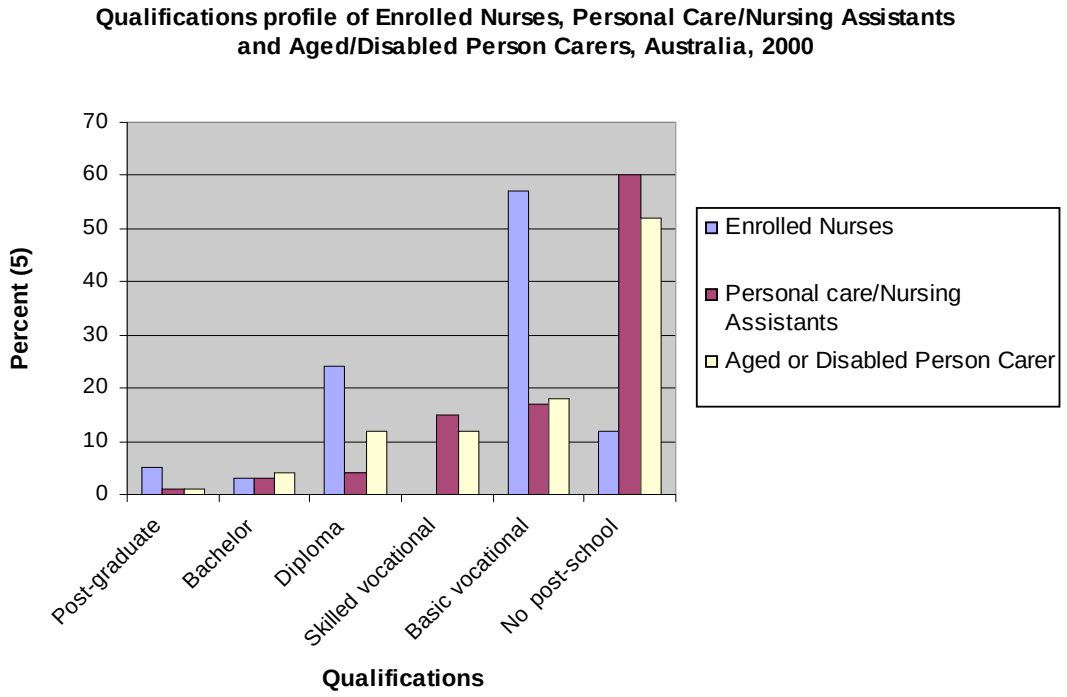
There was a 19% fall in the number of students completing an undergraduate or postgraduate health-related course in nursing between 1996 and 2001 (Australian Institute of Health and Welfare 2004, Table 5.30, p.271). However, it is likely that the number completing courses at either the undergraduate or postgraduate level will start to increase in a few years' time (Australian Institute of Health and Welfare 2004, p. 271).

Table 6 (see Appendix) shows that there were a large number of course enrolments in field of Health by qualification level for Australia in 2004 (107, 240), but very few course completions (7,057). There is very little further statistical data available. The need for such a comprehensive information base is identified by the Productivity Commission (2005).

According to the report from Department of Education, Science and Training (2001), in May 2000, 57% of those working as enrolled nurses, personal care/nursing assistants and aged/disabled person carers had a basic vocational qualification, 24% had attained a diploma and 12% had no post-school qualification (see Figure 12 which follows). Half of those without a post-school qualification were undertaking tertiary studies. A large majority of personal care and nursing assistants had no post-school qualifications (60%). More than half the people working as aged/disabled person carers had no post-school qualification (52%), however, about 17% of them were attending a tertiary institution.

The level of education and training provision in rural and remote areas has been a concern for some years, with the Productivity Commission (2005) identifying this as a key generic approach to workplace reform in the health sector. Specifically, the availability of quality work placements is a key part of training for health professionals (see, for example, Department of Health and Ageing 2005), and for vocationally-trained workers (see, for example, Country Education Project 2001). Reflecting this importance, there is evidence from within Australia and overseas that government bodies responsible for the education and training of health workers are developing a range of quality assurance strategies for work placement learning (see, for example, National Health Service Education for Scotland 2003/4). However, the shortage of health professionals within Australia cited earlier in the report, suggests that there is limited time and opportunity for clinical supervision of health professional students, and for supervision of VET health workers. This will have a cascading effect on the ability and willingness of health facilities to take students for VET placements, and on the ability of the sector to address skill shortages.

Figure 12: Qualifications profile of enrolled nurses, personal care/nursing assistants and aged/disabled person carers, Australia, 2000



Note: The Post-graduate category includes higher degrees and post-graduate diplomas; the Diploma includes undergraduate diplomas and associate diplomas. The percentages may not add to 100 because of rounding errors. (Source of data: ABS 2000, cited in Department of Education, Science and Training 2001)

Career pathways from VET to professional qualifications

As noted in the earlier section on job mobility, employees are more likely to seek positions which offer a career path. This has implications for the health industry in terms of ensuring articulation or training pathways, both within the VET sector, and between the VET and tertiary sectors. The current review of the Health Training Package within Australia (Community Services and Health Industry Skills Council 2005b) addresses the need for clearer qualification pathways, with the revised Health Training Package to streamline qualifications to avoid duplication and create career pathways, and develop common or generic units of competency to facilitate articulation between qualifications. Changes within the Australian health and community services sector are being informed by the Skills Escalator approach in the United Kingdom (Department of Health 2005), which uses a strategy of lifelong learning to facilitate staff to renew and extend their skills, and to move up the escalator, by offering a range of training entry and exit points.

For rural and remote areas in particular, research suggests that pathways are a powerful tool for recruitment and retention of younger health workers. Telfer (2004) notes the importance of targeting local young people who may not wish to leave their communities to pursue tertiary study, and engaging them in VET courses such as allied health assistants. She highlights the success of the Nursing with VET in Schools Programs in South Australia, suggesting that VET in schools models may have considerable potential for addressing health skills shortages, particularly in rural and remote areas.

How is industry and the VET sector responding to skills shortages in health and community services?

Given the invaluable contribution that they make, and particularly in the face of skills shortages in the field, there is surprisingly little research on vocationally trained health workers. As explained in the Tasmanian Government submission to the Productivity Commission, vocational education and training is seen to present a significant opportunity to provide skills for health care (Department of Health & Human Services 2005). The submission points out that some service delivery areas engage in vocational education and training of current staff with good results, but that there is a need for competency based, nationally accredited courses aligned to workplace needs (Department of Health and Human Services 2005).

In their 2004–2008 strategic plan (Community Services and Health Industry Skills Council 2004), the Community Services and Health Industry Skills Council identifies a range of strategies to facilitate an increased support for and uptake of VET within the industry. These include influencing the provision of VET funding to ensure support for flexible training, promoting the use and value of competency standards, and acting as a broker of information to stakeholders. Other research on training brokerage within the agricultural sector (Kilpatrick et al. in press) suggests strongly that brokers play a pivotal role in improving industry productivity and performance, by targeting training needs and matching them to the most appropriate training opportunities. In many cases, brokers help to develop new and customised training opportunities where existing training is not appropriate to client needs.

Systemic factors, such as rigid regulatory frameworks and management practices, and entrenched workforce behaviours, prevent the skills of a number of health workers from being adequately recognised and utilised (Productivity Commission 2005). This suggests that a number of changes are needed within industry and the VET system if health skill shortages are to be adequately addressed (Community Services and Health Industry Skills Council 2005a). For unqualified workers these included better processes for recognition of current competence, and increased opportunities for upskilling. The Productivity Commission (2005) suggests recognition of current competence and appropriate remuneration arrangements are particularly vital for Indigenous health workers, in order to encourage Indigenous participation in the health workforce. For workers who currently hold Certificate III and IV qualifications within the health sector, the VET system needs to focus on skill advancement (Community Services and Health Industry Skills Council 2005a). Linked to recognition of current competence, is the issue of volunteering, which is likely to gain increasing prominence as skill shortages increase within the health and community services sector. Specifically, the Productivity Commission (2005) notes that the provision of disability services relies heavily on volunteer carers. Research suggests that skills gained through volunteering could form part of the recognition of current competence process, or may already be recognised through completion of relevant accredited volunteer training programs. Statistics show that volunteering may provide a path to paid employment, particularly for young people in the 18–24 year age group, who volunteer to gain work experience and gain new skills (Volunteering SA Inc. 2001, cited in Harris & Simmons n.d.).

The recent and ongoing national review of the Health Training Package (Community Services and Health Industry Skills Council 2005b) is addressing the issue of skill shortage by developing new qualifications in key skill shortage areas such as enrolled nursing, by incorporating new qualifications and competency units to meet the needs of additional industry areas, as well as looking at strategies to enhance mobility within the health industry and between the health and community services industries. The review also indicates that national competency and qualification benchmarks are being used by employers in recruitment and selection of staff, as well as to improve job design and career pathways (Community Services and Health Industry Skills Council 2005a). This is important given that the creation of career options for health

service workers with alternative path options, modular competency gain and employment opportunities at each step, increases the attractiveness of these courses to potential entrants to the workforce (Department of Health & Human Services 2005).

A range of strategies is being adopted by health stakeholders to address skill shortages, including scholarships funded by health departments, universities and other organisations to encourage health workers to undertake study. Particularly relevant to the current project is the increasing focus amongst allied health practitioners and policy makers across Australia on harnessing the potential of allied health assistants in addressing workforce shortages. Most States/Territories are exploring the formalisation of vocational training and supervision for allied health assistants, and the need for greater clarity in job classification, role and responsibilities (see, for example, Lowe 2003 re Western Australia; Watson 2004 re the ACT; Telfer 2004 re South Australia). As Watson (2004) notes, this initiative 'also has the potential to raise the skills of existing workers, increase youth employment and assist mature-aged people returning to the workforce' (p. 6). The issue is also being addressed nationally as part of the Health Training Package review (Community Services and Health Industry Skills Council 2005b).

The issue of funding for the development and implementation of innovative solutions to skill shortages is always high on the agenda. Certainly within rural Australia, evidence from the literature (see, for example, Goodale & Lin 2005) suggests that Regional Health Services funding has been instrumental in facilitating the development of a number of solutions. However, submissions to the recent Productivity Commission review (2005) highlighted the need for increased funding for the development of further VET health worker courses, with distribution based on the identified needs of those jurisdictions with skill shortages. This will enable jurisdictions to plan services with greater certainty regarding probable staffing supply and skill mix (Department of Health & Human Services 2005).

Coupled with increased funding and reforms to the VET system, the Productivity Commission (2005) proposes a multi-faceted approach to addressing skill shortages, including training more health workers, realigning existing workforce roles and creating new roles, increasing retention and re-entry rates for qualified workers, the establishment of national health workforce accreditation and registration boards, and the establishment of a health workforce improvement agency to support, facilitate and evaluate local innovations that have national significance. These measures will need to be underpinned by systemic changes to facilitate better coordination of Australian and State/Territory government responsibilities for health care, and education and training.

Models that address skills shortages

Clearly there is a need for innovative service delivery and training models to help reduce health skill shortages. These same issues are also being addressed internationally (see, for example, Department of Health 2005 re the Skills Escalator approach in the United Kingdom; Chapman et al. 2004 re allied health innovations in California). Such models are likely to focus on creative recruitment and outreach strategies for potential employees, development of training and accreditation for new industry areas, and increasing employee retention and job satisfaction through appropriate professional development and other support services (Chapman et al. 2004).

A search of the literature yielded a relatively small number of specific models for training health care workers. These models were found through conducting searches of relevant education and health databases (including A+Education via Informit, DELTAA via Informit, ERIC, ProQuest Education Complete and CINAHL), a range of online education and health journals, and through internet searches. Search terms included keywords such as vocational education and training, skills shortages, innovative models and health workers. The small but increasing number

of examples relevant to this paper suggests the need for further research into this field. In particular, a number of emergent models are either still in the implementation phase, or have not yet been formally evaluated.

Two overarching themes emerged from the literature: use of a partnership approach to address skill shortages, and targeting disadvantaged groups for training and employment in health and community services occupations. At a national level the partnership approach is being promoted through the ANTA National Skill Ecosystem project (ANTA 2005). Of relevance to the health industry is the demonstration project currently being undertaken in New South Wales by the Community Services and Health Industry Skills Council and Central Coast Health–Mental Health Services, as part of the skills ecosystem project (ANTA 2005). The project is studying mental health services in the Central Coast as a skill ecosystem, in which a range of strategies will be identified and implemented to improve productivity and better use of limited resources, by facilitating greater collaboration amongst mental health services. These strategies will include, but will not be restricted to, training solutions. Partnership approaches where health providers work with communities are noted as particularly relevant in rural and remote communities, where access to resources is limited (Cunliffe 2004). The Katherine Regional Allied Health project described by Cunliffe relies on creating linkages between health providers, other organisations (such as schools), and community members (through the employment and training of local community-based health workers).

At a national level, there is a focus on addressing unemployment and underemployment issues amongst disadvantaged groups of potential employees, such as the disabled, those over 45 years of age, and those from culturally and linguistically diverse (CALD) backgrounds, by targeting them for training or retraining to fill skill shortages in the health and community services sector (Department of Education, Science and Training 2003). As a result of research funded by the Department of Education, Science and Training (2003), the Community Services and Health Industry Skills Council identified a range of barriers that prevented these target groups from accessing employment, and provided recommendations for facilitating their participation in the health workforce. Key recommendations included more appealing industry marketing, encouraging employers to actively recruit employees from these target groups, ensuring adequate funding is available to support training for these groups, and focusing on males in the over 45 years age group, as this group is identified as more resistant to considering a career in the health and community services sector. This includes promoting men in non-traditional roles, and individually tailoring bridging courses for this sub-group.

Following this broad overview, the review then focused on identifying and analysing specific models developed to address skills shortages. Two broad categories of models were identified: those which focused on upskilling current employees to create a career path, and those which focused on training programs for new entrants to the health workforce. The issue of bridging programs for new and current employees is identified as a sub-theme. One of the most significant barriers to recruiting health workers, especially in high need areas such as remote Indigenous communities, is the lack of bridging programs to help potential students reach the minimum academic skill level for entry into the certification courses (Pashen et al. 2005). Stone (2003) supports this by suggesting that employment opportunities will only be available to those who have a command of fundamental maths, science and communication skills

Most models contain elements of successful vocational education and training programs such as flexible workplace arrangements, remedial education, careers counselling, supportive employers, financial assistance, appropriate funding structures, and a career ladder.

Creating a career path for existing employees

Most of these models share a number of common attributes: training creates opportunities for advancement, and there is evidence of job improvement and increased benefits and satisfaction for employees. In some models, the focus is broader and includes identifying, clarifying and formalising roles, standards of practice and training for VET health workers. A number of the models also describe how the success of the program is dependent on accessing appropriate funding. Funding comes from a variety of sources, such as government, employers, and unions.

For example, the Paraprofessional Healthcare Institute and Home Care Associates of Philadelphia: Training and Retention Program (United States Department of Labor 2000) addresses the acute shortage of skilled healthcare paraprofessionals, home health aides, certified nursing assistants and personal attendants. A partnership was established between Paraprofessional Healthcare Institute, a non-profit organisation which develops worker-owned cooperatives that offer training and retention programs for healthcare professionals, and Home Care Associates of Philadelphia, a worker-owned home health care agency providing paraprofessional job training and employment. The partners developed a model that is based on a four-week training program to increase the number of skilled workers, and create better jobs and career paths for workers, with a view to reducing staff turnover.

The 1199C Training and upgrading Fund: Career Ladder Program (Goldberger 2005) is a Philadelphia-based Practical Nursing program operated by a union-employer training fund, and provides positions for hundreds of nursing assistants and other entry-level health care workers. The program is geared towards part-time, entry-level working adults and is the only union-sponsored program in the country. It provides a free, intensive preparatory program to raise participants' maths and reading skills to the meet course entry standards. The preparatory program also teaches study skills, time management and critical thinking skills. There is also a well designed support structure to help ensure student success, with individual counselling, group tutoring, and literacy programs all available. The Fund running the program has plans to design and implement a nursing career ladder that articulates nurse's aide training to the Practical Nursing program to a Registered Nursing program, with the goal of aligning the curricula and shortening the total length of training.

In another example, the Community College of Denver has developed an innovative program to help address nursing shortages (Goldberger 2005). This program focuses on upskilling Certified Nursing Assistants and other entry-level (lowest skill level) workers to become Licensed Practical Nurses. One of the key features of the program is the Learning Lab, an intensive, 30 week remedial course designed to take students with low reading, writing, and maths skills up to the college entry level proficiency that is required for entry into the Licensed Practical Nurse course. The Learning Lab also includes counselling on life skills, time management and study skills, and tutoring support is available. On completion of the Learning Lab, students begin the Licensed Practical Nurse course. This program is a part-time, evening and weekend worksite program and participating employers provide classroom space, coordinate work schedules for participants, and help to pay for tuition. The course allows Certified Nursing Assistants and other entry level staff to advance from the lowest development skill level to college-level courses in half the time required in traditional development education, and creates opportunities for a career ladder for the students.

The Midwest Murchison Allied Health Assistant project (Goodale & Lin 2005) arose in response to an increased focus within Australia on the use of allied health assistants particularly in rural and remote areas, as discussed in the earlier section on how the industry and VET sector are responding to health skill shortages. It was funded by the Australian government under the Regional Health Services initiative. Specifically this model focuses on standardising the training offered to allied health assistants, to ensure quality and consistency of therapy services delivered

by allied health assistants, regardless of their location. Based in Western Australia, the project was undertaken collaboratively by the Midwest Murchison region and the Combined Universities Centre for Rural Health. Outcomes of the project include the development of a model of allied health assistant training that incorporates generic allied health assistant requirements but has the flexibility to accommodate local conditions and requirements as well. This has been adopted on a statewide basis, and is delivered by videoconference to rural allied health practitioners. Other outcomes include the documentation of designated roles for therapists, allied health assistants and managers, as well as the creation of minimum standards of supervision for allied health assistants and a process for monitoring supervision practices.

Training programs for new entrants to the health workforce and bridging programs

These models demonstrate a targeted approach to recruiting and training specified groups of new entrants, particularly those who are most likely to be disadvantaged in the labour market because of disability, low socioeconomic status, and/or low literacy levels, or because of ethnic and cultural background (e.g. Indigenous). Some are targeted specifically at the youth and young adult market (see, for example, Telfer 2004 re VET in Schools initiatives). The models are all customised to meet the learning and other needs of each target group, and include a range of supports to ensure a successful transition to the workforce, such as bridging courses, counselling and career guidance. Some are linked to employment outcomes, and offer a range of incentives to retain new entrants, such as incremental pay increases linked to successful completion of each stage of the program. Some highlight articulation of entry-level training with further training.

For example, the Goodwill Industries: Competency Evaluated Nurses Assistant Program (United States Department of Labor 2005) is both a bridging model and a training program for new entrants to the health workforce. It targets youth with disabilities or special needs, into the health care industry in Grand Rapids, Michigan. The program was developed through a partnership between Goodwill Industries of Greater Grand Rapids, who run the Competency Evaluated Nurses Assistant program, and Kent Intermediate School District, which refers high school students with special needs to the Competency Evaluated Nurses Assistant program. Participating students receive on-site training with a local health care provider. The training includes classroom instruction, practice sessions on mannequins, and repeated sessions working with the facility's residents.

The Workforce Alliance and Hospital Corporation of America: Licensed Practical Nurse Career Advancement Program (Goldberger 2005) is a partnership between the Workforce Alliance and Hospital Corporation of America and the local Workforce Investment Board. This career ladder program for residents of West Palm Beach, Florida was initiated to advance welfare recipients and other low-income adults into well-paying jobs. It is offered part time and is geared towards the needs of working adults. The Academy for Practical Nursing and Health Occupations, an accredited non-profit training institute, delivers the Licensed Practical Nurse program. A local literacy group provides remedial tuition. All participants in the program qualify as Certified Nursing Assistants and Patient Care Assistants within the first six months, enabling students to earn pay increases before reaching Licensed Practical Nurse status. These qualifications also serve as marketable credentials for students who do not complete the Licensed Practical Nurse program. The program also recruits Licensed Practical Nurses and Registered Nurses to serve as mentors to support and encourage trainees. Most students work at one of the sponsoring facilities as entry-level nursing aides and upon completion, are required to work at the facility for two years after getting a Licensed Practical Nurse license, as an exchange for their employers' financial contribution to their tuition.

An Australian example, the Mt Isa Rural Health School program (Pashen et al. 2005), addresses the problems that health services in the remote northwest of Queensland face in recruiting and retaining Indigenous health workers, despite the fact that 25% of the population is Indigenous. In response to this issue, the Mt Isa Centre for Rural and Remote Health developed articulated education programs designed to promote, recruit and facilitate participation by Indigenous people in the health workforce. Success of this initiative is illustrated by the increased numbers of Indigenous students successfully completing higher-level vocational qualifications (eight students in 2004 and nine students in 2005 completed Certificate IV in Primary Health Care, compared with no completions prior to 2004). There is also evidence that the program has been successful in supporting Indigenous students to continue with their studies (in 2005, one student was completing an Enrolled Nursing certificate and three progressed to Bachelor of Nursing studies).

Conclusion

Skills shortages in the health sector are a major concern for employers, governments, and the public. An ageing population is placing increasing demands on health and community services. The statistics indicate an ageing workforce, particularly in nursing and aged/disabled carer occupations, coupled with low numbers completing relevant VET qualifications. While the national shortage of enrolled nurses is of concern, there are indications that the increase in the numbers of personal carers and nursing assistants may be helping to address this shortage to some extent. However, there are clear indications that skill shortages within the health sector are set to worsen, and this heightens the need to identify and implement a range of solutions relevant to local needs and conditions.

Of particular interest is the increase in the number of allied health assistants to help address shortages of allied health professionals, and the work currently being undertaken to formalise their training, and to develop standards of practice and policy for this group. Other models likely to help address skill shortage amongst VET health workers focus on recruiting, supporting and training employees from a range of disadvantaged target groups, and also on providing career paths with opportunities for staff to expand their skills. Such models are underpinned by nationally recognised qualifications, but at the same time, each solution is targeted to a particular context in terms of the potential workforce and local need. Coupled with the potential of the volunteer 'workforce' within Australia, there are indications that these alternative solutions to skill shortages should be further explored and developed.

The statistics indicate that rural and remote areas rely on VET trained workers to a greater extent than capital cities, and are likely to experience the greatest skill shortages in health. Consideration needs to be given to a range of factors that will facilitate the development of innovative solutions to skill shortages, including increased investment in VET sector training in the industry, particularly within rural and remote Australia.

Methodology

Design of research

This section presents supplementary methodological detail to add to that given in the main report.

Stages of the research

The research was designed in four stages.

Stage 1 identified and analysed readily available statistics and literature on the structure of the national health workforce and perceived skill shortages in health. This stage also located and reviewed literature on perceived skill shortages in health in Australia in the last ten years to identify the skills perceived to be in short supply, the locations of the shortages, and the factors contributing to the perceived shortages, such as retention and wastage. The areas where skill shortage pressure is occurring and is likely to occur in the near future were identified from a descriptive analysis of the data and the literature, with input from the project reference group.

Stage 2 identified when and where skill shortages in health have been addressed with innovative and effective models. Models were identified from the literature and an internet and database search, supplemented by a request for nominations from key contacts in health. In this stage we:

- located and reviewed the literature and other information on innovative models for training and service delivery in health, including VET in Schools, return to the health workforce for those absent for some time (e.g. for child rearing), and retraining programs. Australian and international literature was reviewed.
- identified barriers and enhancers to training and innovative delivery, as well as criteria for good practice/features of effective models. These criteria assisted in identifying the models for Stage 3.
- contacted key stakeholders in health by email and asked them to nominate effective innovative models for consideration. Models that could be transferred to other contexts were noted for consideration for writing up as case studies in Stage 3.

We anticipated that around 200 models would be found, however only 74 were identified. The majority came from the literature and internet searches. Fewer than expected came from nominations by stakeholders, with an increase as a result of our presence at the Community Services and Health Industries Skills Council Conference, Brisbane, in June 2006.

In **Stage 3** we identified and reviewed innovative training and service delivery models that address skill shortages in health, from the literature and nominations of innovative and effective examples. Examples were restricted to those primarily involving VET qualified staff, and/or using the VET system to train staff.

The 74 models identified in Stage 2 were categorised in terms of the barriers and enhancers identified in Stage 2, the nature of perceived skill shortage pressure from Stage 1 and other characteristics such as health care specialisations and customer groups (e.g. Aboriginal and Torres Strait Islanders, aged, women, youth).

Fifty models which appeared to be effective in addressing the areas of skill shortage pressure from Step 1 were selected for further analysis. Information from public sources was used to write brief summaries. Where insufficient information was available, further information was sought by telephone and email from those responsible for the innovative training and service delivery models. To comply with requirements of the Human Research Ethics Committee (Tasmania) network, the identity of those who nominated models has not been disclosed.

Six of the fifty models were then selected for writing up as case studies. The project reference group assisted in selecting models that covered a diversity of situations and represented a range of innovative solutions. The cases were written up so as to assist others wanting to apply or adapt the models to their own contexts.

Stage 4 involved the preparation of this final report, to include an overview of areas of skill shortage pressure in health, the features that signal perceived skill shortages to stakeholders in health, barriers and enhancers to training and innovative delivery of health services, and implications of the findings for policy and practice.

Case studies

Using the criteria listed above, six case study sites were selected with the assistance of the reference group.

A VET in Schools model

A model detailing upskilling of enrolled nurses

An Aboriginal dental health worker model

An Allied Health Assistant training model

A mental health skills eco-system

An aged care skills eco-system.

To collect data for each model, we contacted 3 or 4 representatives from relevant stakeholder groups by email and telephone and provided them with Information Sheets on the project as required by the Human Research Committee (Tasmania) Network. Having obtained their written consent to participate, and approval to name the relevant organisations, we then telephone-interviewed representatives for up to 30 minutes. Interviews were audio-recorded and transcribed. Where written documentation was available, it was used to supplement interview data. The case studies were written with a view to providing user-friendly access to the processes involved in developing and sustaining the model, including barriers and enhancers. They were then sent back to participants for checking and amendments were made accordingly.

Models

Summary of 50 selected models

The majority of models are Australian. Those marked * are overseas models, from either the UK or USA.

1. Training only

Non-targeted training

(1) Healthcare assistant training in Ireland*

(2) Illawarra aged care online – a model of blended delivery

Targeted training

Youth

(3) Education and training reform for the future (ETRF) health project – Healthy futures

(4) Illawarra Institute of TAFE New South Wales Shellharbour College VET in Schools nursing program

(5) Riverland VET in Schools nursing program (part of the national Aged Care targeted industry project) *[SEE SEPARATE CASE STUDY]*

(6) School based New Apprenticeships dental assistant program

(7) St George Hospital Sydney VET in Schools

Special needs groups (Indigenous/ethnic, low socio-economic status, rural and remote, older workers)

(8) Allied dental adult personnel training program

(9) Allied health rural distance education: Planning and implementation model

(10) Booroongen Djugun College VET in Schools health care studies program

(11) Brotherhood of St Laurence training and recruitment model for aged care: A partnership between industry and providers

(12) Central Australian Remote Health Development Services Aboriginal Health Worker Training

(13) Customising Aboriginal Health Worker training to a remote community

(14) Developing Aboriginal and Torres Strait Islander health workforce

(15) Explore careers in health through training and education (ExCiHTE) program

(16) Innovative pathway to increasing the supply of Aboriginal and Torres Strait Islander workers in the Community Services and Health industries

(17) Jewish Vocational Services health tech gateway to health careers*

(18) Job Corps certified nursing assistant training*

(19) Mature aged workers giving in care (MAGIC) program

(20) RSL Veterans Retirement Village

(21) Sectoral employment initiative: Good Faith Fund*

(22) Step Up Pathway: Remote and rural nursing education

(23) Training rural and remote first aid volunteers using blended learning

Other (the existing health support workforce, those returning to the workforce after an absence)

(24) Return to practice program for nursing staff at Central Coast Health

(25) School at Work program – hiring from within*

(26) Skills for Growth program

2. Job and/or workforce redesign and training

Upskilling and providing career pathways for existing workers

(27) Aboriginal Health Worker Oral Health Training program *[SEE SEPARATE CASE STUDY]*

(28) Aboriginal sports massage program

(29) Care supervisors

(30) Career ladder mapping project*

(31) Certificate IV allied health assistant (physiotherapy)

(32) Churches of Christ Care competency framework

(33) Creation of new stroke support position*

(34) Enabling role and supervision of administration of medication by home helps*

(35) Existing worker traineeships in aged care

(36) Introduction of endorsed enrolled nurses in haemodialysis units *[SEE SEPARATE CASE STUDY]*

(37) Midwest Murchison region allied health assistant project 2003-2004

(38) Patient transport service, Taree New South Wales

(39) Top End Aboriginal mental health worker program

(40) Upskilling aged care workers to nursing qualifications in workplace

(41) Western Australian Country Health Service allied health assistant training initiative *[SEE SEPARATE CASE STUDY]*

Mobility across health roles in line with multi-disciplinary team-based approaches to care

(42) Generic patient safety education framework

(43) Tele-check mental health training program

Creation of new health worker roles

(44) Katherine regional allied health project

(45) Medical assisting national qualification

3. Holistic approach

(46) Better skills, best care

(47) Health commons approach to oral health in New Mexico*

(48) New South Wales Central Coast mental health skills ecosystem *[SEE SEPARATE CASE STUDY]*

(49) Queensland aged care skill formation strategy *[SEE SEPARATE CASE STUDY]*

(50) Queensland supply chain project

1. Training only models

(1) Healthcare assistant training in Ireland

Location/scope	Republic of Ireland
When and why was the model set up?	To develop and deliver standardised training to previously unregulated and untrained healthcare assistants, who are increasing in numbers as skilled nurse numbers decrease. Prior to the development of this training, there was no statutory requirement for these workers to receive training, and any training delivered depended on the healthcare setting in which they were employed. The model focuses on developing nationally accredited training and supervision of healthcare assistants to ensure that safety and liability issues relating to delegation by nurses to healthcare assistants are fully covered.
VET health skill shortage area(s)	Healthcare assistants
How does it operate? (i.e. who is involved, what do they do?)	A six-month training program for healthcare assistants was developed by the Department of Health and Children in Ireland in 2000, and piloted in 14 hospitals and community care settings with 273 healthcare assistants. Training was accredited using the national Further Education and Training Accreditation Council competencies and learning outcomes. Courses were delivered flexibly, using teaching staff and clinical assessors at each pilot site. Content was in line with basic nursing education and closely linked to the needs of service. The course developed a broad range of vocationally-specific skills and provided general theoretical understandings. Participants were required to have basic literacy skills and a desire to undertake the course, but there were no other prerequisites. Healthcare assistants continued to work while undergoing training.
How do you know the model has been successful in addressing a skill shortage? (evidence)	An evaluation of the model suggests that completion of the training improved the confidence, motivation and performance of healthcare assistants, and provided pathways to further training (e.g. some healthcare assistants who had completed the training were considering applying for entry into nurse education). Recommendations from the evaluation included the need to further refine the training program based on feedback received, and to increase delivery throughout the Republic of Ireland.
Barriers and enhancers to setting up the model	Variable levels of preparation for teaching staff and clinical assessors, depending on the site. This included differing levels of understanding of the assessment criteria. Most thought that the program was too short for the amount of information that needed to be covered, especially as healthcare assistants continued to work while completing the training. Another barrier was an increase in workload for teaching staff and clinical assessors, who undertook these roles in addition to their regular duties.

Source: McKenna, H, Keeney, S & Hasson, F 2005, 'Views on the ground: Teaching and clinical assessors' views on vocational training for healthcare assistants in Ireland', *Journal of Clinical Nursing*, *14*, pp. 426-434.

(2) Illawarra aged care online – a model of blended delivery

Location/scope	Illawarra region, New South Wales.
When and why was the model set up?	The program was developed to meet the urgent need and escalating demand for accessible quality training for aged care workers.
VET health skill shortage area(s)	Aged care workers
How does it operate? (i.e. who is involved, what do they do?)	This generic training model, developed by Illawarra Institute of TAFE in consultation with various aged care facilities, delivers Certificate III in Aged Care Work. It comprises blended delivery options: online coursework, work-based learning, and offline conferencing. Supporting materials include reading notes and video footage on various aspects of aged care practice. A number of the course development staff also work part time in the health industry, which ensures relevance of materials to the workplace. The program is for entry-level and existing employees. Units are aligned to national training package competencies, and include personal care, cross-cultural diversity and senior first aid. Online activities are based on real aged care scenarios. Learning communities are built online and in the workplace, using strategies such as real time online chat sessions and email and forum, to discuss issues in aged care within Australia. Materials are recognised as quality eLearning resources. Individual colleges that form part of the Illawarra Institute of TAFE will recruit their own students and customise course delivery to suit individual and group requirements (e.g. greater focus on online delivery in rural and remote areas).
How do you know the model has been successful in addressing a skill shortage?	It is too early to produce evidence of course success, as materials are still being developed and trialled, with the first trials commencing in July 2004. Feedback from students is incorporated into subsequent course offerings.
Barriers and enhancers to setting up the model	The main barrier was the lack of more advanced technology skills amongst course development staff from the nursing and welfare areas. To overcome this barrier, staff were provided with development opportunities and assistance from instructional designers, which was a fairly lengthy process. The result was course materials characterised by rich learning experiences.

Source: Project information presented at Community Services and Health Industry Skills Council conference in 2005, and accessed on 12/1/06 at http://www.cshisc.com.au/docs/upload/Post-ConfPack2005-GuidetoSpeakersandPresns.pdf

(3) Education and training reform for the future (ETRF) health project – Healthy futures

Location/scope	North Brisbane area
When and why was the model set up?	The model was set up to develop pathways for students into the health and aged care industries, the third largest employer in north Brisbane. Australia's ageing population and well documented skills shortages in the sector were other reasons for this industry being targeted in the State Government's Skills Formation Strategy (see case study on Queensland Aged Care Skills Formation Strategy).
VET health skill shortage area(s)	Health and aged care workers.

How does it operate? (i.e. who is involved, what do they do?)	As part of the Education and Training Reforms for the Future project, school districts and their communities develop District Youth Achievement Plans, reflecting conditions in their local environment as well as the factors that influence how well young people make the transition from school to further education, training and work. Within these Plans are a number of specific projects designed to address these local issues. The Education and Training Reforms for the Future Health Project is one of those initiatives for the Brisbane North and Brisbane Central and West Districts. One of the aims is to establish a relationship between employers in the industry and schools, to develop formal structured pathways for students into a range of industry specific vocations. Generally, most students do not automatically consider the Health and Aged Care industry as a likely or preferred source of employment. Similarly, industry has not extensively looked to the youth market when recruiting, especially in the area of casual and part-time employment. The main focus is Year 10 (2005) students, but Year 11 are also considered. Both students aiming for a university entrance score and VET students in all schools are eligible. Employers are Masonic Care Queensland and the Prince Charles Hospital Health Service District. Minimum outcomes for students include: Exit with statement of attainment; Start on an industry qualification; Experience in the Health and Aged Care Industry; Valuable networking/contacts. 19 students accepted placement offers (16 of these in aged care facilities, doing 4 units from Cert III Aged Care Work; the others were in kitchen, wards and diversional therapy). Commencing in January 2006, successful applicants in 'nursing' roles began their one-semester placement, one day per fortnight, also undertaking Certificate III Aged Care through Brisbane North Institute of TAFE in alternate weeks. On completion of this first semester, student options include securing a traineeship, gaining part-time employment, continuing with the placement, completing the Certificate III qualification, or exiting the program with a statement of attainment.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The idea that the Health and Aged Care Industry sectors are a rich source of career options, has been planted in the minds of hundreds of students across north Brisbane. Pathways into the industry have been identified and promoted to schools in two districts. An articulation agreement for entry into nursing degree program has also been secured. 13 of the 19 students who commenced the program have accepted School-based Traineeships with their respective employers. Both health care employers are keen to evaluate the successes of this project with a view to incorporating it into their future recruitment strategies. Succession arrangements are being finalised with Local Community Partnership organisations to take the program into 2006/7.

Barriers and enhancers to setting up the model	Restricting the project to only one hospital & one aged care facility meant many schools in the District could not readily access suitable transport to these facilities, so their participation was mostly ruled out. The eight schools initially targeted soon proved too limited a group to attract sufficient student interest. Inflexibility of senior school timetable in many instances inhibited students taking one day per week away from classes etc. Lack of awareness of the varied career opportunities in Health and Aged Care. Health institutions had existing commitments to Universities with regard to Student Nurse placements. Staff were already 'stretched' with work experience placements, school visits etc. On-line or more flexible delivery of Aged Care units would have allowed more resident/patient contact.

Source: Nominated model.

(4) Illawarra Institute of TAFE New South Wales Shellharbour College VET in Schools nursing program

Location/scope	Illawarra region of New South Wales
When and why was the model set up?	The model was part of the national Aged Care Targeted Industry Project. A partnership was established five years ago between Illawarra Institute Shellharbour College of TAFE, one local aged care facility and schools in the region. Its purpose is to provide training in aged care specifically Certificate III in Aged Care Work for year 11 and 12 students to give them a head start into nursing and aged care careers. A second facility has since joined the program. Successful students graduate with Certificate III in Aged Care Work, six units towards their High School Certificate, and the opportunity to work part time in the aged care facility.
VET health skill shortage area(s)	Nursing assistants in aged care sector
How does it operate? (i.e. who is involved, what do they do?)	The 18 month course was developed by Illawarra institute, Shellharbour College of TAFE Nursing Studies section, and is delivered in partnership with the Warrigal Care Group of Aged Care Facilities, the Illawarra Retirement Trust and the Department of School Education. Originally the program was developed with the support of the government-funded Enterprise and Career Education Foundation, which no longer exists. Students undertake 5.5 hours per week of class-based training as well as a block of one week at the end of the January school holidays, and six pupil free days. This training is delivered by TAFE staff onsite at the aged care facility. Attendance is negotiated with the school, to ensure students are not disadvantaged by participating in the course. Students also spend time with residents of the nursing home on a regular basis during this time, under the supervision of their teacher and are supported by nursing home staff as they integrate the skills learned in class. They are debriefed at the end of each day to ensure areas of concern are discussed and resolved. Time spent on the job increases as students gain experience and maturity, until part of every day is spent in the nursing home. This time is usually at the end of the day when the students can be of some assistance to the nursing home staff.

How do you know the model has been successful in addressing a skill shortage? (evidence)	On successful completion of the course, students are offered work in local aged care facilities as a nursing assistant. This provides local employment for young people and meets the needs of local employers in the Illawarra. The course is also effective in giving students a true knowledge of the requirements of a career in aged care and the culture of nursing. A number of students from the course have progressed into higher level nursing programs (e.g. Enrolled Nursing, Registered Nursing). The Shellharbour College VET in Schools nursing program was the first model of its kind in the State. Other, similar models are now offered throughout New South Wales by other TAFE Colleges and private providers.
Barriers and enhancers to setting up the model	Initially there was some difficulty promoting the program to schools. It was difficult for school career advisors to understand a program that was quite different from other VET in Schools programs. This was overcome by working with school career advisors and school visits to promote the program. The support of senior academic staff at TAFE, as well as support by the participating high schools, contributed to the development and sustainability of the model. The program also requires a special kind of teacher. In the Illawarra, the same teacher has taught all the students with great success.

Source: Nominated model.

(5) Riverland VET in Schools nursing program

[SEE SEPARATE CASE STUDY]

Location/scope	Riverland, South Australia (operating in four towns: Waikerie, Glossop, Loxton, Renmark)
When and why was the model set up?	The model forms part of a State government initiated Futures Connect program encouraging the development of VET in schools partnerships. The development of the Nursing Pathways Program in the Riverlands district in 2002 was driven by a state shortage of aged care and nursing staff, and community need to retain trained local aged care and nursing staff.
VET health skill shortage area(s)	Broad range of nursing and support positions aimed primarily at aged care sector
How does it operate? (i.e. who is involved, what do they do?)	The program features a partnership between TAFE South Australia Regional, four major secondary schools, and hospital and aged care facilities in the region. It is supported by the South Australian Department for Education and Children's Services and the South Australian Department of Health. Schools bear a proportion of the cost of training students. Coordination is provided by the schools' VET coordinators and the Coordinating Lecturer at TAFE's Renmark campus. Students complete Certificate III in Community Services Aged Care Work, incorporating TAFE coursework and on the job training in local health and aged care facilities. It is inclusive of students with different backgrounds and abilities, and from all locations within the region. The course is practical and encourages transferability of skills. There are regular meetings between TAFE and hospital personnel to ensure workplace learning tasks match requirements of course outcomes.

How do you know the model has been successful in addressing a skill shortage? (evidence)	A clear pathway to a nursing career, with articulation to aged care and Enrolled Nursing studies at TAFE, articulation and credit for nursing degree programs at Flinders University, and postgraduate study through flexible delivery. The Nursing Pathways Program exposes students to a nursing career pathway, who may not otherwise have considered this career choice. The model is seen as an example of best practice for ensuring skill retention in other industry areas, and won the South Australian Training VET in Schools Excellence Award in 2003. Over the four years of the program since 2002, 75 students have completed the first year. Three years of year two since 2003 have seen 26 students complete. Indications are that the program is proving successful in retaining qualified staff in this rural area, where it is important to understand the local culture and needs of the community. Local employment opportunities in aged care are optimised by participation in the program. Other regions within South Australia have requested information with a view to adapting the model.
Barriers and enhancers to setting up the model	Need to coordinate four different school timetables with TAFE classes and workplace learning. Prior to this happening, some students were missing mainstream classes and assessments. The program offers flexibility to students and employers, in terms of delivery of work placements, and in terms of offering broad workplace experience (e.g. in acute care and food preparation, as well as the focus area of aged care). There is a focus on keeping training costs as low as possible to ensure ongoing access and participation by students. The program is sustainable because of its high profile in the community, the level of commitment by education and industry, as well as parents and students, and because it is an embedded part of the schools' senior curriculum. Hospital and aged care facility staff are proactive in choosing experienced preceptors to work with students on the job. Cooperation of hospitals and TAFE in accommodating individual student needs and differences has been extremely important. Formal and informal feedback is sought from students, parents and partners, and changes are made as a result of feedback.

Source: Project information accessed on 21/2/06 at http://www.decs.sa.gov.au/docs/files/communities/docman/1/FC_RiverlandMurrayCluster.doc

(6) School based New Apprenticeships dental assistant program

Location/scope	North Brisbane.
When and why was the model set up?	2005. To prepare school students for work in an area of skill shortages. This is part of a project by Community Services and Health Industry Skills Council to develop a comprehensive communication strategy and regional development models to increase the uptake of School Based New Apprenticeship pathways in three broad sectors within the Community Services and Health industries: Health, Disability, and Children's Services.
VET health skill shortage area(s)	Dental assistant

How does it operate? (i.e. who is involved, what do they do?)	High school students from Mueller College complete Certificate III in Dental Assisting by the end of their Year 12 studies. Their school prepares them for their transition to the workplace with a vocational education certificate program and helps coordinate and support their School Based New Apprenticeships with local businesses. There is a School Based New Apprenticeship arrangement with one employer, one student, and a registered training organisation. Students do a minimum of 48 days on-the-job in Year 11 and 12, complete theory work in addition to this, either at school or during their time at the workplace. They can work one day a week or do two split shifts as well as some school holidays on a casual basis. Timetabling is modified to allow students to catch up on any schoolwork they miss. Work can be organised so that students complete a full school study program to allow them to gain a university entry score. The Sunshine Institute of TAFE is the registered training organisation. Training is by flexible mode, with workbooks, email and phone access to trainers and support. There is a career pathway to further study, e.g. Certificate IV in Dental Assisting or range of Certificate IV Health Technician courses.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Employer is satisfied with arrangements and would take other school based new apprenticeship students.
Barriers and enhancers to setting up the model	There is no one model that will suit all. Best practice principles should be used to work out what suits.

Source: Increasing the Take-Up of Australian School Based Apprenticeships Pathways in Community Services and Health Industries (forthcoming), Final Report by the Community Services and Health Industry Skills Council to the Department of Education Science and Training, Industry Pathfinders Project.

(7) St George Hospital Sydney VET in Schools

Location/scope	Sydney New South Wales
When and why was the model set up?	Began in 2005 as a response to feedback from work experience students that there was no vocational education course available in nursing while they completed their final years of high school. The St George Hospital therefore began its Nursing Studies Program to introduce students to nursing and a wide range of health careers.
VET health skill shortage area(s)	Enrolled nurses.
How does it operate? (i.e. who is involved, what do they do?)	The course is an example of innovation – it provides students with a pathway into nursing studies at university level that they can start while they are still at school, and at the same time provides practical experience in the workplace.

	Students who pass the course and complete the practicum can access a number of flexible entry points into nursing including: an Australian Qualifications Framework Statement of Attainment towards Certificate III in Assistant in Nursing; recognition of prior learning for two first-year subjects; and recognition of prior learning credit for the clinical practicum of Year 1 in the Bachelor of Nursing at university. Students will also have the opportunity to work at The St George hospital while studying for a nursing degree. Key partners are: the St George Hospital, New South Wales Department of Education and Training (Georges River College, Oatley Senior Campus), TAFE New South Wales, the Australian Catholic University. All students are interviewed before admission to the course to ascertain their suitability, people skills and academic levels, but also to address issues of study workload, as the course is done on top of the High School Certificate workload. Travel issues and safety are also addressed. The students attend the St George Hospital every Tuesday afternoon from 1.30 to 5.30pm where they experience a mixture of theory, delivered on-site by a TAFE teacher and fieldwork on a range of wards. Stage One of the course (Year 11) comprises 133 hours and consists of five modules from the Community Services Industry Training package and the Health Industry Training package as offered by TAFE. These are: Infection Control Policies and Procedures, Assist with Client Patient Movement, Senior First Aid, Communicate Appropriately with Clients and Colleagues, Participate in the Work Environment and (optional) Work Effectively in the Health Industry (can be taken if students have already gained Senior First Aid). Stage 2 (Year 12) teaches modules from Nursing 1, Bachelor of Nursing as delivered in the Registered Nursing degree at the Australian Catholic University. However, even if students do not achieve a high enough score to go straight into registered nursing, they will still get recognition of prior learning, allowing them to easily opt for Enrolled Nursing with what they have done. They have started on their pathway. Funding to New South Wales TAFE is via Technical and Vocational Education and Training, New South Wales Department of Education and Training.
How do you know the model has been successful in addressing a skill shortage?	18 Year 11 students (all female) from ten State, Private and Catholic schools in the St George/Sutherland/Canterbury area began the course and are on track to complete it before they finish Year 12 in 2006. Recruitment for the 2006 intake of Year 11 students has already begun. The St George Hospital expects the current group of students will all proceed to a Bachelor of Nursing.
Barriers and enhancers to setting up the model	None mentioned.

Source: Kennedy, G. 2005, Case studies: Aged care and nursing. VET in schools. A real taste of the industry, 2nd. ed., pp. 25–26, Australian Government Department of Education, Science and Training.

(8) Allied dental adult personnel training program

Location/scope	United States of America
When and why was the model set up?	The model was developed several years ago, based on a textbook prepared by an experienced certified dental assistant. It is currently being implemented across the United States by the American Dental Assistants Association. The distant learning self-study program was designed to offer an alternative to traditional, academic-based dental assisting programs, and is targeted at culturally diverse learners, as well as those who are working full time while studying, and those who are more comfortable with a non-traditional study program. The program provides a career pathway for these workers. It was developed at a time when the number of traditional educations programs for dental assistants had decreased in the United States, contributing to a national shortage of entry-level dental assistants. The program saves training time on the part of dentists, who provide clinical placement and supervision only.
VET health skill shortage area(s)	Dental assistants
How does it operate? (i.e. who is involved, what do they do?)	The Allied dental adult personnel training program (ADAPT) comprises a textbook and self-study program, developed to incorporate national dental assisting accreditation standards and program curricula. The self-study materials were developed using instructional design principles, and emphasise both theory and skill. For those courses with a clinical requirement, participants need to be affiliated with a dental office or similar organisation. The comprehensive chair-side dental assistant program takes approximately 12 months and comprises 37 courses. Successful participants graduate with an American Dental Assistants Association Certificate of Completion. Other options include completion of selected individual courses, as well as speciality courses in areas such as endodontic speciality assistant, pediatric speciality assistant and prosthetic speciality assistant. To reflect changes in the delegation of advanced functions to dental assistants, the program is also developing a set of professional development course options in advanced oral health procedures, which are subject to ongoing development to reflect changes in the workplace.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The article cited below describes the development of the program, rather than program evaluation. The program developer expressed confidence that the model would be effective in addressing skill shortages, because it was based on research findings regarding the reasons for shortages of qualified dental personnel, barriers to educational access, and effective instructional design and human resource development principles.
Barriers and enhancers to setting up the model	Although not stated in the article, inability of participants to find a workplace for clinical placements would present a barrier to program completion. The article does not mention program costs, which may also present a barrier.

Source: Novak, D. 2004, 'ADAPT: A new ADAA Allied Dental Adult Personnel training program: Meeting the challenge of dental assisting education', *The Dental Assistant*, Jan-Feb, accessed on 12/12/05 at http://www.findarticles.com/p/articles/mi_m0MKX/is_1_73/ai_113376832/print

(9) Allied health rural distance education: Planning and implementation model

Location/scope	Rural California
When and why was the model set up?	To address difficulties recruiting and preparing students for the allied health workforce in rural and remote areas
VET health skill shortage area(s)	Allied and auxiliary health workers (personal carers, aged carers, plus administrative support staff)
How does it operate? (i.e. who is involved, what do they do?)	Partnership between Regional Health Occupations Resource Center and California State Rural Health Association. Development of a distance education approach using the internet, to address staff shortages in allied health in 14 rural and remote counties. The program was developed after extensive needs analysis of health care providers, inventory of distance education and facilities available, and forums on distance education options in five regional areas. Courses included basic caregiver skills, medical assisting, plus a range of administrative support courses (e.g. medical terminology). Staff at community colleges were instructed on computer-assisted teaching techniques. Supported by funding from the Allied Health Workforce project 2001 - 2003.
How do you know the model has been successful in addressing a skill shortage?	Pilot course was successful in terms of encouraging adoption of distance education elsewhere in rural northern California, extension to other allied health fields and to other rural areas of the state.
Barriers and enhancers to setting up the model	Technical and financial barriers, and slow adoption of distance education techniques by community college staff.

Source: Chapman, S et al., August 2004, Allied health Workforce: Innovations for the 21st century, Center for the Health Professions, University of California, San Francisco; and California State Rural Health Association Regional Health Occupations Center, www.csrha.org and www.healthoccupations.org/rhorc/1/

(10) Booroongen Djugun College VET in Schools health care studies program

Location/scope	Kempsey, mid-north coast of New South Wales – a rapidly growing region, with a 14% Aboriginal population, and relatively high rates of Aboriginal unemployment and limited employment opportunities.
When and why was the model set up?	The model is part of a broader focus on providing adult education specific to the needs of Indigenous people in the region. Booroongen Djugun College, an independent community-controlled registered training organisation, was established in 1994 and offered Certificates in Community Care Nursing and Community Care Ancillary Services. These courses were offered specifically to respond to the Indigenous community's desire to care for the needs of elderly Indigenous people in the region. Once a pool of qualified aged care graduates from the College was available, the Booroongen Djugun Aged Care Facility was opened in 1997. The College and Aged Care Facility are co-located.

VET health skill shortage area(s)	Aged care workers at Certificate II and III levels
How does it operate? (i.e. who is involved, what do they do?)	The health care studies VET in Schools model involves Aboriginal students from the three local high schools attending the College one day per week. The day is structured as follows: class-based instruction in the morning; on the job training in the adjacent aged care facility in the afternoon supervised by college staff and aged care facility staff, completed by a return to the classroom to discuss and re-examine on the job experiences. The program includes different levels of health care studies, from a Grade 9 non-vocational taster course, through to fully accredited vocational courses in nursing and aged care for Grade 11 and 12 students.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Although not specifically devised to address industry skill shortages, this has been one of the outcomes of the model. Graduates from the College are in high demand and aged care is a growth area in the region, so successful students are likely to find employment both within the Booroongen Djugun Aged Care Facility as well as other facilities in the region. Other outcomes of the program have been the high rate of Indigenous students continuing with education and training beyond Grade 9.
Barriers and enhancers to setting up the model	Key features of the model that contribute to its success are its cultural fit (alignment of curriculum, delivery and pedagogy with local Indigenous cultural perceptions, values and needs); the community-based nature of the education and training; direct linkages between skill development and subsequent employment, and ability of the partners to find a balance between differing expectations of two cultures to ensure the desired outcome (jobs).

Source: Material from case study prepared by Jerry Schwab: VET-in-schools for indigenous students: Success through 'Cultural Fit', accessed on 12/12/05 at http://www.dest.gov.au/archive/Research/fellowship/docs/Jerry_Schwab/Jerry_Schwab.pdf

This program has also been modified to ensure relevance to the needs of local communities (e.g. Kimberleys). http://www.kamsc.org.au/documents/sohs_cert3.pdf

(11) Brotherhood of St Laurence training and recruitment model for aged care: A partnership between industry and providers

Location/scope	Victoria
When and why was the model set up?	The model was developed in 2002 to address difficulty in recruiting staff to aged care facilities run by the Brotherhood of St Laurence, and to provide employment opportunities to long term unemployed and unqualified people that are clients of local industry employment services.
VET health skill shortage area(s)	Aged care workers – personal carers
How does it operate? (i.e. who is involved, what do they do?)	The project is a partnership between the Brotherhood of St Laurence residential aged care services and industry employment services. It comprises a traineeship program, in which disadvantaged job seekers complete a Certificate III course in personal care in one of the Brotherhood's residential care facilities.

How do you know the model has been successful in addressing a skill shortage? (evidence)	In its three years of operation, 15 people have graduated with certificates, and 12 have gained permanent employment within the Brotherhood's aged care facilities. Disadvantaged job seekers were first offered a pre-employment personal care attendant program for 15 weeks before moving onto traineeships at aged care facilities.
Barriers and enhancers to setting up the model	None mentioned.

Source: Information presented at Community Services and Health Industry Skills Council conference 2005 and accessed at http://www.cshisc.com.au/docs/upload/Post-ConfPack2005-GuidetoSpeakersandPresns.pdf

(12) Central Australian Remote Health Development Services Aboriginal health worker training

Location/scope	Central Australia (north to Elliott, south to Finke, and to the Western Australian and Queensland borders)
When and why was the model set up?	To introduce competency based training in Certificate III and IV Aboriginal Health Work, and to assess existing Aboriginal health workers who had trained under the earlier Basic Skills model, against the new competencies. The introduction of competency based training prompted a number of experienced Aboriginal health workers to resign during the changeover period, contributing to staff shortages and the need to train further staff.
VET health skill shortage area(s)	Aboriginal health workers
How does it operate? (i.e. who is involved, what do they do?)	The training is provided to Aboriginal health workers by Central Australian Remote Health Development Services, a registered training organisation. Aboriginal health workers operate in a variety of settings, including large and small Aboriginal Community Controlled Health Organisations, or clinics operated either by the Northern Territory Department of Health and Community Services or Aboriginal Community Controlled Health Organisations in remote communities. Aboriginal Community Controlled Health Organisations are administered locally by a Board of local Aboriginal community members. Northern Territory Department of Health and Community Services clinics are administered from Alice Springs. Training needs to reflect the differing roles of Aboriginal health workers in different clinics. Rapid staff turnover in many clinics means that roles may change, while workers in large clinics might have more clearly specified roles. Roles are likely to include a range of clinical, administrative and other activities, such as patient transport, interpreting and client advocacy. In remote communities in particular, local Aboriginal health workers also act as cultural brokers, linking community members and medical staff. Training plans are developed for each participant, giving Aboriginal health workers the opportunity to work with educators to identify skill gaps and areas in which they were lacking in confidence. Training is delivered using a range of formats, including workplace delivery (usually in remote communities on a one-to-one basis), workshops on specific topics in Alice Springs or Tennant Creek, and one-to-one

	assistance in Alice Springs. Community based delivery was favoured by participants, educators and employers as it facilitated learning. Community based delivery is also important in allowing other medical staff to see the quality of support and training provided to Aboriginal health workers, which enhanced the role of Workers in the health team. This was supplemented by workshops held in regional locations, which reduced the isolation of Aboriginal health workers by giving them the opportunity to meet with others.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Evaluation of the model indicated an improved standard of performance (e.g. knowledge of latest techniques, better understanding of responsibilities under duty of care), increased levels of confidence of Aboriginal health workers in performing their role, improved career paths, and reduced stress levels. Evidence from employers showed that some of those who had completed Certificate IV were operating as sole practitioners, indicating effectiveness of the training model. In terms of increased confidence, two Aboriginal health workers went on to enrol in nursing studies, while six others indicated they were considering enrolling. For others, increased pay or improved community standing as a result of completing the training, boosted self confidence. A number of Health Workers had used their background and training to move into other health-related areas (aged care, mental health).
Barriers and enhancers to setting up the model	There are insufficient positions available at the higher level for Aboriginal health workers with Certificate IV qualifications, which can lead to worker frustration. One possible career path to be explored, is employment of those people as educators in the training program for Aboriginal health workers. Differing literacy levels of workshop participants caused problems and reduced opportunities for less literate Health Workers to participate. There was a need to increase the amount of time educators spent in communities, for training delivery, observation and assessment. Inconsistency in the quality of educators from Central Australian Remote Health Development Services. Enhancers were good communication and sharing of resources between Central Australian Remote Health Development Services and others, including employers. Most of the educators had worked in remote communities so had a good understanding of Aboriginal health workers and their environment, and delivered culturally appropriate training.

Source: Pam Collier Consulting November 2005, Report on an evaluation of Aboriginal Health Worker Training delivered by Central Australian Remote Health Development Services.

(13) Customising Aboriginal health worker training to a remote community

Location/scope	Remote Aboriginal communities in the Sandover region of Central Australia, located between Alice Springs in the south, Tennant Creek in the north, and extending east just over the Queensland border.
When and why was the model set up?	The model is broad and addresses a range of issues, not specifically health skills shortages amongst Aboriginal health workers. The report presents a case study of remote Aboriginal communities in Central Australia with a community-controlled health service. It identifies key features of a 'both

	ways' model of vocational education and training for health and other workers in these remote communities, that incorporates cultural control and respect for Aboriginal law and culture, with the development of skilled and literate people through vocational education and training.
VET health skill shortage area(s)	Aboriginal health workers
How does it operate? (i.e. who is involved, what do they do?)	The model is still evolving, but focuses on the development of culturally appropriate and relevant training for health and other workers, that complements locally-developed community development plans for the region. It seeks to introduce vocational education and training that is customised to the needs of this remote community, and questions whether an exclusive focus on nationally recognised and transferable qualifications for Aboriginal health workers is relevant or appropriate, given generally low literacy levels and the fact that Aboriginal people from remote communities are more likely to remain in their communities than their rural and urban counterparts. Some mature and experienced Aboriginal health workers have resigned from their positions due to lack of confidence and literacy skills required to complete Certificate III training, creating skill shortages and disruption for remote communities. Some of these positions have been filled by younger Aboriginal workers, who are better equipped to undertake vocational education and training at Certificate III level. However, this has caused cultural problems where younger workers are required to address the health needs of their elders. In addition to providing increased literacy support, other solutions are customising training packages to take into account literacy levels, and the possibility of introducing a new position/role that would allow mature Aboriginal health workers to continue in their culturally designated roles, but with different and less literacy-dependent accreditation. These workers would work alongside those with Certificate III accreditation. Such a role is not currently defined within the VET sector. The case study also identifies a number of training features that the health service is developing to meet specific community needs, including integrating younger trainees into workplace culture before expecting them to take on higher level responsibilities, ensuring that senior Indigenous staff and council members mentor younger trainees, and providing transparent, informal and opportunistic training on-site.
How do you know the model has been successful in addressing a skill shortage? (evidence)	This is a work in progress, with initiatives still being developed and implemented. Community members involved in developing and implementing strategies are confident that the emerging model of vocational education and training will deliver positive and sustainable outcomes, because it is culturally appropriate and fits the meaning and purpose of community life, in a way that previous training models did not.
Barriers and enhancers to setting up the model	At the time of preparing this case study, policy did not recognise that remote communities differ widely in their education and training needs. Implementation of innovative and customised training solutions in remote areas will require policy flexibility and change. An enhancer was that the health service has Aboriginal management that is recognised within Aboriginal law and that works closely with the Indigenous Health Council.

Source: Information from Kral, I & Falk, I 2004, *What is all that learning for? Indigenous adult English literacy practices, training, community capacity and health*, NCVER, Adelaide.

(14) Developing Aboriginal and Torres Strait Islander health workforce

Location/scope	Southern Queensland
When and why was the model set up?	In 2005 15 Aboriginal and Torres Strait Islander people began Certificate III Indigenous Community Services and Primary Health Care as part of an approach to training that will increase the number of health workers and improve health outcomes for Aboriginal and Torres Strait Islander communities.
VET health skill shortage area(s)	Aboriginal and Torres Strait Islander health workers.
How does it operate? (i.e. who is involved, what do they do?)	A collaborative partnership between two government departments, the Cunningham Centre, Queensland Health's Southern Rural Workforce Unit, and Southern Queensland Institute of TAFE is addressing the need for more trained Aboriginal and Torres Strait Islander health workers. The initiative for the program came from a senior Aboriginal and Torres Strait Islander Health Worker who approached the Cunningham Centre, which negotiated with Southern Queensland TAFE to combine resources and work collaboratively to deliver a program. The program aims to deliver an introductory qualification that ensures a student obtains the necessary skills to enter the field and be job ready. Seven students are currently employed by Queensland Health and five by community controlled health services. Three are presently unemployed. To facilitate community participation, local elders and members of the community were invited to attend a function at the commencement of the program. Training is delivered in 'block' mode (four times weekly attendance at the Toowoomba Campus) with site visits to urban facilities and vocational placement to expose students to a broad cross section of community and health settings and social issues that they would expect to encounter during employment in the field. Participants who are existing workers were eligible to undertake the Recognition of Prior Learning process, whereby evidence is provided by the student to demonstrate skills and knowledge to satisfy assessment criteria. Courses were clustered together in order to make the learning process more holistic and streamlined. The program will improve health outcomes for Aboriginal and Torres Strait Islander people by providing trusted and culturally appropriate services. It will also provide greater career opportunities for health workers already employed. The program also increases employment opportunities for the three unemployed students.
How do you know the model has been successful	Positive feedback from participants.
Barriers and enhancers to setting up the model	The majority of participants had not attended an educational institution for some time. Computer access and skills were also restrictions. As a result, flexible delivery model was considered inappropriate. The major disadvantage of the 'block' training program was the requirement for participants to travel. ABSTUDY provides financial assistance for travel and accommodation for participants who are not working, and at a reduced fraction for existing workers depending on their remuneration.

Sources: Nominated model.

(15) Explore careers in health through training and education (ExCiHTE) program

Location/scope	Ipswich, Queensland
When and why was the model set up?	The program's Taste Test Program began 2004; Orientation Program, 2005; Industry Placements, 2005. This is an Aboriginal and Torres Strait Islander career awareness and career education model with industry placements. The initiative arose in response to a number of factors including: higher than average youth unemployment in Ipswich, low student retention at school, a need to smooth the transition from school to work, and a need for health care employers to meet staff shortages. Initial scoping by the Nursing Initiative for Schools found a gap in programs aimed at raising awareness of health careers for Aboriginal and Torres Strait Islander students. The program aims to identify multiple pathways for students between school, further education and employment in the health industry.
VET health skill shortage area(s)	Health sector generally.
How does it operate? (i.e. who is involved, what do they do?)	Key partners: Australian Government, Department of Education, Science and Training, Queensland Health, Kambu Medical Service, Education Training Reforms for the Future (Ipswich District) Department of Employment and Training Education Queensland, Brisbane Catholic Education Office, Ipswich Region Schools Industry Links Inc, the Aboriginal and Torres Strait Islanders Corporation for Health Education & Training, Bremer Institute of TAFE. There were 30 students for Stage 1, Taste Test program, and 17 in Stage 2, Industry Placements plus TAFE course (Certificate I competencies from Community Services and Health Training Packages). This is to provide young people with broad career options and recognition of training provided. On the job training was at Ipswich Hospital and Kambu Medical Service. Funding sources: Ipswich Region Schools Industry Links Inc through Department of Education, Science and Training, Queensland Health, in-kind support, Education Queensland (Access to Pathway ETRF Grants), Increasing Vocational Learning Opportunities for Indigenous Students Program Department of Education, Science and Training.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Feedback has been positive. Queensland Health is committed to developing similar programs to this model in rural and remote locations, taking in local needs, and running it in St George, Roma and Charleville in 2005/6, in partnership with local community controlled health services. Queensland Health's Southern Zone Indigenous Workforce Development Officer says the 'Taste Test' program is groundbreaking in terms of developing a simple labour market building program. 'From our perspective it's actually engaging with the schools in a way that is sustainable. It is a program that can be implemented in any Health Service District in Queensland. The program effectively engages with government and non-government organisations enhancing relationships and strengthening partnerships. Aligning with national training reforms, Education and Training Reform for the Future Earning or Learning and in-kind support to develop and implement the program ensures this program is cost effective and produces outcomes for all parties involved.'

Barriers and enhancers to setting up the model	None mentioned.

Source: Kennedy, G 2005, Case studies: Aged care and nursing. VET in schools. A real taste of the industry, 2nd. ed., pp. 36-39, Australian Government Department of Education, Science and Training.

(16) Innovative pathway to increasing the supply of Aboriginal and Torres Strait Islander workers in the Community Services and Health industries

Location/scope	Victoria
When and why was the model set up?	2004. To increase employment opportunities for Aboriginal and Torres Strait Islander workers in the aged care industry.
VET health skill shortage area(s)	Aged care workers (personal care assistant), home and community care workers
How does it operate? (i.e. who is involved, what do they do?)	The program is ongoing, with outcomes from only the 2004 program available at the time of writing. It was developed and delivered by the Australian Centre for Workplace Learning, which is a registered training organisation. The program was endorsed by the Aged Care Association (Victoria) and received government funding from the Indigenous Unit of the Department of Workplace Relations. The program provided a combination of classroom learning provided by the registered training organisation, and workplace learning provided by host aged care or Home and Community Care facilities, including the Aboriginal Community Elders Service in Brunswick.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Sixty Aboriginal and Torres Strait Islander students enrolled, most of whom were newcomers to the industry, and 90% graduated with a Certificate III in Aged Care Work or Home and Community Care. This is acknowledged as a high completion rate for the target group. Most of them had previously been to TAFE but none of them had completed TAFE studies. Of those who graduated in 2004, 86% are still working in the aged care industry. Most students were found trainee positions with aged care facilities or Home and Community Care, and were offered ongoing employment on completion of their study. Because of success in Victoria, the model is expanding into New South Wales.
Barriers and enhancers to setting up the model	None mentioned.

Source: Project information presented at Community Services and Health Industry Skills Council conference 2005 and accessed on 12/1/06 at http://www.cshisc.com.au/docs/upload/Post-ConfPack2005-GuidetoSpeakersandPresns.pdf

(17) Jewish Vocational Services health tech gateway to health careers

Location/scope	San Francisco
When and why was the model set up?	To address the urgent need for entry-level allied and auxiliary health workers by providing a bridging course for potential job seekers without required skills for entry level positions, who require English and computer skills, and occupational training and support services.
VET health skill shortage area(s)	Entry-level allied and auxiliary health workers (clerical, technical, patient care).
How does it operate? (i.e. who is involved, what do they do?)	Program focused on low income residents of San Francisco, including social welfare recipients and those in low skill and low wage jobs. It comprises a 23 week health Tech Gateway Program to prepare participants for allied health career training at the City College of San Francisco. The course provides basic skills training in English proficiency, computer literacy, reading, writing and maths, and some basic instruction in medical terminology and resuscitation as well as career exploration. Participants who completed the course and who either sought employment or enrolled in allied health training courses at the City College of San Francisco, were also provided with additional resources such as career counselling, childcare, re-employment and career advancement services. Funded by Allied Health Care Workforce project 2001 – 2003.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The Program has supported 33 low income individuals to complete the basic skills coursework and various allied health training courses at City College of San Francisco. At a policy level, the program influenced efforts aimed at addressing unemployment and reducing workforce shortages that focus on basic skills training and support services for at risk individuals.
Barriers and enhancers to setting up the model	None mentioned.

Source: Jewish Vocational Services, San Francisco Project Director Elizabeth Young www.jvs.org or www.jvs.org/Training_HC.htm

(18) Job Corps certified nursing assistant training

Location/scope	A Department of Labor initiative across the whole of the United States of America
When and why was the model set up?	Funded by the Department of Labor, the model is a partnership focused on young people at risk, from 16 - 24 years of age. There are 110 Job Corps centres across the United States.
VET health skill shortage area(s)	Certified nursing assistants
How does it operate? (i.e. who is involved, what do they do?)	The model involves a partnership between a large aged care facility and Job Corps sites across Pennsylvania, Arizona, Florida and Illinois. Job Corps offers entry level health related training and accreditation to young people between 16 and 24, most of whom have not completed high school. Intensive training and support are provided in a residential setting. Instruction is self paced and individualised, and well suited to individuals

	who would have difficult succeeding in the traditional nursing education system. The aged care facility provides the on the job training component, and uses Job Corps as a recruiting source for entry level, certified nursing assistants.
How do you know the model has been successful in addressing a skill shortage? (evidence)	No information on this available.
Barriers and enhancers to setting up the model	None mentioned

Source: Pindus, N, Tilly, J & Weinstein, S 2002, *Skill shortages and mismatches in nursing related health care employment*, The Urban Institute, Washington DC, p. 37

(19) Mature aged workers giving in care (MAGIC) program

Location/scope	This was a Community Services and Health Industry Skills Council pilot program in Hunter Region New South Wales. A roll out strategy promoting and expanding the application of the pilot will target regional settings across Australia.
When and why was the model set up?	Trial model was implemented 2005. Integrated Care Management, a registered training organisation in the Hunter Region of New South Wales, was aware of skills shortages in a number of local community service sector organizations. Discussion with the Industry Skills Council led to the pilot program, which focused on a new way of recruiting workers.
VET health skill shortage area(s)	Aged care.
How does it operate? (i.e. who is involved, what do they do?)	The Program focuses on the placement of mature-aged workers in the Community Services Industry, specifically in the areas of Aged Care Work, Children's Services and Youth Work. The Community Services and Health Industry Skills Council was awarded an Industry Training Strategies Project Pathfinders grant from the Department of Education, Science and Training. The program uses New Apprenticeships as part of the solution, increasing participation of the target group in New Apprenticeships. The focus of the pilot was on recruitment. Local aged care facilities were recruiting from a casual pool, which was proving unsatisfactory. The pilot tapped into a wider market, offering information sessions on community services. There was an overwhelming response. There are 3 key steps in the process: Partnering with an employer, finding and screening potential workers, and conducting the group interview and training sessions. During sessions people were given information and a self-selection form. Some workshopping activities provided them with understanding of the job. They could leave if/when they decided it was not for them. At the end of the session the registered training organisation had a number of people

	who applied formally to do Certificate III 2-3 days a week of full-time training while completing some unpaid shifts: they very soon moved into employment as trainees on the full award rate. The key outcomes achieved in pilot phase included: strong partnerships with all involved in the process (employers, mature-aged candidates/trainees, JobNetwork/employment services staff). Resources were developed by the Industry Skills Council to support the implementation stage of the program, including a *Guide to Coordinating the MAGIC Program*, which emphasises the need for collaboration and coordination between key players in a region.
How do you know the model has been successful in addressing a skill shortage?	The pilot was considered successful. Residential aged care facilities have a workable way of getting new recruits through this process.
Barriers and enhancers to setting up the model	It was considered an enhancer that the recruitment process was open to all, and not limited to JobNetwork clients.

Source: Nominated model.

(20) RSL Veterans Retirement Village

Location/scope	Northern Beaches of Sydney
When and why was the model set up?	To address the issues of poor retention of aged care workers and previous lack of career structure in aged care
VET health skill shortage area(s)	Aged care workers, including assistants in nursing, and personal care assistants.
How does it operate? (i.e. who is involved, what do they do?)	The project is a partnership between RSL Veterans Retirement Village and South Western Sydney Institute of TAFE. The aged care facility places considerable value on education and training for its staff. The program delivers customised, flexible work based training to new and existing staff. Career development is enhanced because of the nature and size of the organisation. The program is offered to existing and new employees, and offers recognition of prior learning. It provides incentives and opportunities for people to join the aged care workforce who may not have previously considered this vocation (e.g. the facility will pay students' fees). This includes recruiting older people looking for a 'sea change'. The program offers a Certificate III in Aged Care. Participants must be employed full time by the RSL Veterans Retirement Village. The twelve month course is delivered fully onsite, comprising a ½ day per week workshop conducted by TAFE trainers, and 2 days per week with TAFE trainers working onsite alongside trainees. Participants work in their regular roles for the remainder of the time.

How do you know the model has been successful in addressing a skill shortage? (evidence)	The model has been successful in retaining aged care staff by providing a career path and encouraging further participation in education and training, including University study. The model has since been adapted several times for use in a range of other aged care facilities, to accommodate block release schedules and training preferences.
Barriers and enhancers to setting up the model	There are challenges involved in offering the same course to longer term staff with extensive knowledge, and to new staff with less knowledge. Strategies need to be considered for grouping people according to their experience.

Source: Nominated model.

(21) Sectoral employment initiative: Good Faith Fund

Location/scope	Rural Arkansas
When and why was the model set up?	Funded by a philanthropic foundation as a three year project to help low-skilled health workers advance in the workforce and to create systemic change.
VET health skill shortage area(s)	Certified Nursing Assistants
How does it operate? (i.e. who is involved, what do they do?)	The model is driven by a health care employment organisation that works across the rural Arkansas delta region. The organisation targets low income women from minority groups who are moving from welfare to employment. It enrols them in a 12 week training course as certified nurse assistants. The course significantly exceeds the state's minimum requirements for certified nursing assistants. The initiative makes community colleges more accessible, by re-examining and amending bridging and transitional programs, so people with low literacy and numeracy are not turned away as in the past. Integral to course delivery is a range of strategies designed to help the women overcome barriers to training completion and job retention. The initiative also had an advocacy component, resulting in a change to state policy to allow participation in employment-related training to be recognised in fulfilment of welfare recipients' work obligations.
How do you know the model has been successful in addressing a skill shortage?	At the end of the second year of this three year project, a total of 107 women had enrolled, with 55% graduating and 97% of graduates in employment.
Barriers and enhancers to setting up the model	None mentioned.

Source: Pindus, N, Tilly, J & Weinstein, S 2002, *Skill shortages and mismatches in nursing related health care employment*, The Urban Institute, Washington DC, p. 32

(22) Step up pathway: Remote and rural nursing education

Location/scope	Rural New South Wales.
When and why was the model set up?	The program was set up in 2003 when the Australian Department of Health and Ageing provided a grant to assist in preparing rural Multi-Purpose Service sites as suitable workplace learning environments to support the Step Up program.
VET health skill shortage area(s)	Enrolled nurses in rural areas.
How does it operate? (i.e. who is involved, what do they do?)	An intersectorial partnership was formed involving Mid Western Area Health Service (with support from Macquarie Area Health Service), Western Institute of TAFE and Charles Sturt University, to investigate ways of bringing nursing education closer to remote communities. The Step Up pathway resulted from this collaboration. Potentially it captures some of the beneficial characteristics of former hospital training, but in a format adapted to the changed circumstances of nursing education and contraction of local services. It is intended to provide a pool of 'home grown' nursing professionals who will deliver health care in their own communities. It is designed to draw on existing training support schemes open to rural communities to fund vocational training. These include the federal government funding schemes for prevocational training as well as the vocational training scheme that involves health facilities sponsoring trainee assistants in nursing. The pathway allows local community members to begin training at the Assistant In Nursing level in their local Multi Purpose Service in the Aged Care section. At completion of assistant in nursing training they are able to progress to the next level which is training to become an enrolled nurse (within the acute section of the Multi Purpose Service and through accessing surgical and advanced medical experience through placements at the nearest base hospital). Enrolled nurses on the pathway can then continue to work in their facility while undertaking study through Charles Sturt University by distance education, to upgrade to the registered nurse qualification. All steps of the pathway are undertaken while remaining as employees of the area health service. Incremental learning of this kind is believed to be a major factor in attracting remote community members into vocational training. The project underwent a pilot phase in February 2002 in the rural communities of Peak Hill, Trundle, Tottenham, Tullamore, Eugowra, Canowindra, Grenfell and Condobolin Nursing Home. A training position was created in the Multi Purpose Services in these towns allowing the pathway to commence. This designated training position provided the opportunity for the incumbent employee to progress from assistant in nursing to enrolled nurse to registered nurse. As this person moves from one level to the next level of training, the opportunity is created for employment of another community member in a traineeship to begin the pathway. It was envisaged that between 17 and 20 employees would commence Certificate III training in 2002. Initially six of these employees would be recruited into Commonwealth Traineeship funded positions, three with Condobolin Nursing Home, two at Grenfell Multi Purpose Service and one at Peak Hill Multi Purpose Service.

How do you know the model has been successful in addressing a skill shortage? (evidence)	The Step up pathway was evaluated in 2002 and a focus group was carried out again in early 2003 across eight Multi Purpose Service sites. Step Up is considered to be highly sustainable as an organisation model if embraced within the policy for workforce development by an entire area health service.
Barriers and enhancers to setting up the model	Evaluation found within most small rural hospitals a reticence to learn, inertia in relation to self-directed learning and a profound sense of imposed change. The partnership members who developed Step Up believed that intervention was needed to nurture the growth of a culture that valued learning in its various forms. New South Wales government were very supportive and used the ideas in government policy papers, but funds were not available to help roll out the model in New South Wales beyond the research period. It is particularly well supported by Aboriginal and Torres Strait Islander educators and community members.

Source: Nominated model.

(23) Training rural and remote first aid volunteers using blended learning

Location/scope	Across Australia, including in many rural and remote locations.
When and why was the model set up?	From 2004. From 2006 all new volunteer First Aiders in St John are required to complete a learning program leading to eight national competencies from Certificate III in Health Service Assistance (Client/Patient Services). Most training is only delivered in capital cities but a program that got out to the regions was needed. A variety of learning resources had to be developed to support the program, particularly for rural and remote volunteers.
VET health skill shortage area(s)	Volunteer First Aiders St John Ambulance.
How does it operate? (i.e. who is involved, what do they do?)	There are around 10,000 volunteer First Aiders in St John Ambulance Australia. Between 500 and 1,000 new volunteers join each year. The Skills Development Program was developed involving meetings with representatives from all states and territories. The program was trialed in most states and territories from the end of 2005 and will be fully operational from July 2006. The program is implemented in two stages. In the three-month stage 1, the new member gains skills in Occupational Health and Safety and Infection Control and knowledge of St John. Stage 2 (nine months) focuses on first aid skills and learning. All participants are provided with workbooks which specify what they need to complete and provide a record of undertaking the program. Learners are then directed to reading, online learning resources, practical scenarios, courses and appropriate on the job learning in order to complete the program. Learners can choose resources appropriate to their needs. New members are allocated a mentor to assist them. The program development will be modified late 2006 so that it fully meets requirements of the proposed qualification in the current review of the Health Training Package – Certificate II in Emergency Medical Service First Response.

How do you know the model has been successful in addressing a skill shortage? (evidence)	Feedback has been positive.
Barriers and enhancers to setting up the model	The key challenges have been: 1. Gaining agreement from all states and territories on the content of the program. 2. Breaking down the idea that the only way to learn is by a formal course. 3. Promoting the program within states and territories. 4. Ensuring all Divisions have a person who has workplace assessor qualifications to be able to assess the program.

Source: Nominated model.

(24) Return to practice program for nursing staff at Central Coast Health

Location/scope	Central Coast of New South Wales
When and why was the model set up?	To facilitate the return to practice of registered and enrolled nurses in acute care settings, using strategies to promote competence, confidence and person-environment satisfaction. The program, developed by Central Coast Health Services, targets nurses returning to the workforce after an absence of at least five years or more.
VET health skill shortage area(s)	Enrolled nurses
How does it operate? (i.e. who is involved, what do they do?)	This model differs from traditional 'one size fits all' return to practice models that tended to highlight content acquisition, in that it focuses on the lifelong learning/professional practice approach to contemporary nursing. It matches learning experiences and clinical placement to individuals' strengths and employment preferences. Participants complete the program without being paid. This strategy is designed to address concerns of earlier return to practice models regarding unrealistic expectations being placed on participants as members of the paid workforce. The model was based on research that identified two barriers to return to practice: lack of self confidence and non-supportive work contexts. The program lasts for 180 hours, comprising 60 hours of classroom learning, 60 hours of self directed learning and 60 hours of clinical practice. The sessions are delivered by clinical specialists. Students on clinical placement are supported by preceptors .When students have completed their clinical hours they are required to give a short presentation to demonstrate their learning outcomes.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Retention of return to practice participants over the 12 month period from June 2004 – June 2005 was 55%. Participants have successfully gained positions in a variety of clinical areas. There is a good match between area of practice, and professional and career needs of participants. Participant evaluation identified valuing of staff as the most important determinant of the success of this return to practice program. Evaluation also noted that program content and structure were appropriate to participants' learning needs. Longitudinal research is planned, to track the experience of return to practice participants and their retention in the workforce.

Barriers and enhancers to setting up the model	None mentioned.

Source: Project report accessed on 23/1/06 at http://www.archi.net.au/content/index.phtml/itemId/175988

(25) School at Work program – hiring from within

Location/scope	Hospitals in 25 States of the United States of America
When and why was the model set up?	The model was developed in 1992 by a Louisville entrepreneur to address shortages of health professionals by recruiting from a largely untapped source: support staff from within health services who are already part of the 'hospital family … they work hard and they're loyal'. The program, School at Work, aims to help hospitals identify and prepare clerical, food handling, maintenance staff and assistants for training in nursing and allied health professions. It is supported by the United States Department of Labor, which provides grants to hospitals to help implement programs.
VET health skill shortage area(s)	This is a generic model, targeted at shortages of a range of VET and University-trained health occupations.
How does it operate? (i.e. who is involved, what do they do?)	The program comprises eight months of study, including videos, online learning and small group sessions. Participating hospitals provide course instructors or coaches to take students through the material. Topics covered include basic anatomy and health care job opportunities. Assistance is also offered with resume writing, interviewing and computer skills. Participants are paid for their time in class. Following completion of the course, participants are ready to apply to colleges and technical schools to undertake training in their area of choice or to seek promotion. Their employing hospital will reimburse further tuition costs.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model demonstrates significant cost savings by recruiting and promoting from within, rather than externally. Examples of School at Work programs in a range of United States hospitals indicate success rates of at least 65% (i.e. 65% of participants each year are either promoted, enrolled in study or pursuing medical careers within three months of completing the program). At least one hospital reported in the paper has a waiting list of participants waiting to join the program. Examples of successful transitions include a nursing assistant who completed the program and subsequently went on to study as a surgical technician at a nearby technical college, and groundskeepers, clerical and cafeteria workers who were considering previously unthought-of careers as nurses, surgical technicians and radiologists.
Barriers and enhancers to setting up the model	A considerable amount of time was spent promoting the model to potential participants; getting the support of line managers in health care facilities was also essential, as line managers have to find appropriate cover for those participating in the program. Line managers also played an important role in encouraging staff to participate in the program.

Source: Gosselin, S 2005, 'Hiring from within', *The Lane Report*, Lexington, 1 December, p. 34, accessed on 24/1/06 at http://proquest.umi.com/pdqweb?did=950544161&sid=1&Fmt=3&clientId=20931&RQT=309&VName=PQD

(26) Skills for Growth program

Location/scope	A Tasmanian Department of Education initiative across the whole of the state
When and why was the model set up?	Funded by the Department of Education at a cost of $3.6 million, the model was launched in early 2006, and is a State Government response to skills shortages in a range of industry sectors, including selected health/community services occupations.
VET health skill shortage area(s)	Aged care workers, including Certificates III and IV in aged care work and Certificate III in Home and Community Care.
How does it operate? (i.e. who is involved, what do they do?)	The program will involve 23 training organisations, including TAFE, which will deliver a number of training courses in health/community services, and other occupations where skill shortages have been identified. Initially, training organisations will be able to offer targeted courses to students who meet the eligibility criteria at 50% of the normal fee, until the end of 2006. The initiative is accompanied by a statewide advertising campaign aimed at both individuals and businesses. To ensure the program keeps pace with changing skill needs, industry advisory bodies will provide ongoing input, including job forecasts.
How do you know the model has been successful in addressing a skill shortage?	This is a new initiative launched to coincide with the beginning of the 2006 training year, so it will be some time before outcomes are available.
Barriers and enhancers to setting up the model	None provided on website.

Source: Tasmanian Department of Education http://www.education.tas.gov.au

2. Job and/or workforce redesign and training

(27) Aboriginal health worker oral health training program

[SEE SEPARATE CASE STUDY]

Location/scope	Kununurra and Broome, Western Australia
When and why was the model set up?	Evidence shows that the employment and training of Aboriginal health workers is significantly beneficial in improving general health. This project aims to institute a culturally appropriate basic preventative oral health delivery program at a community level, through providing a training module for Aboriginal health workers. At the time of development, there was no nationally consistent oral health training component for these health workers, with some states having no dental training modules, and other states having a component focused on urban oral health issues which had little relevance for rural and remote areas. The baseline for the number of nationally accredited qualifications in Aboriginal Health Work was taken at February 1998.

VET health skill shortage area(s)	This project is targeted at Aboriginal health workers, particularly in rural and remote regions working in the area of oral health.
How does it operate? (i.e. who is involved, what do they do?)	This pilot project was developed, delivered and accredited through the appropriate accreditation body. Appropriate stakeholders were included in program development, including the Kimberley Aboriginal Medical Services Council. The course comprised three oral health modules which were 'stand alone' and could be taught at various levels of Aboriginal Health Worker training. They involved a combination of practical and theoretical on which the training is assessed. A certificate of attainment was awarded at the successful complete of each module in line with the accreditation process. Those successfully completing all three modules were awarded a certificate at level IV in oral health for Aboriginal Communities.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The pilot programs highlighted the importance of a flexible approach engendered through competency-based training with a focus on the development of skills as opposed to traditional repetition-based training. 96% of students reported the modules as enjoyable, relevant to their needs and neither over-demanding nor easy. The dental training program encourages Aboriginal health workers to improve community dental health. The developers expected participation in the program would encourage Workers to pursue other oral health care delivery courses, which would also help to address oral health workforce issues in rural and remote areas.
Barriers and enhancers to setting up the model	No barriers or enhancers to setting up the model were discussed.

Source: Pacza, T, Steele, L & Tennant, M 2001, Development of oral health training for rural and remote Aboriginal health workers**,** *Australian Journal of Rural Health, 9*, pp.105–110.

(28) Aboriginal sports massage program

Location/scope	Durri Aboriginal Corporation, New South Wales
When and why was the model set up?	The project started some four years ago. It was developed in response to the finding that many Aboriginal people suffer from musculoskeletal disabilities, and with the aim of addressing modifiable, commonly-presenting musculoskeletal conditions in the community. The program also includes preparation of Aboriginal health workers to conduct some general health promotion activities (i.e. smoking cessation handouts and weight loss guidelines). Although not specifically devised to address a health skill shortage, the culturally-relevant and culturally-sensitive program provides lessons for the development of effective Aboriginal Health Worker training, from the participants' perspective.
VET health skill shortage area(s)	This model was designed to upskill Aboriginal health workers in the area of sports massage

How does it operate? (i.e. who is involved, what do they do?)	There were two avenues for participation: firstly either a nationally accredited qualification as an Aboriginal Health Worker, Assistant in Nursing or allied health qualification, or secondly as a community elder with an interest in the sports massage course. The course included theoretical and practical components which were conducted three days per week over 2 weeks. Informal 'round table' techniques were used to deliver the course, based on those used by Booroongen Djugun College (see separate VET in Schools model in this report). The courses were delivered on site, with as much flexibility as possible.
How do you know the model has been successful in addressing a skill shortage? (evidence)	By the end of the two weeks of instruction, all participants were observed to have developed adequate competence in all topics. The training program appeared to be culturally acceptable to participants and to the broader community, and was found to be enjoyable, well organised, useful and personally relevant. High levels of course completion are more likely when Aboriginal Health Worker training is delivered in a culturally appropriate manner. The program has the potential to be adapted by other rural/remote Aboriginal communities, using the distance learning approach.
Barriers and enhancers to setting up the model	This program relied on volunteer assistance. Community participation in and ownership of the program and its sustainability was critical to program success and acceptance.

Source: Nominated model.

(29) Care supervisors

Location/scope	Sydney, Newcastle and Canberra.
When and why was the model set up?	In 2000 Baptist Community Services sought a solution to skills shortages in their aged care facilities. They created the new role of Care Supervisor as an adjunct to the registered nurse role.
VET health skill shortage area(s)	This model upskills VET-trained workers to address the aged care industry shortage of registered nurses.
How does it operate? (i.e. who is involved, what do they do?)	A care supervisor workgroup developed position descriptions, policy, communication and change strategy; developed the recruitment and selection process; developed a registered nurse professional development program including case management; provided an Intranet site for Care Supervisors. An industrial award was negotiated for salary of care supervisors. There are two qualification pathways to the role of care supervisor: Certificate IV in Aged Care Work; and Medication Management for endorsed enrolled nurses (established in response to industry shortage of registered nurses). 44 Students attend 42 week course, with weekly six hour classroom teaching and weekly 2 hours supernumerary practical with registered nurse in facility. Students are mentored by registered nurses throughout course. The care supervisor role has been created in Baptist Community Services across 32 facilities.

How do you know the model has been successful in addressing a skill shortage? (evidence)	Evidence of the model's success and evaluation include: utilisation of the job role within the organisation (23 Care Supervisor positions currently); demand for further Certificate IV in Aged Care Work courses within the organisation (89 graduates to date); demand from external organisations to access the course and model; series of surveys conducted on each participant, their manager, their mentor at the beginning, middle and end of the course, indicating overall growth in skills and development of the participant.
Barriers and enhancers to setting up the model	Barriers have included: engaging the registered nurses through change management; using the registered nurse professional development program and the case management model; ongoing discomfort over people other than registered nurses administering medication, particularly those who are unlicensed; the cost at facility level for back filling and releasing staff for training; the impact of the student learning on each facility and creating a culture of learning. Future challenges include maintaining and developing the Care Supervisors as a group with further education and updating of skills.

Source: Nominated model.

(30) Career ladder mapping project

Location/scope	Oakland, California
When and why was the model set up?	To address the shortage of licensed vocational nurses, radiology technicians, medical assistants and surgical technicians by providing opportunities for already-employed, entry-level, unlicensed assistants to move up the career ladder. Currently these people cannot afford to stop working to attend school full time.
VET health skill shortage area(s)	Licensed vocational nurses, radiology technicians, medical assistants and surgical technicians.
How does it operate? (i.e. who is involved, what do they do?)	The project is a partnership between Shirley Ware Education Center, Service Employees International Union, and Kaiser Permanente–Northern California Region (a health care facility). It examined 60 'hard to fill' job classifications and developed criteria for classifications that would lend themselves to career advancement through worksite training. The model involved three steps: map out the pathways for career advancement; develop partnerships with employers, unions, community colleges and government to develop programs; support employees on their career advancement path. Advancement is usually by advanced training, additional education or experience, and examination. The program involves the use of training materials targeted specifically at the health care facility, as well as onsite training. Training is undertaken on a full time basis and on successful completion, graduates are guaranteed employment in their new role. Various career advancement paths are mapped for different health occupations. For example, one pathway is from certified nursing assistant, to licensed vocational nurse, to registered nurse, to bachelor and doctoral nursing studies. Project initially funded by the Allied Healthcare Workforce project 2001-2003, with ongoing programs being funded by the United States federal H1B Skills Training grant.

How do you know the model has been successful in addressing a skill shortage? (evidence)	This program allows employers to fill positions with workers already familiar with workplace culture and to diversify their workforce to include minorities and males, in what would otherwise be a white, female dominated field. The model could be adapted to other multi-facility health care providers to attract and retain workers. By providing training on site, staff morale and loyalty is increased, coursework is tailored to the employer's requirements, and there is recruitment flexibility in recruiting from the incumbent workforce.
Barriers and enhancers to setting up the model	The project identified six generic barriers to career advancement, that need to be addressed: lack of high school diploma, remedial education and language challenges, structural barriers (prerequisites, certification requirements) workplace culture and entry-level opportunities, cost of transportation and cost of training.

Source: Shirley Ware Education Center, Project Director Joan Braconi. Information accessed on 12/1/06 at www.seiu250.org/docUploads/Career_Ladder_Mapping_Project.pdf

(31) Certificate IV allied health assistant (physiotherapy)

Location/scope	Australia-wide
When and why was the model set up?	To address national shortage of allied health professionals.
VET health skill shortage area(s)	Allied health assistants (Physiotherapy)
How does it operate? (i.e. who is involved, what do they do?)	The proposed model builds on the existing Certificate III Allied Health Assistance, by proposing the introduction of a higher level qualification Certificate IV Allied Health Assistant (Physiotherapy). Completion of Certificate III would be a prerequisite for Certificate IV. The new national qualification and competencies are being developed as a result of the Health Training Package review which was due to conclude in June 2006, but which has been delayed by several months. Submissions for this were received from relevant professional groups such as the Australian Physiotherapy Association, and from other relevant stakeholders. The proposal would see physiotherapy assistants with a Certificate IV acting as a 'second pair of hands' to physiotherapists with whom they would work under supervision. The level and method of supervision would be at the discretion of the physiotherapist. Although they would be expected to take initiative and problem solve, they would also need the ability to recognise when to refer to the physiotherapist for assistance. It is suggested that the course include basic understanding of health ethics, anatomy and physiology, and the legal responsibilities of physiotherapy assistants. Issues covered in the existing Certificate III will be developed in Certificate IV (e.g. Certificate III would include competencies in following Occupational Health and Safety procedures, while Certificate IV would include competencies in implementing Occupational Health and Safety procedures. In keeping with a multi disciplinary focus, sharing of relevant training with others, such as assistants for occupational therapists, is recommended. Because of the variety of physiotherapy settings and specialities, the Certificate IV would need to include electives (clusters of competencies) from which participants could choose, depending on their

	requirements (e.g. aged care, acute care, paediatrics). Specifically, the Certificate IV would need to provide for the training needs of those who work in rural and remote areas, and with Indigenous people. It is recommended that assessment include supervised, hands on practical experience, and that supervisors be appropriately remunerated. Some form of compulsory continuing education for assistants would follow completion of Certificate IV.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model will be in its early stages, following endorsement, so it is too early to provide evidence of outcomes.
Barriers and enhancers to setting up the model	Issues to be considered in developing the model include possible amendment to State legislation to allow use of the PTA title and to ensure that services provided by a PTA are not classed as physiotherapy. There will also need to be some consideration of billing of PTA services, as well as professional indemnity issues.

Source: Nominated model

(32) Churches of Christ Care competency framework

Location/scope	Churches of Christ Care operate aged care services throughout Queensland.
When and why was the model set up?	The most recent strategic plan is 2005. Care sees it as essential that staff receive quality training and education to ensure that they continue to live the organisation's values.
VET health skill shortage area(s)	Aged Care workers. The model is an organisational one, not aimed at addressing skill shortages; however it effectively does this.
How does it operate? (i.e. who is involved, what do they do?)	The foundation of Care's approach to staff training and education is Care's competency framework. It identifies the need for all staff to demonstrate competency in three areas – core competencies, specific skill competencies and management competencies – which are each underpinned by leadership attributes. Every position in the organisation has a competency profile (with competencies drawn from the national competency standards) that specifies the required core, specific and management competencies for that position. The competency framework informs staff training and education at both the level of the individual staff member, and at the level of organisational training initiatives. At the individual level, the competency profile informs the development of an appropriate individual training and development plan. Care also has a policy of succession planning that encourages the development of staff members in order to move into management positions. At an organisational level, the competency framework is used as the basis for the organisational learning needs analysis, which is conducted every two years. All staff are provided with an opportunity to assess their performance against identified competency standards.

In the aged care division, Care was awarded 1.2 million dollars by the Australian Government Department of Health and Ageing through the Better Skills for Better Care program to deliver accredited training to personal care workers in residential aged care facilities. To achieve this, Care partnered with the Australian Institute for Care Development (Aged Care Queensland's registered training organisation). The delivery of Certificate III and IV in Aged Care Work from the Community Services Training Package, and the Diploma of Nursing (pre-enrolment), began in August 2005, using a mix of distance and face to face education delivery. 38 staff members enrolled in the Certificate III program, 37 in the Certificate IV program and 76 in the Diploma of Nursing (pre-enrolment). All training and assessing is completed by the Australian Institute for Care Development, however mentoring is provided 'on the job'. Staff have started completing these programs, with graduates being offered appropriate roles in either their own or other Care services. Care's completion rate to date is higher than the average of students enrolled in similar programs.

In addition to the accredited training provided through Better Skills for Better Care, the 'Aged Care Channel' has been installed in each of Care's residential aged care facilities. This provides training and education programs specifically developed for the aged care industry via satellite television. The programs are interactive and include a live question and answer period with industry experts after each program. The programs can also be recorded and made available for staff not able to attend the initial screening.

Care also has in place a minimum budget for staff training of 2% of gross wages, and additional funds allocated to their internal 'Study Assistance' program. Eligible staff are provided with direct financial assistance to undertake training from the Certificate level through to postgraduate studies, or to attend conferences etc.

Care's approach and commitment to staff training and development has earned them the award of Large Employer of the Year in the Queensland Training Awards (Brisbane Region). At time of writing they were progressing to the next stage of the state level awards.

How do you know the model has been successful in addressing a skill shortage? (evidence)

Care's competency model has been instrumental in targeting recruitment strategies and training and development of staff at all levels. The approach to use of competency development as a succession planning tool has also resulted in the appointment of managers from within the organisation.

Care is now in the process of altering its structures at service level to incorporate greater career pathways, including pathways for endorsed enrolled nurses. Already they have seen graduates of the Better Skills for Better Care funded program taking up suitable positions within the organisation. Through a well articulated competency model, funding and management support for training and development, and structural changes that build in clear career paths, Care is in a better position to 'grow their own' cohort of skilled and qualified staff.

Barriers and enhancers to setting up the model

There have been few barriers to developing the model. Managers have come to see that money spent on training and development is money saved on turnover, responding to adverse events and so on. Managers and staff have embraced all measures to improve staff's competencies and career paths. One mechanism that has supported implementation of the model has been a

	centrally administered fund to augment local training budgets. In this way, particularly for smaller services, there is always a way to afford providing staff with development opportunities that meet their needs and the needs of the organisation.

Source: Nominated model.

(33) Creation of new stroke support position

Location/scope	Pilot project in Derbyshire, United Kingdom.
When and why was the model set up?	Set up as part of National Health Service Changing Workforce program, the model looks at skill mix changes in addressing the shortage of registered nurses in stroke care. It examines the effectiveness of a pilot study in which a new health care assistant position was introduced, to work with health professionals in coordinating patient recovery and rehabilitation from stroke. Role redesign and delivery of training to facilitate new ways of working for lower level health and community care workers is part of broader National Health Service workforce reform through the Skills Escalator approach.
VET health skill shortage area(s)	Health care assistants
How does it operate? (i.e. who is involved, what do they do?)	The pilot involved providing training to health care assistants to allow them to take on a number of specified tasks in relation to stroke care, many of which were previously undertaken by registered nurses. The support workers were also trained to work in partnership with patients and their carers, to facilitate their participation in the recovery process. Registered nurses were able to train and assess the new stroke support workers. Following completion of training, the stroke support workers undertake a range of duties previously performed by registered nurses, saving approximately three hours per day of registered nursing time.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Outcomes include a marked improvement in the nature and quality of patient care after the new support worker role had been introduced, as well as reduced pressure on registered nurses. Interest in replicating the model across the United Kingdom is growing.
Barriers and enhancers to setting up the model	When role redesign crosses organisational boundaries (in this case, the health and social care settings), there are implications for pay and grading that need to be resolved equitably. The other challenge in implementing the model is the need to free up registered staff from clinical duties in order to provide the training.

Source: Reported in 'Care for the older person', *Changing Workforce programme: Pilot sites progress report Spring 2003*, NHS, UK. Workforce designer: Penny Shuttleworth.

(34) Enabling role and supervision of administration of medication by home helps

Location/scope	Pilot project in Derbyshire, United Kingdom.
When and why was the model set up?	Set up as part of National Health Service Changing Workforce program, the model looks at job redesign as a strategy for addressing skill shortages. It examines the effectiveness of a pilot study in which the role of home helps was expanded, to reduce pressure on health professionals and to keep elderly people in their homes or help them return home from hospital more quickly. Role redesign and delivery of training to facilitate new ways of working for lower level health and community care workers is part of broader National Health Service workforce reform through the Skills Escalator approach. The model reported here, and a number of other models being piloted in the United Kingdom, facilitates entry to the skills escalator by offering an alternative entry point and the opportunity to move up the escalator as new skills are acquired.
VET health skill shortage area(s)	Personal care attendants/home and community care workers
How does it operate? (i.e. who is involved, what do they do?)	The pilot looked at a range of job redesign options, some for VET trained and some for university trained health workers, and was a partnership between health services, county council social services, users, carers and educational establishments in the North Derbyshire region. The model reported here focuses on home helps, who were upskilled in two areas: delivery of care plans developed by therapists to elderly people in their own homes, and supervision of administration of medication. To prepare them to deliver care plans, home helps were provided with five half-day training sessions that were developed and delivered by local therapists. Training was then further developed and benchmarked with a steering group from across the broader region. Training on the administration of medication was provided by district nurses and the community pharmacist, with district nurses developing a training package. Pending successful evaluation, the training package may be adopted across the National Health Service. These new roles were recognised through accreditation at National Vocational Qualification Level 3. Future plans include the development of career pathways for home helps to health and social care assistants, and health and social care workers who are involved in enabling hospital discharge and preventing emergency hospital admission.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The new role of home helps was effective in reducing the workload of health professionals further up the chain, by reducing the number of hospital admissions and supporting elderly people to stay in their homes. Job redesign provided a career structure, motivation and improved job satisfaction for home help workers Full results of the evaluation not available on project website at time of preparing this summary.
Barriers and enhancers to setting up the model	When home helps were being trained, there were some problems in terms of supervision and accountability because their work covered several different nursing localities with no clear line management pathway. Having the domiciliary services officer and therapist in the same room facilitated the development and implementation of the model.

Source: Reported in 'Care for the older person', *Changing Workforce programme: Pilot sites progress report Spring 2003*, NHS, UK. Workforce designer: Penny Shuttleworth.

(35) Existing worker traineeships in aged care

Where is the model located?	Wheatbelt region, Western Australia.
When and why was the model set up?	The existing worker traineeships using the model began in May 2005. The traineeships meet an ongoing skills shortage in qualified aged care workers by providing traineeships for existing staff throughout the 158,000 square kilometres of the Western Australian Country Health Service - Wheatbelt Region.
VET health skill shortage area(s)	Aged care workers.
How does it operate? (i.e. who is involved, what do they do?)	CY O'Connor TAFE and Western Australian Country Health Service–Wheatbelt, in consultation with Western Australian Department of Education and Training and the Community Services Health and Education Industry Training Advisory Body, offer traineeships to all eligible non-regulated (i.e., not registered by a board or authority determining industry standards in education and/or care delivery) aged care workers without a Certificate III level in the Wheatbelt. This is the single largest sign-up of workers in the whole of Western Australian Country Health Service. The project is seen as a model in collaboration between industry and training providers. The first stage of the project determined the exact nature of the problem and identified the most appropriate intervention. Western Australian Country Health Service–Wheatbelt and CY O'Connor TAFE identified a skills shortage and entered into an arrangement to negotiate with the Industry Training Advisory Body and the Apprentice and Traineeship Support Network for approval of Existing Worker Traineeships. 145 staff throughout the region received traineeships. C Y O'Connor College of TAFE and Western Australian Country Health Service–Wheatbelt agreed to a model with the following components from Existing Worker Traineeship funds: (a) Western Australian Country Health Service–Wheatbelt to provide for one day per week/pro rata study; one day per month study leave to attend workshops; full payment of enrolment and other fees, books and resources; Aged Care mentor/supervisor at each of the health services; computer access and support for all trainees (b) CY O'Connor College of TAFE to provide for an orientation program at four campuses through the Wheatbelt; provision of two identical workshops per month to accommodate rostering and enable health services to continue service delivery; development of interactive WebCT CD; development of course materials; assessment and assessment support for the workplace. Stage 2 Implementation and ongoing evaluation of the Existing Worker Traineeship model. A number of future training pathways are available for graduates, including higher level certificates in aged care and areas within health such as Diploma of Enrolled Nursing and Certificates III and IV in Health Service Assistance (Allied Health) planned for 2007.

How do you know the model has been successful in addressing a skill shortage? (evidence)	Evaluations by CY O'Connor and by Western Australian Country Health Service–Wheatbelt indicate outstanding results. Western Australian Country Health Service–Wheatbelt has over half of all the state's trainees in Aged Care Work and moved from a situation in 2005 where 4% of non-regulated carers had nationally recognised qualifications in Aged Care to one in 2006 where 96% of staff hold a nationally recognised qualification. There has been a reduction of 21% in all incidents in the age group 70-99 years over the 2005-2006 period. There has been an increase in the ability of non-regulated carers to move across health roles and to take on multi-skilling within their current roles. Cost benefits have been experienced by Western Australian Country Health Service–Wheatbelt. Aged Care residents report improvement to the quality of care provided by non-regulated carers. There is evidence of engagement in Existing Worker Traineeships in system wide change in Western Australian Country Health Service–Wheatbelt. Less than 5% of trainees have withdrawn. 50% indicate going further with studies. Overall student satisfaction rate is greater than 95%.
Barriers and enhancers to setting up the model	Main barriers were: (1) Issues around time-tabling were addressed and built into the model in order to ensure continuity of service to residential clients. (2) Most students needed coaching in computer skills. Some needed access to computers and this access was provided at each Western Australian Country Health Service–Wheatbelt workplace. (3) The demographics of the group of students required planning to ensure attendance and support both in the classroom and in the workplace. Most students were over the age of 47; most had not finished high school; most had not been involved in formal training since high school (some 20–40 years before). Enhancers included: high level of commitment by all partners; support from all key players within health region; co-location of key players in the Wheatbelt; promotional work ensured all key players including prospective students knew their roles and responsibilities; ongoing evaluation and meeting between TAFE and Health allowing for rapid response to any areas of concern; an ongoing culture of change within Health in the area of Aged Care with strong support from the newly established Wheatbelt Aged Care Unit; use of mentors/supervisors at the site providing a two pronged effect on culture change, the first from the grass roots and the second from mentors following up with more senior staff and encouraging change where needed.

Source: Nominated model

(36) Introduction of endorsed enrolled nurses in haemodialysis units

[SEE SEPARATE CASE STUDY]

Location/scope	Sydney South West Area Health Service
When and why was the model set up?	Set up in 2004 with the aim of promoting and enhancing the extended role of enrolled nurses in dialysis settings. The project was set up in response to an inability to fill nursing vacancies in the renal service, and linked with the Nurses Registration Board initiative of increasing the skills base of enrolled nurses through medication administration. The program used education as a key recruitment and staff retention strategy.
VET health skill shortage area(s)	Enrolled nurses upskilled to address shortage of registered nurses
How does it operate? (i.e. who is involved, what do they do?)	In 2003/4 continued advertising for registered nurses to work in the renal service of the Sydney South West Area Health Service had been unsuccessful. The organisation conducted a job analysis which resulted in job redesign in renal care. Specifically, it was identified that enrolled nurses, under the supervision of registered nurses, could undertake identified roles in dialysis settings, following the provision of adequate education and training. A program was subsequently developed and endorsed, following consultation between senior nursing management and educators. The program comprised classroom training in medication administration and dialysis procedures, and clinical placement in the renal ward. All enrolled nurses completed the accredited medication course at TAFE, as well as theory and practical sessions on cannulation and haemodialysis. The course took between 3–5 months to complete.
How do you know the model has been successful in addressing a skill shortage? (evidence)	In the first intake, four enrolled nurses successfully completed both the medication administration program and the accredited cannulation program. Successful participants became endorsed enrolled nurses with the ability to undertake extended roles in nursing care. Based on the success of the first course, further enrolled nurses sought entry to the dialysis unit. The course is being further developed to prepare appropriately upskilled enrolled nurses to work in other areas such as peritoneal dialysis. The program represented a change in the model of care from predominantly registered nurses only, to team nursing and shared care. Evaluation of the program by participating enrolled nurses, as well as registered nurses and nurse unit managers, indicated a high level of satisfaction with the extended nursing roles and skill development provided. This on-the-job education program for enrolled nurses is seen as filling a gap in the provision of education and training in dialysis settings.
Barriers and enhancers to setting up the model	There was some initial resistance to the proposed job redesign and training program, however the change process was well managed and received.

Source: project report accessed on 23/1/06 at http://www.archi.net.au/e-library/health_administration/baxter_2005_nsw_health_awards/education_and_training/endorsed_ens

(37) Midwest Murchison region allied health assistant project 2003-2004

Location/scope	Midwest Murchison region of Western Australia (regional centre of Geraldton and nine small rural towns receiving outreach allied health services).
When and why was the model set up?	The demand for therapy services and shortages of allied health professionals in rural and remote Australia drove the development of the allied health assistant project. Its purpose was to develop generic standards and benchmarks for allied health assistant work in the rural and remote context, to ensure quality and consistency of delivery throughout the Western Australian Country Health Service. The model was developed and implemented over two years, 2003 and 2004.
VET health skill shortage area(s)	Allied health assistants working in three areas: speech pathology, occupational therapy, physiotherapy.
How does it operate? (i.e. who is involved, what do they do?)	The model was a collaboration between the Midwest Murchison region and the Combined Universities Centre for Rural Health. It built on earlier projects that examined the practice of allied health assistants in rural and remote Western Australia. Using an action research framework, the project developed and improved standards of practice, as well as resources that would support therapy services delivered by allied health assistants. A model was developed that encompassed local training issues (i.e. shared across allied health disciplines but also job specific and related to immediate practice) and broad allied health assistant training issues (i.e. relating to rural and remote practice). This model reflects a move towards the concept of generic assistants who work across a number of disciplines, a model particularly suited to the provision of allied health services in rural and remote areas. The model proposed that training would be delivered by videoconference. Other outcomes were the development of minimum standards of supervision and a supervision monitoring process (supervision logs) for rural and remote allied health assistants, documentation of roles for allied health assistants, therapists and managers, protocols for sharing resources and a Western Australian Country Health Service policy on allied health assistants. The need for supervision guidelines was particularly significant, given that at least half of the allied health assistants in Western Australia are located some distance from their supervisors. The project was coordinated by a project officer, whose roles included coordination of local allied health assistant training, development and implementation of resources to guide practice, advocating and mediating for allied health assistants and therapists, and project monitoring and evaluation.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Although the project concluded in September 2004, the development of policy and a model of practice, training, and supervision of allied health assistants have been adopted statewide. It was further developed in a follow up project (see case study *Western Australian Country Health Service allied health assistant training initiative*), which included the project officer from the Midwest Murchison region project.
Barriers and enhancers to setting up the model	An enhancer was the appointment of a dedicated project officer to coordinate and oversee the project. On conclusion of the two-year project, ongoing support was provided by a part-time allied health assistant coordinator.

Source: Goodale, B & Lin, I January 2005, *Midwest Murchison Region Therapy Assistant project 2003-2004*, WA Country Health Service and Combined Universities Centre for Rural Health, Western Australia.

(38) Patient transport service, Taree New South Wales

Location/scope	Manning Base Hospital, Taree New South Wales
When and why was the model set up?	2005. Due to increasing costs, unreliable timeliness of ambulance transport and an unfillable demand for nurse escorts, Manning Base Hospital, Taree, implemented a Patient Transport Service.
VET health skill shortage area(s)	Patient Transport Officers
How does it operate? (i.e. who is involved, what do they do?)	The model is about recruitment and training of Patient Transport Officers. The officers have completed Certificates in Automated External Defibrillation, Advanced First Aid and Advanced Resuscitation. The Patient Transport Service transports inpatients to specialist appointments and non-emergency transfers to other New South Wales facilities. Their area of expertise is in the area of transporting patients and they have intimate knowledge of the equipment in their vehicles. The Patient Transport Vehicle has a patient stretcher with lock downs and carries oxygen, disposable pans/bottles, First Aid equipment and recently Automated External Defibrillators which the Patient Transport Officers are fully qualified in using. The education and subsequent reaccreditation provided is VETAB accredited. Advanced First Aid – Level 2 Automated External Defibrillation is a stand-alone course (National Course Code for Parasol EMT Pty. 30122QLD) but learning outcomes equate to those relevant from HLTFA402B. – Level 4. Advanced Resuscitation Code Oxygen is a standalone course (National Course Code for Parasol EMT Pty. 80518ACT) but learning outcomes equate to those relevant from HLTFA402B. – Level 4. Manning Base Hospital advertised externally for Patient Transport Officers with a vision to recruit enthusiastic, non-institutionalised people that were not necessarily from a health background. Panel members interviewing were instructed to be astute to attitudinal cues as well as clinical cues. There were over 60 applicants, seven were interviewed and two appointed. One is an ambulance paramedic that left the ambulance service some years prior due to dissatisfaction and the other was a childcare worker.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Having trained Patient Transport Officers has lessened reliance on using registered nurses for escorts. For a three-month period in 2005 93 patients requiring a nurse escort were transported, of these 65 (70%) were escorted by a Patient Transport Officer. There have been no adverse events. As a result of the initiative there is a consistent $20k per month decrease in ambulance costs and a significant decrease in nurse escort costs.
Barriers and enhancers to setting up the model	One of the major challenges has been to overcome traditional values held by some Nursing Unit Managers in regard to their insecurity handing over 'their' patient to an unregulated, non-nurse. This has been largely overcome by consistently safe transports with no adverse events.

Source: Townsend, P 2006, Innovative rural transport, pp.1–2, Australian Resource Centre for Healthcare Innovations ARCHINet News 27.03.06.

(39) Top End Aboriginal mental health worker program

Location/scope	Remote communities in the Top End of Australia, including Groote Eylandt, Katherine, Yirrkala, Elcho Island, Maningrida.
When and why was the model set up?	The program has been running for five years, with core funding from the Department of Health and Ageing. Significant funding has been received from Beyond Blue, the Alcohol Education Rehabilitation Foundation and the Northern Territory Department of Health and Community Services. The model was set up to create two-way partnerships between remote general practitioners and Aboriginal Mental Health Workers, which will improve the health care of Aboriginal people by providing effective allied health services. The partnership supports remote general practitioners and encourages their retention in the bush, by providing cultural links in the treatment of Aboriginal people and by building community capacity to address mental health issues.
VET health skill shortage area(s)	Aboriginal Mental Health Workers
How does it operate? (i.e. who is involved, what do they do?)	The program places qualified and supported Aboriginal Mental Health Workers in as many remote communities in the Top End as possible, to work with general practitioners as part of a locally based mental health team. The Aboriginal Mental Health Workers provide a critical cultural link between doctors and the community. The doctors and Aboriginal Mental Health Workers are also supported by a dedicated Indigenous support worker who visits and provides ongoing support. The program coordinates an annual joint forum of all Aboriginal Mental Health Workers, doctors and nursing staff to facilitate shared learning.
How do you know the model has been successful in addressing a skill shortage? (evidence)	One of the broader purposes of the program is to contribute to the recruitment and retention of rural doctors by providing community based support in the treatment of mental illness. The program has seen a reduction in the number of air evacuations to Darwin by patients with acute mental health problems, and a reduced need for general practitioner crisis intervention.
Barriers and enhancers to setting up the model	The number of participating remote communities had to be reduced due to a reduction in funding levels. The high turnover of doctors and nurses in remote communities can disrupt the establishment of ongoing relationships. Clarification of the roles and responsibilities of the Aboriginal Mental Health Workers in the community is a requirement.

Source: Nominated model.

(40) Upskilling aged care workers to nursing qualifications in workplace

Where is the model located?	Brisbane, Queensland
When and why was the model set up?	2005, in response to the need for qualified nurses within the aged care sector and funded by the Commonwealth Government. A model of workplace delivery was set up to provide for the upskilling of aged care workers to Diploma of Nursing level.
VET health skill shortage area(s)	Enrolled nurses.

How does it operate? (i.e. who is involved, what do they do?)	The project was funded by the Commonwealth Government to address workforce issues in residential care, where some nursing competencies are needed (e.g. certificates of attainment in Medication Management for enrolled nurses). There was also funding for aged care workers to obtain and upgrade qualifications up to enrolled nurse level. As the funding was for aged care workers, the training had to suit the needs of these facilities, but the qualification would be a generic nursing qualification. Moreton Institute of TAFE worked with a number of aged care facilities to recruit existing staff to undertake the training and develop an individual responsive model of delivery. The model had to be responsive to industry needs, to be suitable for workplace delivery. It would ensure the integrity of all aspects of the training program was maintained. The student cohort came from a number of aged care facilities. Theory delivery was undertaken on two set days per week so that staff rostering could be planned in advance. On the job assessment was shared between the educational and the workplace staff. The model included a mix of flexible and face-to-face delivery.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Many TAFE institutes in Queensland now offer some version of this model. In Moreton TAFE, five cohorts have now commenced training. There is some attrition early, but minimal after that. All students who stay are passing the competencies to date. There will be 87 qualified nurses from Moreton TAFE alone (the first will graduate in 2007), and 25 residential aged care facilities will have thus gained in numbers of qualified nurses.
Barriers and enhancers setting up the model	Obtaining appropriate clinical experience was a challenge. Trainees were able to work on higher duties with a mentor to learn about some of the more clinical acute care. Maintaining appropriate staff numbers for aged care needs during training sessions, and ensuring the aged care facilities had appropriate resources for delivery, were other challenges. Some of the students had unrealistic expectations or underestimated the rigour of the course, resulting in an attrition rate. Ensuring that teachers were flexible enough to manage a non-TAFE mode of delivery was a further challenge. The knowledge gained by trainees is immediately useful and applicable to their work. The TAFE teaching staff also maintain a contemporary knowledge of aged care issues.

Source: Nominated model.

(41) Western Australian Country Health Service allied health assistant training initiative project

[SEE SEPARATE CASE STUDY]

Location/scope	Rural and remote Western Australia
When and why was the model set up?	This project builds on the Midwest Murchison region allied health assistant project 2003–2004, and other pilot projects, by developing a statewide training system for allied health assistants across all allied health services including

	disability services, over the course of 2004 and 2005. It was funded by the Western Australian Country Health Service and Disability Services Commission, with funding for distance learning materials provided by the Australian Government Department of Health and Ageing. The project aimed to standardise foundation competencies for allied health assistants, to establish distance learning training models, and to coordinate a program of allied health assistant training to be delivered through videoconferencing and distance learning materials. The project also determined the extent to which modules met accreditation standards within the Certificate III Health Service Assistance.
VET health skill shortage area(s)	Allied health assistants
How does it operate? (i.e. who is involved, what do they do?)	Using outcomes of the needs assessment conducted during the Midwest Murchison region allied health assistant project 2003–2004 and other pilot programs, a total of 18 videoconference training modules were developed in 2004, with delivery scheduled from June 2004 to July 2005. Modules selected for development and delivery included a focus on paediatrics, and multi disciplinary training (speech pathology, occupational therapy and physiotherapy), and had to lend themselves to delivery by videoconference. Modules were developed by working groups of approximately three experts, plus the project officer. Additional training was developed for supervisors of allied health assistants, including a train the trainer workshop and additional activities and reading. The initial train the trainer workshop was conducted face to face in Perth. Subsequent workshops will be offered in the regions, and by videoconference for those in remote locations. Links were established with an accredited training provider (West Coast TAFE) to facilitate the delivery of Certificate III in Health Service Assistance. The development of videoconference modules was matched to relevant units within the Certificate III.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model will facilitate greater consistency across allied health assistant roles. At the time of project evaluation, 16 training modules had been developed by key stakeholders from Western Australian Country Health Service and Disability Services Commission, and included learning outcomes, presenter notes, participant handouts and skill assessment/review. Protocols to disseminate these materials to Western Australian Country Health Service and Disability Services Commission staff had been established. Approximately 662 people participated in the delivery of 15 modules between June 2004 and July 2005 (on average, 44 people per module). An average of 16 sites connected to each videoconference. Feedback from participants indicated that training delivery using videoconferencing and distance education materials was appropriate and relevant for allied health assistants in rural and remote Western Australia. Further evaluation has been recommended to assess the impact of training on allied health assistant skills and competencies.
Barriers and enhancers to setting up the model	The project evaluation recommended the ongoing employment of a program coordinator to continue the training strategy. The role of the coordinator would be to coordinate training and the linkage with TAFE, develop additional modules and review existing ones, and further develop allied health assistant practice.

Source: Goodale, B June 2005, *WACHS DSC Therapy Assistant Training Initiative Project Report – Evaluation*, WA Country Health Service and Disability Services Commission, Western Australia.

(42) Generic patient safety education framework

Location/scope	Australia-wide
When and why was the model set up?	The framework was developed on behalf of the Department of Health and Ageing, by the Centre for Innovation in Professional Health Education at the University of Sydney, and was released in 2005. Its purpose is to provide a national generic training and education framework for health workers in the area of patient safety. This reflects a new approach to education and training in health care, which in the past had been profession or occupation-based. The generic patient safety framework has been developed because patient safety is integral to all health care settings, and because of the multi disciplinary and team-based approaches to care.
VET health skill shortage area(s)	Not targeted specifically at skill shortage areas, but is relevant for all health workers and professionals, including those involved in support areas.
How does it operate? (i.e. who is involved, what do they do?)	The National Patient Safety Education Framework was developed following widespread consultation with health care workers, consumers and other stakeholders. It identifies key skills, knowledge, behaviours and attitudes in relation to patient care. Its purpose is to facilitate a patient-centred approach, by ensuring all health workers are equally competent and supported in their roles. The Framework is not a curriculum, but a benchmark for training, educating and assessing health care workers in patient safety. The Framework is divided into seven learning areas that are further subdivided into 22 learning topics. It includes the levels of knowledge and performance required for each category of health care worker. Each level of knowledge and performance builds on the previous level. Levels of knowledge and performance elements required by each category of health care worker are: *Category 1* – Health care workers who provide support services (e.g. volunteers, transport, catering, cleaning and reception staff). *Category 2* – Health care workers who provide direct clinical care and work under supervision (e.g. ambulance officers, nurses, interns, residents and allied health workers) require both Level 1 and 2 knowledge and performance elements. *Category 3* – Health care workers with managerial, team leader and/or advanced clinical responsibilities (e.g. nurse unit managers, catering managers, department heads, registrars, allied health managers) require Level 1, 2 and 3 knowledge and performance elements. *Category 4* – Clinical and administrative leaders with organisational responsibilities (e.g. Chief Executive Officers, board members, directors of services and senior health department staff) only require Level 4 knowledge and performance elements.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model does not specifically address skill shortages and is still in relatively early implementation stages. However, the national and generic focus of the framework in providing criteria for the development of staged patient safety curricula for all health workers, depending on the level and nature of their work, has application to the current skill shortage crisis. It is one example of the need to provide generic education and training for all health workers in appropriate areas and targeted to their level of work, in order to facilitate mobility between and within health occupations. The Framework also introduces common terminology and understandings in relation to patient care, in recognition of the increasing prevalence of multi

	disciplinary and team based approaches to care, which also underpin a number of models for addressing health skills shortages.
Barriers and enhancers to setting up the model	None mentioned.

Source: J Ross, Centre for Innovation in Professional health Education, University of Sydney. Information accessed on 1/2/06 at http://www.patientsafety.org.au/framework/index.html

(43) Tele-check mental health training program

Location/scope	West Coast of Tasmania (communities of Burnie, Queenstown, Rosebery, Zeehan)
When and why was the model set up?	The pilot was launched in September 2004 with an information day, followed by training delivered over a two-day period in October 2004. It was evaluated in April 2005. The program is now embedded as part of the West Coast Health strategy for suicide prevention and is part of the job description for the West Coast Mental Health Worker. The purpose of the program is to increase community capacity to respond to those on the trajectory of risk towards suicide, by providing 'proactive contact beyond the clinical setting' using existing staff within services (health and other professionals, as well as community based service providers and volunteers). Training provides participants with skills to use the telephone to contact identified clients with a view to improving their health and well-being to prevent the risk of suicide. There is a shortage of mental health staff in this relatively isolated region, and in Tasmania generally, as well as limited resources to address mental health issues.
VET health skill shortage area(s)	The program is intended for all VET health and community service workers, as well as health and other professionals, and for community volunteers.
How does it operate? (i.e. who is involved, what do they do?)	13 people of varied backgrounds participated in the two-day training course, designed to raise awareness of suicide and the importance of social connectedness, and to introduce appropriate counselling and referral strategies. Training was delivered in Zeehan. Delivery included audio visual presentations and a workbook.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model was not specifically designed to address a skill shortage, but it has achieved this outcome by increasing community capacity to respond to people at risk of suicide. An evaluation in April 2005 found the program had been highly successful. Community capacity has also been increased by the enhancement of community referral networks. This means clients can be identified and assisted earlier, and referred to appropriate health services as required. The model is also innovative because it uses the telephone to reach people located in various parts of the isolated West Coast of Tasmania. If the model is to be expanded, the evaluator recommends participation by nurses and general practitioners, and other stakeholders such as police, ambulance and emergency workers.

Barriers and enhancers to setting up the model	Barriers: The training is not an accredited VET course. Program developers considered this option when developing the pilot training, but given time constraints and the complexity and time consuming nature of the accreditation process, decided against this option. Participants receive a certificate of completion from the delivering body. Accreditation of the program is a possible option further down the track, as the program extends to other regions. There was some confusion by participants about the purpose of the Tele-check model, which was addressed in subsequent marketing campaigns. Because of the varied level of experience of course participants, some struggled with content. In subsequent programs, volunteers and other community workers without previous skills training experience, were provided with some pre-training preparatory work. Enhancers: The facilitator was described by participants as excellent, easy to understand and with a good teaching style.

Source: Nominated model.

(44) Katherine regional allied health project

Location/scope	Remote Aboriginal communities in the Katherine region of the Northern Territory.
When and why was the model set up?	2003. The model was developed by the Katherine Regional Aboriginal Health and Related Services team, an alliance between four community controlled services, to improve access to therapy services by Indigenous people living in remote areas. The three-year project is based on a primary health care framework, as opposed to treatment-only visiting health services.
VET health skill shortage area(s)	Community based workers
How does it operate? (i.e. who is involved, what do they do?)	A range of strategies was devised to improve access to health services, including therapy services, for remote Indigenous communities, based on increasing community capacity to care for their aged and disabled people and developing community partnerships. What set this model apart from others was the development of a new health worker role – that of community disability worker. These people are not Aboriginal health workers nor allied health assistants, although they undertake a cultural brokering role like Aboriginal health workers. Training is provided locally by program staff and is not accredited through the VET system. The development of the role and training needs was not completed by the end of the first round of funding. The project has since been re-funded.
How do you know the model has been successful in addressing a skill shortage? (evidence)	A program evaluation found that the regular service and team approach to delivery of services was highly appreciated by the community.

Barriers and enhancers to setting up the model	An early challenge was the need for allied health workers to rethink their own practice, in applying primary health care principles to work in remote Indigenous communities. Some of the allied health project staff were new graduates with little experience in implementing primary health care practices. There were difficulties in recruiting community-based workers because there was no project funding to support their employment (workers were in receipt of Community Development and Employment Project funding), and because paid employment would result in loss of social security benefits. There is uncertainty regarding career paths for community based workers. There was no funding beyond September 2004 to employ a project manager. This had implications for sustainability of the initiative, which became self-managing. The team found this meant time away from their therapy work but on the other hand it gave better control of the project. Enhancers were the supportive health service manager with a strong commitment to primary health care, and the use of pooled funds from other sources to expand the project team.

Source: Nominated model.

(45) Medical assisting national qualification

Location/scope	Australia-wide
When and why was the model set up?	Development and endorsement of a national medical assisting qualification has been proposed by the Community Services and Health Industry Skills Council as part of the review of the Health Industry Training Package HLT02. There are a number of indicators of interest in this emerging VET health worker role, including the development of a state-accredited course in Queensland. The proposed national Training Package qualification will ensure that medical assisting health workers are trained to national standards and that training is driven by key employer, peak and industrial organisations. It will also facilitate skills recognition for staff currently undertaking medical assisting roles and provide a framework for developing job descriptions. Development of the qualification is in line with the move from state/territory accredited courses to national Training Package qualifications.
VET health skill shortage area(s)	Certificate IV in Medical Practice Assisting. This proposed new VET health worker role will undertake administrative and identified clinical and patient support roles under supervision of general practitioners or other authorised health professionals
How does it operate? (i.e. who is involved, what do they do?)	The proposed qualification and units of competency have been reviewed by general practitioners and relevant employers, regarding scope of practice, level of supervision, interaction with the broader team, patient safety requirements and compliance with organisational procedures. The proposed new certificate forms part of the reviewed Health Training Package (HLT02) which was submitted to the Department of Education, Science and Training (DEST) for endorsement in early October 2006. Endorsement of the qualification and units of competency is expected by approximately February 2007. Certificate IV training would be suited to New Apprenticeships pathways. It is proposed that the qualification would

	require completion of 24 competency units, of which 21 would be compulsory and three elective. Compulsory units would include administrative, clinical and generic (e.g. communication) competencies.
How do you know the model has been successful in addressing a skill shortage? (evidence)	As the model has not yet been implemented it is not possible to assess the extent to which it will help to address skill shortages amongst general practitioners. The model will have the advantages of a nationally recognised qualification in terms of assured training quality and mobility of health workers.
Barriers and enhancers to setting up the model	

Source: Nominated model.

3. Holistic approach

(46) Better skills, best care

Location/scope	Victoria
When and why was the model set up?	Began 2005. One reason for the project is to prevent staff shortages in health. The strategy will incorporate a series of projects to look afresh at the organisation of work for specific patient populations or services and to minimise duplication of effort and make best use of available staff.
VET health skill shortage area(s)	All health workers.
How does it operate? (i.e. who is involved, what do they do?)	The Better Skills, Best Care strategy seeks to encourage health services to explore new and redesigned work roles and provide support to pilot and roll out initiatives. 38 health workforce pilots are underway to look at the organisation of work for specific patient populations or services. Of these, eleven support worker pilots are focusing on new or amended roles in areas as diverse as paediatrics, acute in-patient wards, community podiatry, day oncology and dialysis, dietetics, physiotherapy, community health promotion and mental health services. These projects will develop the new or amended roles, perform assessment of prior learning, identify training gaps, commission and deliver training, implement the roles and evaluate their impact on patients, staff and the service. The Community Services and Health Industry Skills Council is working with the Department of Human Services to provide advice on existing and required training modules for the identified competencies, and how each pilot site can best access the vocational education and training they require. One outcome of this approach will be competencies and vocational qualifications that better meet evolving patient and service needs. Each pilot has engaged an external consultant to: map and document typical patient journey(s) at the site, identify and analyse all tasks required to meet patient needs, brainstorm opportunities to amend work roles and practices for better service delivery, identify competencies required for amended roles, document barriers to change, validate with staff of the

	work unit/service stream, and report on the agreed amended role and critique the role mapping process and tools. Some pilots are well on the way towards completion of the role development phase.
How do you know the model has been successful in addressing a skill shortage? (evidence)	Evaluation of the first stage (38 individual redesigned roles piloted during 2005) is nearing completion. The Better Skills Best Care evaluation framework measures role change impacts on patients, staff and services, as well as the process and tools used in workforce design.
Barriers and enhancers to setting up the model	None mentioned.

Source: Better Skills, Best Care websites at http://www.health.vic.gov.au/workforce/downloads/pso_pilot_summary.pdf and http://www.health.vic.gov.au/workforce/skills.htm

(47) Health commons approach to oral health in New Mexico

Location/scope	New Mexico, United States of America
When and why was the model set up?	The model was developed in 2000/2001, in response to the need to seek short and long term solutions to the shortage of dental services for low income families in New Mexico. It was tested in urban sites but has particular relevance for rural and remote sites.
VET health skill shortage area(s)	The model focuses on dental hygienists and other health professionals rather than VET-trained dental workers, but could be adapted to include dental assistants
How does it operate? (i.e. who is involved, what do they do?)	The model is a collaboration between oral health stakeholder in New Mexico, and includes health providers and officials, academics and policymakers. It was supported by grants from the Kellogg Foundation and Health Resource Services Administration Community Access Program. The coalition developed a 5-pronged approach to dental health skill shortages, based on a 'health commons' approach (pooling of resources by public and private stakeholders). The 5 strategies were: (1) enhance dental service capacity, (2) broaden the scope of dental skills of local health providers, including dental hygienists and general practitioners, (3) expand the pool of dental providers serving indigent and low income populations by revising the Medicaid rebate to dental practitioners, (4) create new inter-disciplinary teams in community-based sites, including dental hygienists, (5) develop oral health policy to support innovative dental practice models.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The paper reports on the model development and implementation. The developers were confident that the 5-pronged strategy, covering a range of creative, collaborative and broad-based solutions, would be successful in addressing the oral health crisis in New Mexico. Outcomes reported in the paper included creation of the Division of Dental Services at the University of New Mexico and employment of eight faculty staff, increased scope of locally available health providers to perform emergency dental procedure in rural areas, and legislation to allow for collaborative practice of dental hygienists who now work under supervision as part of the primary health care team

Barriers and enhancers to setting up the model	Barriers included protracted processes for state credentialing of dentists from other states which results in a loss of potential applicants. Enhancers were: high level of motivation of stakeholders to developing both short term and long term solutions to the oral health crisis; availability of grants from philanthropic and other sources that supported development of the model.

Source: Beestra, S et al. 2002, A 'health commons' approach to oral health for low-income populations in a rural state, *American Journal of Public Health*, *92*, 1, January, pp. 12-13.

(48) New South Wales Central Coast mental health skills ecosystem

[SEE SEPARATE CASE STUDY]

Location/scope	New South Wales Central Coast region
When and why was the model set up?	This demonstration project is part of a broader Australian government skill ecosystems initiative which was initiated by the former Australian National Training Authority. Skills ecosystems are a framework for understanding and addressing the factors that determine demand, supply and use of skills within specific industries and/or regions. They recognise that skill shortages are not necessarily resolved by skill formation strategies alone. The project began in January 2005, led by the Community Services and Health Industry Skills Council. The purpose of the project is further develop partnerships relevant to mental health service delivery in the Central Coast region of New South Wales, by identifying and addressing barriers to better collaboration amongst relevant agencies and organisations.
VET health skill shortage area(s)	At this stage of the project, there is a broad focus on mental health workers in general. As the project proceeds it is expected that interventions will be targeted at particular groups of workers, as appropriate.
How does it operate? (i.e. who is involved, what do they do?)	The project is being undertaken in three stages. Stage 1 comprised the research phase. It involved broad-based stakeholder and community consultation regarding mental health service provision in the region, as well as targeted interviews and focus group discussions regarding barriers to collaboration between services, and a review of the literature and secondary data analysis. From stage 1, a number of barriers were identified, of which skill deficits were one. These included two sorts of skills: partnership skills, and mental health clinical skills. Other barriers included differences in knowledge levels (e.g. understanding of dual diagnosis, knowledge of legislation and policies), entrenched negative attitudes towards working in partnership, insufficient resources, funding regimes that encouraged competitive rather than collaborative behaviour, and structural problems (e.g. inflexible bureaucratic structures and Mental Health Act, and workforce issues such as shortage of trained staff and ageing workforce). Through stakeholder interviews and focus group discussions a series of short, medium and long term strategies and interventions were identified. Stage 2 comprised implementation of selected interventions designed to improve coordination of mental health service provision. Short term interventions trialled included strengthening the role of the Mental Health Community Consultation Committee, and providing skills intervention for

	managers and staff. The Committee is an existing structure, with the capacity to enhance collaboration among organisations and facilitate the development of inter-agency regional plans. It has already established much in the area of inter-agency collaboration, so it is proposed to enhance the Committee's role, by modifying its functions, strategic plan, structure, membership base and existing activities. In terms of skills interventions, strategies to be implemented include a professional development program that facilitates workplace learning opportunities in a range of generic and specific competencies. *Walk a Mile in My Shoes* staff exchange program is being piloted in 2006 with a group of 12 across a range of different services. Another intervention was the Dual Diagnosis Forum, held in September 2005, where approximately 150 key stakeholders including Central Coast mental health employees, Alcohol & Other Drugs, other local service providers, government and non-government departments attended to identify the barriers to effective collaboration. A dual diagnosis model of care was subsequently developed, to be piloted across mental health services in the Central Coast in 2006. Stage 3, evaluation, is underway. It is recognised that the development of a new multi-disciplinary framework for mental health service delivery is a long term goal, extending beyond the life of the current project. The goal would be a team based approach to care involving different professionals and non professionals, with a worker coordinating care for each mental health patient.
How do you know the model has been successful in addressing a skill shortage? (evidence)	The model is still a work in progress, and final results from project evaluation were not available at the time of preparing this summary. A progress report prepared in July 2005 notes the usefulness of the skill ecosystem model in that it addresses the contextual and structural factors, as well as well as the nature of the workforce and work structure of mental health services on the Central Coast. The skills ecosystem approach recognises that skill shortages are best addressed by a range of strategies, in addition to skill formation strategies. Using and strengthening the role of the existing Mental Health Community Consultation Committee to facilitate coordination amongst mental health service agencies ensures immediate gains from the project, and is likely to ensure sustainability of project outcomes into the future.
Barriers and enhancers to setting up the model	Barriers to partnership forming included inflexible bureaucratic structures. In some cases it was necessary to work with available partners to develop a model of working and then move to interest other agencies in it. On the whole, however, stakeholders were enthusiastic about finding new solutions and were ready to experiment. Assured funding was an enhancer to this.

Source: Nominated model

(49) Queensland aged care skill formation strategy

[SEE SEPARATE CASE STUDY]

Location/scope	Queensland
When and why was the model set up?	A state government initiative to address labour shortages in the aged care sector, including both residential and community care. The aged care strategy was initiated in December 2003 by the Department of Employment and Training, and was one of the first of a total of 17 skills formation strategies put in place across a range of industries. The strategy employs a skills ecosystem approach, where government, industry and registered training organisations work together to identify reasons for labour shortages and develop strategies to address them.
VET health skill shortage area(s)	Aged care workers: enrolled nurses, personal care assistants, assistants in nursing, allied health assistants.
How does it operate? (i.e. who is involved, what do they do?)	The strategy is managed by the Queensland Community Services and Health Industries Training Council, and focuses on aged care across the whole state. It is a work in progress, and represents a new way of operating, where government acts as facilitators or brokers, to foster ownership of industry training requirements by industry, and to encourage registered training organisations to be more responsive to industry needs. The strategy takes a holistic approach to addressing skill shortages, including education and training, workforce management, organisation, job design, industry image and industrial relations. This long term strategy involves attitude change by industry, registered training organisations and government, and is being undertaken in three phases: development, implementation and sustainability. *Development:* The development phase lasted for approx 12 months and focused on bringing together the stakeholders, encouraging dialogue, building trust, developing networks, and accessing and analysing data on industry skills needs. *Implementation:* The strategy is currently in the implementation phase, predicted to last approximately three years. During this phase a wide range of initiatives has been developed and have been or are currently being trialled, including : Development of a Diploma of Endorsed Enrolled Nursing, negotiated between industry and registered training organisations, to allow staff to combine part time paid work with two days per week of study and clinical placement; Negotiation of additional aged care electives within the enrolled nurse course; Negotiation re extended scope of practice for endorsed enrolled nurses and enhanced roles for unregulated workers; Development of industry/school partnerships targeting Grade 10 students for careers in aged care; Mapping sets of skills sets against existing qualifications and competencies in relation to community aged care and residential aged care; Negotiation of changes required to Certificate III to meet sets of skills required by industry in the future;

	Establishment of aged care skills formation sub strategy for Aboriginal and Torres Strait Islander aged care, focusing on skills needed by Aboriginal and Torres Strait Islander aged care workers, and creating links and pathways for Aboriginal and Torres Strait Islander health workers; Skills development strategy for voluntary aged care workers, including provision of comprehensive orientation and induction and participation in appropriate professional development opportunities, offered by aged care facilities in which they work as volunteers; Facilitation of career pathways to allow staff to move between acute and aged care sectors; Supply chain project, which looks at the shortage of allied health workers involved in aged care. The project targets a number of changes needed to address skill shortages, beginning with changing views regarding the role of Aboriginal and Torres Strait Islander health professionals and aides. It also targets the need to focus specifically on Aboriginal and Torres Strait Islander health aides in terms of defining positions and scope of practice, defining career pathways and skills development, and improving access to training and skills development.
How do you know the model has been successful in addressing a skill shortage? (evidence)	This is a long-term strategy, still in relatively early stages of implementation, so it is too early to produce an evidence base documenting its effectiveness. Indications from aged care facilities involved, suggest good uptake of training options, with 30% of previously unqualified personal care workers completing Certificate III, and 50% of enrolled nurses currently undertaking training or in transition programs. The aged care skills formation strategy is likely to be sustainable because at the centre of the strategy is a strong industry skills council committed to industry ownership of training and workforce issues, which will provide ongoing leadership. It is an evidence-based change process, with input from Australian (University of Sydney) and international experts (from the United Kingdom) on successful change management in the health sector.
Barriers and enhancers to setting up the model	The strategy is long term and involves changing attitudes and a certain amount of risk-taking by senior government officials, VET providers and industry. Administrative and funding arrangements are informed by these mindsets. Attitude change is an ongoing process, with some more ready to embrace the new way of working than others. Current VET monitoring and reporting systems are inadequate to measure the effectiveness of this strategy, as they are largely quantitative, and do not adequately explain the behavioural and cultural changes inherent in this approach. At a macro level, changes have been difficult due to policy that does not reflect the changing context and content of work. Data limitations are identified as another barrier to be addressed.

Source: Nominated model.

(50) Queensland supply chain project

Location/scope	Queensland
When and why was the model set up?	This is a sub project that forms part of the Queensland aged care skills formation strategy (see separate model and case study). Its purpose is to examine and provide solutions to issues that affect the recruitment, training, retention and utilisation of allied health assistants in the aged, community and acute care sectors. Allied health assistants have a vital role in supporting the capacity of allied health professionals to deliver extended allied health services in a climate of shortage of allied health professionals. The project commenced in August 2005, and focuses on increasing the ability of staff to work across different types and levels of care and across different allied health occupational groups.
VET health skill shortage area(s)	Allied health assistants
How does it operate? (i.e. who is involved, what do they do?)	The project is being conducted by the Queensland Community Services and Health Industries Training Council Inc. together with two industry partners, BlueCare and Uniting Health Care. It is guided by a steering committee comprising industry, training, and government stakeholders. A consultant was engaged to: undertake a literature review; interview allied health professionals and assistants working in community, residential and acute care settings; map competencies, qualifications and training pathways currently available, and identify current and possible barriers to the supply of skilled staff. Barriers included lack of clear, agreed role definition and scope of practice for allied health assistants, lack of career pathways, and lack of access to training and skills development. A strategy was developed to address these issues, by developing and piloting new workplace arrangement for allied health assistants in two pilot sites within BlueCare and Uniting Health Care. New workplace arrangements included defining the role and scope of allied health assistants across community, residential and acute care sectors; enhancing worker mobility across the sectors; defining and trialling new job roles and developing new job and task descriptions; identifying related industrial relations issues; and increasing the capacity for workers to enter the field, upskill and pursue careers. The renegotiated allied health assistant role is being piloted in the two workplaces, and will include trialling a range of skilling opportunities such as training and fast tracking with gap training and recognition of prior learning. The focus was on a combination of work process improvement and workforce development.
How do you know the model has been successful in addressing a skill shortage? (evidence)	This is a long-term strategy, which has not yet moved beyond the pilot stage. The final report from the pilot was not available at the time of preparing this summary. Predictors of likely success include the evidence-based nature of the strategy, and the incremental approach to address skill shortages, with the Queensland Community Services and Health Industries Training Council emphasising that 'the project needs to progress at a rate appropriate to the industry partners and their stakeholders'. Stakeholders believe the collaborative approach fostered by the project is a key outcome that will facilitate greater mobility of allied health assistants across the aged, community and acute care sectors. This is not a stand alone project

	but forms part of the overarching Queensland aged care skills formation strategy. It is also complementary to the Home and Community Care Workforce Skills Development project. This suggests that reforms resulting from the supply chain project will have broad-based support across relevant sectors and will allow for transferability to other areas of the aged care and health sectors.
Barriers and enhancers to setting up the model	Key enhancers in setting up the model were the pre-existence of a collaborative relationship between Queensland Community Services and Health Industries Training Council, BlueCare and Uniting Health Care, and the appointment of a steering committee representing the broad range of stakeholders in allied health. The willingness of other organisations and government agencies to share relevant information and research was also noted.

Source: Nominated model.

Case studies

Riverland VET in Schools nursing program (model 5)

Summary

Strong community partnerships underlie this innovative response to a perennial regional shortage of aged care and nursing staff. Local TAFEs, high schools and hospital and aged care facilities developed the VET in Schools nursing pathways program and make it an outstanding success. Year 11 and 12 students complete Certificate III in Community Services Aged Care Work, incorporating TAFE coursework and on the job training. The model thus offers pathways from school to TAFE and to employment, and to higher education, while being responsive to industry needs. Similar models have followed across regional South Australia and other states as well.

STATE AND LOCATION
South Australia's Riverland (operating in four towns: Waikerie, Glossop, Loxton, Renmark)
MODEL TYPE
Training only, regional; VET in Schools program
START DATE
Beginning 2002
QUALIFICATIONS
Certificate III in Community Services Aged Care Work
NAMES OF KEY PARTNERS
Department of Health South Australia
TAFE South Australia Regional
Renmark, Waikerie, Loxton, Glossop High Schools
Renmark Paringa District Hospital
Waikerie Hospital and Health Services
Loxton Hospital Complex
Riverland Regional Health Services, Barmera
ON THE JOB TRAINING
Renmark Paringa District Hospital
Waikerie Hospital and Health Services
Loxton Hospital Complex
Riverland Regional Health Services, Barmera
FUNDING SOURCES
South Australian Department of Health and Department for Education and Children's Services

Background

The Riverland is located on the Murray River and extends from Renmark to Waikerie, around 200 km or more from Adelaide. The district faces challenges characteristic of regional Australia, including the difficulty of adequately staffing health sector facilities and the paucity of local careers for school-leavers. Since the late 1990s, however, collaboration between industry groups, employment agencies, TAFE and schools in Riverland had resulted in a number of successful

VET opportunities for students, and models had been developed to support Year 11 and 12 students through these pathways without major disruption to their mainstream subjects. So one day late in 2001 when the Director of Nursing at Renmark Paringa District Hospital was talking with her former teacher, then District VET Coordinator with the Department for Education and Children's Services, it was natural that the topic of the acute shortage in future aged care workers would come up. An idea for a VET in Schools nursing pathways program began to form.

Developing and implementing the solution

The District VET Coordinator and the Renmark Paringa Director of Nursing moved quickly. Within a month, a meeting was arranged at one of the local high schools, attended by principals and VET Coordinators from nine district schools, Directors of Nursing from the four major Riverland hospitals and two representatives from TAFE, which has campuses across the Riverland. All were keen from the start. They set up a working party to implement an action plan to have students enrolling in Certificate II Community Services Aged Care Work and getting their hands-on experience in local health and aged care facilities. The Coordinating Lecturer from TAFE's Renmark campus said:

> If we could get kids from school interested in doing Aged Care as a starting point, it would give them a bit of a flavour of working in hospitals and working in Aged Care and they might then choose to go on and do nursing, and they could now do it locally.

The VET Coordinator at Renmark High School said, 'The critical thing was that the industry was predominantly government based. The kids would end up with real jobs, and these would be fairly secure'. Funding would come from the Department of Health and from the schools' own funds. This would pay for the students' TAFE studies and support the aged care facilities to train students on the job.

Two possible models were offered to the aged care facilities: in one, students would come in a one-week block, once a term; in the other, they would come one day a week throughout the term. Schools had generally found the one-week block model worked best for other VET courses. Over a week, students could see a process happening. However it was recognised that this placed a certain burden on the students, catching up with missed lessons, and that it was easier for them to catch up a day than a week. The school VET Coordinators would be the main support for students in this. The work placement component of the program is a minimum of 80 hours to gain the qualification. The health facilities' Managers in Aged Care would oversee the program on site, with training generally one-on-one by staff who themselves were provided with preceptor training, including Certificate IV Workplace Training and Assessing. Renmark Paringa District Hospital, for example, trained four senior staff as part of a funding grant received from the Commonwealth Department of Health and Ageing. Supervision of the students would be part of the trainers' workloads, but the Director of Nursing at Renmark Paringa said her staff were 'extremely receptive' to the program. The facilities' main challenge was a rostering one: if students were to come once a week, the selected trainer had to be rostered for duty the same day.

> The key thing for us . . . we believe you've got to take advice from industry as to what is best for them. The hospital is doing the training, and what suits them the best, what is best at the end of the day for their patients, these are integral to the whole plan. (Former District VET Coordinator)

Responsiveness to industry needs is thus a hallmark of this program. On the other hand, as the VET Coordinator at Renmark High said, 'One of the reasons that this program works is that none of the sectors thought anything was more important than the kids' education.'

In the end the one-week block was the model generally chosen, and the former District VET Coordinator said:

> In a way, setting up the program was easy, because of the absolute enthusiasm of the hospitals and their directors of nursing. They were so committed to getting training of young people into their hospitals and to showing young people this career path. And some of [the on-site trainers] were just fantastic. Some were people who didn't have experience in offering training and they just proved to be absolute gems.

Flexibility is a key to the program's success. If students prefer, they can do shift work or work during holidays. Students are not locked into aged care, but participate in other hospital activities as well. The program can thus be a pathway to a number of careers as well as nursing and aged care work.

The other aspect of the model was TAFE attendance at theory classes.

> The other really positive thing was that the lecturer who was in charge of this at TAFE was just so good at being flexible and thinking outside the square and finding ways to make this work. (Former District VET Coordinator)

To begin with, a three-day block was decided on. This however proved difficult for schools and students, and it was changed to one day every few weeks to make the standard attendance of 22 days over the year. Regular meetings took place between TAFE and hospital personnel to ensure workplace learning tasks matched the requirements of course outcomes.

The program was underway by March 2002. Community partnerships are vitally important in a model like this one. 'It was a huge community effort. I have never worked on a project that has just taken off the way this one did,' said the Coordinating Lecturer from TAFE's Renmark campus, where the course was based. But issues did arise in a number of areas. Generally, if young Riverland people wanted to study, they had to move away from home. This program offered a way of studying locally, but the district was a very large one. Transport was a problem, and remains so, with the rising cost of country fuel adding to it, as some students have a 200 km round trip. South Australians can get a driver's license at age 16, so a number of students drive. Others are driven by parents, other students and TAFE staff. The program arranges for billets for students to stay overnight to allow for multiple training days. Parts of courses were sometimes run at TAFE's Berri campus, next door to Glossop High's Senior School. To begin with, a certain rivalry between the region's towns had to be addressed, with some team building required to bring together successfully a class of students of differing backgrounds and from different areas. 'Every year since that first year, we address this really early on,' said the Coordinating Lecturer from TAFE's Renmark campus.

Early predictions from some that young people would not like aged care work proved wrong.

> As it turned out, the way that these kids related to the older people was just fantastic. For the older people it was wonderful, having someone young fussing around them and obviously learning skills as well. (Former District VET Coordinator)

There was also some resistance at first from parents who perceived TAFE as a less valuable pathway than university. This has diminished since Community Health became an accredited VET Studies course, enabling Year 12 students to get a tertiary entrance score. 'They do the competencies through TAFE, and do a school project,' explained the Waikerie High VET Coordinator, adding that parents are now 'on side'.

The students who put their hands up for the course, however, were extremely diverse, including in academic ability. The program had no pre-set targets in terms of numbers; it would take as many students as it could, depending on the capacity of the hospitals. Most were girls. Some were considered at risk of not staying in school. There were students from groups that are traditionally under-represented in vocational education and training, such as some from non-English speaking and from indigenous backgrounds. English language support was provided by incorporating

nursing studies into school-based English as a Second Language lessons. TAFE emphasised the practical content of the course—'lots of practical stuff, lots of activity, hands-on … and we've continued that' (Coordinating Lecturer, TAFE's Renmark campus)—and provided learning support for the students. Adjustments were made as the course and the years progressed: subject lengths were changed, more flexible delivery was offered including CDs and booklets, and assessment included oral testing as well as practical skills-based performance. 'Whatever the needs are, we'll try and address it in the best way possible' (Coordinating Lecturer, TAFE's Renmark campus). With the advent of the revised Community Services and Health Training Package in 2002, Certificate II Aged care work ceased to be. From 2004, students were enrolled in Certificate III. In 2006 eight TAFE lecturers are involved in program delivery. Five of these are registered nurses (two with Aged Care and three from general nursing backgrounds).

Logistic challenges also involved the different needs of schools with regard to time-tabling. Students were missing mainstream classes and sometimes assessments. Over time, the schools managed largely to coordinate their timetables with TAFE classes and workplace learning, so that students would for example miss no double lessons. As time passed, funding became an issue. The schools found that VET costs ran over budget on this and other programs and they had to look at other sources for money.

Overall, however, those involved in setting up the program found it was 'easy', because 'the community got behind it', and 'it was worth it'. 'The enthusiasm of the hospitals and the Directors of Nursing was so important,' said the District VET Coordinator of the programs early years. The group of principals, VET Coordinators, Directors of Nursing and TAFE people continued to meet regularly. 'We spent a lot of time talking together' (VET Coordinator, Renmark High).

Evaluation and sustainability

No formal evaluation of the program has been carried out, as funding for this has not been available, but the model is seen as an example of best practice for ensuring skill retention in industry areas, and won the Australian Training VET in Schools Excellence Award in 2003. 'Every regional area in South Australia has a nursing pathways program now' (Coordinating Lecturer, TAFE Renmark Campus).

'The success rate of kids in these programs has just been so good. They've gone on to get employment in the industry or they've gone on to further TAFE training, or university', said the former District VET Coordinator. Over the four years of the program since 2002, 75 students have completed the first year. Three years of year two since 2003 have seen 26 students complete. TAFE says the reasons for reduction in numbers for the second year group include: Year 12 study commitments (with some students focusing their study towards University entrance and Bachelor of Nursing/Early Childhood Education qualifications); some students leaving school after year 11 (some gaining work in the Aged Care sector and completing their study through TAFE as vocational students); one school until this year allowing only year 12 students to enrol in stage 1; and some students deciding that caring/nursing careers are not for them. In 2006 20 students are enrolled in first year, with six in second.

Formal and informal feedback is gathered from students through VET Coordinators and hospital mentors. TAFE tracks the students on a yearly basis, to see where they have gone. Up to 70% continue in the health sector. Many obtain employment from the facilities where they did their placements, and the retention rate is good. The Director of Nursing at Renmark Paringa District Hospital said: 'The program has proved itself over years. We are constantly reviewing it.' Future plans involve expanding the model so that students can link with the Home and Community Care program.

Flinders University Rural Clinical School started a nursing school in Renmark in 2002. The VET in Schools nursing pathways program feeds into this, with students able to enter university from Year 12, or from Certificate III Aged Care, and Flinders recognising prior qualifications from TAFE as suitable prerequisites for its Bachelor of Nursing degree and offering credit for one unit of study.

The Riverland Nursing Pathways Program is very dependent on continued funding. Funding from the Department of Health has remained the same, but since recent restructuring, TAFE costs have almost doubled. The program costs schools around $1000 per student. So far they have met the expense by sharing it equally—evidence of the fact that 'this group of principals is so committed to the notion of VET in Schools' (former District VET Coordinator). But this year some schools have had to introduce a 15% co-payment from students. The Waikerie High VET Coordinator said this in itself is not a disincentive to students, who are aware of the benefits of the pathway program. But he fears that schools may not be able to afford to continue to participate in the program. The District VET Coordinator of the program's early years agrees:

> Funding is a major problem. The program was heavily subsidised until 2006. Every year the principals approach the VET in Schools officer at TAFE with their numbers of interested students, and ask what the cost will be. This determines whether they participate or not.

Efforts are being made at a political level to try to solve the funding problem.

Spokespersons from the organisations involved are in one mind as to the lessons they have learned and the advice they would pass on to others: 'Never say no,' advised the Renmark High VET Coordinator. 'Take up an idea and run with it,' said the VET Coordinator at Waikerie High. 'Have a go!' urged the Director of Nursing at Renmark Paringa District Hospital.

Aboriginal health worker oral health training program (model 27)

Summary

A culturally appropriate basic preventative oral health delivery program was delivered by a specially established registered training organisation (the Centre for Rural and Remote Oral Health), University of Western Australia, to deliver a vocational oral health education program. Through this oral health training program. Aboriginal health workers were encouraged to implement long-term preventive measures at a local level and to improve community dental health. They were also encouraged to link with other oral health-care delivery programs (Pacza, Steele & Tennant 2001). This model has proven to be both sustainable and transferable, being implemented in places outside Western Australia.

STATE AND LOCATION

Western Australia, various locations

MODEL TYPE

Job redesign and training (upskilling and providing career pathways for existing workers)

START DATE

1998

QUALIFICATIONS

Aboriginal Health Worker Certificate III and IV—oral health module

NAMES OF KEY PARTNERS

Kimberley Aboriginal Medical Services Council

Centre for Rural and Remote Oral Health

University of Western Australia

Western Australia Department of Health

ON THE JOB TRAINING

At Aboriginal Medical Services centres in Western Australia

FUNDING SOURCES

Government of Western Australia Department of Health

Background

Projections indicate that in the coming years the dental workface will face shortages, especially in areas outside capital cities (Tuesner & Spencer 2003). This shortage stems, in part, from the significant improvement in oral and general health in the population, resulting in 'people keeping more of their teeth, living longer and demanding increased levels of care' (Director, Centre for Rural and Remote Oral Health). Despite this shortage, very low numbers of dental personnel are actually being trained, due to the high cost of training.

There is particular difficulty in attracting the oral health workforce to work in rural and remote areas and to government funded oral care provision. Aboriginal people, especially those living in rural and remote areas, face significant dental care problems. There is 'a clear need for a preventive focus and for linking the [Australian Government] funded Aboriginal oral health services with the [State] public dental health services' (Training Coordinator).

The Oral Health Training Program targets Aboriginal health workers who are at the coalface of health care. It is designed to provide them with an understanding of basic oral health principles

and prevention strategies, and the skills for basic preventive dental practices. The program also teaches technical dental terms, how to communicate with dental professionals, and how to recognise the basic dental problems that clients present with, such as the causes of dental pain.

Developing and implementing the solution

This program arose out of informal volunteer activities. Around 1998, at the request of a friend, the program's creators, including the Director of the Centre for Rural and Remote Oral Health, went with some other volunteer dentists and oral hygienists to provide basic oral health training in the far north-west of Western Australia. While there, they discussed the issues and realised 'that in a dental system, there's some strongly evidence based preventive measures, that are relatively simple and cost effective, [for example] fluoride and tooth brushing ' (Director, Centre for Rural and Remote Oral Health), that can have a significant positive effect on oral health. A more formal education program was then set up, catering for a range of people including health workers and remote nurses. The trainers were professional dental auxiliaries and dental students, all of whom gave their time and experience to the project.

The Western Australian Government now supports the program in collaboration with the University of Western Australia, through the Centre for Rural and Remote Oral Health. The Centre was specifically designed to facilitate the development of the oral health training activities, to provide direct dental care and to undertake research into rural and remote oral health issues. The Centre, now some six years on, has been highly successful in its efforts.

The program was set up in collaboration with the Kimberley Aboriginal Medical Services Council, who were running the Aboriginal Health Worker training program. It was also designed to complement the establishment of some Aboriginal Medical Services dental clinics, in other parts of Western Australia. The program development team was clear about the sort of information and training in dental care most needed by Aboriginal health workers:

> We knew what we wanted to put in it and had spent a long time consulting with key stakeholders. We had collected together the basic information that was thought to be relevant to Indigenous people, because the people working on the project had had experience at both preventive programs and with Indigenous people. So that was easy ... we thought, ok well, there's no point in talking about aesthetic crowns and periodontal surgery, when basic problems of abscesses and pain were the biggest problems. (Training Coordinator)

The Aboriginal Health Worker Oral Health Training program was set up as an additional, complementary unit to the existing health worker program, and was designed as a flexible, stand-alone module, to allow it to be taught at various certificate levels (Pacza et al. 2001). The course comprises 22 learning objectives divided into three oral health modules: introduction to oral health and hygiene, applied oral health and oral health delivery (Pacza et al. 2001).

Adding the oral health modules to the existing Aboriginal Health Worker program was a strategy to ensure uptake of the training, given that 'the Aboriginal Health Worker program has been very successful in providing an access point to Aboriginal people for primary health care' (Pacza et al. 2001).

An aspect that the developers found to be particularly easy was recruiting dentists and oral hygienists to provide the training to the Aboriginal Health Workers, at little or no cost. The program creators found that when news about the program spread, many dental professionals were keen to try to help make a difference in what is now recognised as an area with some of the poorest oral health conditions in Australia.

There were many challenges in setting up the program. One of the first hurdles faced was that, as a university, the University of Western Australia does not provide vocational education and training. The Centre for Rural and Remote Oral Health overcame this problem by becoming a registered training organisation, and linking with the Kimberley Aboriginal Medical Services Council, who became the registered training provider for the program.

Another challenge, as described by the Program's Training Coordinator, was understanding and completing the paperwork required for accreditation and registration of the training organisation and revision required with the introduction of the National Training Package framework a couple of years later.

Other difficulties were described as being 'barriers of the profession':

> We work in a very constrained environment, legislatively, and expectation-wise, and so at first these programs were seen as silly ideas, from academics thinking they could do things. So I think that these constraints are in the dental profession for good reason; they're there to prevent adverse outcomes and we all must work within that. Sometimes, with a little bit of thinking these constraints can be managed to build programs that consider the context of the environment in which people live and work in Australia and ... that was one of the difficulties (Program Director).

Evaluation and sustainability

Since its inception, the program has expanded. The course has grown from small, informal activities into a suite of different education programs extending beyond Aboriginal Health Worker training. For example, in order to facilitate the training of dental assistants in rural and remote areas, online and distance education courses are now offered across Western Australia, and to some students in other jurisdictions throughout Australia. The program also has a high level of transferability, and links are being built with people from international locations looking to develop programs based on the Western Australian program.

The organisers informally evaluate the program from an educational and user perspective every time the program is run, to ensure that the content and delivery process continue to evolve. The program continues to be funded (it has been sustained for over 10 years now) and there continues to be a demand for the program, which is also seen as an indicator of its success.

> It started off [as] two people with a suitcase wandering around the outback, to try and do something. It grew to then setting up an office getting staff that are doing research, dental service delivery, which links in with the dental students and developing teaching resources. (Training Coordinator)

The organisers admit, however, that it is much more difficult to assess and evaluate the impact of the program in terms of the oral health of the Aboriginal people in areas where the program has run. Concrete evidence of the impact needs to be collected over a long period, and there is a wide range of other variables that could affect the outcomes. The feedback from the primary education providers and the students however, continues to be very positive. There is also evidence of pockets of improving knowledge about dental practices in the areas where the program has been in place and preventative oral health practices continues to be an important focus of the training.

Introduction of endorsed enrolled nurses in haemodialysis units (model 36)

Summary

This Sydney South West Area Health Service model uses education and training as a recruitment and staff retention strategy, and also fills an expanding need for trained nurses working in renal services, initially in haemodialysis units. The program comprises TAFE training in medication administration and dialysis procedures, and clinical placement in the renal ward. Successful participants become endorsed enrolled nurses able to undertake extended roles in nursing care.

STATE AND LOCATION

Sydney, South West Area

MODEL TYPE

Job redesign and training; local.

START DATE

2004

QUALIFICATIONS

Accredited Medication Management and Dialysis Procedures courses for enrolled nurses

NAMES OF KEY PARTNERS

Nurse Registration Board

New South Wales Institute of TAFE

ON THE JOB TRAINING

Sydney South West Area Health Service

FUNDING SOURCES

No special funding sourced

Background

Sydney South West Area Health Service looks after all public hospitals and healthcare facilities in central and south western Sydney, providing healthcare to more than 1.3 million people over 17 local government areas. In 2003/4 repeated advertising for registered nurses to work in its renal service had been unsuccessful. The renal service had grown in response to patient demand and was caring for several hundred kidney failure patients, many of these on haemodialysis. The lack of availability of trained personnel prompted Sydney South West Area Health Service to review the existing job description and design. A job analysis was conducted, which determined that an enrolled nurse could assist a registered nurse in undertaking some responsibilities and skills in dialysis settings, if adequate and appropriate education and training was provided. As a recognised provider of clinical education for trainee enrolled nursing and undergraduate Bachelor of Nursing programs, Sydney South West Area Health Service knew that education linked with the Nurse Registration Board initiative to increase the skills base of enrolled nurses through medication administration could also be a key recruitment and staff retention strategy.

Developing and implementing the solution

Senior nursing management and educators began an extensive consultation process. They set up a communication process with TAFE New South Wales and the Nurse Registration Board, and proceeded to develop theoretical and clinical components of a program, beginning with the competencies they needed in nurses in renal units. Assessors for medication assessment and dialysis procedures were identified. Liaison with nurse unit managers and an education session

for staff took place to ensure that students would be well supported in the clinical areas. Finally, candidates were recruited according to relevant selection criteria.

The program has two main strands: accredited TAFE training in medication administration and dialysis procedures, and clinical placement in the renal ward overseen by Clinical Nurse Educators. The program therefore focuses on knowledge-skill transfer and practical application.

The TAFE training is based on competencies in the Health Training Package. For the clinical strand, a two-day Introduction to Renal Nursing workshop deals with basic theoretical understanding of renal patient care; renal anatomy and physiology; haemodialysis and peritoneal dialysis patient care; renal diet, drugs, and transplant; in-centre, satellite and home dialysis care; and the psycho-social needs and issues of patients. Further to this, a three-hour theory and practice haemodialysis- and cannulation-specific program involves completing a workbook, checking intravenous medications and fluids and completion of five successful cannulation procedures in the renal ward. Throughout the training, candidates have individualised clinical teaching and supervised practice which is accredited to haemodialysis policies and procedures. These theoretical and clinical components are conducted at Sydney South West Area Health Service by Clinical Nurse Educators and Clinical Nurse Specialists respectively. Completion of all the haemodialysis theoretical and clinical components takes from three to five months.

The Nurse Manager and Acting Business Manager at Liverpool Health Service at the time of the introduction of the program was deeply involved with it from the beginning, having co-written the proposal for the program with the then Director of Nursing, and worked with local Nursing Managers to set it up. As the program was a new concept, she said:

> A big cultural change was needed. We did a survey of attitudes, then we ran an education session about the program for all registered nurses and all our health and medical teams to prepare them.

Getting it accepted by registered nurses was something of a challenge. A Clinical Nurse Educator from that time said:

> I wouldn't say it was hard. Short-lived resistance, I would say. Some may have had the feeling all our registered nurses' positions were going to be absorbed by enrolled nurses. Once that fear was quashed, it was not an issue.

Another Clinical Nurse Educator in the early stages of the program said:

> At that time, Enrolled nurses in New South Wales were not allowed to give medication. There were registration restrictions. There was no endorsed enrolled nurse program. So there was some concern about whether Enrolled nurses would have the ability to make decisions with regard to haemodialysis and cannulation procedures—these are very independent decisions.

Another challenge was building confidence in the enrolled nurses that they could do the training and the job adequately.

> We had a little bit of trouble getting appropriate enrolled nurses for these positions. Part of it was geographical. We're in the west of Sydney, so we don't attract the same number of people as you might in the inner city. (Local Dialysis Nursing Unit Manager, Clinical Nurse Educator in early stages of program)

Overall, however, the change process was well managed and received. Within four months of employment, four enrolled nurses successfully completed the accredited cannulation program. They also completed the required theoretical and clinical assessment for enrolled nurses Medication Courses conducted by TAFE in November 2004. They thus became endorsed enrolled nurses and their extended roles were made legal. Their success boosted confidence in

the program within Sydney South West Area Health Service and encouraged further uptakes of enrolled nurses the dialysis units.

The program relies on cooperation between education and support staff and the renal units within Sydney South West Area Health Service, but produces high gains for relatively low cost.

> The way the service I run works, there are three satellite dialysis centres. Now at Campbelltown especially, that is often staffed with a registered and an enrolled Nurse, who basically share the patient load there. So the enrolled nurse will do essentially the same as the registered nurse as far as commencing treatment, terminating treatment, but always under the supervision of the registered nurse. From my point of view it's worked very well. I think there's still a lot of hesitance out there about giving enrolled nurses this extra dimension to their role, but to me the message at the end of the day is, give it a try. (Local Dialysis Nursing Unit Manager, Clinical Nurse Educator in early stages of program)

Evaluation and sustainability

Outcomes of the program in skill development and the extended roles for enrolled nurses are good. Eight enrolled nurses have been through the program at Liverpool Health Service. Questionnaires for staff, nurse unit managers and the enrolled nurses measure the success of the program and its impact on the organisation. The enrolled nurses', registered nurses' and Nurse Unit Managers' feedback concerning the program have been positive, indicating a high level of satisfaction with the extended nursing roles and skill development. The on the job education program has been very effective with regard to recruitment and retention of nursing staff and has been beneficial both to the individual and the organisation. For the individual, it promotes personal growth and professional development through role extension. For the organisation, it has addressed the shortage of trained personnel in the renal service and allows for future expansion of the service.

Western Australian Country Health Service allied health assistant project (model 41)

Summary

The demand for therapy services and shortages of allied health professionals in rural and remote Australia drove the development of the allied health assistant project. Its purpose was to develop generic standards and benchmarks for allied health assistant work in the rural and remote context, to ensure quality and consistency of delivery throughout the Western Australian Country Health Service, and to provide allied health assistants with training immediately useful for their work. The model has now been adopted statewide, and is regarded as enhancing the role of allied health assistants.

STATE AND LOCATION

Regional centres of Western Australia

MODEL TYPE

Job redesign and training; regional response

START DATE

Beginning 2003

QUALIFICATIONS

Certificate III in Health Service Assistance – Allied Health Assistance

NAMES OF KEY PARTNERS

Western Australian Country Health Service

Western Australian Disability Services Commission

Combined Universities Centre for Rural Health

West Coast Institute of TAFE

ON THE JOB TRAINING

Videoconferenced training supervised by allied health professionals at workplaces

FUNDING SOURCES

Western Australian Country Health Services

Western Australian Disability Services Commission

Australian Government Department of Health and Ageing

Background

The demand for therapy services and shortages of allied health professionals in rural and remote Australia drove the development of the Western Australian Country Health Service allied health assistant project. Its purpose was to develop a statewide training system for allied health assistants (known in Western Australia as therapy assistants) across all allied health services over the course of 2004 and 2005.

Allied health assistants are increasingly seen as an appropriate model of allied health service delivery in rural and remote Australia. In Western Australia half of these are based in towns away from their supervising therapists. The work tends to be part time, in some cases only a few hours per week, and may involve multiple allied health disciplines. It is also varied: predominantly concerned with speech pathology, occupational therapy and physiotherapy, country allied health assistant work may also include health promotion, audiology, dietetics and administrative tasks. The vast majority of workers have no formal allied health assistant qualification. Recruiting allied health assistants in some areas can be difficult.

Historically allied health assistant training had occurred on an individual site basis and included on-the-job training and occasional training days organised by local therapists. Formal training that existed was limited. No regional Western Australian registered training organisation was able to offer Certificate III in Health Service Assistance (Allied Health Assistance); neither was there, until very recently, any Western Australian registered training organisation offering it by distance education. The distance education available from interstate did not fully meet the requirements of Western Australian rural and remote allied health assistants.

Developing and implementing the solution

The Western Australian Country Health Service allied health assistant project was established through processes that began development years ago. Regional and statewide projects from 1999 to 2003 provided the foundations for a number of regions to begin investigating or developing allied health assistant programs, including the Midwest Murchison, Wheatbelt, Goldfields, Pilbara Gascoyne, and Kimberley. Project officers were appointed, and steering groups included representatives from therapist groups, health facilities, Western Australian Country Health Service, and the Combined Universities Centre for Rural Health. Outcomes of these programs showed that there were many common aspects to allied health assistant work across the different regions.

In 2004 a project officer was employed by Western Australian Country Health Service to develop and coordinate statewide training for allied health assistants. The priorities for training were that it must be relevant, accessible, and that there would be recognition for allied health assistants who participated in training. The project aimed to standardise foundation competencies for allied health assistants, to establish distance learning training models, and to coordinate a program of training to be delivered through videoconferencing and distance learning materials. The program would offer choices to the allied health assistant workforce, allowing employees to complete training modules related to their jobs, even if they did not wish to do Certificate III.

Using an action research framework, the project developed and improved standards of practice, as well as resources that would support therapy services delivered by assistants. A model was developed that encompassed local training issues shared across allied health disciplines and also job specific ones related to immediate practice, and broad allied health assistant training issues relating to rural and remote practice. This model reflects a move towards the concept of generic assistants who work across a number of disciplines, a model particularly suited to the provision of allied health services in rural and remote areas. A scope of practice for allied health assistants developed in the Midwest Murchison region was adapted for the wider role which allied health assistants perform across the state. Minimum standards for supervision developed in Midwest Murchison were used as a basis for the development of supervision guidelines for the Western Australian Country Health Service.

> We have very strict guidelines about allied health assistants and supervision, so assistants cannot work unsupervised by an allied health professional. One of our big lessons has been that there needs to be careful thought as to how many allied health assistants it is appropriate for a therapist to supervise. Having allied health assistants can increase the load on the therapist—not decrease it. Allied health assistants are not a skills substitute. They do however enhance services to communities. (Western Australian Country Health Service Senior Project Officer)

Western Australian Country Health Service therapists and allied health assistants were surveyed to determine allied health assistant training needs. In areas of common need training module topics were selected and working parties, comprised of rural and remote allied health professionals from within Western Australian Country Health Service, were formed around each module.

> The hardest challenge was getting representatives on the working party, and getting them to work on developing the modules, on top of their workloads as therapists. But we got a lot of participation because therapists had all been doing their own isolated training of assistants in their regions, and they saw that if they collaborated on one project they'd have access to a whole body of training modules. (Senior Speech Pathologist, Wheatbelt Region)

The role of therapists in the working parties was crucial:

> It's really important to have people who know what it's like to do the work. I was a project officer but I was also at the same time working as a speech pathologist with allied health assistants. I knew the group. You can empathise, and people respect you for that. (Former project officer)

18 videoconference training modules were developed in 2004, matched to relevant units within the Certificate III. They included a focus on pediatrics and multi-disciplinary training (speech pathology, occupational therapy and physiotherapy). Additional training was developed for supervisors of assistants, including a train-the-trainer workshop and additional activities and reading. Coordinated by the project officer, the training modules were delivered across rural and remote Western Australia by videoconference. Western Australian Country Health Service has an extensive tele-health network that allows high quality and relatively inexpensive videoconferencing within the network. Each training module included a presentation by videoconference, handouts, a training evaluation, and a post-test for the allied health assistants to complete and hand into their supervising allied health professional.

> The videoconference modules provide us with one way to make sure our allied health assistants are receiving the training we require. An issue that we have with the Certificate III in Health Service Assistance (Allied Health Assistance) is that it's quite 'metro' focused and quite aged-care focused, whereas the majority of our allied health assistants are working in a pediatric environment. Secondly a significant part of the workforce would probably never undertake Certificate III, because they were only working small hours. Our videoconferencing training can be accessed by allied health assistants up in Derby or right down to Albany. (Western Australian Country Health Service Senior Project Officer)

A partnership with West Coast TAFE in 2005 linked the training developed by Western Australian Country Health Service to formal accreditation, enabling participants to enrol in distance mode and receive prior learning credit toward Certificate III in Health Service Assistance (Allied Health Assistance).

> This gives us the best of both worlds. We're now giving our staff access to accredited training, and we've had our first cohort go through. We will have increasing numbers of people in the country who've completed Certificate III, where formerly there were almost none. (Western Australian Country Health Service Senior Project Officer)

Those who have attended or viewed the allied health assistant videoconference training program may enrol in two units available through flexible delivery: HLTAH1A Assist with the provision of an allied health therapy program, and HLTCSD6A Respond effectively to difficult and challenging behaviour.

The project continues to have a project officer working on training. This is regarded as an essential element. The other important factor is collaboration. An ongoing partnership between Western Australian Country Health Service and the Combined Universities Centre for Rural Health has allowed examination of allied health assistant practice through a number of research and evaluative steps. This partnership was enhanced by proximity of location, with the Combined Universities Centre for Rural Health an easy walk from the Geraldton hospital where the former project officer was based. Maintaining collaboration with other partners across vast distances was effected through regular teleconferencing or telephone contact. 'The regions are vast, but the

allied health therapy world in Western Australia is quite small,' said the former project officer. In rural and remote areas Western Australian Country Health Service and the Disability Services Commission work closely together in delivering the services provided with the aid of their allied health assistant employees. Memoranda of Understanding between Education and Western Australian Country Health Service, and the Disability Services Commission and Western Australian Country Health Service, have formalised the management and budget allocations of allied health assistants employed by Disability Services Commission and supervised by Western Australian Country Health Service therapists. From this agreement, six monthly reporting guidelines were established which further improved communication between parties.

Evaluation and sustainability

The model is regarded as 'a strategy to enhance allied health services and increase access to them' (Western Australian Country Health Service Senior Project Officer). It is promoted as a supervision model, with a therapist from the relevant discipline regularly supervising the assistant. In no way does the allied health assistant model replace a therapist's skills.

> Using allied health assistants requires a lot of support and a lot of resources to get the model going. Although it might increase client through-put, it does change the work of the professional. The assistant needs to be well supported by the therapist, who needs to be well supported by a project officer. The model can't be superimposed without thought about the amount of resources that can be put towards it. Simply adding more allied health assistants to an already under-resourced system would not be the answer. (Lecturer in Rural and Remote Allied Health Practice, Combined Universities Centre for Rural Health)

Further resources and opportunities for networking for allied health assistants could benefit the program.

> At the moment assistants are aligned with therapists rather than with each other as a workforce. The allied health assistant identity and the progression of career hasn't been sufficiently looked at yet. (Senior Speech Pathologist, Wheatbelt)

To date there has been no formal evaluation of the efficacy of using allied health assistants. Feedback from professionals, however, has been positive.

> The feedback from therapists is that they were really keen to continue with the program, because they can see that the outcomes are helping with their service delivery. The communities (anecdotally) are happy with the program, especially so to have an allied health assistant in their town. (Senior Speech Pathologist, Wheatbelt)

Feedback from participants has indicated that training delivery using videoconferencing and distance education materials is appropriate and relevant for allied health assistants in rural and remote Western Australia.

The project evaluation has recommended the ongoing employment of a program coordinator to continue the training strategy. The role of the coordinator would be to further coordinate training and the linkage with TAFE, develop additional modules and review existing ones, and further develop allied health assistant practice. Ongoing evaluation has been recommended to assess the impact of training on allied health assistant skills and competencies.

New South Wales Central Coast mental health skills ecosystem (model 48)

Summary

The mental health services project, led by the Community Services and Health Industry Skills Council, seeks to improve the quality of care to consumers by developing the structures and skills necessary to improve collaboration between the services. Strategies designed to enhance both consumer-focused and organisational collaboration are being trialled. The project is based in the New South Wales Central Coast and has strong participation by the Northern Sydney Central Coast Area Health Service.

STATE AND LOCATION

Central Coast New South Wales

MODEL TYPE

Holistic and regional

START DATE

January 2005

QUALIFICATIONS

Interventions to date have involved workplace based professional development aligned to national competencies. Both generic and technical competencies in the relevant Training Packages have been examined.

NAMES OF KEY PARTNERS

New South Wales Department of Education and Training

Community Services and Health Industry Skills Council

Northern Sydney Central Coast Area Health Service

Mental Health Community Consultation Committee

New Horizons (a non-government organisation)

Central Coast Mental Health Service

Central Coast Alcohol and Other Drug Service

ON THE JOB TRAINING

Staff exchange program

FUNDING SOURCES

Funding is from the Australian Government Department of Education, Science and Training, managed by the New South Wales Department of Education and Training

Background

This project is part of a broader Australian Government skill ecosystems initiative. Skill ecosystems involve the concentration of skills and knowledge in a region or industry. Skill ecosystem projects work through complex partnership of key stakeholders, including industry, industry organisations, VET partners, unions, and government agencies. Enhancing the quality and sustainability of the skill ecosystem is believed to increase opportunities for development and use of skills, innovation and growth.

With federal and state funding to the New South Wales Department of Education and Training, and led by the Community Services and Health Industry Skills Council, the Central Coast Mental Health Skills Ecosystem project began in January 2005. The purpose of the project is to further develop partnerships relevant to mental health service delivery in the Central Coast region of

New South Wales by identifying and addressing barriers to better collaboration amongst relevant agencies and organisations.

> Mental health services throughout Australia . . . are delivered by a wide range of public sector, private and non-government organisations and financed by an equally disparate range of sources . . . The mental health service offering on the Central Coast currently displays as a typical 'comprehensive' mental health service system . . . [with] significant scope for improvement in intra-system collaborative behaviour. . . . These factors make the Central Coast mental health service system an ideal subject for this study. (Community Services & Health Industry Skills Council website 2006)

The project is intended to achieve:

- greater understanding amongst mental health service network partners of each other's roles, and improved relationships
- more efficient use of limited resources
- improved experiences for consumers of mental health services resulting in improved health outcomes
- increased innovation in the construction and delivery of total mental health service offerings.

Developing and implementing the solution

The project was undertaken in three stages: research, intervention and evaluation. The research phase involved broad-based stakeholder and community consultation on mental health service provision in the region, as well as targeted interviews and focus group discussions regarding barriers to collaboration between services, and a review of the literature and secondary data analysis. A number of barriers were identified, including skill deficits in two areas: partnership skills and mental health clinical skills.

> You cannot assume that people have the skills required to partner or to collaborate. They are specific skills that not everybody has. I think there is a skill shortage around working together and working in partnership. (Manager, Community Development and Partnerships Division, New South Wales Mental Health)

Other barriers included differences in knowledge levels, negative attitudes towards working in partnership, insufficient resources, funding regimes that encouraged competitive rather than collaborative behaviour, structural problems involving inflexible bureaucratic structures and Mental Health Act, and workforce issues such as shortage of trained staff and ageing workforce.

Through stakeholder interviews and focus group discussions a series of short, medium and long term strategies and interventions were identified. Eventually it was agreed that skill-related interventions would be best connected to a trial of a new collaborative form of client services. A change in the service model would drive more collaborative behaviour and also require all services in the network to learn more about each other's areas of expertise and treatment protocols. The collaborative service model chosen for trial and development was an integrated dual diagnosis service to cater for people with both alcohol and drugs, and mental health issues.

Stage Two comprised implementation of selected interventions designed to improve coordination of mental health service provision.

> I had been doing various partnership programs as part of my normal job. I started the Mental Health Community Consultation Committee a couple of years ago. It's a mental

> health inter-agency meeting. We meet every three months and in between if things come up we have a mailing list and we can meet online. I'm the central point for the committee. I got a phone call from a private company investigating where the skills ecosystem project would happen and what it would look like, asking if Central Coast Mental Health Services would like to be a pilot study. Basically the objectives of the pilot project were very similar to the goals of my job, so I said yes! There's a lot of good will on the Central Coast and people viewed the project as an extension of work that was already being done. (Manager, Community Development and Partnerships Division, New South Wales Mental Health)

Stage Two interventions began with a Dual Diagnosis Forum in September 2005, attended by approximately 150 key stakeholders including Central Coast mental health employees, representatives from the Alcohol & Other Drugs Service, other local service providers, government and non-government departments. Barriers to effective collaboration were identified at the Forum. Guided by this forum, the project began developing a regional dual diagnosis model of care. This model is for cases where a client has more than one problem, such as mental health and alcohol, or mental health and intellectual disability, and thus calls for close inter-agency collaboration. This was not invariably forthcoming from all agencies approached as part of the intervention.

> I now have a better understanding of some of the barriers to partnership. Locally an agency might really want to participate in the program, but with the way some agencies are structured, the levels of management you have to go through, it can make it impossible for them to participate. We found it best to develop a model of care with an agency or service that could participate, then we had a model that we could take to senior management of those other agencies, show them the benefits and ask if they now wanted to involve their staff. (Manager, Community Development and Partnerships Division, New South Wales Mental Health)

Parallel to this, the team developed a 12-month *Walk a Mile in My Shoes* staff exchange program, which began but was not completed during the life of the project in 2005 – 2006. The Mental Health Community Consultation Committee had already come up with the idea of workers from non-government and government agencies learning more about each other's protocols, treatment models and policies prior to the skill ecosystem project. However, project funds allowed development and structure to be added to the program, with an external consultant engaged to develop the program and supporting resources, and map it to the competency framework. Twelve workers from Mental Health Services, Alcohol and Other Drug Service and the Housing and Accommodation Support Initiative Program operated by New Horizons (a not for profit community-based disability support organisation) participated in this program, which provided the opportunity to be exposed to a new work environment without the need for lengthy secondment, and to gain knowledge and skills in an area of choice. It also promoted the expansion of professional networks by mixing staff from relevant clinical and non-clinical areas and services, and demonstrated the importance of inter-agency collaboration.

> Everyone involved was very keen to see it happen. That made things very easy. The hardest thing? We're a non-government organisation and our skill level is below Area Health Services' skills. My staff's understanding of clinical supervision was a big hiccup that we had. They didn't fully understand the concept. So we had untrained staff working with trained clinicians—that was probably the biggest thing we had to be aware of. (Supervisor, *Walk a Mile in My Shoes* program)

The supervisors would meet with the people coming to work with their staff and identify learning outcomes they wanted to achieve. The exchange workers would come for one day every two or three weeks, and periodically review learning outcomes and set new ones.

Other interventions trialled included strengthening the role of the Mental Health Community Consultation Committee, and providing skills intervention for managers and staff. As an existing

structure, this Committee had the capacity to enhance collaboration among organisations and facilitate the development of inter-agency regional plans. It had already established much in the area of inter-agency collaboration, and the Committee's role was enhanced by modifying its functions, strategic plan, structure, membership base and existing activities.

A crucial factor in all processes of the project was strong funding support. The Manager, Community Development and Partnerships Division, New South Wales Mental Health, said: 'We achieved so much in such a short time because of the funding.' Another important factor is the key position of the Manager, who said:

> The three interventions we chose, I made sure were part of the core business of my position, so that everything could be tied into my existing job. That's what makes the interventions sustainable: they now form part of my normal day to day job.

A long term goal, extending beyond the life of the current project, is the development of a new multi-disciplinary framework for mental health service delivery. The goal would be a team based approach to care involving different professionals and non- professionals, with a worker coordinating care for each mental health consumer.

Evaluation and sustainability

The model is still a work in progress, and results from evaluation of the three interventions were not available at the time of preparing this case study. A progress report prepared in July 2005 notes the usefulness of the skill ecosystem model in that it addresses the contextual and structural factors, as well as well as the nature of the workforce and work structure of mental health services on the Central Coast. A final report will be concluded soon. Partners in the project are convinced of its value. '*Walk a Mile* is definitely working and is easily sustainable. Feedback is very positive,' said the Manager, Community Development and Partnerships Division, New South Wales Mental Health. A program supervisor from a participating non-government organisation agrees:

> I am the clinical supervisor for three of the people from other areas coming over to work with my staff. I'm getting feedback from them about what they are learning and their experiences. And I'm also then speaking to my staff [working elsewhere] and hearing what they're learning. [With] the outcomes that we're getting, it's something that I would like to see continue so that other staff can participate as well.
>
> The program is sustainable because it doesn't have a huge cost impact. Apart from freeing staff up to be able to have a day away from their normal duty, the cost impact is fairly minimal, and so from that perspective certainly the program is sustainable.

Using and strengthening the role of the existing Mental Health Community Consultation Committee to facilitate coordination amongst mental health service agencies ensures immediate gains from the project, and is likely to ensure sustainability of project outcomes into the future. Staff who participated in the interventions learned partnership skills which will enhance their ability to work with clients. The project has made an impact on hundreds of people—workers in mental health, drug and alcohol, disability, community service, and carers as well.

From the national skill ecosystem perspective, the mental health project was successful because the project proponent, the Community Services and Health Industry Skills Council, worked sensitively with participants who already had in-principle commitment to support ecosystem-style interventions and basically knew what needed to be done. In the context of health funding cuts, external funding served to galvanise the key players and provide a focus for action. The project provided small but strategic amounts of funding directly to stakeholders to develop their ideas and capacity to design initiatives.

The integrated nature of the interventions—service model change, workplace-based professional development, and network development—was also a positive feature of this project, and has made it likely that its initiatives will be able to be sustained beyond the funding period. The project also worked with the regional TAFE Institute to identify ways of delivering *Walk a Mile* in the future.

Queensland aged care skill formation strategy (model 49)

Summary

An holistic and long-term solution to skill shortages in the aged care sector, this strategy challenges traditional thinking about skill shortages and training. It offers an innovative solution to problems where traditional solutions have failed. Industry is the driver of reform, working collaboratively with government, registered training organisations, unions and other key stakeholders. The ability and willingness of stakeholders to risk take and think outside the square are hallmarks of the model. The model is a long-term approach to skill shortages in the aged care industry involving all relevant stakeholders. It is applicable across different industry sectors and can be applied at a regional or statewide level. The model is based on the concept of skill ecosystems which have been supported nationally by the Department of Education, Science and Training and the former Australian National Training Authority (ANTA).

STATE AND LOCATION

Queensland

MODEL TYPE

Holistic, Statewide (skills ecosystem)

START DATE

2003

QUALIFICATIONS

Various, including Diploma of Endorsed Enrolled Nursing, Certificate III Aged Care, Certificate IV Allied Health Assistance. Training is aligned to either the Health or Community Services or Training Packages as appropriate.

NAMES OF KEY PARTNERS

Queensland Department of Employment and Training

Queensland Community Services and Health Industry Training Council

Employers in the aged care sector

Relevant aged care sector unions

Relevant TAFE institutes

Peak industry bodies

ON THE JOB TRAINING

Various aged care sites in Queensland, ranging from large scale employers like Blue Care Ltd to small employers

FUNDING SOURCES

Queensland Department of Education and Training

Australian National Training Authority/Department of Education Science & Training

Education Queensland

Queensland Community Services and Health Industry Training Council

Industry sources (mainly in-kind contributions of resources and staff time)

Background

The aged care skills formation strategy was developed in response to skill shortages in the aged care sector in Queensland, brought about by the aging population and increased use of aged care services. The other key driver was the changing nature of service provision, and the growth of community care settings in which VET-trained workers play a greater role than in residential aged care, in areas such as allied health assistance. The strategy represents a significant change in

thinking about how skills shortages are viewed and addressed, focusing on education and training, workforce management, job design, industry image, and industrial relations. Utilising a skills ecosystem approach, the Queensland Department of Education and Training is supporting the aged care industry to identify and address its own workforce needs. This requires a collaborative approach between funding bodies, employers, unions and training providers. The strategy is being implemented in three phases: development (relationship building and data collection); implementation, and sustainability. It is currently in the implementation phase.

Initiatives implemented to date include: development of a Diploma of Endorsed Enrolled Nursing that combines part time paid work with study and clinical placement; negotiation of extended scope of practice for endorsed enrolled nurses; development of industry–school partnerships targeting Grade 10 students for careers in aged care; and a skills development strategy for voluntary aged care workers. Two related sub projects are currently underway, focusing on casualisation and supply chain issues respectively.

Developing and implementing the solution

Concerned that traditional solutions to skills shortages had failed, a manager from the Department of Employment and Training initiated the aged care skills formation strategy in December 2003 to reflect a better connection between organisational performance, workforce planning and skill outcomes. She was supported by a visionary senior manager who was 'willing to take a bit of a risk' to find a new solution to a problem that traditional solutions had been unable to solve. The strategy was one of the first of a total of 17 skills formation strategies introduced across the state in a range of sectors. It linked neatly with the activities of an existing industry health and aged care workforce planning network that had been meeting regularly to talk about issues common to all. The network had identified that 'collaborative work on an industry level' was needed to address issues of workforce recruitment, training and retention. Not surprisingly, because the skills formation strategy represented a new way of looking at skill shortages, it took some time and a good deal of effort from the Department of Employment and Training manager, for people to understand and embrace the concept. This meant 'selling the notion of what a skills formation strategy was' to colleagues from her own Department, as well as to other government and industry stakeholders.

The Executive Director of the Queensland Community Services and Health Industry Training Council was one of the first to see the potential of the skills formation strategy to support the work his organisation was already undertaking. Described by the Department of Education and Training manager as 'a real ideas man, he's also a brilliant project manager … [and] has a very good grasp of the industry', he was appointed to manage the project. He is supported by 'a couple of other people … that have as much knowledge about the sector, particularly its culture'. The excellent working relationship and high level of trust between the Department of Education and Training manager and the Executive Director of the Queensland Community Services and Health Industry Training Council provided the foundation for the development of the skills formation strategy.

An industry reference group was convened to work with the Queensland Community Services and Health Industry Training Council and to oversee implementation of the strategy. The group meets regularly, and includes members of the original workforce planning network and other relevant stakeholders. Members include: TAFE, large and small employers including Blue Care Ltd, one of the largest aged care employers in Australia; peak industry groups like Aged Care Queensland; relevant unions; Commonwealth and State agencies responsible for health, and the original Department of Education and Training manager who initiated the strategy but who has since moved to another role within the Department.

The Executive Director of the Queensland Community Services and Health Industry Training Council noted the importance of pre-existing relationships between reference group members and the Council that assisted in the development of the strategy. Although representing diverse interests, members of the industry reference group recognised that they needed to put aside their differences in order to solve some of the significant issues facing the industry. As the Executive Director of the Industry Training Council noted:

> That happened very early on, almost immediately … developing it as an industry strategy as opposed to an individual organisation strategy significantly shifted some of those antagonisms.

The Senior Human Resource Advisor of Blue Care Ltd agreed, explaining how he was 'blown away' by the way that 'everyone's sitting around the table, everyone's wanting to make it work'.

Funding to develop the strategy came from the Department of Education and Training, and this was linked to specified outcomes. The Executive Director of the Queensland Community Services and Health Industry Training Council valued the way in which the Department of Education and Training manager ensured outcome indicators were not overly prescriptive but

> identified the parameters and said within these parameters this is what we need you to do. So that provided us a great deal of scope about how we utilised the resources and allocated those to the initial research.

This flexibility was vital given that the concept of skills formation strategies was very new to the Department and to the Industry Training Council.

Other sources of funding included ANTA/Department of Education, Science and Training funding for skills ecosystems, which allowed for work to begin on the supply chain sub project. Education Queensland contributed funds for the school–industry initiative. The Queensland Community Services and Health Industry Training Council provided resources, and industry made in-kind contributions. The strategy also used existing resources in different ways, as the Executive Director of the Industry Training Council explained:

> so we've linked into TAFE funding … to try and address these sorts of issues within the skills formation strategy. So some of that has been about utilising existing resources that were already allocated, but using them in different ways…

Whilst the Department of Employment and Training saw the need for flexibility in terms of the development and management of the strategy, some difficulties were reported in relation to one of the other funding bodies, which was more focused on the 'paperwork side of things rather than the actual outcome'. Difficulties were also encountered because workforce issues for the aged care sector cover multiple government funding agencies with differing policies and agendas. To address this, the Executive Director of the Queensland Community Services and Health Industry Training Council recently initiated a high level policy working group comprising relevant funding stakeholders such as Queensland Health, the Australian Government Department of Health and Ageing, and Veterans Affairs amongst others. The Council is working with this group around a policy coordination strategy which is seen as necessary if the aged care skills formation strategy is to be sustainable. Using a facilitative approach, 'our agenda for this group is to drive some change in more joined-up thinking'.

The aged care skills formation strategy is underpinned by an increasing evidence base regarding the nature of the aged care workforce. Prior to 2003 there was little comprehensive workforce data available on the industry as a whole, and particularly for personal care assistants, allied health assistants and the community care workforce. On receipt of funding, one of the first tasks was to coordinate the collection and analysis of workforce data. Following this, the Queensland Community Services and Health Industry Training Council wrote a background paper, including information on players in the training process and the sorts of training programs in existence,

award coverage, an overview of findings from other reports, and indicators in relation to workforce development. The paper was workshopped with the industry reference group, and formed the basis of a workplan for further development. The collection and presentation of comprehensive workforce data was also important in securing the commitment of multiple stakeholders to the strategy. As the Executive Director of the Industry Training Council noted: 'industry was ecstatic at the level of information they got out of I, about how they were progressing as a sector rather than just a part of a sector'.

From the data, casualisation was identified as a significant issue, leading to the development of the casualisation sub project that will produce a discussion document and potential solutions for consideration by the industry reference group. A second sub project relating to the supply chain, and specifically to allied health assistants, was also identified. The supply chain project commenced in August 2005 and is trialling extended scope of practice for allied health assistants. There has also been input into designing the new Certificate IV in Allied Health Assistance that forms part of the national Health Training Package. Each subproject is driven by a working group comprised of relevant stakeholders and managed by an industry facilitator. Information is fed via the working groups back to the industry reference group responsible for implementation of the overarching strategy. Facilitators play a critical role and were carefully selected by the Executive Director of the Queensland Community Services and Health Industry Training Council as having the right mix of interpersonal skills and industry knowledge to ensure projects will meet their targets in terms of workforce reform. As the Department of Education and Training manager noted, facilitators have strong skills in being able to:

> mix and match courses and develop courses by pulling competencies from here, there and everywhere, [and by] tell[ing] them where to go to get their training …

Evaluation and sustainability

Because the strategy is still in the implementation phase, evaluation results are not yet available. In addition, some of the outcomes are long term, as the strategy aims to change attitudes, beliefs and practices about solutions to skills shortages across industries and government sectors. However, there are already early anecdotal indications of impacts on skills shortages, in terms of 'providing volunteers with qualifications which has led to employment in the industry'. In addition, the proposed development of a cadetship for enrolled nurses is a new delivery model that will support increased capacity for training delivery.

For the allied health subproject, the Senior Human Resource Advisor of Blue Care Ltd identifies 'huge benefits' in terms of fostering a collaborative approach to allied health workforce issues in acute and aged care, including aligning skills to allow staff to move more easily between sectors. The way in which the skills formation strategy has brought together multiple stakeholders firmly committed to health workforce reform, was a consistent response to the question 'how do you know the strategy has worked?' The Executive Director of the Queensland Community Services and Health Industry Training Council noted that they wouldn't be committed to the strategy if it wasn't adding value to their work. 'The continued commitment of the stakeholders … [is] our primary source of information about whether it has worked'.

The strategy has also attracted increasing levels of interest from those interested in health workforce reform in other states, and the Executive Director of the Industry Training Council is invited to speak regularly at conferences and workshops.

While the continued existence of the skills formation strategy concept in Queensland is ensured by Department of Education and Training policy, the innovation reverses traditional skills policy and necessarily has created some tension regarding appropriate measures of success. The Director of VET Strategy and Research in the Department of Education and Training argues that traditional quantitative measures are inadequate to capture the richness, complexity and long-

term nature of outcomes, and identifies a case study approach as an appropriate indictor of outcomes. She notes:

> I think we need another three years to get some case studies or case reports done. I'd like to be able to do them annually, update them annually, so as people can see that this is a long term process, it's not a one year thing that fits into a political agenda.

In terms of sustainability, there is widespread belief amongst the stakeholders, such as the Senior Human Resource Advisor of Blue Care Ltd, that the strategy is sustainable because of the continued high level of commitment of stakeholders: 'there are so many people in it who want it to succeed'. The Executive Director of the Queensland Community Services and Health Industry Training Council agrees:

> We may not have delivered the product that was in the mind of the Department of Education and Training originally but I think it is delivering the sorts of outcomes that are important for industry … It's getting a better sense of what needs to be done.

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Appendices

Table 1: Persons employed in health and community services occupations, 1996 – 2001

Occupation	1996	2001	Difference	Per cent Difference
HEALTH SERVICES				
General medical practitioner	26,358	29,130	2,772	10.5
Specialist medical practitioners	347	489	142	40.9
Dentist	6,878	7,386	508	7.4
Dental technician	2,914	2,952	38	1.3
Dental assistants	11,264	13,098	1,834	16.3
Nurse manager	6,178	7,392	1,214	19.7
Nurse educator	1,773	1,915	142	8.0
Nurse researcher	279	700	421	150.9
Registered nurse	133,944	142,202	8,258	6.2
Registered midwife	10,902	11,646	744	6.8
Registered mental health nurse	6,037	6,489	452	7.5
Enrolled nurses	24,567	19,492	-5,075	-20.7
Personal care assistant	16,705	27,883	11,178	66.9
Nursing assistant	25,941	22,775	-3,166	-12.2
Occupational therapists	4,361	5,353	992	22.7
Optometrists	2,253	2,694	441	19.6
Physiotherapists	8,898	10,246	1,348	15.1
Speech pathologists	2,336	3,005	669	28.6
Podiatrists	1,460	1,765	305	20.9
Dietitians	1,712	1,998	286	16.7
Audiologist	685	805	120	17.5
Orthoptist	348	434	86	24.7

Orthotist	331	364	33	10.0
Clinical psychologist	5,252	7,567	2,315	44.1
Allied health assistant	1,421	2,711	1,290	90.8
Medical Technical Officers	8,218	13,927	5,709	69.5
Ambulance Officer	4,112	3,244	-868	-21.1
Intensive Care Ambulance Paramedic	1,849	3,464	1,615	87.3
Indigenous Health Workers	708	926	218	30.8
Massage Therapists	2,261	4,921	2,660	117.6
COMMUNITY SERVICES				
Welfare worker	6,226	8,985	2,759	44.3
Family support worker	1,001	1,383	382	38.2
Residential care officer	1,015	2,825	1,810	178.3
Disabilities services officer	4,930	6,232	1,302	26.4
Integration aide	2,877	10,396	7,519	261.3
Aged or disabled person's carer	35,943	51,792	15,849	44.1
Community worker	15,804	17,113	1,309	8.3
Welfare associate professional	61	527	466	763.9
Total all Health and Community Services occupations	591,550	687,838	96,288	16.3

Source: Adapted from ABS, Census of Population and Housing, 2001 (cited in AIHW 2001, Table A.20 & A21) – Data adapted from Australian Institute of Health and Welfare 2001, Tables A.20 & A.21 for select health and community services occupations.

Table 2: Health and Community Services occupations by sex and age, 2001

	Age (years)														
	15-24			25-34			35-44			45+			Total		
	Percent (%)														
Occupations	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Total**
HEALTH SERVICES															
General medical practitioner	0.62	0.64	1.26	12.46	10.58	23.04	17.2	12.18	29.38	34.82	11.5	46.32	65.1	34.9	100
Specialist medical practitioner	0.21	0.85	1.06	13.48	11.99	25.47	16.47	12.56	29.03	33.78	10.65	44.43	63.94	36.05	100
Dentist	1.71	1.82	3.53	13.95	9.71	23.66	20.29	8.91	29.2	37.43	6.18	43.61	73.38	26.62	100
Dental technician	7.19	3.37	10.56	16.54	6.48	23.02	26.12	6.55	32.67	30.21	3.54	33.75	80.06	19.94	100
Dental assistant	0.51	35.13	35.64	0.37	28.85	29.22	0.24	21.78	22.02	0.18	12.93	13.11	1.3	98.69	100
Nurse manager	0.04	0.46	0.5	2.31	12.67	14.98	4.63	28.64	33.27	4.84	46.41	51.25	11.82	88.18	100
Nurse educator & nurse researcher	0.34	0.8	1.14	2.58	18.65	21.23	3.99	35.81	39.8	2.13	35.7	37.83	9.04	90.96	100
Registered nurse	0.56	5.18	5.74	2.38	20.17	22.55	2.44	28.91	31.35	2.24	38.11	40.35	7.62	92.37	100
Registered midwife	0.08	1.25	1.33	0.19	20.52	20.71	0.54	42.74	43.28	0.34	34.34	34.68	1.15	98.85	100
Registered mental health nurse	0.49	1.94	2.43	5.33	12.56	17.89	12.26	23.23	35.49	17.19	26.99	44.18	35.27	64.72	100
Enrolled nurse	0.86	5.35	6.21	2.64	18.23	20.87	2.85	34.73	37.58	2.35	33	35.35	8.7	91.31	100
Personal care assistant	2.75	7.48	10.23	5.26	10.49	15.75	6.94	20.51	27.45	10.53	36.04	46.57	25.48	74.52	100
Nursing assistant	2.09	12.09	14.18	3.38	16.23	19.61	3.56	24.27	27.83	4.37	34	38.37	13.4	86.59	100
Occupational therapist	1.29	15.06	16.35	2.81	35.83	38.64	1.5	23.71	25.21	1.2	18.57	19.77	6.8	93.17	100
Optometrist	3.67	5.94	9.61	16.03	18.14	34.17	21.08	10.83	31.91	18.18	6.12	24.3	58.96	41.03	100
Physiotherapist	3.23	6.44	9.67	11.03	21.87	32.9	8.05	22.16	30.21	4.68	22.53	27.21	26.99	73	100
Speech pathologist	0.27	14.38	14.65	1.43	38.09	39.52	0.86	26.77	27.63	1.03	17.17	18.2	3.59	96.41	100
Podiatrist	4.02	7.41	11.43	15.28	24.28	39.56	11.6	16.07	27.67	7.58	13.75	21.33	38.48	61.51	100
Dietitian	1.3	8.27	9.57	3.21	36.56	39.77	2.06	23.67	25.73	2.51	22.42	24.93	9.08	90.92	100
Audiologist	0.38	5.53	5.91	7.8	33.84	41.64	4.65	20.38	25.03	8.3	19.12	27.42	21.13	78.87	100
Clinical psychologist	0.28	2.71	2.99	4.56	21.9	26.46	7.38	17.34	24.72	16.11	29.73	45.84	28.33	71.68	100
Allied health assistant	2.57	14.3	16.87	2.21	16.24	18.45	2.24	24.44	26.68	2.57	35.43	38	9.59	90.41	100
Medical technical officer	3.61	9.34	12.95	6.85	19.06	25.91	6.59	23.38	29.97	7.39	23.79	31.18	24.44	75.57	100
Ambulance officer	2.2	2.66	4.86	19.67	11.51	31.18	26.14	5.88	32.02	30.25	1.7	31.95	78.26	21.75	100
Intensive care ambulance paramedic	0.98	0.87	1.85	20.54	10.26	30.8	35.6	5.63	41.23	24.79	1.33	26.12	81.91	18.09	100
Indigenous health worker	2.84	6.34	9.18	10.49	17.92	28.41	9.18	22.84	32.02	8.09	22.3	30.39	30.6	69.4	100

	Age (years)														
	15-24			25-34			35-44			45+			Total		
	Percent (%)														
Occupations	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Persons**	**M**	**F**	**Total**
Massage therapist	1.49	8.92	10.41	6.56	19.95	26.51	6.58	22.58	29.16	11.65	22.27	33.92	26.28	73.72	100
COMMUNITY SERVICES															
Welfare worker	1.17	6.14	7.31	5.51	18.86	24.37	7.06	19.95	27.01	11.02	30.29	41.31	24.76	75.24	100
Family support worker	2.88	5.34	8.22	3.75	17.74	21.49	4.61	27.83	32.44	5.26	32.59	37.85	16.5	83.5	100
Residential care officer	1.77	6.53	8.3	7.45	18.72	26.17	8.76	22.04	30.8	10.63	24.09	34.72	28.61	71.38	100
Disabilities services officer	1.25	6.14	7.39	5.9	20.12	26.02	9.52	19.49	29.01	12.37	25.21	37.58	29.04	70.96	100
Integration aide	0.89	4.56	5.45	1.16	9.95	11.11	1.35	42.48	43.83	1.66	37.96	39.62	5.06	94.95	100
Aged or disabled person carer	1.59	6.99	8.58	3.3	11.82	15.12	3.83	22.33	26.16	6.47	43.66	50.13	15.19	84.8	100
Community worker	0.94	3.5	4.44	4.52	16.8	21.32	7.06	24.66	31.72	9.25	33.29	42.54	21.77	78.25	100
Welfare associate professional	0.58	4.65	5.23	5.62	14.53	20.15	11.24	20.35	31.59	11.82	31.2	43.02	29.26	70.73	100

Source: ABS, Census of Population and Housing, 2001 (cited in Health and Community Services Labour Force, 2001 (Australian Institute of Health and Welfare 2003)) - Calculations from Table A.14 and Table A.15 (Australian Institute of Health and Welfare 2003) for selected health and community services occupations.

Table 3: Persons employed in selected health and community services occupations, proportions male, part-time and earning over $1,000 per week, Australia 2001

Occupation	Proportion male	Proportion working part-time	Persons employed with weekly income of $1,000 or more
	Percent %	Percent %	Percent %
Predominantly male occupations(a)			
Ambulance officers and paramedics	80.1	8.4	45.9
Dental practitioners	74.0	24.1	75.3
Generalist medical practitioners	64.1	22.7	76.5
Specialist medical practitioners	73.7	15.5	88.0
All medical practitioners	67.3	19.1	80.3
Optometrists	58.9	24.6	55.4
Dental associate professionals	52.5	29.6	14.9
Predominantly female occupations(b)			
Dental assistants	1.3	43.6	0.6
Occupational therapists	7.0	38.9	17.4
All nursing professionals (c)	8.5	48.2	12.3

(a) All occupations in which the majority were male.

(b) Occupations with the highest proportions of females.

(c) Includes nursing professionals (not further defined)

Source: ABS, census of Population and Housing – 2001 (cited in AIHW 2003, Table 9, p. 15) for selected health occupations.

Table 4: Persons employed in selected health occupations: capital city and other regions, Australia 2001

Occupation	Persons employed (no.)			Persons per 100,000 pop.		
	Capital city	Other region	Total	Capital city	Other region	Total
HEALTH WORKERS						
Medical workers	37,336	13,715	51,051	312	202	272
Medical imaging workers	5,737	2,277	8,014	48	33	43
Dental workers	17,989	7,364	25,353	150	108	135
Nursing workers	149,105	89,635	238,740	1,246	1,318	1,272
Director of nursing	1,648	1,002	2,650	14	15	14
Registered nurses	108,402	59,445	167,847	906	874	894
Enrolled nurses	8,906	10,282	19,188	74	151	102
Nursing assistants/personal carers	30,149	18,906	49,055	252	278	261
Pharmacists	9,959	3,734	13,693	83	55	73
Allied health workers	27,867	10,999	38,866	233	162	207
Complementary therapies	5,430	2,875	8,305	45	42	44
Other health workers	38,696	19,000	57,696	323	279	307
Total health workers	292,119	149,599	441,718	2,441	2,200	2,353
COMMUNITY SERVICES WORKERS						
Child and youth services	62,772	35,621	98,393	524	525	524
Family services	6,744	4,685	11,429	56	69	61
Disability workers	18,735	11,699	30,434	157	172	162
Aged or disabled care	25,066	24,717	49,783	209	363	265
Other community services	25,764	14,626	40,390	215	215	215
Total community services workers	139,081	91,348	230,429	1,161	1,346	1,228
Total	431,200	240,947	672,147	3,602	3,546	3,581

Note: Excludes those whose place of work varied in the reference week, or was not stated.

Source: ABS data (cited in Australian Institute of Health and Welfare 2003, Table A.29) for selected health and community services occupations.

Table 5: Job mobility by age and gender, %

	Persons who worked at some time during the year ending Feb 2002			Persons who worked at some time during the year ending Feb 2004		
Age group	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**
15–19	19	19.6	19.3	19.2	18	18.6
20–24	25.2	26.6	25.8	23.5	25.6	24.5
25–34	20.6	18.3	19.6	19.5	17.6	18.6
35–44	13.5	12.7	13.1	14.7	10.8	13
45–54	10.1	9.5	9.9	9.8	7.8	8.9
55–69	5.9	5.3	5.6	7.2	5.2	6.4
All ages	15.2	14.9	15.1	15	13.5	14.3

Source: ABS 2002 and 2004, Labour mobility, Australia, Cat. no. 6209.0, February 2002 & February 2004

Table 6: Vocational course enrolments and completions in field of education 06 (Health) by qualification level for Australia 2004

Qualifications	0601 Medical Studies (e)	0603 Nursing (b)	0605 Pharmacy	0607 Dental Studies (c)	0609 Optical Science	0611 Veterinary Studies	0613 Public Health (a)	0617 Rehabilitation Therapies (d)	0619 Complementary Therapies (f)	0699 Other Health (g)	Total (06 Health)
Course enrolments											
Diploma or higher	60	1,979	0	637	0	201	1,464	411	1,881	334	6,967
Certificate IV	186	7,011	12	567	816	1,294	2,603	197	1,004	172	13,862
Certificate III	1	182	0	2,022	57	1,375	1,058	49	0	1,726	6,470
Certificate II	0	173	0	16	0	1,234	823	0	0	0	2,246
Certificate I	0	0	0	0	0	0	127	0	0	0	127
Secondary education	0	0	0	0	0	0	0	0	0	0	0
Non award courses	146	308	10	19	0	23	9,127	201	747	4,109	14,690
Other education	826	3,487	1	25	37	491	30,751	312	76	26,872	62,878
Total	**1,219**	**13,140**	**23**	**3,286**	**910**	**4,618**	**45,953**	**1,170**	**3,708**	**33,213**	**107,240**
Course completions											
Diploma or higher	2	20	0	130	0	16	197	79	424	102	970
Certificate IV	43	1,884	6	162	97	347	660	42	327	79	3,647
Certificate III	0	97	0	680	8	280	218	18	0	633	1,934
Certificate II	0	139	0	15	0	236	114	0	0	1	505
Certificate I	0	0	0	0	0	0	1	0	0	0	1
Secondary education	0	0	0	0	0	0	0	0	0	0	0
Non award courses	0	0	0	0	0	0	0	0	0	0	0
Other education	0	0	0	0	0	0	0	0	0	0	0
Total	**45**	**2,140**	**6**	**987**	**105**	**879**	**1,190**	**139**	**751**	**815**	**7,057**

Source: National Centre for Vocational Education Research (NCVER) 2004