Submission to the Senate Inquiry on the factors affecting the supply of health services and medical professionals in rural areas

Faculty of Medicine, Health and Molecular Sciences

James Cook University

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Organisation Faculty of Medicine, Health and Molecular Sciences
James Cook University

Contact person Pam Stronach, Faculty Executive Officer

Address James Cook University
Townsville QLD 4811
AUSTRALIA

Executive Summary

This submission stems from the expertise of the Faculty of Medicine, Health and Molecular Sciences at JCU in delivering a health workforce to meet the needs of regional, rural and remote north and far north Queensland.

The major factors affecting the supply of health services and medical, nursing and allied health professionals to small regional communities as compared with major regional and metropolitan centres include:

- **Growth** of the health sector due to higher levels of usage and demand for health services, in combination with the ageing of the health workforce;
- Current and forecast **health workforce imbalances** which are not uniformly distributed and which vary by health profession, specialty, jurisdiction and geographical location;
- The need for more emphasis on **clinical generalism** which is critical in rural and remote practice settings, and the restrictions imposed by the interests, skill demarcations and responsibilities of existing professions;
- The funding and support systems available to universities and the health system to deliver **clinical placements** in a context of care relevant to students' future practice and in areas of health need;
- Lack of **continuing professional development** opportunities, career pathways and professional support for health professionals in rural and remote areas;
- **Top-down policy approaches** to health workforce planning which have often undermined regional solutions;
- Inadequate **infrastructure** to support the growth of the health sector within an evolving teaching health system.

The submission also lists numerous further factors related to recruitment and retention of health professionals to rural and remote areas.

The key concern with the ASGC-RA scheme is that some smaller regional cities are inappropriately classified. Mackay, for example, is classified as ASGC-RA 2 when, as a small regional city over 900km away from Brisbane, it should be classified as ASGC-RA3. A broader concern about the existing classification systems is that consideration of population and geographic distance alone can obscure the complexities of remoteness relating to factors such as demography and quantum of, and degree of access to, services and infrastructure.

Introduction

The Faculty of Medicine, Health and Molecular Sciences (the Faculty) welcomes the opportunity to make a submission to the Senate Inquiry on *the factors affecting the supply of health services and medical professionals in rural areas*. This submission reflects the expertise of the Faculty in delivering a health workforce to meet the needs of regional, rural and remote north and far north Queensland.

The Faculty has a long history of commitment to developing a professional, work-ready workforce to service the health needs of rural, remote, tropical and Indigenous Australia. Since developing the first of the new medical schools in Australia for 25 years, and rolling out a range of health professional programs over the last 13 years (nursing is over 20 years), we have built a strong reputation both for contributing to the health workforce in a region of unmet need, and for providing national and international leadership in rural, remote, Indigenous and tropical health through research and policy advocacy.

The problem of health workforce maldistribution between metropolitan and non-metropolitan Australia is a longstanding concern in our region and addressing it is fundamental to health workforce and health system redesign and planning.

This submission is structured against the Inquiry's Terms of Reference, addressing:

> a) the factors limiting the supply of health services and medical, nursing and allied health professionals to small regional communities as compared with major regional and metropolitan centres;
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> (b) the effect of the introduction of Medicare Locals on the provision of medical services in rural areas;
>
> (c) current incentive programs for recruitment and retention of doctors and dentists, particularly in smaller rural communities, including:
>
> > (i) their role, structure and effectiveness,
> >
> > (ii) the appropriateness of the delivery model, and
> >
> > (iii) whether the application of the current Australian Standard Geographical Classification – Remoteness Areas classification scheme ensures appropriate distribution of funds and delivers intended outcomes; and
>
> (d) any other related matters.

(a) The factors limiting the supply of health services and medical, nursing and allied health professionals to small regional communities as compared with major regional and metropolitan centres.

Factors limiting the supply of health professionals to small regional communities underpin the relative undersupply of health services to these communities. Factors limiting supply of medical, nursing and allied health professionals to rural and regional communities include:

i. Growth of the health sector due to higher levels of usage and demand for health services, in combination with the ageing of the health workforce.

Within Queensland, workforce projections indicate that Queensland Health will need to grow its clinical workforce by approximately 10,300 full-time workers by 2016,[1] which, as a percentage of the total workforce, is an increase from 11.3 percent in 2008 to over 20 percent by 2025.[2] Demand for medical practitioners, as well as the nursing and midwifery workforce, is forecast to increase by about 50 per cent by 2024.[3] An overriding concern for Queensland is the ageing of the clinical workforce. In 2011, 16.3 per cent of the workforce is aged over 55 years, with a significant proportion being expected to exit the system within the next five to ten years.[4]

Universities are therefore at a critical juncture in managing the projected demand for many health professionals. A major rate-limiting factor in increasing graduate output is the limited capacity of the health system to support clinical placements. In addition, the number of new and expanding health professional degree programs means that there is more competition for a limited number of placement sites. The ramifications of the transition to demand-driven funding of undergraduate places for clinical placements also warrant consideration.

ii. Current and forecast health workforce imbalances which are not uniformly distributed and which vary by health profession, specialty, jurisdiction and geographical location.

There is a significant geographic maldistribution of health professionals in Australia within a context of current and predicted undersupply in some discipline areas. This is compounded by uneven population growth (for example, mining towns grow at a faster rate) and the lack of a nationally agreed set of services for populations of a given size.

In 2008, an Audit was undertaken by the Australian Government to ascertain the current supply of doctors, nurses, and other health professionals in rural and regional Australia and to identify where health workforce shortages exist.[5] The general findings of the audit were that:

- The current supply of health professionals is not sufficient to meet the current needs;
- The situation will be exacerbated as both the population and the workforce itself age;
- Distribution of the workforce is poor and declines significantly with greater remoteness;
- We are highly reliant upon overseas trained health professionals; and
- Our reliance on these overseas trained health professionals to fill the gaps in rural and regional communities has increased in recent years.

The Audit also identified the health workforce availability and distribution in a number of health disciplines across Australia (Table 1).

Table 1: Workforce availability of medical, nursing, dental and allied health across Australia[6]

Medical workforce	• Rural and remote Australia has experienced medical workforce shortages for a considerable period – particularly numbers of GPs which decrease significantly in proportion to population with greater remoteness; • One-third of doctors currently working in Australia were trained overseas, and the proportion of these doctors practicing in rural and remote areas is much higher; • Geographic maldistribution and trends towards sub-specialisation have limited the number of professionals working in rural and remote areas.
Nursing workforce	• While nurses are more evenly distributed across Australia than other health professionals, there are variations between and within jurisdictions with, for example, remote areas of Queensland suffering lower distribution; • Current sources of data are insufficient to determine if there will be enough nurses in the medium to longer term.
Dental workforce	• Three-quarters of dentists are located in metropolitan areas; • Access for public sector patients is largely dependent on access to public sector dental hospitals and services, which are largely also based in metropolitan areas.
Allied Health workforce	• Many allied health professionals operate as private businesses and are based within major cities, with low numbers working in regional and remote areas.

iii. The need for more emphasis on clinical generalism which is critical in rural and remote practice settings, and the restrictions imposed by the interests, skill demarcations and responsibilities of existing professions.

Generalist roles are vital to the health system, particularly outside of metropolitan Australia. Health practice in rural and remote communities is broader and more complex as distance from major secondary and tertiary centres increases.[7] In these communities, a more limited health workforce means that it is essential that this workforce be able to manage a wide range of health conditions, including co-morbidities and the health needs of disadvantaged populations.

The trend towards increasing subspecialisation, particularly in medicine, is increasingly being recognised as a problem for building the rural and remote health workforce. Over the past five decades, there has been a decline in the numbers of procedurally skilled generalists in Australia accompanied by growing specialisation within health professions,[8] including an increasing culture of 'referring off'. This trend towards subspecialties has particularly affected rural and remote areas leading to reduced access to many essential health services.[9] These trends have resulted from a plethora of policy initiatives and financial incentives which have been implemented in spite of the evidence that greater investment in generalist medical services, as well in primary health care, may be more cost-effective, efficient and equitable for rural communities compared with specialist and sub-specialist medical service providers.[10] In particular, funding models that reward specialty practice have had a deleterious impact on generalist pathways and therefore on rural and remote health workforce - for example, existing funding models that reward high volume specialty procedural practice (such as gastroscopy and colonoscopy) which are optimally carried out in large scale facilities.

Queensland Health has now recognised the rural generalist career structure within the award, with junior doctors now able to pursue a vocationally registered, rural and remote medical career in Rural Generalist Medicine – attaining Rural Generalist status in Queensland. Other states in Australia are also moving in this direction. This formal recognition of the rural generalist pathway, in combination with the rise of medium sized hospitals, needs to be considered in terms of the ramifications for scopes of practice, training and award structures across the other health professions.

A further area of health workforce policy concern regarding practitioner roles is the highly regulated registration and scope of practice frameworks, and accreditation requirements for tertiary education providers, which currently dominate the health professional workforce. While important in maintaining professional standards, these role definitions and limitations can further reinforce the difficulties rural and regional communities face in accessing particular essential health services which are available elsewhere but only through specialised practitioners.[11] Rigid demarcation of roles and scopes of practice inherent in 'mono-professional' approaches to health labour needs have been shown to work against efficiency, effectiveness and sustainability of health care.[12] In the health system, one size does not fit all, and the challenge of maldistribution underscores the need for different training models and skill requirements.

Rural and remote clinical practice in Australia already has established traditions of team-based health care, including flexible delegation of clinical tasks by rural doctors among hospital nurses, practice nurses, enrolled nurses, remote area nurses, Aboriginal health workers, rural paramedics and lay health care assistants. This is a sensible adaptation to both workforce shortages and geography and has helped to ensure that the evolving abilities of all members of the health care team can be fully applied. For example, Allied Health Professionals working in remote and rural settings tend to have flexible role boundaries with tasks shared across professions in a trans-disciplinary model of service delivery – often responding to issues outside of their agency, agenda or mandate that would normally be left to colleagues or other occupational groups who may not be available in the area or at that time.[13]

Creative approaches to the training, system of regulation and scope of practice of health practitioners include allowing mid-level health care personnel to take on roles traditionally taken by doctors within a team-based 'delegated practice' model, and the development of profession-specific advanced clinical practice extension training. Profession-specific advanced clinical practice extension training, such as Nurse Practitioners, involves codification of new roles and health practitioners returning to universities to complete their training. The delegated practice model is now supported by the Australian Government through the development of 'practice nurse' incentives for General Practitioners. GPs can now obtain subsidies to employ Registered Nurses, Enrolled Nurses or Aboriginal Health Workers and can also access fee-for-service rebates for wound dressings, immunisations and pap smears that are performed by the practice nurse on their behalf. Under Medicare guidelines, individual doctors are responsible for assuring the competence of workers to perform delegated clinical tasks. This system allows for flexible and locally-evolving roles under clinical governance without the need for externally-imposed credentials and codification of tasks.

Further expanded practice initiatives in Australia include the training of Physician Assistants – building on successful implementation in the United States where the emergence of the profession

in the 1960s reflected rural medical workforce shortages. The Physician Assistant model is well-suited to Australia's health workforce needs is being increasingly recognised as such, with JCU's Physician Assistant program beginning in 2012. Features of the Physician Assistant model are:[14]

- Diverse backgrounds drawn from many health-related fields;
- Trained as generalists in clinical assessment and medical management;
- Work within formal systems of supervision by a medical practitioner (a 'delegated practice' framework);
- Flexible, locally negotiated and evolving scope of practice and autonomy in clinical decision making within with the PA-doctor relationship;
- Mandatory continuing professional development and re-certification as generalists, regardless of current specialty area of practice.

There are numerous entities involved in delineating scope of practice and approving courses of study and for health professions. It will be imperative to engage these entities in the change process to ensure that they are contributors to, or at least supportive of, required developments in the health workforce. In addition, any change in roles, including greater substitution of roles, needs to be carefully planned and accompanied by appropriate legal protection.[15]

iv. The funding and support systems available to universities and the health system to deliver clinical placements in a context of care relevant to students' future practice and in areas of health need.

Clinical placements in a context of care relevant to students' future practice develop graduates' work-readiness for areas of health need, which is an important element of socially accountable training of the health workforce. The evidence strongly suggests that students who studied at regional universities,[16] undertook rural subject studies as a graduate,[17] underwent clinical placement in regional/rural areas[18] and had a positive placement experience in these areas[19] are more likely to go rural and stay rural. It is therefore in the national interest to encourage training in regional, rural and remote locations for long-term workforce retention in these areas. Education providers who adopt this approach to clinical training need to be supported and encouraged through recognition of the additional costs to both the university and the students undergoing placement.

Regional universities accrue significant costs as a result of running a distributed model of health education delivery and clinical training – substantially higher than the costs of this training within a traditional metropolitan hospital-based model. Without a nearby large city, regional universities conduct recruitment, support and liaison with large numbers of small and often remote clinical locations for placement. These smaller and more geographically dispersed placement sites increase the costs per student to provide adequate training and supervision, as there are fewer opportunities for economies of scale. The system shift towards a distributed clinical training model highlights the inadequacies of the current resourcing arrangements, especially for providers who conduct placement activities in multiple sites across rural and remote areas as necessitated by virtue of their location, philosophy and commitment to providing a regional health workforce.

Recognition of these increased costs was reflected in the increase to university regional loading through the 2011 Federal Budget. However, universities are still expected to fund clinical placement

activities for their health professional programs from their core DEEWR funding, which does not include additional allocation for clinical training. Various supplementary discipline-specific targeted funding initiatives are provided for clinical training, but these are ad hoc and vary across disciplines – allied health, for example, receives almost no additional funding from any source for clinical placement despite this training being central to producing work-ready graduates. Most health professional students are required to pay for these additional expenses, which cause significant financial strain. This is an important equity issue, as students from low SES backgrounds have less capacity to pay. Inaction to address this funding problem will come at a significant economic cost to the community, as graduates who are less skilled require substantial remedial training in the workplace.

Simply increasing university places will not ensure increased graduate employment in rural areas. Initiatives that target student applicants who have an interest in rural practice, encourage positive training experiences in regional, rural and remote areas, and which provide adequate financial support to facilitate participation in this training need to underpin the development of a health workforce willing to work in areas of greater workforce need.

v. Lack of continuing professional development opportunities, career pathways and professional support for health professionals in rural and remote areas.

There is a lack of career structure and opportunities for progression for health professionals in rural and remote areas. This stems from reduced opportunities for continuing professional development (CPD) which is predominantly based in capital cities. Vocational training in medical specialist disciplines has historically been centred on metropolitan teaching hospitals and this has contributed to subspecialisation trends and maldistribution of the specialist workforce.

Of all the QLD-based specialist training posts, less than 8% were located in the north of the state (i.e. Mackay, Townsville, Mt Isa, Cairns areas).[20] These figures indicate the low volume of training posts means there are fewer training pathways in the north – there are simply too few training options beyond the second postgraduate year to retain the required number of trainees to meet future health care needs in the north. Coupled with good outcomes in terms of graduate destinations in prevocational years, there is a need to ensure that there are sufficient vocational training posts (i.e. specialist training pathways) to retain this volume of workforce in the region. Without sufficient and attractive career pathways in the north, it is only sensible that junior doctors (from JCU and around Australia) position themselves in larger centres where there is greater chance of getting into the speciality training program of their choice. This trend is not in keeping with the objective to build up an adequate and appropriate regional workforce.

A related concern is the lack of professional support networks in rural and remote areas which further affects the capacity for health professionals to keep on top of developments in their profession.

vi. Top-down policy approaches to health workforce planning which have often undermined regional solutions.

Health workforce policy is regularly premised on the adequacy of supply to meet demand: 'do we have enough doctors, are we facing a nursing shortage crisis?'[21] Policy levers applied to influence the supply and distribution of the health workforce have traditionally been a mix of 'health' and 'education' instruments,[22] and implementation often involves trade-offs between different policy objectives.[23] The legacy of this policy approach in Australia's history has been one of oscillation between oversupply and undersupply of health professionals. Achieving an appropriate balance between supply and demand is acknowledged to be difficult for a number of reasons, including:

- heterogeneity in the demand/supply balance between the different health professions;
- low mobility of health professionals; [24]
- long lead times for education and training;[25]
- rapid changes in technology potentially invalidating long term predictions of demand/supply;[26] and
- delay from the time that data is analysed to articulate a problem to the time of policy implementation.

The challenge for governments is to negotiate a balance between a laissez faire approach and a prescriptive planning approach, where there is a risk that policy intervention may exacerbate, rather than address, health workforce supply and demand imbalances. An effective, politically-expedient and equitable strategy needs to consider a range of relevant policy issues including career pathways and educational preparation, and recognise the dynamic nature and heterogeneity of the health workforce.

A key barrier to reform is a reliance on negotiated change that engages stakeholders at a national level in a 'national' solution. All too often, the outcome is minimal change based on compromise. Because of the heterogeneity of local and regional circumstance across rural, remote, regional, outer metropolitan and urban locations, it is not possible to identify a single best-practice maternity services model, one approach to cancer care or a common way of responding to mental illness. As necessity is the mother of invention, so it is that rural and underserved areas will provide the exemplars of needed reform that might be expanded more broadly.

An important role for Government is therefore to empower local and regionally-based innovation and to be prepared to identify and remove financial and administrative barriers to regionally-planned change. Barriers might include financial disincentives (or perverse incentives) and regulatory provisions – for example, existing funding models that reward high volume specialty procedural practice which encourage subspecialisation within major metropolitan centres.

vii. Inadequate infrastructure to support the growth of the health sector within an evolving teaching health system

The training pathways for health professionals, from professional entry training, to postgraduate/vocational training, and to Continuing Professional Development (CPD) in the workplace needs to be continuous and involve universities at each level within a 'teaching health system'. The teaching health system is beginning to replace the model of public 'teaching hospitals' as the centres for clinical education, by harnessing public and private institutions in the primary,

secondary and tertiary health sectors across geographic locations – reflective of the increasing proportion of health care being delivered in community and primary health care settings.

This shift towards a community-based health professional education away from tertiary/urban institutions involves a major retooling of the health system particularly in infrastructure. Community-oriented team-based care needs to be embedded in the architecture of teaching and learning in intense multi-learning practice. Currently, the lack of infrastructure such as consulting rooms, teaching resource space and physical accommodation for students is a huge barrier to developing the capacity of the workforce and to support clinical training.

(b) The effect of the introduction of Medicare Locals on the provision of medical services in rural areas.

Medicare Locals, as a national network of independent primary health care organisations with strong links to local health professionals and the needs of the local community, will likely improve the status of health services in rural and remote areas – enabling them to engage in workforce planning and improve service provision.

However, a limiting factor is the lack of skilled and qualified primary health care professionals across the disciplines of nursing, allied health and general practice. These professionals are required to form the strong links with local health professionals and service providers needed to respond effectively to local health needs. Unless the maldistribution of health professionals is addressed, the capacity of Medicare Locals to fulfil their role will be diminished.

(c) Current incentive programs for recruitment and retention of doctors and dentists, particularly in smaller rural communities, including:

(i) their role, structure and effectiveness

(ii) the appropriateness of the delivery model

Numerous factors have been highlighted in the literature as being relevant to the recruitment and retention of doctors, dentists and other health professionals in smaller rural and remote communities. Some of these include:

- Completing studies at a regional university;[27]
- Undergoing clinical placement in a rural area;[28]
- Positive rural clinical placement experience;[29]
- Financial cost of living (especially as regards housing, transport and food) and other financial factors such as payment for enhanced skill-set, payment for on-call and after hours work, return of service education grants and return of service contracts;[30]
- Quality of life in rural areas;[31]
- Education and safety for children;[32]
- Work conditions – arrangements for time off and locum relief[33] (staff burnout is often a problem in rural and remote areas – often stemming from long hours and lack of locum support);
- Feeling like part of the community;[34]
- Familiarity with the rural health care system;[35]
- Addressing perceived health inequalities and making a difference;[36]

- Availability of professional support networks;
- Spouse's work and/or background[37] - (a determining factor for health professionals is often a lack of employment opportunities for spouses/partners);
- Opportunity for general practice;[38]
- Opportunities for professional development;
- Good support structures in a regional hospital;[39] and
- Availability and nature of existing data sources on health workforce.

The multitude of factors emphasise the need for inter-sectoral approaches to address health workforce challenges. Attracting and maintaining health professionals in under-resourced areas is clearly influenced by wider social factors than the delivery of education and health services. Adequate housing, schools, and reliable communication systems reduce maldistribution. Further, research evidence supports 'grow your own' initiatives, which have long-term benefits for building regional, rural and remote workforce. Service planning needs to be integrated across jurisdictions in order to ensure effectiveness, efficiency and equity of all health workforce innovation and reform initiatives. For example, the provision of health education to the community and school aged children should be planned and co-ordinated within the health workforce plan.

Overall, simply training more numbers of health professionals is akin to the 'trickle-down' effect in economics – not enough enter and remain in the rural and remote health workforce. To address the problem, incentives have focussed on international medical graduates who are often poorly supported and ill-prepared for work in rural and remote Australia. However, notwithstanding the small proportion of international medical graduates without the depth of skill, rural Australia is indebted to these professionals who are providing an essential service in areas of critical shortage.

(iii) Whether the application of the current Australian Standard Geographical Classification – Remoteness Areas classification scheme ensures appropriate distribution of funds and delivers intended outcomes

The key concern with the ASGC-RA scheme is that some smaller regional cities are inappropriately classified. Mackay, for example, is classified as ASGC-RA 2 when, as a small regional city over 900km away from Brisbane, it should be classified as ASGC-RA3. A broader concern about the existing classification systems is that consideration of population and geographic distance alone can obscure the complexities of remoteness relating to factors such as demography and quantum of, and degree of access to, services and infrastructure.

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