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## ORIGINAL RESEARCH

# A conceptual model for recruitment and retention: Allied health workforce enhancement in Western Victoria, Australia

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## A B S T R A C T

Attracting and retaining allied health professionals in rural areas is a recognised problem in both Australia and overseas. Predicted increases in health needs will require strategic actions to enhance the rural workforce and its ability to deliver the required services. A range of factors in different domains has been associated with recruitment and retention in the allied health workforce. For example, factors can be related to the nature of the work, the personal needs, or the way an organisation is led. Some factors cannot be changed (eg geographical location of extended family) whereas others can be influenced (eg education, support, management styles). Recruitment and retention of allied health professionals is a challenging problem that deserves attention in all domains and preparedness to actively change established work practices, both individually as well as collectively, in order to cater for current and predicted health needs. Changes to enhance workforce outcomes can be implemented and evaluated using a cyclic model. The Allied Health Workforce Enhancement Project of the Greater Green Triangle University Department of Rural Health (GGT UDRH) is working towards increasing the number of allied health professionals in the south west of Victoria. Based on themes identified in the literature, an interactive model is being developed that addresses recruitment and retention factors in three domains: (1) personal or individual; (2) organisation; and (3) community.

**Keywords:** allied health, Australia, conceptual model, recruitment and retention, rural health workforce.



## Background

The difficulty of attracting and keeping allied health personnel in rural Australia has been well established<sup>1</sup>. Recruitment and retention of these workers is notoriously problematic, particularly in areas removed from metropolitan areas such as the south west of Victoria. Staff turnover rates are high and there is evidence to suggest that this can be attributed to a range of factors, some of which are harder to control than others. The shortage of allied health professionals has been recognised by political leaders as a high priority, requiring effective strategies to improve the stability of this workforce<sup>2</sup>. In addition, there will be a continued and increasing demand for allied health practitioners due to reasons such as ageing populations<sup>3</sup>, increased physical inactivity and the associated chronic disease burden<sup>4</sup>, and effectiveness of allied health interventions within the healthcare system<sup>5</sup>.

Effective allied health recruitment and retention strategies must allow for projected changes in key characteristics of the professions<sup>6</sup> and changes in (preventive, curative) healthcare demands in communities<sup>5</sup>. Health service delivery is likely to be enhanced when skills of allied health professions are used to their full potential. Allied health professionals are well equipped to be involved in cost-effective and evidence-based intervention of a range of chronic diseases and activities such as health promotion<sup>5</sup>. Despite the higher levels of need for allied health services in rural areas<sup>7</sup>, Australians in metropolitan areas receive more than double the level of service provision by allied health professionals such as physiotherapists, podiatrists, occupational therapists, and social workers<sup>8-10</sup>.

Demographic results of a survey in South West Victoria showed that the allied health workforce is an older workforce that values multi-disciplinary teams<sup>11</sup>. This is in line with other Australian rural and remote allied health surveys<sup>12,13</sup>. South west Victorian services are predominantly delivered from public agencies that run regional services for

more than one location. Professionals are highly qualified. The three most important reasons for remaining in their current position are: lifestyle, career and family ties, whereas the three main reasons for leaving are: lack of career path, personal and social isolation<sup>11,14,15</sup>. Based on these south west Victorian findings it is important to focus on enhancing allied health workforce retention from the outset in order to ensure that fewer professionals will be lost in future.

Recruitment and retention of allied health professionals is a complex interplay between personal, environmental, and work related factors<sup>16</sup>. A recent major allied health survey found that many practitioners leave rural practice due to personal factors<sup>17</sup>. Some of the problems are more difficult to address than others, for instance, it can be hard to find suitable rural work for a spouse or to cater for specific educational needs for some of the children of allied health professionals. Retention problems in allied health have been associated with organisational commitment and management in a number of studies<sup>13,18-27</sup>. Lack of career structure, input in decision-making, job autonomy, time management, organisational and professional support, and poor job satisfaction can compromise personal needs and intention to stay<sup>28</sup>. Conversely, allied health professionals and their managers can be trained to enhance team management skills such as respecting and negotiating. Although other retention factors have been identified (eg remuneration, workload, lack of task variety, lack of opportunities for partners, lack of social and cultural infrastructure, communication, distance and transport, educational needs for children)<sup>12,16,21,28,29</sup>, they can at least in part be addressed by effective management and community support<sup>30-32</sup>.

The Allied Health Workforce Enhancement Project of the Greater Green Triangle University Department of Rural Health (GGT UDRH) aims to increase the number of practicing allied health professionals in the Barwon South West and Wimmera regions, and their length of stay. The project is funded by the Victorian Department of Human Services and tasks include the design, implementation and testing of an evidence-based recruitment and retention model



of allied health professionals. Allied health professionals have been defined as university trained health professionals, other than nurses and medical practitioners, who are involved in direct patient care or services to the community, or both<sup>33</sup>.

## **Generational challenges in the recruitment and retention of rural professionals**

Many young allied health graduates seek rural positions to start their career, and, as a result, rural regions have been described as 'professional nurseries'<sup>12</sup>. Unfortunately, many graduates leave or intend to leave their rural positions<sup>11,29</sup>.

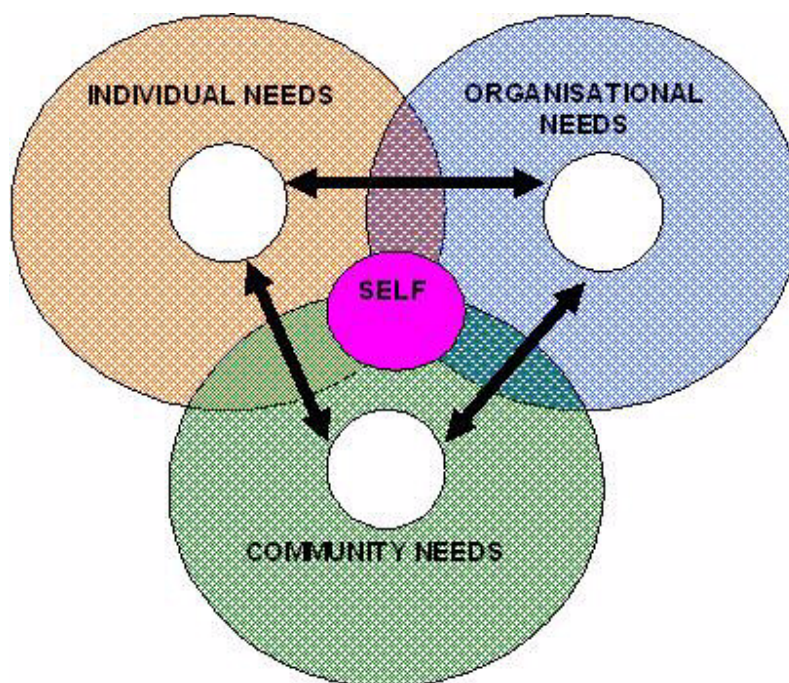
Workforce trends have been noted in the different age groups of workers. Generation X is the term used to refer to those born between 1961 (or 1965) and 1981 (or 1980)<sup>34,35</sup>, whereas Generation Y is born after that date. Trends noted with Generation Y include wanting to work in a team environment<sup>36</sup>, Generation X wants to be mobile and flexible, whereas baby-boomers plan to retire<sup>12</sup>. Generation X has been described as being empowered, self-directed, techno-competent, flexible, and wanting to change jobs more frequently when dissatisfied with work conditions<sup>34</sup>. Generation Y are described as team workers<sup>36</sup>. These findings challenge existing recruitment and retention practices and are likely to have ramifications in relation to management and forward planning of rural workforce requirements<sup>37</sup>.

For the purpose of allied health rural workforce enhancement, it is useful to focus on factors that attract and keep those who elect to be in the country rather than limiting oneself to putting all the effort in recruiting young graduates from the city. For instance, many physiotherapy students reared and educated in bigger cities are not interested in entering rural practice largely due to social reasons (family, friends and entertainment), long distance travel and perceived cost of living<sup>38</sup>. Important factors for working in rural areas are rural connectedness, lifestyle, clean environment, adventure, inexpensive accommodation and professional independence<sup>38</sup>. Surveys among rural

dieticians<sup>23</sup>, new physiotherapy graduates<sup>39</sup> and nurses<sup>22</sup> confirmed these results, in addition to wanting job opportunity and satisfaction, a desire to be exposed to a variety of work experiences, and to be a valued member of a team. On the downside, factors such as lack of funding for clinical education is inhibiting students to look for rural placements<sup>40</sup> due to travel and paying for double accommodation during a period of rural placement. Many rural students have financial problems<sup>41</sup>. After graduation and spending most of the time in the city, even students who originate from rural areas are not always interested in returning to the country<sup>42</sup>.

## **A conceptual model for recruitment and retention**

The proposed recruitment and retention model is multidimensional and based on balancing needs and responsibilities of health professionals (including those that pertain to family, profession, peers, career and income), agencies they work for (including the legislative municipal, state and federal entities that affect these organisations), and communities they service (individuals as well as groups in the society that use their services or that support them financially) (Fig 1). Other conceptual models have been described in the health workforce recruitment and retention literature. For example, Crandall and colleagues<sup>43</sup> described four types of models, namely: (i) affinity models (recruitment of rural students into training programs and promoting rural practice); (ii) economic incentive models (financial incentives that support rural practice); (iii) practice characteristics models (technical and collegial support); and (iv) indenture models (recruitment of fixed-term providers through scholarships and other incentives). Although the models are simple, describe concrete mechanisms and contain important elements that pertain to some of the needs and responsibilities within each of the three domains (ie, individual, organisational and community needs), they have been designed for one discipline (ie, medical practice) and do not sufficiently recognise needs of other disciplines. It can be argued that for models to be sustainable, needs and responsibilities within each of the three domains (Figs 2-4) need to be recognised and respected.



**Figure 1: A multidimensional interactive allied health workforce recruitment and retention conceptual model.**

The interactive and symbiotic relationships between the needs and responsibilities in these three different domains is dynamic and partially based on Glasser's choice theory and lead management principles<sup>44</sup>, and Covey's circles of 'concern' and 'influence'<sup>45</sup>. The model is in line with results from studies by Cheers and Lonne that used narratives<sup>46</sup>. The many issues that concern each of the groups is represented by the outer circles, whereas what can be influenced by the entities within each of the domains is represented by their respective inner circles. People have the freedom to choose the manner in which they want to respond (response-ability), and Covey<sup>45</sup> made a distinction between reactive response patterns (eg 'I can't') and proactive ones (eg 'I choose') whereas Glasser<sup>47</sup> made a distinction between deadly habits (eg blaming) and caring habits (eg encouraging). Positive attitudes and responsible actions in each of the domains are likely to enlarge their inner circles of influence. In this sense responsibility is defined by Glasser<sup>48</sup> as 'the ability to fulfil one's needs, and to do so in a way that does not deprive others of the ability to fulfil their needs'.

Figs 2-4 show factors within each of the three domains of this conceptual model that can be changed by members of that group with relatively little effort (printed in purple) and those that are more challenging to address (printed in black). It is reasonable to assume that when perceived needs and what is received in reality are comparable, frustration levels are low<sup>44</sup> and retention is enhanced. This is confirmed by results of a recent allied health survey that showed that 45% of professionals who felt supported in their job intended to stay for more than 2 years, whereas those who were not supported were less likely to stay and recommend their position to others<sup>15,49</sup>. This means that retention and recruitment issues are likely to be interrelated and that attention needs to be given to both for a workforce enhancement program to be effective. This may also be applicable to other trades and university student recruitment<sup>50</sup>. The following is a detailed explanation of the three components of the conceptual model.





Highlighted in Pink Organisation Circle of Concern

Highlighted in Black Organisation Circle of Influence

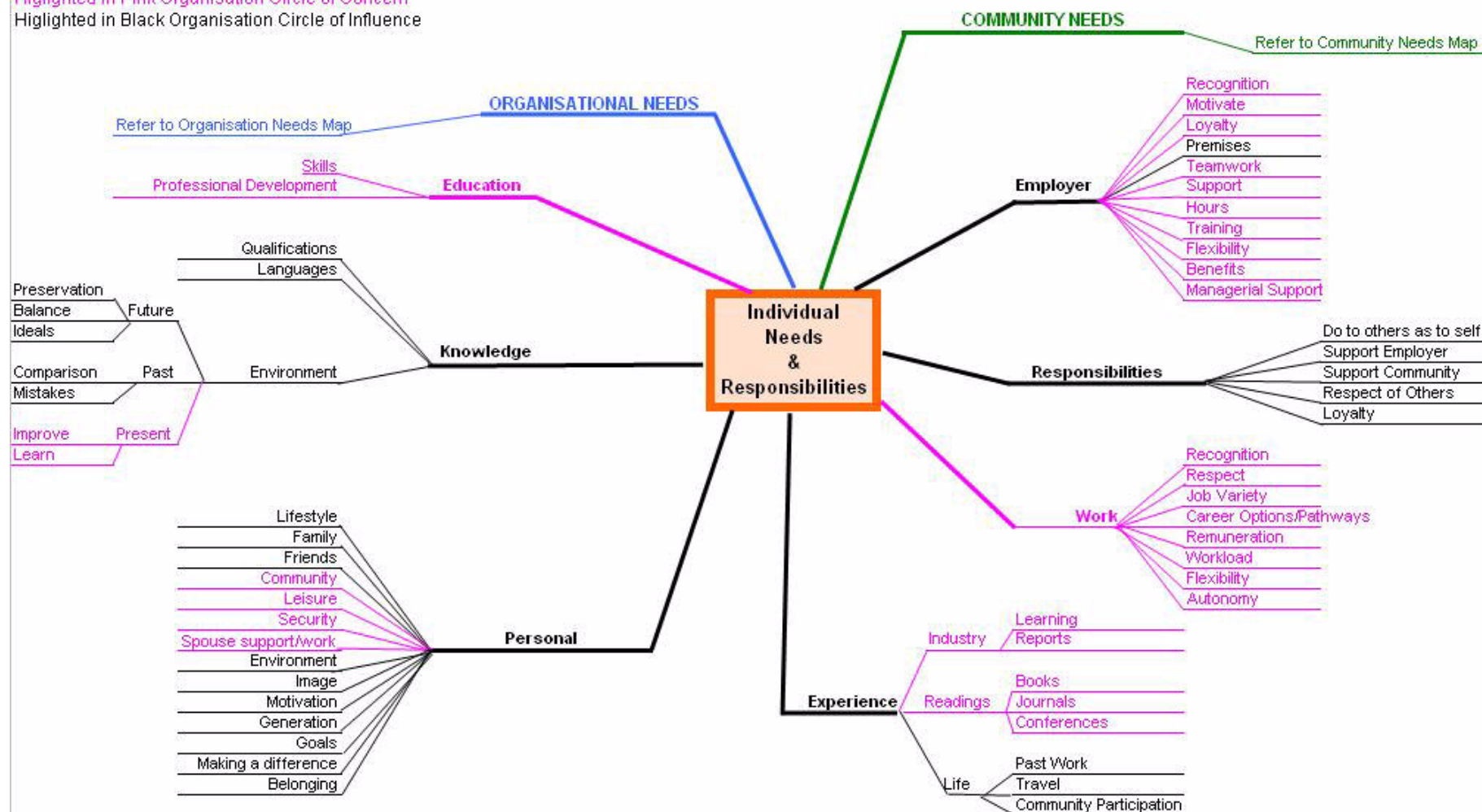


Figure 2: Needs and responsibilities of the individual



Highlighted in Pink Organisation Circle of Concern  
Highlighted in Black Organisation Circle of Influence



Figure 3: Needs and responsibilities of the organisation

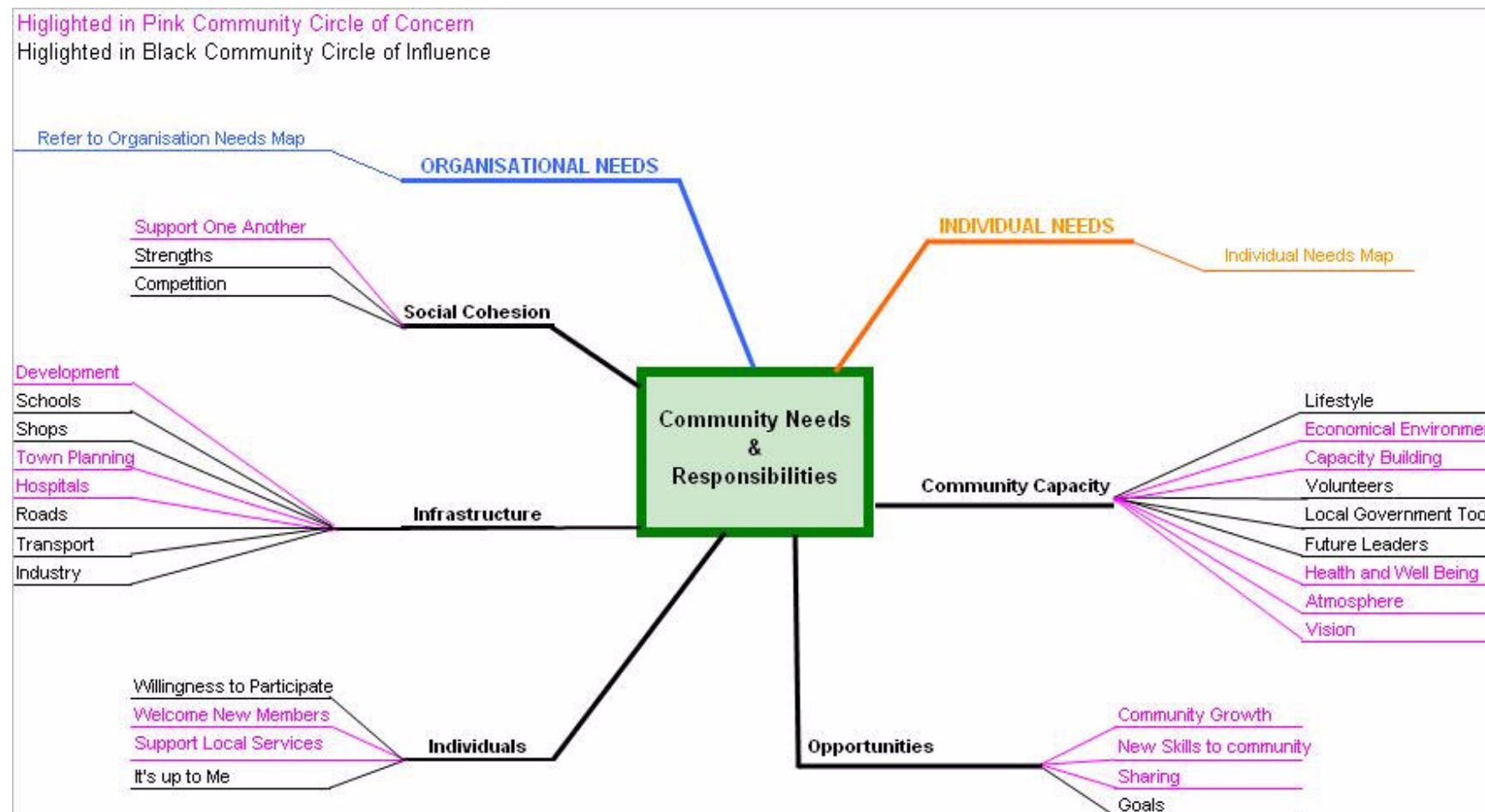


Figure 4: Needs and responsibilities of the community





## *Individual needs and responsibilities*

The various needs and wants individual practitioners and their families have<sup>51</sup> need to be recognised when enhancing rural recruitment and retention<sup>46</sup>. Needs are similar for everyone<sup>48,52,53</sup>, although they may differ in intensity. In contrast, 'wants' are personal to the individual<sup>54,55</sup>. The basic needs are the need for survival, power, fun, belonging and freedom<sup>55</sup>, and translate to issues such as isolation and peer contact, remuneration, job responsibility, team spirit, autonomy. The higher needs are the need for self-actualisation<sup>56</sup>, inner-vision and inner-divinity<sup>57</sup>. It is possible that in fulfilling higher needs people's behaviours are more flexible and effective, and work environments are more pleasant than in situations where people have to struggle to fulfil their external necessities to live.

The hierarchy of needs Maslow postulated in the 1950s and 60s was a break from existing schools at the time, that is psycho-analysis (eg Freud, Jung) and behaviourism (eg Watson, Skinner). In essence, in the humanistic view of Maslow human behaviour is not seen as being solely dependent on the unconscious mind, instincts or a learnt set of actions, but rather on the fulfilment of needs<sup>52-54</sup>. According to Maslow, needs at the lower end of the scale need to be alleviated first (ie, physiology, safety, love, esteem) before the higher need for self-actualisation can be filled. The need for esteem has two aspects: (i) self-esteem due to the ability of performing certain tasks; and (ii) the positive interest and acknowledgment from peers and others that comes with it. The need for self-actualisation has been defined by Gwynne<sup>56</sup> as 'the desire to become more and more what one is, to become everything that one is capable of becoming'. The order of Maslow's needs and the exact definition of them is not necessarily based on precise research data and in this sense these proposed needs are not unlike those suggested by Glasser<sup>55</sup>.

A recent survey among allied health practitioners in south west Victoria showed that they preferred teamwork<sup>15</sup>. Teamwork was associated with the intention to stay in their positions. In choice theory, lead managers assist their team

members in helping themselves to fulfil their present needs by making responsible choices<sup>44</sup>. The desire to minimise the difference between what people want to have (based on what their perceived quality world) and what they perceive to have in reality drives them to action. The person who uses internal control methods<sup>58</sup> is likely to apply the following behavioural patterns:

- ◆ has a win-win method of dealing with problems
- ◆ will investigate to appreciate a particular problem
- ◆ recognises the needs of others
- ◆ fosters confidence in others
- ◆ recognises the input of others
- ◆ accept others for who and what they are
- ◆ looks at the present situation as well as ahead
- ◆ will ask rather than demand
- ◆ will communicate and depends on cooperation
- ◆ is concerned with others and does not use them
- ◆ gets on with the job without blaming others.

Although well meant, existing and newly proposed models of healthcare management such as that for the enhancement of recruitment and retention of medical practitioners<sup>31</sup> do not necessarily cater for the individual needs of other health professionals. Current evidence-based practices in health care require input from more than one discipline, particularly in the prevention and treatment of chronic diseases<sup>5,59</sup>. This has ramifications for rural health care where clients are generally older, have more chronic diseases than their metropolitan counterparts, and are less likely to be eligible for rebates of the private sector<sup>60</sup>. Teams operating from rural health agencies may therefore include expert professionals and assistants from a range of disciplines that have common purpose and goal performance, possess complimentary skills and keep themselves mutually accountable<sup>61</sup>.

For a team to function effectively there must be a motive for operating together, an awareness that joint input is more effective than working alone, a dependence for members on each other to attain the agreed goal, joint accountability



within an organisation or community, and leadership<sup>62-64</sup>. Functioning in a team requires professionals to trust and respect each other, to remain flexible, to accept program protocols, to understand the procedures, to take part in team development, and to be able to let go or accept particular roles<sup>64,65</sup>. This is particularly relevant when client-focused teamwork progresses from multidisciplinary (separate disciplinary treatment plans) to interdisciplinary (shared plan and monitoring of progress) or even transdisciplinary (crossing professional boundaries) modes of service delivery, particularly in small rural organisations that have limited resources. The latter mode requires integration, collective thinking and the highest degree of trust, and even blurring of professional boundaries<sup>66</sup>.

Allied health professionals need a range of competencies to manage their clinical work, to be a team player or to give direction to a team, to function as a member of a multidisciplinary organisation, and to represent clients, the profession or organisation. Lincoln, Adamson and Cant<sup>67</sup> grouped managerial competencies in seven different domains, namely: organisational practices, legislative knowledge, staff relations management, management of future planning, negotiating skills, managing funding, and team leadership skills.

New graduates may feel that they lack competence in different areas through lack of experience, contacts and/or knowledge<sup>68-70</sup>. Consequently, they may feel less secure in their positions, particularly when they are required to work as a sole practitioner. The shock after starting a career in rural practice can have a profound impact on the individual professional<sup>68,71,72</sup> and their intention to stay. Providing the required information and support (eg education, professional network, and management) is likely to assist retention of allied health practitioners in rural settings<sup>28</sup>. Unfortunately, allied health professionals are not always well supported and included in the communication networks. For example, there is evidence that professionals from diverse backgrounds are less likely to be included in formal and informal information networks and decision-making processes within organisations<sup>73</sup>. A supportive and anti-discriminative work

environment can assist in filling personal needs people have and could enhance retention of the younger recruits in rural allied health professions.

## *Organisational needs and responsibilities*

Health organisations and their workers are generally expected to respond to health needs in their communities in an effective and efficient manner. The availability of human resources (ie, younger workers), competence and a healthy work environment are important factors that assist optimal long-term outcomes for all stakeholders<sup>74</sup>. Organisations need to deal with workforce changes and have the responsibility to create a stimulating and supportive environment in which employees can be innovative, productive and learn<sup>2</sup>. A recent Mercer's workforce survey in Australia found that employees who are in open communication with management are more likely to be committed to the organisation, whereas those who do not receive sufficient support (ie, training) are more likely to leave<sup>75</sup>.

Costs associated with the recruitment of staff for rural health agencies services can be high<sup>76</sup>. There can be a potential conflict between managers who are under increasing pressure to control costs and professionals who are expected to deliver up-to-date evidence-based practice, and who may have a need to advance in their profession<sup>77</sup>. Collins et al.<sup>20</sup> found that career progression in allied health professionals and nurses was associated with enhanced job satisfaction, whereas low job satisfaction was associated with intention to leave the profession. Recognition for performance and creativity of counsellors has been related with organisational commitment and intention to stay, and job autonomy was found to be directly related to intention to stay<sup>24</sup>. Keeping valuable employees of any discipline by facilitating career paths is an important issue<sup>78</sup>, although may require creative management.

A holistic workforce recruitment and retention model should balance the needs of all parties involved and deliver services in an effective, efficient and fair manner (ie, organisational



justice). This includes utilising allied health assistants<sup>79</sup> and disciplines such as exercise scientists to improve health services in an ageing society and enhance allied health workforce retention through interdisciplinary teamwork, improving career options and preventing professional burnout<sup>80-84</sup>. Although it can be useful to highlight individual and group interests, satisfactory workforce planning is unlikely to be served by preferential treatment of professions over the interests of health agencies, communities, or of one profession over the other. Challenges for organisations include the development of alternative management models<sup>77</sup>, teaching professionals specific managerial competencies<sup>67</sup>, and inviting their workers and other members of the community to take more responsibility for their own needs and that of new staff/community members<sup>30,31,85</sup>.

## ***Community needs and responsibilities***

Communities can be defined as groups of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or setting<sup>86</sup>. The needs of communities can change over time and depend on factors such as population growth, movement and age. For example, the population age-mix of communities in south west Victoria is predicted to change dramatically over the next 25 years in favour of those who are 60 years of age or older<sup>87</sup> (Fig 5). In addition, coastal towns, particularly Warrnambool, are predicted to expand in comparison with towns in other parts of the region<sup>87</sup> (Fig 6). These factors together will have ramifications for the number of allied health professionals needed to improve and maintain services to larger and ageing communities of south west Victoria, for example, podiatrists.

Given the predicted population changes and current shortage of allied health professionals in the south west of Victoria, particularly in areas of physiotherapy, occupational therapy and podiatry, communities require organisations that:

- (i) address the changing needs in the community effectively

- and efficiently; and (ii) provide employment for its members. One of the challenges for communities, organisations and employees is to adjust to increasing change. This requires flexibility and particularly 'quality input' on behalf of the community members<sup>88</sup>. Teamwork through constructive partnerships between members of communities, organisations and various levels of government can be very effective in achieving a satisfying balance between the immediate and future needs of communities, and their organisations and workers.

Evidence shows that active and dynamic communities reach better outcomes in areas such as health, education and economic development<sup>2</sup> by 'doing it for themselves'<sup>74</sup>(p.16). In addition, active and supportive communities keep their allied health professionals for longer periods of time than less supportive communities. An Alaskan study found that allied health workers in places with low attrition rates were more likely to feel respected and supported by the community<sup>28</sup>.

## **Implementation and evaluation of the recruitment and retention concept**

Successful performance of the allied health recruitment and retention concept requires the design, implementation, evaluation and adjustment of sets of actions that lead to optimising workforce outcomes for each of the communities or health agencies in the south west of Victoria as a part of an ongoing process (Fig 7). Factors that may affect recruitment and retention outcomes and health service delivery could include marketing strategies, size and location of the community, type of health agency, demand for particular disciplines, interdisciplinary teams that utilise trained allied health assistants to enhance quality and quantity of service delivery and that reduce workload, and availability of recruits from particular generations.

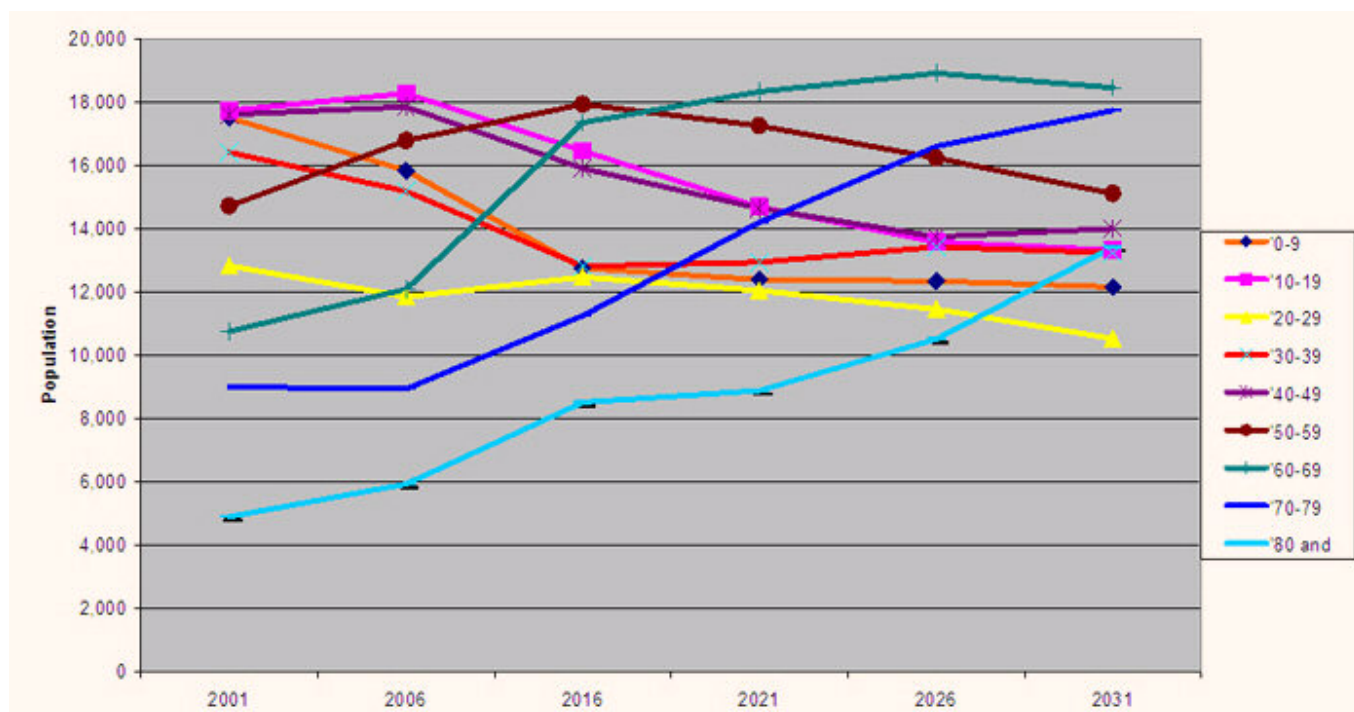


Figure 5: Projected population age-mix for South West Victoria, based on data from the Victorian Department of Sustainability and Environment<sup>87</sup>.

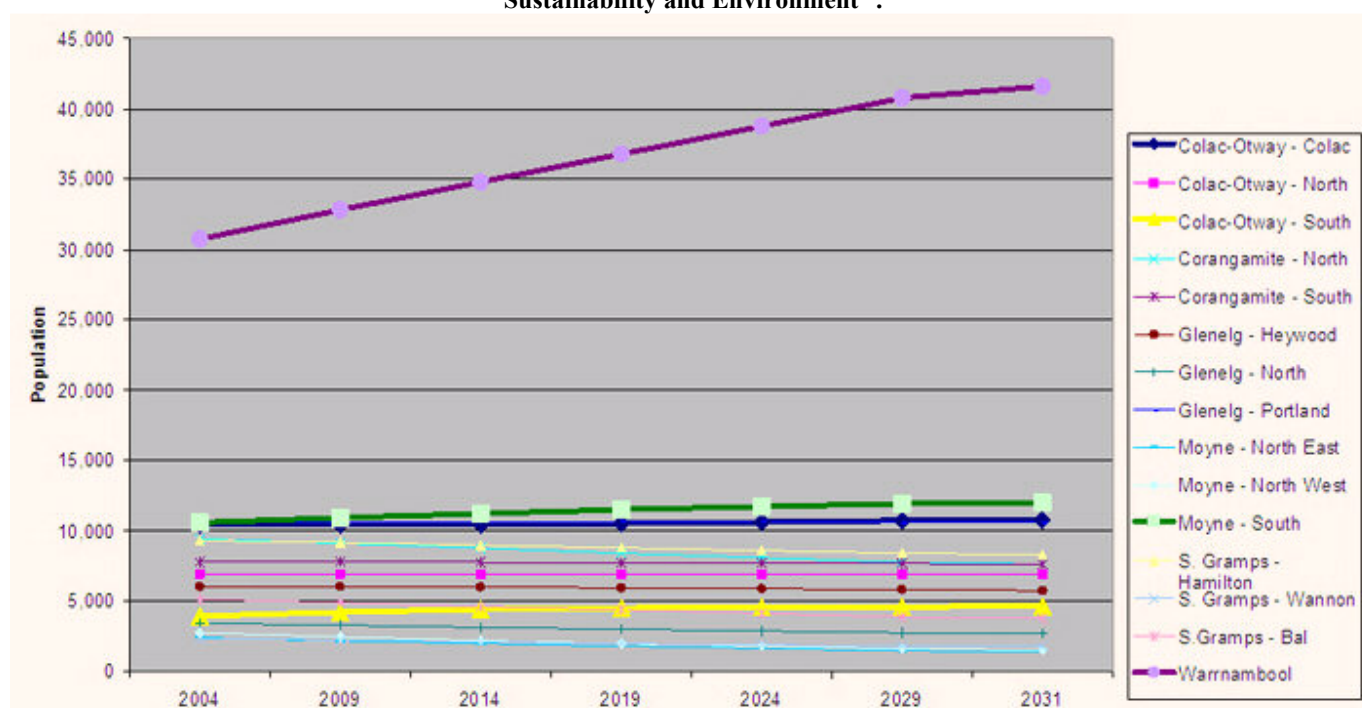
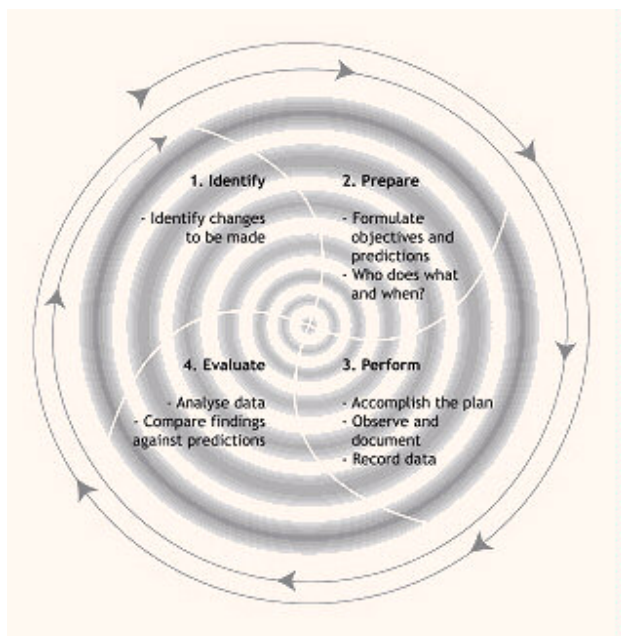


Figure 6: Projected population growth of communities in South West Victoria, based on data from the Victorian Department of Sustainability and Environment<sup>87</sup>.





**Figure 7: A model for the enhancement of health recruitment and retention, based on Langley, Nolan and Nolan<sup>89</sup>**

Recruitment is enhanced by effective and efficient marketing strategies, and there is a need for human resource administrators to constantly evaluate and improve the outcomes of these<sup>90</sup>. An Alaskan study found that the three most effective methods across the different health agencies were websites (28%), word of mouth (26%) and newspapers (16%)<sup>76</sup>. Given the cost of recruiting staff and advertising in newspapers, it can be attractive for organisations to optimise staff retention by assisting in satisfying basic needs of individuals and their communities since Alaskan workers were found to be very effective in bringing in new recruits. The three least effective recruitment strategies were newspaper advertisements (32%), websites (15%) and journals (13%). Reasons given for the ineffectiveness of newspapers included 'dismal return on investment', 'indiscriminate ads are not useful' and 'not appropriate enquiries'<sup>76</sup>. Likewise, websites were found to be ineffective

when they were not well targeted. Also, websites (including Government sites) can be extremely user-unfriendly.

Program initiatives so far address issues in all three domains of the conceptual model for workforce recruitment and retention in south west Victoria. They include:

- exit interviews to find out why professionals left
- working together with organisations on evidence-based recruitment
- cost-benefit analysis of promoting a professional to a Grade 2 position versus recruiting and training a person for a Grade 1 position
- promoting new models of care (eg interprofessional, teamwork, assistants, teleconsultation) and locum services to prevent professional burnout
- providing continuous professional development (CPD) based on professional group needs and adult learning principles<sup>91</sup> and flexible delivery<sup>92</sup>
- preceptorship training to boost the quantity and quality of student placement (eg through problem-based learning<sup>93</sup>), and to improve work enjoyment of the preceptors<sup>94</sup>
- delivering population health seminars and cultural awareness training for professionals and students to increase awareness of rural health issues, and to promote interdisciplinary practice<sup>95,96</sup>
- orientation program for students and linking them with local groups in the community
- involving the community in projects and providing information on workforce and health service developments.

Preliminary findings suggest reduced staff turnover, reduced number of vacancies, high levels of satisfaction with CPD, and a positive effect of CPD on clinical skills and the number of patients seeking treatment.



## Conclusion

It is essential to target the younger professionals and those with young families to become part of the rural workforce in south west Victoria. The projected growth of coastal towns, the ageing populations, and an ageing allied health workforce require strategic action and evaluation of evidence-based practices that include alternative ways of service delivery to provide for future needs. At the same time, one needs to take into account preferences of the younger workers. The provision of a supportive work environment, flexible working hours, and opportunities for work exchange to gain experience or to move into private practice should be catered for. Recruitment and retention of the allied health workforce is likely to improve with a set of actions that include: the provision of CPD and work exchange opportunities, teaching managerial competencies, utilising the various disciplines and allied health assistants, enhancing student placement, creating a supportive and creative work environment, and having an active and supportive community. Recruitment is likely to be enhanced when retention is optimal, because workers are willing to recommend their workplace. Last, in marketing vacancies, it is essential to use evidence-based strategies in line with the preferred forms of communication by the different generations (Baby Boomers, X and Y).

Although preliminary findings suggest reduced staff turnover, reduced number of vacancies, high levels of satisfaction with CPD, and a positive effect of CPD on clinical skills and the number of patients seeking treatment, more research is needed to test the utility of the conceptual model. The long-term approach to evaluating the utility of the model will be focussed on the three domains. For the individual domain, methods will include focus groups and semi-structured interviews including: continual data collection on exit interviews and the impact of CPD training; and a survey of allied health workforce needs in 2008. The latter will be a follow-up survey and compare results of the 2008 survey with the 2003 survey. For the organisation domain, methods will include a survey of organisations with

regards to management style, staff management, and remuneration packages within the organisation. For the community domain, analysis will be made of health and professional organisations, number of support groups, and community initiatives. Data will be wide ranging and include newspaper articles, to demographic profiles of a community, to mapping of infrastructure within a community.

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