EMERGENCY MEDICINE IN RURAL AUSTRALIA

For those who live in the bush, the litmus test for their local health service is its ability to provide care in an emergency.

One of the defining features of rural practice is the management of medical emergencies and trauma.

Rural communities have the right to the better outcomes associated with early medical intervention.

However, their access to this care is currently compromised by metro-centric policies, shortfalls in appropriately trained personnel and inadequate funding systems and systems that jeopardize sustainable local emergency services.

RDAA calls for a Rural Health Obligation that will mandate the provision of minimum local emergency care in rural communities.
BACKGROUND
In 2006, the Department of Health and Ageing (DoHA) provided funding to assist the Rural Doctors Association of Australia (RDAA) and the Australian College of Rural & Remote Medicine (ACRRM) mount the third in their series of national symposia in conjunction with the 9th National Rural Health Conference held in Albury in March 2007. About 75 people from a range of health professions attended the symposium which was addressed by the Minister for Health, the Hon Tony Abbott. Using methodology refined at previous RDAA/ACRRM symposia, short expert presentations led into facilitated group work which was the core of the event. Written input was collected from both the groups and all the individuals involved, creating a rich body of data that forms the basis of this paper. This material was synthesized into a presentation at the National Rural Health Conference later that week and subsequently into a summary report to DoHA.¹ An analysis of these documents and the expert presentations from the symposium identifies five main areas that must be addressed if people who live, work and travel in rural and remote Australia are to have timely access to quality emergency care that articulates smoothly into systems and secondary and tertiary level services when necessary.

These priority areas are: team approaches, local capacity, appropriate models, funding and policy. In addition, the paper identifies workforce and training issues related to these priorities and makes the following recommendations to address them:

**Recommendation 1:** Quarantined funding for on-site multidisciplinary training and cross-placements for all rural emergency care teams should underpin mandatory professional development appropriate to the setting.

**Recommendation 2:** A Rural Health Obligation based on minimum standards of access and services, including emergency care, should be developed with and for rural communities.

**Recommendation 3:** Jurisdictions should develop integrated emergency service networks based on local health care provision complemented when necessary by coordinated regional and metropolitan retrieval systems.

**Recommendation 4:** An integrated rural emergency skills curriculum designed for segmented local team delivery should be developed by ACCRM, RACGP, ACEM and the nursing and allied health colleges.

**Recommendation 5:** The MBS Items relevant to rural emergency care should be adjusted to reflect the real costs of this care and best practice in providing it.

¹ Copies attached
Recommendation 6: Governments and key stakeholder organizations should develop a national framework for emergency management systems, including basic training, infrastructure, communications and equipment, that allows for flexible application at a jurisdictional and regional level.

TEAMS
Although few studies of emergency services include a focus on rural communities, the participants at the Albury symposium articulated a number of issues specific to the bush:

- The GPs and health care professionals providing rural emergencies services need a wider range of knowledge and skills than their urban counterparts
- Peer support and specialist back-up is less likely to be available
- Physical resources and ancillary staff are likely to be limited
- There can be long lead times to retrieval

The health care providers at the symposium and relevant sessions of the National Rural Health Conference were unanimous in seeing team models of care as the optimum way to address these issues. These teams will vary according to the setting, but are likely to include ambulance officers, paramedics, nurses, midwives and other hospital staff, doctors, health and hospital administrators, social workers and other allied health professionals, remote consultants and retrieval teams.

Though the composition of the teams may differ from place to place, their effectiveness will be determined by parallel clusters of concrete and cultural factors. The basic components of the former are training and supportive systems that encourage vertical integration. The latter depend on trust and respect, mutual confidence and shared knowledge.

Combined learning for all team members will encourage effectiveness, efficiency and trust. The basic knowledge required for immediate emergency response is common across disciplines. Involving not only the health workers but also police and community volunteers in joint training sessions also assists capacity development in the wider community and should be seen as essential in local and regional emergency planning. It will also ensure that each professional group is aware of the capacity and capabilities of the others and the role(s) that they play in an integrated emergency response.

Integrated training and support should also include isolated health and other workers. Whether this involves basic first aid instruction or higher level professional development appropriate to their environment and scope of practice, their access to learning opportunities is part of wider emergency service planning.

On-site training in this, as in other healthcare areas, brings obvious benefits. Apart from shared knowledge and better team work, it is usually a cost-effective way of simultaneous skills transfer that also keeps scarce staff on location with lessened demand for locums and backfilling. The value of on-site training in emergency care is greatly enhanced if it includes healthcare professionals from referral and retrieval services and destinations. All input emphasized the benefits to patients and local healthcare providers when those at the metropolitan or regional end of these services have a practical understanding of capacity...
and conditions at the point of referral. Representatives of these services also saw joint on-site training as perhaps the most effective way of engendering trust and confidence.

Formal training should be complemented by regular joint professional development that incorporates interactive sessions between rural health professionals and emergency consultants and other staff at receiving hospitals. Ideally this should be supplemented by clinical attachments in both directions. Rural service providers also stressed the importance of being able to establish contact with senior and experienced staff at the other end when discussing emergency care and retrievals.

In this way the referral, transfer and retrieval systems that are an essential component of rural emergency care can operate on a basis of mutual understanding and respect for the roles, responsibilities and context of those working at all parts of the system.

Supportive systems include encouraging all members of the rural emergency care team to identify their own requirements for training and professional development that will augment their contribution to the models of care in place in their particular setting. The diverse environments of rural and remote Australia suggest inter-professional leadership which may come from any of the disciplines involved, should be a feature of rural emergency teams. Counselling and de-briefing are also integral parts of a truly supportive system and these functions should be built into structures and budgets.

**Recommendation: Quarantined funding for on-site multidisciplinary training and cross-placements for all rural emergency care teams should underpin mandatory professional development appropriate to the setting.**

**LOCAL CAPACITY**

Centralization of services and other policies that undermine local capacity to deal with emergencies create health hazards that people in rural Australia should not have to face. The population profile and higher levels of health risk factors and motor vehicle and work related injury in rural and remote areas demand that timely emergency care be available locally.

For example, mortality from circulatory disease has been shown to rise with increasing remoteness. Demographic aging is occurring more quickly in many rural areas where outward migration of younger people leaves a higher proportion of the population in older age cohorts. Recent research found that 64% of women and 74% of men in two rural areas were overweight or obese. Abdominal obesity and other health risk factors all increased with age.

Chronic heart failure (CHF), myocardial infarction and stroke are more common in people over 60 years of age. A 1998 study found the overall prevalence of CHF in people between 60 and 86 across Australia to be 13.1%, but looked at in geographical terms, the rate was 12.4% in metropolitan areas and 16.1% in rural areas. Indigenous people are

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2 Australian Institute of Health and Welfare (2006) – Australia’s health 2006, Canberra, AIHW [Cat no AUS 73]
three times more likely to suffer a coronary event than other Australians, with those in the 25-44 age group eight times mote likely to do so.\textsuperscript{4}

Half the 48,000 major coronary events that occur in Australia each year are fatal. People in remote areas have a 10% - 30% higher risk of death from CHD than those who live in metropolitan areas.

In a recent Position Statement, the National Heart Foundation of Australia pointed out that intervention during the first 1-2 hours may reduce the death rate by half, but the benefit rapidly declines with delays in treatment. Shortening the response time for suspected heart attack may substantially reduce the burden of cardiac damage and save many lives each year.\textsuperscript{5}

Rural emergency services are needed to provide this response quickly as possible. Rural communities have the right to the better outcomes demonstrably related to early treatment: without access to them their risk of mortality is multiplied.

Non-metropolitan populations experience higher rates of morbidity and mortality from both work related and motor vehicle accidents. Studies have found that transporting severely injured patients directly from the accident scene to a major trauma centre is associated with a reduction in morbidity and mortality. However this is not always possible within a reasonable timeframe in non-metropolitan Australia. The “golden rule” of treatment within an hour to maximize positive outcomes is sometimes misinterpreted to apply to patient uplift within 60 minutes. In fact it refers to medical intervention and in many rural communities access to such timely care is only possible if it can be provided by local procedural doctors and those trained in emergency medicine.\textsuperscript{6}

The need for immediate medical care is clearly set out in this Australian study:

\begin{quote}
Deaths from trauma typically occur in one of three distinguishable time periods. The first peak occurs within seconds/minutes of the injury, where only prevention of the accident could have avoided deaths. The second peak occurs in the second to fourth hours of injury … resulting in 35\% of deaths from trauma in motorised countries with advanced trauma services.\textsuperscript{7} The third peak occurs several days/weeks after the initial injury where death results from sepsis or multiple organ failure. Not only are increased survival rates likely to result from early and
\end{quote}

\textsuperscript{5} Finn JC, Bett JH, Shilton TR, Cunningham C \& Thompson PL (2007) – Patient delay in responding to symptoms of possible heart attack: can we reduce the time to care? Medical Journal of Australia 187:5 293-298
\textsuperscript{6} A recent British study suggests that increased journey distance to hospital appears to be associated with an increased risk if mortality: and increase of 1\% for every 10 km increase. Nicholl, J, West J, Goodacre S \& Turner J (2007) – The relationship between distance to hospital and patient mortality in emergencies: an observational study. Emergency Medicine Journal 24:665-668
\textsuperscript{7} Editorial note: It is this second peak that can be minimized by the medical intervention within “the golden hour” referred to above.
appropriate medical, but the costly treatment offered in Intensive Care Units would be significantly reduced.

Preventable deaths occur due to a failure to make fast and appropriate clinical assessments and rapidly to institute the appropriate resuscitative measures…

Although some would advocate a 'scoop and run' policy when an incident is near a large medical facility, most would agree that, in the case of considerable time delay, adequate resuscitation is essential prior to and during transport, to increase the chances of the patient arriving at the hospital alive and in a reasonable condition for definitive care. A General Practitioner medical team, therefore, needs to be able to institute appropriate resuscitative measures.\(^8\)

The retention of local accident and emergency departments is crucial to the welfare of residents in rural areas.

**Recommendation:** That a Rural Health Obligation based on minimum standards of access and services, including emergency care, be developed with and for rural communities.

**APPROPRIATE MODELS**

Current approaches to rural emergency care can be grouped into two opposing categories: scoop and run or stay and stabilize. The dominant trend is towards the former, though this is more consonant with broader health service centralization policies than in line with the best available evidence. RDAA believes that models of emergency care must be based on two facts: emergencies will happen no matter what precautions are in place to prevent them, and medical interventions to reduce their health impact should occur as soon as possible after the incident.

Scoop and run policies acknowledge the former but ignore the latter. They also involve both immediate and longer terms risks at various levels. Foremost among the former is the risk of patient deterioration during transport, a process that can be delayed by weather, logistic issues or problems in finding a hospital place at the other end.

Symposium participants noted wryly: “You can call in the cavalry, but they can’t always come in time!” As the helicopter crash at Wariatda earlier this year showed, retrieval and transfer providers are not immune to sudden accident themselves. Moreover, even in a small state like Victoria, retrieval services indicate that in optimum circumstances, the best that can be expected is that the retrieval team will arrive at the emergency site 75 minutes after the initial the call-out. Rural doctors talk about an average retrieval time of 5-6 hours after they put in the call and there are examples retrieval not occurring for more than 12 or even 24 hours after the process is initiated.

\(^8\) Somers GT, Drinkwater EJ & Torcello N (1997) – The general practitioner as first responder in a major medical emergency. Paper prepared for the Australian Family Physician
At another level, the local service providers lose input into patient management and continuity of care, a recognized factor in achieving optimum long term health outcomes, is disrupted, while the victim of the trauma is denied ongoing support of family and community at the very time when it is most needed.

Perhaps the most serious long term disadvantage of scoop and run models is that they can undermine the local capacity to deal with emergencies that, as noted above, is the right of all communities.

Yet there will always be some events that require timely retrieval services to regional or metropolitan centres.

Therefore RDAA proposes a composite model for rural emergency services. This model must be based on the dual strategy of adequately resourced sustainable local provision and networked retrieval services both of which are grounded in team training, standardized guidelines and effective communication channels. It must be flexible enough to allow for variation in the very diverse settings of rural and remote Australia. Above all, it must be focused on patient and community need, rather than budgetary considerations or metro-centric policies and characterized by shared decision making based on mutual confidence.

Team training and the enhanced trust and communication it engenders have already been discussed. Team based models of care also facilitate the sustainable on-call rosters – ideally one-in-four – that are needed to provide for ongoing emergency care. While the utilization of nurses and para-medics is increasing in some areas, this approach could be more widespread.

The use of nurse practitioners in emergency departments in the United Kingdom is very effective. Most nurse practitioners in Australia work in urban areas, but targeted strategies to attract them to rural practice and to develop a role for physician assistants in rural emergency care should be given serious consideration. These strategies could include supporting rural residents, for example paramedics, to acquire relevant skills. This concept has already been put forward on a previous RDAA paper prepared for the Department of Health and Ageing. It was also noted that the symposium that in some cases where nurse practitioners are available in rural areas that they are considered to be managers and are not allowed/required to work after hours when their potential to relieve the burden on GP VMOs is highest.

While there is still considerable debate in this country about the value of physician assistants – or “physician extenders” as they are sometimes called in North America - there is growing recognition of their potential to supplementing over-worked rural doctors at an appropriate level. If the health system does move to embrace the concept of physician

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11 There was a similar reluctance to consider Physicians Assistants in Canada, though more individuals are coming to the view recently expressed by one rural doctor on the Society of Rural Physicians of Canada’s RURALMED email list: I’ll put my cards on the table and say that I think they are a great idea, a P.A. is exactly what I need right here, right now, and I would like one for Christmas. July 2007
assistants, as a latecomer to the field, Australia is well placed to ensure that recruitment strategies, training models and locations and a strong emphasis on community based services and generalization rather than clinical sub-specialization create a valuable subset of rural health care providers who could make a major contribution to emergency services.

**Recommendation:** Jurisdictions should develop integrated emergency service networks based on local health care provision complemented when necessary by coordinated regional and metropolitan retrieval systems.

**WORKFORCE and TRAINING**

Training that equips the whole emergency care team to provide quality care in rural and remote areas and upskilling and core skills maintenance through supported CPD are crucial to the policies, sustainable services and team approaches outlined in this paper. These teams will usually be led by a medical practitioner. While this may mean a specialist in metropolitan hospitals, the vast majority of Fellows of the Australasian College for Emergency Medicine (ACEM), like those in other craft groups, practice in urban and larger regional settings. Australian Medical Workforce Advisory Committee (AMWAC) figures indicate only 2.5% of emergency medicine specialists practiced in regional or rural settings in 1996. In any case, then as now, they were few in number.

It is unlikely that this situation will improve significantly in the near future, as emergency medicine has not shared in the increased number of trainees and new Fellows accruing to other Colleges since 2005. In that year only 58, or 3.5%, of all new College Fellows were admitted to the ACEM. In 2006, that College had 486 trainees (7.5% of all medical trainees) in place. In 2006, only 5.6% of all first year vocational training places were estimated to be in emergency medicine. This continues an unfortunate trend: between 1997 and 2005, ACEM training placements decreased by 19.3%. Although the proportion of new Fellows who are women rose from 25.7% to 37.9% from 2000 to 2005, comparison with other Colleges suggests that emergency medicine may not be exploiting the increased proportion and number of female medical graduates.

Training regimes more suited to female approaches, like the FLAME modules developed in Victoria and offered to participants in the Albury symposium, might help to redress this imbalance in both specialists and GPs. An Australian study of sustainable rural practice studies found that women were much less confident than men in providing sentinel emergency procedures, a feeling reflected in data showing that while 69% of the men in the study were sharing or providing most of the emergency care for their communities, only 38% of the women were doing so. The thousand doctors surveyed were asked whether they would be more likely to attend training in emergency medicine if the trainers were women. While the men said it would make no difference, 21% of the women responded that they would be more likely to do so.

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12 ACEM secretariat, pers.comm. August 2007
The extreme shortage of emergency medicine specialists means that most emergency departments in regional and rural hospitals are led either by general practitioners who are increasingly likely to lack the procedural training of their predecessors or International Medical Graduates (IMGs) whose knowledge and skills vary widely. Whilst there are a plethora of training modules and programs, there are currently no generally accepted education or training standards for doctors working in small emergency departments.

A 2005/6 survey of 340 doctors working in 57 regional and rural emergency departments in RRMAs 3 and 4, found that of the 230 respondents, only 13 were FACEM Fellows while 58 and 34 respectively held RACGP and ACRRM fellowships. Twenty-one of these doctors held dual or triple fellowships. Just over one-third (35%) of all respondents held a relevant diploma. About a third (38%) of the others completed a short or certificate course in a relevant area.

Twenty-seven of the respondents reported no specific training in emergency care. Less than half the respondents participated in relevant CPD or skills maintenance program. Nearly a quarter (23%) of them had had no rural experience prior to their current position, a proportion that rose to 29% for the IMGs.

A little over half the respondents had been trained in Australia or New Zealand but a significant proportion of the others had not successfully completed the Australian Medical Council requirements for full registration here.16

While most or the respondents indicated an interest in undertaking further training, they expressed a marked preference for short courses and activities, with only about 20% indicating an intention to do a diploma or longer course. This reflected the difficulty with participating in longer training that many of them mentioned as a negative aspect of their current position. Twelve percent of them planned to study for their FACEM. The ACEM does not provide courses for non-specialists, though they can enrol in a Maintenance of Professional Standards program. Both ACRRM and the RACGP provide training in advanced skills relevant to emergency care. The 2006 extension of Commonwealth support for procedural training to those providing emergency care in rural and remote areas can assist access to this, though the benefits of the program can be constrained by lack of locum or backfilling relief.

Locally delivered training and upskilling would benefit all parts of the rural emergency care workforce. There are already good models in practice here and Canada and New Zealand.

**Recommendation:** An integrated rural emergency skills curriculum designed for segmented local team delivery should be developed by ACCRM, RACGP, ACEM and the nursing and allied health colleges.

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16 Arvier PT, Walker JH & McDonagh (2007) – Training emergency medicine doctors for rural and regional Australia: can we learn from other countries? *Rural and Remote Health* 7:705
FUNDING

Emergency medicine is one of the most demanding and stressful aspects of rural general practice; yet MBS fee structures under-fund emergency care, sometimes to the point that doctors are providing this care without any remuneration. Nor does the system support best practice: for example, if more than one doctor is needed to provide emergency care for a patient, only one of them can claim the rebate, as this 2007 example from South Australia illustrates:

A patient attending the practice suffered cardiac arrest. The patient was attended by three doctors and the practice nurse from the clinic; CPR was performed and the patient successfully defibrillated, intubated and ventilated. Medicare refused to pay for attendance of more than one doctor even though the three doctors spent more than an hour working on the patient. 17

There have been cases where a retrieval service has claimed the rebate so that the local doctor/s who managed the patient in the initial crucial stages received no remuneration.

MBS Item Numbers 160-164 cover attendance at emergencies with time increments of 60 minutes when increments of 15 minutes, similar to those applied to anaesthetic services, would reflect the work patterns in emergency care more accurately.

Other MBS Item Numbers for emergency care are restricted to emergency care physicians and RDAA has already expressed its concerns about the lack of appropriate Item Numbers that reflect the true costs of maintaining the capacity of a rural general practice to provide emergency care. These costs can be significant whether the care is provided in the local hospital, or, in towns where there is no hospital, in the clinic. Recent calculations indicate than when a doctor has to leave the practice to attend an emergency at the local hospital, they are in effect subsidising the provision of public sector services as the fees paid may only cover the practice overheads and not actually remunerate the doctors for their efforts.

When emergencies occur in normal clinic hours, other patients may be sent home while several members of the practice team (including nursing staff who do not attract MBS reimbursement) concentrate on emergency care, leaving the practice not only underpaid for this care, but facing the loss of normal fee for service income. This increases the vulnerability of rural practices, 19% of which have already been identified as non-viable. 18 Table 1 demonstrates the cost to a rural doctor of providing emergency services.

17 Peter Rischbieth, pers com, April 2007
18 RDAA & Monash University School of Rural Health 2003) – Viable Models of Rural and Remote Practice Stage 1 and Stage 2 Reports. Canberra, RDAA
These MBS anomalies strain even the larger, more sustainable GP clinics. Yet to withdraw these services would leave their communities bereft of emergency care.

Practices in towns without hospitals are in particular need of support. Not only is the wider practice team likely to be involved in emergency care but the practice has to provide its own emergency equipment and consumables. The number of these towns is increasing with hospital closures or downgrading. In some places the hospital no longer provides after-hours services, but there is no concomitant payment to the practice for after-hours coverage.

It sometimes happens that rural doctors, particularly those in isolated areas, have to treat several patients at the same time, for example after major road trauma. The current MBS Item Numbers do not allow for adequate remuneration in these rare circumstances and should be revised or extended to recognize the complex demands imposed in these circumstances. As this newcomer to rural medicine points out, this anomaly is as astonishing as it is unfair.

*I was flabbergasted to learn that rural folk cared for by GPs in emergencies are only allowed one doctor, no matter how badly ill or injured the patient is.*

*After being asked to help with a critically ill lady yesterday morning for 3.5 hours, I was angry to learn that I would not be paid, as Medicare will only pay one doctor to attend.*

*If this had occurred in any city or regional centre, this lady would have been attended by about ten doctors simultaneously. As it stands, Medicare will only allow a single doctor to attend her because she is from XXXX, and presented to XXXX Hospital where GPs provide the emergency care.*

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It is bad enough I had to abandon my booked patients and accept half of what I would normally earn in a session, but to be told I will not be paid at all by the Medicare interpretation service supervisor is passing strange.

Emergencies demand immediate and expert care, but they occur relatively infrequently. RDAA therefore believes that while rectifying these anomalies would not have a major impact on MBS outlays, it would have a significant impact on the viability of rural practices and the morale of the high proportion of rural doctors who routinely undertake emergency after-hours work. Table 2 shows a suggested fee structure that could achieve this.

Table 2: Indicative proposed fee structure

( Assume that Level D consults are charged between 30 and 60 minutes under current fee structure. Updated fees based on hourly rate for 45 minutes, 90 minutes, 150 minutes, 210 minutes, 270 minutes and 300 minutes. Note that the proposed Rural Emergency Care Item numbers would be charged on 15 minute increments and based on $248/hour).

<table>
<thead>
<tr>
<th>Time (mins)</th>
<th>Current emergency fees (Level D &amp; Prolonged Professional Attendance)</th>
<th>Updated RDAA Viable Models fee ($248/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 – 60</td>
<td>58.45</td>
<td>174</td>
</tr>
<tr>
<td>60 – 120</td>
<td>191.90</td>
<td>372</td>
</tr>
<tr>
<td>120 – 180</td>
<td>319.80</td>
<td>620</td>
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<tr>
<td>180 – 240</td>
<td>447.60</td>
<td>868</td>
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<tr>
<td>240 – 300</td>
<td>576.65</td>
<td>1116</td>
</tr>
<tr>
<td>&gt;300</td>
<td>639.65</td>
<td>1240</td>
</tr>
</tbody>
</table>

RDAA understands that the Department of Health and Ageing is currently considering relevant adjustments to the MBS Schedule and has formally expressed its willingness to work with it to develop adequate Items for emergency medicine in rural practice.

Recommendation: That the MBS Items relevant to rural emergency care be modified to reflect the real costs of this care and to support best practice in providing it.

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21 A 2006 survey by the South Australian Rural Doctors Workforce Agency indicates that 86% of the rural GPS in that State routinely undertake after-hours emergency care.
22 Maxwell as above.
POLICY
RDAA insists that robust and sustainable primary care, maternity care and emergency care are core services to which all rural communities have a right. The provision of adequate emergency services is therefore a key component of rural health policy. This must include maintaining local capacity to provide immediate care and assessment and integration into a wider system that can provide timely and efficient transfer when necessary.

RDAA acknowledges that the policy frameworks needed to support this capacity must be in place at different levels in the health care system.

Commonwealth mechanisms to provide an adequate and appropriately trained workforce and mechanisms to support ongoing professional development and up-skilling are fundamental. The extension of the Training for Rural and Remote Procedural General Practitioners Program to include doctors who routinely provide emergency services is acknowledged as a very positive step. The urgent need for Medicare to reflect the realities of rural emergency care and provide remuneration that will underpin workforce sustainability has already been highlighted.

At a State level, RDAA is extremely concerned by a consistent trend towards metro-centric policies apparently directed more by economic and management dogma than a focus on the health of rural communities. Statements from influential commentators that compare rural hospitals, and their emergency departments, to “the old corner store .. in the age of the supermarket” not only suggest poor understanding of the place of rural health services in the wider well-being of rural Australia; they are also self-contradictory when they state that the objective of centralized systems is “that they are safe [and] give you the best chance of the best chance of recovery”.

As already noted, numerous studies have demonstrated the safety of small rural hospitals, and that medical treatment within an hour – “the golden rule” – enhances the chances of better health outcomes significantly.

This extract from The Age shows how centralization policies can ignore and undermine local service capacity, by-passing on the scene expertise and systems:

*Doctors in Kerang and Swan Hill were put on stand-by as ambulance helicopters and planes ferried patients to Melbourne’s two specialist trauma centres during a major train disaster in June 2007…*

*Swan Hill and Kerang hospitals were put on "brown alert" to prepare for mass casualties after the first paramedic arrived at the crash scene just before 2pm on Tuesday. Theatres were cleared, surgeons and anaesthetists put on stand-by and a control centre to manage casualties was set up. In Kerang, injuries were treated at a triage centre set up at the Memorial Hall instead of the hospital… Doctors from Kerang [who are] trained in trauma response could have been at the crash site within 10 minutes, and doctors from Swan Hill in less than 30 minutes.*

But because of Victoria’s health emergency response plan — which dictates that seriously ill patients are taken to Melbourne’s main trauma hospitals as soon as possible — the Kerang hospital treated only eight patients for cuts, abrasions and minor broken bones.

Five Melbourne doctors trained as "retrieval specialists" flew to the scene to accompany the seriously injured on two helicopters and three air ambulances.

The State Director of Emergency Management] …said doctors from Kerang Hospital were not needed because paramedics were able to do everything a doctor could do in the field, apart from specialised procedures such as amputations.

[The Health Minister] said the triage of patients at a crash site, with serious cases sent immediately to major trauma hospitals, enabled patients to receive specialist care sooner.24

Obstetric emergencies have become the focus of particular concern as approximately half Australia’s rural maternity units have been closed over recent decades. RDAA, in collaboration with other key organizations (ACRRM, RACGP-National Rural Faculty, RANZCOG, The Australian College of Midwives and the Australian Rural and Remote Workforce Agencies), is developing a National Consensus Framework for Rural Maternity Services grounded in the right of all women to receive maternity care as close as possible to where they live. The draft Framework specifies that strategies to identify and manage risk must be in place in all local services. However, it also acknowledges that sudden and unforeseen emergencies will occur. It therefore stipulates that:

At least one facility within an integrated geographical service network should provide the full range of equipment and trained personnel to provide quality maternal and foetal care.

Formally networked referral and transfer systems must be in place in all rural maternity units to ensure the safe and timely transfer of women and/or their babies who require medical or specialist care.

All members of the rural maternity care team must have access to regular continuing professional development, including training in obstetric emergency care, and the use of equipment that support their current scope of practice.

Rural hospitals without maternity services must have equipment and training to enable them to deal with unplanned deliveries.25

As part of the modified Delphi technique used in developing the Framework, a series of tele-focus groups sought input from health care professionals and consumers on various issues, including obstetric emergency services. Aspects of this issue highlighted by the informants include:

24 The Age, Melbourne 7/06/07
- Increased pressure on transfer services following hospital downgrading or closure
- The importance of standardized guidelines and protocols
- A single point of contact for obstetric and neonatal referral and retrieval services
- Prompt access to authoritative advice and coordinated transport to and placement at appropriate tertiary centres
- Referral staff with an understanding of local capacity and conditions
- Retrieval services require sufficient funding for adequate maintenance and replacement of equipment and vehicles
- Protocols and formal agreements to cover cross-border transfers
- Coordinated defined pathways of communication, referral and retrieval

It is clear that whether designed to meet specific or more generalized medical needs, emergency services must be encompass a set of basic attributes.

**RECOMMENDATION:** That governments and key stakeholder organizations work on the collaborative development of a national framework for emergency management systems, including basic training, infrastructure, communications and equipment, that can be refined at a jurisdictional and regional level

*For those of us who live in the bush, the litmus test for our local health service is its ability to provide care for us in an emergency.*

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