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REVIEW

Triage, treat and transfer: reconceptualising a rural practice model*

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Aim. This article argues that the current model of emergency practice in rural Victorian hospitals, which relies heavily on visiting medical officers, needs to be reconceptualised if emergency services are to be supplied to rural communities.

Background. Medical workforce shortages are manifesting in Victoria as a reduction in emergency care services from rural hospitals. The suggested alternative model of emergency care involves advancing nursing practice to enable a redistribution of clinical capacity across the health care team. Clinicians will need to work collaboratively and continuously negotiate their roles to meet the patient's and the clinical team's needs.

Design. Systematic review.

Methods. This article is based on a review of the Victorian and Australian literature on the subject of Victorian health services and policy, emergency care, collaboration, communication and rural nurse scope of practice and roles. Emergency care activity was drawn from data held in the Victorian Emergency Management Dataset and personal communications between one of the authors and hospital executives in a small selection of rural hospitals in Victoria.

Results. The evidence reviewed suggests that the current emergency practice profile of rural hospitals in Victoria does not reflect the reconceptualised model of rural emergency practice. Instead, only a small proportion of non-urgent presentations is managed by nurses without medical support, and the data suggest that metropolitan nurses are more likely to manage without medical support than rural nurses.

Conclusion. Reconceptualising rural emergency care in Victoria will require significantly greater investment in rural nurses' knowledge and skills to enable them to operate confidently at a more advanced level. Clinical teams that deliver emergency service in rural hospitals will be expected increasingly to work collaboratively and interprofessionally.

Relevance to clinical practice. This article offers some directions for advancing nursing practice and strategies for improving interprofessional collaboration in the delivery of rural emergency care.

Key words: Australia, emergency care, health, interprofessional, nursing, rural

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Introduction

The workforce predictions of the Australian Productivity Commission (2005) regarding the health workforce are already being felt in rural Victoria, particularly with respect to the medical workforce. The lack of medical practitioners in rural Victoria is impacting on rural health services' capacity to deliver emergency care because the current model relies

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heavily on local general practitioners to perform the role of visiting medical officer (VMO) at the hospital as well as staffing the on-call roster. The latter on-call and VMO work are in addition to their private practice work. As the number of available general practitioners in rural Victoria decreases, so does their ability to support the on-call roster in rural hospitals. The on-call role of the (GP)VMO is reported to be a significant disincentive in retaining and attracting GPs to rural communities (RWAV 2006).

Increasingly, there are gaps in the after hours medical on-call roster during the week and weekends. Hospitals must establish contingencies that may involve hospital bypass and transfer by ambulance, additional ambulance support or medical locum relief if this is available (Kenny & Duckett 2004, Fowles 2006a,b, Schmeiszl 2006, Scopelianos 2006, CEO Small rural health service 2007, pers. comm., Director of Clinical Services – local rural health service 2007, pers. comm.). In light of the shortage of medical practitioners, one option is to advance the role of registered nurses. This advanced practice role does not negate the need for a collaborative model of care with the nurses consulting with off-site medical colleagues.

This article provides a profile of the emergency services system and emergency care presentations across the Victorian rural health service sector drawing on the Victorian and Australian published and grey literature. The article argues that the current model of practice, which relies heavily on VMOs to deliver emergency care, needs to be reconceptualised if emergency services are to be supplied to rural communities. The suggested alternative model of emergency care involves advancing nursing practice to create a more equitable distribution of clinical capacity across the health care team. Further, decreasing the workload of already stretched general practitioners can also improve the quality of work-life balance and thus retention of rural doctors.

Method

This article is based on a review of the published and grey literature relating to emergency care in Victoria and Australia. This review is not intended to be definitive, nor is it a meta-analysis as it includes all types of publications, including government reports, media reports and personal communications. The intention is to draw on the available evidence to provide a profile of current emergency service delivery in rural Victoria and suggest an alternative model of practice.

The literature search initially used Ovid (Books@Ovid and Ovid MEDLINE [R]), PubMed, proquest, Medline and CINAHL. The search terms used included rural health, rural health services, Australian and Victorian health services, Victorian health policy, emergency care, rural emergency care, collaboration, communication, unplanned presentations, rural nurse scope of practice and roles, small rural health services and multipurpose services. The reference lists of literature retrieved from the databases also provided additional articles and books. A total of 326 articles, books and reports were retrieved and reviewed. The reference details and associated researcher's notes were stored in Endnote.

One of the authors of this article also accessed the data held in the Victorian Emergency Management Dataset (VEMD) and the 'Agency Information Management System' (AIMS). The data provided to the Victorian Department of Human Services (DHS) by 16 of the 71 rural hospitals and all metropolitan hospitals are recorded in the VEMD. Only the five regional and 11 subregional hospitals in Victoria are required to provide detailed data to DHS as this informs their budget allocations for their emergency services. The remaining 55 local rural hospitals (small to medium rural hospitals) report aggregated emergency presentation activity into the AIMS and 14 bush nursing centres (BNCs) collect data of variable quality and do not report into either the VEMD or AIMS.

Using the 2006–2007 VEMD data, it is possible to model the profile of emergency presentations by their level of urgency [defined according to the Australasian Triage Scale (ATS)]. From this analysis, assumptions will be drawn regarding the profile of emergency care profile of hospitals that do not report into the VEMD. With their permission, the personal communications of hospital executives at a selection of rural hospitals across Victoria has also been used in developing the profile of the emergency care service system in rural Victoria.

Findings

Victorian rural emergency service system

Currently, the Victorian public emergency care system is delivered by 94 hospitals, the metropolitan and rural ambulance service and 14 BNC. The health services range from highly specialised, tertiary hospitals located in metropolitan Victoria that provide the definitive care for complex, highly acute and urgent emergency cases, to BNCs, staffed by sole remote area nurses (RAN). In Victoria, in addition to the large emergency departments located in acute hospitals in the capital city, there are five large regional hospitals, 11 smaller subregional hospitals, 55 local (small to medium) rural hospitals and the 14 BNC (DHS 2005). This is illustrated in Fig. 1.

Figure 1 Victorian rural hospitals and Department of Human Service regional boundaries.

Staffing

The staffing configuration distinguishes emergency services across rural Victoria. The emergency departments (ED) of large metropolitan, all regional and subregional hospitals have a permanent team of emergency clinicians that comprise, as a minimum, doctors and nurses. The staffing configuration of the 55 local rural hospitals varies in terms of whether or not nursing staff are designated to the emergency care area, which is generally defined by the number of patient presentations and according to the industrial award – Victorian Nurses Enterprise Bargaining Agreement. As at 2008, in rural hospitals that have 5000 or more emergency patient presentations per year, nurses are rostered specifically to the emergency care area. In most smaller rural hospitals, there are no nurses designated to the emergency service, the nurses leave their ward duties to manage the patients that present in their emergency area (Duckett & Kenny 2000). BNCs are not bed-based services and deliver a wide range of services to the community as well as first-line emergency care. BNCs are staffed by RANs who usually operate as sole practitioners without on-site medical support and do not have bed-based ward duties (Bleeser 2003). Unlike the regional and subregional hospitals, the 55 local rural hospitals do not have medical staff designated to the emergency area but rely on the local GPs to provide visiting medical support.

Emergency presentation profile

Emergency presentations refer to all unscheduled presentations of people that require some form of clinical service from a hospital. Emergency presentations can range from highly urgent medical emergencies and trauma, requiring acute tertiary health care, to non-urgent presentations requiring primary care interventions. People who present as an emergency presentation to a hospital are assessed first by a nurse to determine the level of urgency of their clinical needs. In Victorian rural hospitals, nurses use the ATS to make this initial assessment. Highly urgent patients are categorised as

ATS 1 and need treatment immediately. At the other end of the scale, patients whose needs are not urgent are classified as ATS 5 and are required to be treated within two hours of assessment (McCallum Pardey 2005). These latter presentations are also referred to as primary care type presentations (Department of Human Services 2007).

In 2006–2007, 1.8 million presentations were reported to the Department of Human services by public Victorian hospitals which includes the total of 496 035 emergency presentations that were reported by smaller rural hospitals into the Victorian Agency Information Management System in 2006–2007. Of these, 1.3 million emergency presentations were reported by metropolitan and rural hospitals in the VEMD. Forty-six per cent of these presentations were reported from the five large regional hospitals and the 11 smaller, subregional hospitals that report into the VEMD.

As illustrated in Fig. 2a, a very small proportion of emergency presentations to both metropolitan and rural health services is highly urgent, needing immediate medical attention. Figure 2b illustrates that the ATS profile of metropolitan hospitals is slightly more urgent than for rural hospitals, possibly reflecting the profile of emergency specialisation and tertiary referral teaching health services. The proportion of ATS category 5 of total presentations for subregional health services is twice that of metropolitan hospitals. In previous work, Duckett and Kenny (2000) described the range of emergency presentations at smaller rural hospitals in Victoria as 'similar to that found in community services'(Duckett & Kenny 2000, p. 124). The role of rural hospitals in the provision of primary health care is increasing as a result of GP-led primary care services not meeting the growing demand for them (Department of Human Services 2007).

Figure 3 illustrates that a small proportion of all emergency presentations (< 10%) is managed by nurses without medical support in metropolitan and regional health services. As previously explained, the VEMD data set does not contain presentations from the local rural hospitals and therefore any indication of presentations seen by a doctor is an estimate. However, Kenny and Duckett (2004) in their study of rural hospitals in Victoria suggested that up to 40% of emergency patients presenting were seen only by a nurse (Kenny & Duckett 2004).

Data from the VEMD provide some explanation of the type of emergency presentations that are most likely to be seen by a nurse only (Fig. 4). The VEMD data charted in Fig. 5 indicate a trend that presentations in larger centres not seen by a doctor are more likely to be non-urgent (Category 4 and 5). This practice is reflected in policy and practice at a number of rural hospitals. It is not unusual for hospitals to base their policy for calling the doctor for unplanned presentations on the ATS, some policies stating that doctors

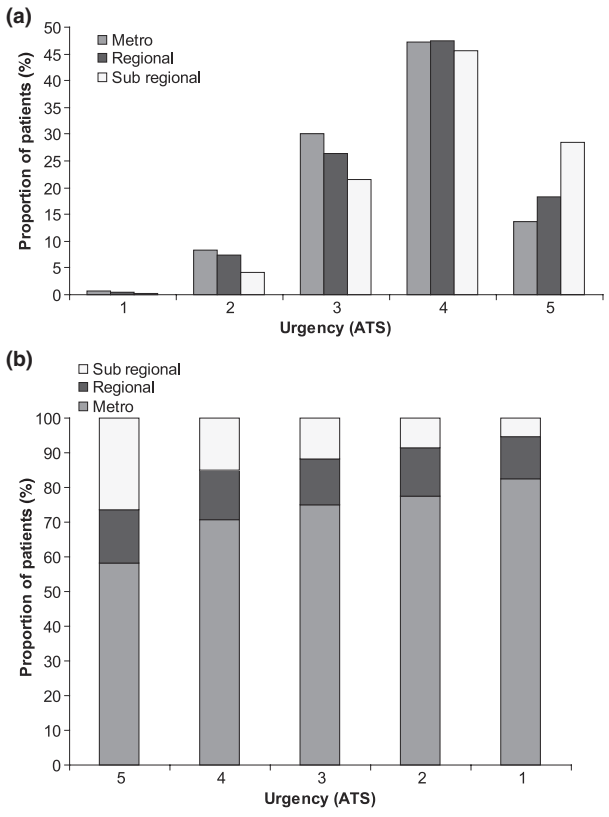

Figure 2 (a) Patient presentations by urgency Australasian Triage Scale and hospital type [Victorian Emergency Management Dataset (VEMD) 2006–2007]. (b) Percentage of emergency patient presentations across ATS categories and hospital type (VEMD 2006–2007).

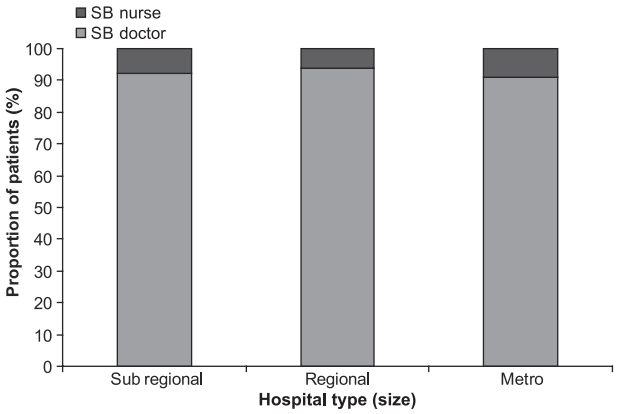

Figure 3 Proportion of emergency patient presentations seen by a doctor or nurse, by hospital type (Victorian Emergency Management Dataset 2006–2007).

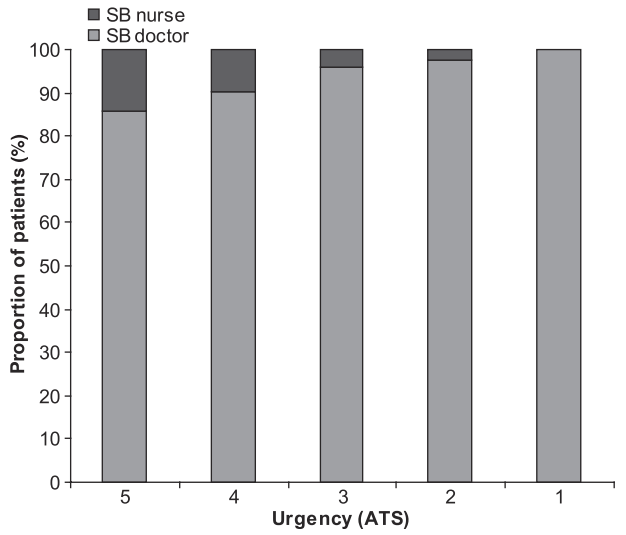

Figure 4 Proportion of patients seen by doctor or nurse by urgency Australasian Triage Scale (Victorian Emergency Management Dataset 2006–2007).

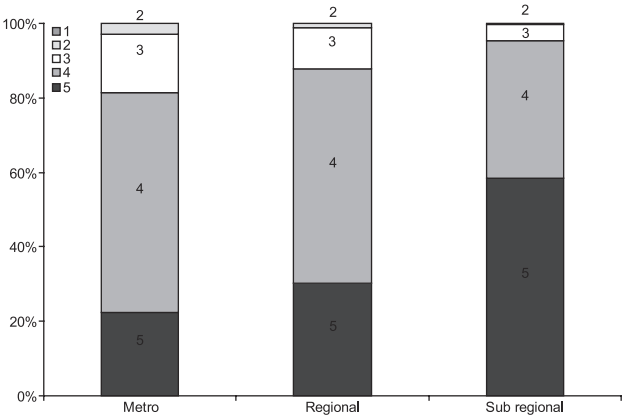

Figure 5 Proportion of patients not seen by a doctor by triage category by hospital type (Victorian Emergency Management Dataset 2006–2007).

are not to be called back for presentations categorised as 5 and 4 (Director of nursing – local rural hospital 2007b, pers.comm.). The VMOs at a growing number of rural hospitals are limiting the patients for whom they will return to the hospital to those that are triaged as ATS 1 and 2 (Director of nursing – local rural hospital 2007a,b, pers. comm.).

Limitations

The data available from the smaller rural hospitals that are the subject of this study are considered of poor quality and do not provide the detail of the patient presentation profile required by this study. The VEMD provides the most comprehensive, detailed and current data on emergency services of all available data sets in Victoria. That only 22·5% of Victorian rural hospitals report into the VEMD may limit the extent to which the findings can be generalised to smaller rural hospitals and BNCs that do not report into the VEMD. However, 72·4% of emergency presentations across Victoria are managed by the hospitals that do report into the VEMD.

Discussion – reconceptualising a model of rural practice

There is a growing body of evidence that there are too few doctors available/resident to deliver medical support to rural hospitals (Productivity Commission 2005, Sullivan *et al.* 2008). This article argues that for rural hospitals to continue to deliver emergency care, the model of rural practice needs to be reconceptualised so that the clinical work is redistributed across the clinical team allowing doctors to focus on more urgent and complex cases and nurses to more autonomously manage the less urgent and less complex presentations that generally fall into the ATS 5 and 4 categories. However, the caution raised by the Australian College for Emergency Medicine (2004) is noted regarding the use of the ATS in isolation to define organisational policy on calling the doctor back (Australian College for Emergency Medicine 2004). Some less urgent patients may have complex needs that require medical attention (i.e. exacerbation of chronic diseases) and some patients who require highly urgent clinical attention will have to be managed by nurses without medical support when no doctor is available.

The reconceptualised model proposed for rural emergency care assumes that:

1 Nurses are able to assess, diagnose and manage the highly urgent patients while waiting for support from the doctor or to transfer the patient via ambulance,
2 Nurses can manage most of the non-urgent, primary care type presentations without medical support and
3 To ensure a consistent level of emergency care is delivered (regardless of the professional group represented on the team), clinicians work collaboratively and will continuously negotiate their roles to meet the patient's and the clinical team's needs (Sullivan *et al.* 2008).

The following discussion will consider the results in terms of the assumptions underpinning the rural model proposed above and draw on published research to explain the relationships between the current profile of emergency care and the reconceptualised model.

Actual vs. model emergency care profile

There is a clear difference between the proportion of patients seen by a doctor, according to their level of urgency between the actual VEMD data as indicated in Fig. 4 and that proposed in the model described above. Applying the VEMD data to the proposed model of care, up to 63% of metropolitan presentations and 73% of rural presentations could be managed by nurses without medical support as this falls into the 'non-urgent' categories. This assumes that all presentations categorised as ATS 4 and 5 could be managed by a nurse alone, which, as previously discussed, is not necessarily the case.

In fact, $<10\%$ of presentations recorded in the VEMD for 2006–2007 were managed by a nurse without medical support. This contrasts with Kenny and Duckett's (2004) findings that up to 40% of emergency patients presenting to the rural hospitals they studied were seen only by a nurse (Duckett & Kenny 2000, Kenny & Duckett 2003, 2004).

Therefore, why are nurses not managing more non-urgent presentations without medical support? There are a number of barriers identified in the published literature to achieving this rural model of emergency care, as well as strategies to overcome them and these will now be discussed.

Professional boundary blurring

The current profile of nursing intervention described in the results section of this article may reflect a restrictive view of nurses' scope of practice. Reconceptualising the model of practice requires blurring of professional boundaries between doctors and nurses (Hegney 1996, Blue 2002, Norris & Melby 2006). It has been argued previously that this shift in the boundaries is necessary to sustain rural emergency services (Sullivan *et al.* 2008). Bonner and Walker (2004) described the formal boundaries between professionals as defined by the law and informal boundaries, which are created by convention and tradition (Bonner & Walker 2004).

Formal boundaries

As at 2009, in Victoria, the Drugs, Poisons and Controlled Substances Act (1981) (DP&CS Act) represent a significant formal boundary between medicine and nursing because it authorises doctors to supply medicines and prohibits nurses from doing so unless they are nurse-practitioners. This boundary is currently under review as a result of a discussion paper released by DHS in March 2008 which describes the proposal to change the law to authorise registered nurses with appropriate training to supply medicines for certain patient conditions without a doctor's medication order (Department of Human Services 2008a). The model proposed is based on the Queensland rural and isolated practice registered nurses (RIPRN) (Sullivan *et al.* 2008). The DHS discussion paper proposes that changing the law to authorise Victorian rural nurses to supply medicines could enable nurses to more completely manage the patient episode for many of the patients that present to rural hospitals and reduce the number of non-urgent presentations needing a doctor (Department of Human Services 2008a).

Informal – conventional boundaries

Beyond the DP&CS Act, there are very few formal boundaries relevant to the rural emergency context, most boundaries between medicine and nursing are best described as conventional and traditional (Sullivan *et al.* 2008). The Australian Nursing and Midwifery Council (ANMC) present nursing scope of practice as a relative concept contingent on what scope of practice is 'established' in the work place. Nurses may expand their scope of practice by taking on roles that were previously not done by nurses in their health service. The same roles may be considered 'usual' practice for nurses in other settings (Australian Nursing and Midwifery Council 2006). Over time, these practice expansions become usual practice wherever they continue to be routinely undertaken by nurses. Given that the nature of nurses' work can be defined by the local context, their current ability to manage emergency presentations with less medical support may have more to do with what is considered at the organisational level to be the role of nurses.

Role blurring between nursing and medicine has been studied in the context of emergency care, nephrology and rural health care (Hegney 1996, Blue 2002, Bonner & Walker 2004, Norris & Melby 2006). There is general agreement that role blurring between these advanced nursing roles and medicine is an inevitable part of health service changes and other pressures in society. The benefits expected of these advanced roles include reduced waiting times, holistic care, more timely treatment, patient satisfaction and safer practice (Norris & Melby 2006).

Advanced or advancing nursing practice

There is a wealth of literature on the subject of advanced nursing practice (Pearson & Peels 2002, Mantzoukas & Watkinson 2006). However, there is a notable lack of consensus on the definition of the concept of advanced nursing practice, which has been defined in the literature in terms of:

- Level of practice relative to the beginning nurse and expert nurse (Australian Nursing Federation 2005),
- Competencies, knowledge and skill, such as research skills, professional leadership and expert clinical practice (Pearson & Peels 2002, Australian Nursing Federation 2005, Mantzoukas & Watkinson 2006),
- Roles, such as nurse-practitioner, clinical nurse specialist and nurse consultant (Pearson & Peels 2002, Mantzoukas & Watkinson 2006),
- Level of education, such as postgraduate certificate vs. Master's degree,
- Degree of decision-making autonomy and specialisation (Mantzoukas & Watkinson 2006), and
- Legislative restrictions on who may use the title of nurse-practitioner (Mantzoukas & Watkinson 2006).

Rather than add another definition to the myriad already available on the concept of advanced nursing practice, this article adopts the model developed by the Australian National Nursing Organisations in 2004 which 'situates advanced registered nurse practice in the Australian context as the level of practice between beginning and expert levels in either a specialist or generalist context' (Australian Nursing Federation 2005, p. 5).

In Australia, the nurse-practitioner is considered the nursing expert (Australian Nursing Federation 2005, p. 5). In Victoria, the title 'nurse practitioner' can only be used by nurses who have completed a Master's degree and who have been endorsed by the Nurses Board of Victoria. As at 2009, in Victoria, there are over 85 500 registered nurses, 39 of these are nurse-practitioners (NPs), two are rural and remote nurse-practitioners. Despite a significant amount of money invested by the Victorian state government to encourage nurses to become nurse-practitioners, very few nurses have taken this step. The reasons for a lack of NPs may be related to the requirement to complete a Master's degree, the ineligibility of nurse-practitioners' patients to access the Australian government's universal pharmaceutical and medicare benefit schemes, and it may be related to persistent resistance by the medical profession to this more advanced, autonomous nursing model. Whatever the reason, there are simply not enough nurse-practitioners in Victoria to fill the void being left by doctors in delivering emergency care in rural health services.

The focus of this article, therefore, is advancing nursing practice, rather than the 'advanced' nurse role. The article argues that advancing the practice of rural nurses will enable them to manage with less medical support. In Queensland, this advanced rural nursing role sits below the nurse-practitioner level and is formally recognised as the RIPRN, with over 600 of such nurses endorsed. As at 2009, in contrast, there is no such advanced rural nursing role in Victoria, the only option for formal recognition of advanced rural nursing practice is via nurse-practitioner endorsement. Despite this, there are many nurses already practicing at an advanced or even expert level in rural Victoria. For example, the Victorian remote area nurses autonomously, with little or no medical support, manage the full range of patients who present to their BNCs, from highly urgent to non-urgent, primary care type patients.

Some authors have argued that rural nursing should be described as advanced practice owing to the context and the advanced level of practice needed to operate in a context where there is limited resources (Hegney 1996, Kenny & Duckett 2003, Kenny *et al.* 2004). There is a significant body of evidence that the scope of nursing practice needs to be more general and nursing clinical capacity more advanced, the smaller and more remote the health service in which the nurse practices (Hegney 1996, Mahnken 2001, Blue 2002, Kenny & Duckett 2003, 2004). A diverse range of skills are needed by rural nurses to manage the wide range of patient types that present (Mahnken 2001, Kenny & Duckett 2003). Skills that will enable nurses to make decisions confidently and competently with limited medical backup include management and leadership, mental health, advanced life support, public health, paediatrics and family health and advanced assessment skills (Kenny & Duckett 2003, Kenny *et al.* 2004).

Furthermore, it is likely that the profile of emergency presentations identified by Duckett and Kenny (2000) as increasingly 'primary care' in nature will continue with the ageing population, increase in chronic disease and the shift in government policy towards health promotion and illness prevention (Duckett & Kenny 2000, Australian Institute of Health and Welfare 2008, Department of Human Services accessed June 2008b,c). To enable rural hospitals to deliver care that is better integrated into the community and with other services, rural nurses will also need to be equipped with primary health care knowledge and skills (Mahnken 2001, Keleher *et al.* 2007).

In contrast to the literature, the trend indicated by the VEMD data (Fig. 3) suggests that nurses in metropolitan hospitals are more likely to manage without medical support than those in rural hospitals. Further, the trend illustrated in Fig. 5 suggests that nurses managing in metropolitan hospitals are more likely to manage highly urgent presentations without medical support than those in rural hospitals. To reverse this trend so that nurses in rural health services manage more patients with less medical intervention, further education and training may be needed to advance their practice. It has been found that many

nurses working in small rural hospitals providing emergency care do not have the competencies to operate with less medical support, including advanced life support competencies (Duckett & Kenny 2000, Kenny & Duckett 2003). Arguably, these nurses are most in need of these advanced skills, for without them the nurses will be unable to respond adequately and confidently to emergency presentations that need treatment urgently and will certainly not be able to reduce their calls on doctors for less urgent presentations.

Interprofessional negotiation and collaboration

Work arrangements will need to alter as workforce growth slows, technologies advance and the traditional divisions of professional knowledge and authority become less relevant (Masterson 2002, Forster 2005). The fluid nature of the rural workforce and the improbability of any one health professional having all the requisite clinical skills to manage the wide range of patient needs mean that the clinical team will need to continuously negotiate their roles and availability on the basis of their skills. Sullivan *et al.* (2008) argued that the inability of health professionals to negotiate in such a way will result in a reduction in services (Sullivan *et al.* 2008).

Masterson (2002) asserts that patient needs are more efficiently and appropriately met when clinical teams work 'interprofessionally'(Masterson 2002). Effective interprofessional relationships exist in teams that place the patient at the centre of the system and organise themselves according to their competence rather than professional boundaries and foundations (Forster 2005). A closely related concept, collaboration has been described as reciprocal interdependence (Thompson 1967), between people, who engage in co-operative and assertive problem solving (Weiss & Davis 1985) and shared decision-making (Baggs 1994, Norris & Melby 2006). A collaborative relationship comprises open and frequent communication, shared goals, common interests, joint contribution of knowledge and skills and mutual respect (Baggs 1994, Norris & Melby 2006). Collaboration is important in managing and coordinating in complex, dynamic and unpredictable environments (Melia 1979, Baggs 1994, Allen 1997, McCarthy *et al.* 2000) where the stakes are high and to effectively manage and resolve conflict (Weiss & Davis 1985, Baggs 1994).

Strategies for achieving collaborative interprofessional teams include practising assertive communication displaying confidence in individual ability (Blue & Fitzgerald 2002), interprofessional approaches to training and education giving clinicians a 'clear understanding of how their own roles fit with those of others' (Masterson 2002, p. 335), and, creating opportunities to work together, resolve problems and develop practice together (McCormack *et al.* 1999, Rosenstein 2002).

Conclusions

This article proposes that a sustainable model of rural emergency practice reduces its reliance on VMOs by enabling rural nurses to manage urgent emergency presentations for longer with no medical support and a larger proportion of the non-urgent emergency presentations with no medical support. It is also proposed that achieving this model requires that the emergency care team comprises clinicians who work collaboratively and continuously negotiate their roles to meet the patient's and the clinical team's needs.

The VEMD data provided to the Victorian Department of Human Services from metropolitan and larger rural hospitals (regional and subregional) indicate that, in reality, emergency practice does not reflect the model of rural emergency practice proposed in this article. Instead, only a small proportion of non-urgent presentations are managed by nurses without medical support, and the data suggest that metropolitan nurses are more likely to manage without medical support than rural nurses. However, other researchers have found that up to 40% of emergency presentations to rural hospitals in Victoria are managed by nurses without medical support. As data from the smaller, local rural hospitals and BNCs are of variable quality and not included in the VEMD, further research is required to test how well the model of emergency practice proposed in this article represents the actual profile of emergency presentations in these smaller rural hospitals and BNCs.

Enabling rural nurses' clinical practice to advance towards the level proposed in the model will require a significant and ongoing investment in their knowledge and skills to enable them to make decisions confidently with limited medical support. The capacity of the clinical team to respond flexibly, consistently and safely to the emergency care needs of rural communities relies on flexible professional boundaries and an organisational culture that supports collaboration and local negotiation.

Relevance to clinical practice

This article offers some directions for advancing nursing practice and strategies for improving interprofessional collaboration to achieve a more sustainable model of rural emergency practice. However, further research is required to develop and pilot a collaborative approach to achieve the

reconceptualised rural emergency model described in this article. This pilot would distil the conditions required to establish the model and generate the data required to measure whether it improved access to emergency care in rural Victoria.

Contributions

Study design: ES, KF, DH; data collection and analysis: ES, KF, DH and manuscript preparation: ES, KF, DH.

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