Innovative solutions to skill shortages in health: research and practice

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Introduction

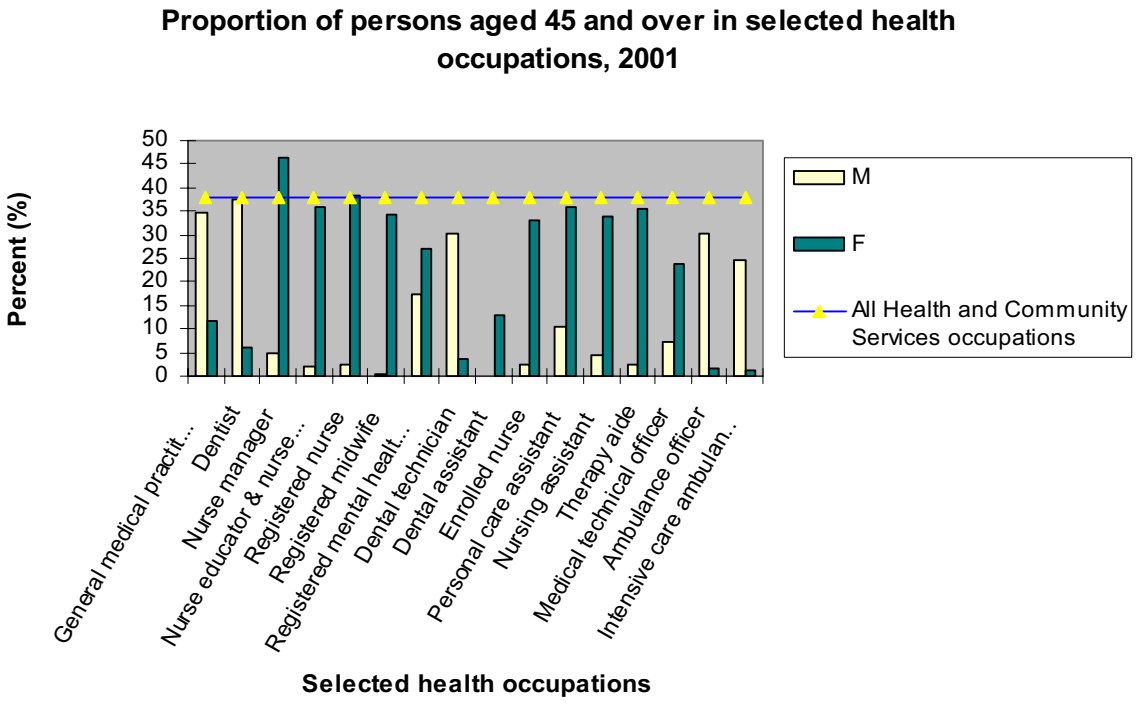
As government and industry grapple with health skill shortages, attention has turned to the role of the vocational education and training (VET) sector. This sector has the potential to address skill shortages in two key ways: by identifying and training new VET health workers in order to meet projected skill shortages, and by upskilling VET-trained health workers to allow for task shifting to them from health professionals, where appropriate. Australian and international research and practice indicates that rural and remote areas have become home to a set of innovative service delivery models related to multi-skilling and upskilling health workers, as well as a range of community-based solutions involving collaborations between local stakeholders. Many of these models are underpinned by customised vocational education and training solutions.

This paper reports findings from a project funded by the National Council for Vocational Education Research. It begins by considering Australian statistics and literature on the structure of the national health workforce and perceived skill shortages. Following a brief overview of Australian and international literature on innovative and effective models for addressing health skill shortages, the project methodology is outlined. A synthesis and discussion of findings from the literature and nominations of models by key health sector stakeholders is presented. This includes barriers, enhancers, features of effective models and criteria for good practice. The paper concludes with implications for policy and practice.

Australian statistics and literature on health workforce shortages

The health and community services industry has experienced ongoing recruitment difficulties. Poor retention and a low full-time participation rate contribute to increasing vacancy levels.[1] At any point in time there will be just over half of the eligible nursing workforce active in nursing. In the area of mental health, extremely high turnover rates have been noted.[2] Poor retention may be due to unsatisfactory working hours, relatively low remuneration, poor working conditions, structural constraints and highly specialised skills needs.[2]

Women make up 78% of the health and community services workforce, the highest proportion of all industries.[3] They are more likely to be in lower income occupations[4] and to work part time. Some commentators suggest that this gender imbalance may discourage prospective male workers.[5] Ageing of the workforce is also a problem, with 38% of health and community services workers aged 45 years and over[4] (see following figure). 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.



Source: ABS, Census of Population and Housing, 2001 and AIHW 2003: Health and Community Services Labour Force 2001 Tables A14 & A15.

Overall, there has been an adjustment of the mix of occupations in nursing toward lower paid occupations. Significantly for the VET sector, there is a national shortage of enrolled nurses[6]; with enrolled nurse numbers decreasing by 21% from 1996 to 2001.[3] At the same time, personal carers and nursing assistants, occupations that are lower paid than enrolled nurses, increased by 20%, apparently substituting for, or taking over some of the less skilled tasks of enrolled nurses.[4] Although there are shortages of allied health professionals, the number of allied health assistants has almost doubled in the five year period from 1996 to 2001.[4] However, recruiting allied health assistants in some rural areas can be difficult. The work tends to be part time, in some cases only a few hours per week, and may involve multiple allied health disciplines.

Rural and remote areas are hit particularly hard by skill shortages. Access to a wide range of health and community services workers, particularly medical specialists and other services relying on infrastructure and services of hospitals, tends to be limited.[7] In addition, the Productivity Commission[8] expresses particular concern over the lack of access to health workers by Indigenous communities. Statistics show that the majority of health workers choose to work in capital cities, although the situation is reversed for aged/disabled personal carers and enrolled nurses; 151 per 100 000 population enrolled nurses were employed in other regions compared with 74 per 100 000 population in capital cities.[7] The higher rates of enrolled nurses outside capital cities suggests substitution of lower qualified workers for professionals may be taking place in rural and regional areas.

Models that address skill shortages: directions from the literature

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 (for example, in the UK[9] and USA[10]). 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.[10]

Two overarching themes emerge 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. Within Australia, the partnership approach is being promoted at a national level through the National Skill Ecosystem project.[11] Skill ecosystem projects work through a 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. Partnership approaches where health providers work with communities are noted as particularly relevant in rural and remote communities, where access to resources is limited.[12] For example, the Katherine Regional Allied Health project 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).[12]

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.[13] Indigenous workers are another target group. Key recommendations by the Community Services and Health Industry Skills Council for facilitating the participation of disadvantaged groups in the health workforce include 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.[13] The need for bridging programs for disadvantaged workers has been highlighted elsewhere.[14]

Methodology

A project reference group was established, including representatives of the Community Services and Health Industry Skills Council, Australian Rural Health Education Network, an allied health professional body, a government health department, and a health consumer group. The role of the reference group was to assist in nominating innovative models that address skills shortages, assist in selection of models to be written up as case studies, and advise on the validity of outcomes of the research. Innovative models were defined as new services or products, including radical (completely new service or product), product differentiated (existing service amended into a different product), and market differentiated models (existing service offered to a new group of clients).[15] Over seventy service delivery models and training solutions were identified from nominations and within the Australian and international literature. Fifty were selected for write up as mini case studies, and six as full case studies. Selection criteria included sustainability, evaluation, ease of transferability, flexible delivery, pathways to/from other training, and Training Package alignment. The majority of models were from rural and remote contexts where skill shortage and the need for innovative partnerships were the greatest. Key personnel were interviewed by phone to explain the process through which models were established and implemented. Permission to name organisations was obtained.

Findings and discussion

Three models to address skill shortages

Models were classified according to scope, into training only, training and job/workforce redesign, or holistic. The most common models were training only. Only about 10% of models were categorised as holistic.

1. Training only models

These approaches were often, but not always, short term, designed to address an identified skills shortage in a defined workplace or geographical area as quickly and efficiently as possible. Many operated at the local level, featuring one health or aged care site and one training provider. Most were targeted to specific groups, such as youth and special needs (Indigenous/ethnic, low socioeconomic status (SES), older workers) groups. Effective training only models were largely directed towards

entry-level or lower level training in aged or health care settings. For example, VET in schools models, such as the Riverland VET in Schools Nursing Pathway program in South Australia, and the Booroongen Djugun College VET in Schools Health Care Studies program in New South Wales, targeted youth and Aboriginal youth respectively. They provided school- or TAFE-based training, and workplace training in local aged care facilities. Reported outcomes of these models include employment as assistants in nursing or personal carers in the health and aged care sectors on leaving school, and pathways to further study at TAFE or university leading to subsequent employment in these sectors.

Successful targeted training models were characterised by cultural appropriateness of program content and delivery. The Mt Isa Rural Health School program was designed to address the problems that health services in the remote northwest of Queensland face in recruiting and retaining Indigenous health workers. The articulated education programs 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).[14]

2. Training and job/workforce redesign models

These approaches varied in nature, but all were characterised by a focus beyond short-term training solutions, to include other strategies to ensure worker retention. This focus is critical, because retention of workers has been identified as a key issue contributing to health skill shortages.[1] Many of these models operated at a regional level, involving a number of sites or communities across a geographical region, and a number of health, education and training, and other partners. Most began by examining existing competencies and roles to determine where there were gaps and to redesign or introduce new roles as appropriate. They then upskilled and provided expanded roles and career pathways for existing workers. The provision of accredited training increased the potential for worker mobility across different rural and remote locations and workplaces. The indications are that rural and remote areas are well served by models that enhance worker mobility, or that redefine health roles to accommodate local needs and conditions

A good example is the Western Australian Country Health Service Allied Health Assistant project, a partnership between a number of state and federal disability, health, and education and training agencies. Its purpose was to develop generic standards and benchmarks for allied health assistant work in the rural and remote context. A model was developed that encompassed local training issues shared across allied health disciplines, job specific issues related to immediate practice, and broad allied health assistant training issues relating to rural and remote practice. Training modules are delivered by videoconference. Participants complete Certificate III in Allied Health Assistance, or individual modules as required. This model reflects a move towards the concept of generic assistants who work across a number of disciplines (physiotherapy, occupational therapy, speech pathology) or areas (paediatrics, aged care), and is particularly suited to the provision of allied health services in rural and remote areas. Although there has been no formal evaluation of the efficacy of using allied health assistants, allied health professionals acknowledge that the model has improved and expanded service delivery, with trained and appropriately supervised allied health assistants providing an ongoing presence in a number of rural and remote areas where these services may previously have been limited.

The Aboriginal Health Worker Oral Health Training program is a partnership involving a university, state health department, and an Aboriginal medical services council. It is offered in various locations within rural and remote Western Australia, and expands the scope of Aboriginal Health Workers to include a focus on dental care, in order to meet the specific health needs of participating communities. This culturally appropriate basic preventative oral health delivery program is delivered by a specially established registered training organisation (RTO). Trained Aboriginal Health Workers complete a stand-alone oral health module designed to complement Aboriginal Health Worker Certificates III and IV. On completion, they are encouraged to implement preventative measures at a local level to reduce the need for later dental interventions. While there are early indications of pockets of improved knowledge about dental practices in areas where the program has been run, concrete evidence is yet to be collected regarding the long term effects of the model.

3. Holistic models

These approaches are overarching and medium to long-term in nature, targeted largely to addressing projected skill shortages in a sustainable manner. They are either regional or statewide in focus, involve ongoing consultation with and ownership of the skill shortage problem by all relevant stakeholders (government, industry, RTOs), and employ a range of solutions to skill shortages in addition to training and job redesign, such as focusing on industry image, industrial relations, and examining the effects of skill shortages in the supply chain.

Holistic models that have particular potential are based on the skills ecosystem approach[11], with the Mental Health Skills Ecosystem in New South Wales a good example. This model covers a relatively large geographical region on the Central Coast and includes multiple stakeholders from government health and education sectors, as well as a non-government organisation. Led by the Community Services and Health Industry Skills Council, this project aims to promote more efficient use of limited resources and to increase innovation in terms of mental health service delivery. Following broad-based stakeholder and community consultation on mental health service provision in the region, several strategies were implemented, including a 12-month staff exchange program to expose workers to different work environments, with a view to facilitating greater understanding and collaboration between services. Another intervention included strengthening the role of the existing Mental Health Community Consultation Committee, and providing skills intervention for managers and staff. Although an evaluation of outcomes to date was not available at the time of preparing this paper, a progress report notes the usefulness of the skill ecosystem model in addressing contextual and structural factors, as well as the nature of the workforce and work structure of mental health services.

Developing effective solutions

Barriers

Although the study focused on successful solutions to skills shortages, there were some consistent themes relating to barriers or challenges to developing the models. These included policy and organisational issues, such as the need for both policy and organisational flexibility to accommodate changing workplace needs and to support collaborative solutions to skill shortages. Many of these issues could not be overcome during the lifespan of the models, given their complex and long-term nature. However, those involved in developing and implementing models identified strategies for working around or minimising the effect of certain barriers, such as the specific focus of the New South Wales Central Coast Mental Health Skills Ecosystem on the development of partnership skills amongst stakeholders, to increase the capacity of partners to work collaboratively.

Enhancers, features of effective models and criteria for good practice

Effective models take into account the context in which they have been developed, including the area of skills shortage, workforce issues (availability of potential workers, number of existing unskilled or low-level skill workers), type of solution required (short, medium or long term), availability of local and external partners, and availability of technology. The Riverland VET in Schools Nursing Pathway program was effective because it addressed two issues of concern to the district: the difficulty of adequately staffing health sector facilities, and the paucity of local careers for school leavers. It drew on the willingness and determination of two key players, the Director of Nursing at the district hospital, and the District VET Co-ordinator from the Department for Education and Children's Services, to jointly devise a solution to these ongoing problems.

All models were underpinned by a partnership approach involving a range of stakeholders. The composition of stakeholders varied, with regional or statewide approaches involving a greater number and range of partners, including different levels of government (for example, the Western Australian Country Health Service Allied Health Assistant project) and government and non government organisations (for example, the Mental Health Skills Ecosystem). Responsibility for addressing the skill shortage was jointly shared between government and industry, with employers taking a proactive role. The role of universities in helping to develop medium to long term regional solutions was also noted. Some of the most effective collaborative models grew from existing small networks of local health and/or education agencies, which gradually expanded to include a range of other local and external

agencies, in an effort to address skill shortage issues that were beyond the capacity of individual agencies to solve.

In addition to knowledge and understanding of the community context, effective models demonstrated clear understanding of the workplace context. The starting point for planning and development included consideration of the organisation/work unit tasks, competencies required, and the sort of job (re)design required. Successful solutions provided a direct link between skills development and employment, and offered pathways to and from other training to ensure worker retention.

From the models examined, the following criteria for good practice have been identified:

- *Co-location of partners, or effective communication channels*. The co-location of the training college and aged facility in the Booroongen Djugun College VET in Schools program is an example. In another example, the New South Wales Mental Health Skills Ecosystem model uses a formal consultative committee to facilitate communication and co-ordination amongst mental health services agencies.

- *High profile of the model within the community and high level of commitment by the partners.* A good example is the Riverland VET in Schools Nursing Pathway program, which enjoys a high level of commitment by education and industry, as well as parents and students, and is an embedded part of the schools' senior curriculum.

- *Community-based nature and cultural appropriateness of the model.* Most of the successful models were highly valued by the community, however the high valuing of Aboriginal Health Workers by their communities was particularly apparent. Community participation in and ownership of the program and its sustainability was critical to program success and acceptance.

Conclusions and implications for policy and practice

The changing face of the health and community services workforce has implications for rural and remote health, in terms of an increased role for VET workers, the need to implement a range of localised and regional strategies to increase the uptake of training in particular areas of skill shortage such as aged care, and the need to vigorously pursue recruitment and retention of workers in rural and remote areas. These efforts need to be underpinned by a supportive policy framework which encourages the development of creative solutions, facilitates collaborative government and industry approaches, and ensures flexibility in terms of program resourcing.

Models that focus on addressing skills shortages in aged care can and do provide a broad pathway to careers in the health sector. This includes VET in schools models for entry level training, which have been shown to develop skills and pathways for the future rural workforce.[16] Targeting younger workers through these and other programs would seem to be part of the solution to the health skills shortage, given the rapidly ageing health workforce. Although training models provide a short term solution to some of the most critical and localised skills shortages, it is clear that such solutions need to be balanced with medium to longer term solutions (job redesign, holistic approaches) that also address projected skills shortages. Such solutions require a co-ordinated approach, involving a range of players beyond those in the immediate rural community, such as state departments of education, training and health, state health industry skills councils, large and small employers, and unions, with industry playing a proactive role.

It is apparent that transferable innovative solutions are being implemented across the country, but are not being disseminated to the broader community. Transferability of models will be enhanced by the availability of detailed documentation regarding the processes involved in developing and implementing solutions, as well as broad dissemination of innovative models such as those featured in this paper. In addition, there is a need for more rigorous evaluation of models, to provide a comprehensive evidence base to support policy and practice. Many of the models identified do not appear to have been formally evaluated. Evaluation and dissemination of findings must be the concern of all stakeholders: industry (through practitioners and skills councils), researchers such as those in regional universities, and policy makers.

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Presenter

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