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COMMENTARY

Ten ideas for building a strong Australian rural health system

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Those who work in rural health are constantly experiencing the impact of protracted shortages in all clinical disciplines. What is required to build a sustainable rural health system?

This commentary was written to generate ideas and provoke debate about priorities for rural health, in advance of the Australian National Rural Health Alliance 2009 conference. The conference will doubtless be packed with highlights as together we reflect on 20 years' successes and failures in the rural and remote health sector under the conference theme: ' celebrating the sector'. Another key theme is 'collaborating in health care teams and service models that work'. We propose that our communities can learn from models that work and build on recent successes in rural health policy and service delivery.

Beyond the droughts and floods, what is great about rural practice (apart from living in some of the beautiful places in Australia) is that most rural clinicians practice in collegial and supportive teams and genuinely enjoy working and learning together. Many rural practices have creative solutions to their workforce shortages and have well established partnerships to maintain a service in their community despite unpredictability. Rural practice is characterized by groups of highly skilled and committed clinicians willing to go beyond the call for their communities. They are fundamental to a town's ongoing health, wellbeing and economic sustainability. When the health service is under threat, the whole community is galvanized into action.

Australia has implemented some good rural education and training initiatives. Stemming from the 2000 budget, building on the establishment of the University Departments of Rural Health (UDRH), the Department of Health and Ageing funded universities to provide 20% of domestic

medical students a minimum of 50% of their clinical training in rural or remote areas. There are 14 rural clinical schools (RCSs) and 3 medical schools in rural Australia. Several other successful initiatives have been implemented. These include: rural scholarships, Rural and Remote Area Placement Pilot (RRAPP); Post Graduate Placement Program (PGPPP); Regional Training Providers (RTP); some innovative procedural rural and practice based training models (eg level C Obstetrics and practice-based basic Obstetric Diploma training); rural hospital junior doctor training places; and specific practice support programs[1].

Lacking is overall coordination and integration of these initiatives. It is important to clarify the key outcomes of these initiatives. It is essential to publish the richness of these programs to learn about the outcomes and transfer knowledge into practice. It is also time to establish appropriate budget incentives for vertical education templates to advance rural clinical training pathways. The newly established Office of Rural Health is well positioned to facilitate a comprehensive national approach to strengthening the rural health workforce and to ensure funding is invested for the greatest impact. A national approach should facilitate good education and training programs to maximize the retention of trainees and students in rural areas.

Health services, clinicians, education providers, rural communities and governments are interdependent and thus form a symbiotic system[2]. A symbiotic rural health system is successful when the parts of the system are working towards mutually beneficial outcomes. Education of the workforce needs to be at the centre of a symbiotic rural health system. Students add vibrancy in clinical practice and contribute to a better health service culture. Doctors experience increased work satisfaction when teaching students[3]. Furthermore, we know that longitudinal community-based placements are effective for clinical placements[4]. When medical students live and learn in rural communities they are more likely to take up rural practice[5]. However, such longitudinal clinical placements are currently confined to some medical programs, while there is a lack of training pathways beyond medical school.

Some rural areas struggle more than others to attract and retain clinicians. At a national level we still have a limited understanding of where and why there are critical shortages, and whether there is a lack of doctors, nurses or allied health professionals. A national rural health workforce strategy will require a whole of system approach with inter-professional education and training pathways at its core beyond a simplistic view of workforce strategies[6]. Using a systematic approach, a national rural health workforce strategy would need to give consideration to the following issues (examples are provided to show how these ideas may be established and implemented).

Rural medical training pathways

The development of rural medical training pathways will provide more creative and flexible training programs and pathways for medical students interested in rural practice. There is an opportunity to expand these programs with the annual intake of medical students increased from 1200 students per year in 2000 to over 3000 students in 2009[7]. Currently there is a lack of rural intern positions and now that rural Australia has a good intern curriculum framework, we need the government to fund more rural internships. Rural training pathways should include options such as recognizing GP rotations and providing broader training opportunities. There is currently no clear pathway for rural specialist training posts. The recent government funding provided additional training places but did not have a strong emphasis on building the rural doctor workforce, consequently few new rural places were created. Rural training pathways would also include flexible special training models with some clinical supervision provided via distance learning.

The Remote Vocational Training Scheme is a vocational training program for medical practitioners in remote and isolated communities throughout Australia. The four-year program trains doctors in remote communities with the aim

of building the workforce in remote communities. It is delivered to doctors by distance education and supervision while they work in a remote or isolated community. The training provides a pathway to Fellowship of both the Australian College of Rural and Remote Medicine (ACRRM) and the Royal Australian College of General Practitioners (RACGP).

Rural and remote nursing

More consistent approaches are needed to rural graduate nurse programs and programs specifically aimed at retaining rural nurses. Rural and remote nurses need to have a higher profile and greater recognition of their expertise[8]. Nurses are highly skilled but limited by traditional hospital centrism. What is needed is better work re-design. Rural nurse practitioners should have the opportunity to develop their expertise and practice in different settings across the health spectrum, including primary health care. Strategies to achieve nursing workforce sustainability include the allocation of resources to reduce stress in the workplace, education to meet the needs of new and experienced nurses, and the offer of employment preferences[9].

Rural allied health professionals

Coordinated longitudinal rural clinical placements with clinical supervision and accommodation for allied health students would attract more students to rural practice. Rural allied health programs have been funded through the UDRH program; however, while there has been an increase in the level of support for clinical placements, these programs have not implemented longitudinal clinical training models for allied health students. Evidence suggests that such programs would lead to increased student numbers and the retention of graduates attracted to and employed in rural areas. Smith developed a profile of the rural allied health workforce in northern New South Wales, and made a comparison with previous studies[10]. The results showed a need for further regional allied health workforce programs, and highlighted the need for a recruitment and retention strategy that targets new graduates of rural origin and encourages them to stay. Such programs should include strategies for increasing the capacity and teaching skills of clinical supervisors. Opportunities should also be provided for expanding an extended scope of practice to encompass multidisciplinary mentorship within specialty areas.

Mental health workforce

To improve mental health services there is a need to invest in education and research to increase the mental health workforce. The Centre for Rural and Remote Mental Health in Orange NSW has developed a database that includes major influences on the mental health of individuals, families and communities[11]. Developing and/or promoting additional mental health programs should be through the establishment of joint appointments. Mental health clinicians should have a joint appointment with a university, both as clinical educators providing education for students in their region, and also providing specialist input and training in mental health within the state's mental health clinical networks. They should be recruited from various clinical specialties, including psychiatry, drug and alcohol, psychology, social work, occupational therapy or mental health nurse practitioners based in rural areas. Where possible, universities should offer a double degree in mental health and another clinical program (especially nursing, psychology, social work or occupational therapy) that leads to professional registration.

Medical specialist training

Rural communities require a minimal level of services in acute health care and chronic disease management. Rural specialists who live in rural communities are essential to building a stronger health system. For example, consider the ageing population, where changing societal expectations and medical workforce shortages have created an unprecedented demand for acute and community health services. Another example: research demonstrates a need for additional support in rural community-based critical care[12]. An increase in the

number of patients with chronic kidney disease will require more nephrologists but the workforce is insufficient to replace the projected number of retirements by 2010[13].

Many rural health services are dependent on international medical graduates. Many are excellent clinicians but they have variable levels of expertise and there needs to be a more systematic approach to attracting, training and retaining them. To retain highly skilled rural doctors there is a need to recognize, support and develop GPs' procedural skills. Procedural GPs are able to support the resident specialists, thereby aiding retention of both.

Social determinants of health

The burden of disease in rural areas is higher than in urban areas. Rural populations have vastly different demographic profiles from metropolitan Australians. Consider the NRHA conference theme 'Conquering Indigenous disadvantage and bringing health equity to the people of rural and remote areas'. It is now well recognized that rural health policy and service development requires a much stronger emphasis on Aboriginal health and culturally specific services to achieve policy aims such as 'Closing the Gap in Indigenous Health'. Training in cultural competence as a quantifiable set of communication and practice skills and attitudes will enable staff to work more effectively with patients and families from varying backgrounds. The concept of cultural safety requires health professionals to reflect on their position of power and their communication style, and to provide a more inclusive service, especially in rural areas where choice of service may be limited.

There is considerable variability in rural health service utilization by culturally and linguistically diverse (CALD) community members. There is an identified need for improved networking and cooperation between services, and increased efforts to improve access to services and more culturally appropriate services to the community. Sharing limited resources in rural and remote areas is essential if health professionals are to meet the needs of the CALD community.

Greater support is needed for rural people, especially in the context of their very high incidence of chronic illness in cardiovascular disease, mental illness and cancer. A whole-of-community approach with a focus on health prevention and primary health care is recommended. For example, in Queensland, health professional leaders and peer leaders work together to deliver chronic disease self-management courses. The courses deliver positive outcomes for people with chronic disease, and highlight the importance of a culture of mutual respect and a system that values more than one form of knowledge and expertise[14].

Health infrastructure

Partnerships between rural health services, universities, governments and communities are the key to more equitable and sustainable health service delivery. Rural hospital infrastructure is poor and the lion's share of infrastructure funding has been allocated to metropolitan hospitals. Rural people are used to traveling long distances but there is no public transport available, and they should receive financial support for travel and accommodation. The Australian Government is investing in the establishment of GP 'super clinics' in some regional areas[15], and a National Rural and Remote Health Infrastructure Program[16]. Governments should invest in the development of better technology and information systems to improve the capacity for e-health and telemedicine initiatives[17,18].

Rural clinical simulation

More funding for the development of rural clinical simulation facilities and programs are required to provide rurally specific education programs and to develop clinical educators to deliver simulation programs. Some RCSs have established simulation centres and invested in training clinicians to develop innovative clinical simulation scenarios. In some cases these scenarios are high fidelity (eg emergencies requiring complex skills such as thoracotomy), and other scenarios may be interprofessional (eg obstetric emergencies). In rural areas there is a need to develop

mobile clinical simulation capability to enable the whole team to learn together. This not only promotes clinical confidence and competence, but also good team communication (eg in scenarios that enhance teamwork[19]) and improves patient safety[20].

Health service management

State governments could invest in scholarships for rural health service management development programs, including an education exchange program. Rural health services are unique; hence, there is a need to develop education programs specifically addressing issues for rural health service managers.

Although the Australian College of Health Service Executives (ACHSE) has a rural special interest group and the state branches are supportive, the college could consider developing a mentoring program for rural health service managers, for example postgraduate education programs such as the Flinders University Centre for Remote Health's Masters in Remote Health Management, or the Health Services Development Unit's Graduate Certificate in Rural Health Service Management.

Quality and safety

Role of individuals within heathcare teams

Modern rural health care, wherever it is provided, involves a team of individuals working cooperatively with the patient's best interests at heart. Team members rely heavily on others for aspects of their work. However, as within any team, the roles and responsibilities and accountabilities of each individual need to be clear. When dysfunctional hospital systems are reviewed, it is often noticed that this is not necessarily the case. Often there is evidence of a move away from comprehensive standing orders and protocols and nurse-led hospital care, to a system in which particular team members wish to be involved in virtually every aspect of decision-making. At times this has meant that the skills of all groups are not being used in a timely or efficient way. An example of the former is the tension generated by the simple insertion of an intravenous line by nursing staff; an example of the latter is the review of all patient attendances at a district hospital, even if the patient is not admitted but attended by a nurse and then discharged. It is important to understand that contemporary team-based care requires that appropriate delegation and autonomy for appropriate tasks is provided at all levels. This requires clear delineation of roles, responsibilities and lines of reporting. Without these, the high levels of skills available may be degraded. This leads to a loss of confidence and further degradation of skills in decision-making. In such circumstances, a negative feedback loop needs to be addressed with the reinstitution of clear definitions of roles and responsibilities for all individuals involved. Students in training can be introduced to this concept by augmenting multidisciplinary training, especially when using simulation units.

Consumer perspectives

Team function is assessable, in part, by gaining the views of consumers when their patient journey includes in-patient hospital care. Patient evaluations of health services are commonly used to gauge performance and to assist in the quality improvement cycle. This is consistent with the NRHA conference theme: 'Consulting our communities on health'. Community engagement is essential for effective rural health systems and services. Some patient evaluations give encouragement to functional teams – satisfaction being registered in areas that include patient involvement in care decisions, briefing about the risks and benefits of treatment, home follow up, the facility to enquire about treatment, and the safety and coordination of teams. However, areas of patient concern include health facility staff being under pressure, team communication issues, and tension or stress contributing to mistakes. Such studies provide compelling evidence for resource allocation that enables teams to function to their greatest potential and to address issues of safety and quality.

It is highly desirable that students of the health professions receive education about safety and quality, and are encouraged to reflect on their studentship and future practice.

Conclusion

In conclusion, in the current tenuous economic climate amid an aging population and major increase in chronic disease, rural areas have a much higher burden of disease to be managed by an aging workforce. Rural clinicians are confronted daily with the reality that the health status of people living in rural and remote areas is poorer than people in metropolitan areas. The increasing cost of delivering health care results in disproportionate funding for metropolitan hospitals with the expectation that rural people must travel long distances for health care. The need for quality health services in rural and remote Australia has never been greater. There is, however, also a groundswell of innovation and resourcefulness in rural and remote health policy implementation and service development. An opportunity beckons with the establishment of the Office of Rural Health and the upcoming increase in medical student graduates, to initiate a systemic approach to rural health policy beyond a 'one size fits all' or similar simplistic approach to the rural health workforce[6].

The successful initiatives outlined would form the nexus for developing a systematic approach, coupled with interprofessional education and rural training pathways. Regardless of drought, floods or fire in rural Australia, it is time for an approach to health care in the form of a national rural health workforce strategy.

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