Chapter 1.2.6

POSTGRADUATE PATHWAYS TO RURAL MEDICAL PRACTICE

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Introduction

Training pathways into rural practice form a major component of the rural pipeline. Pathways evolve over time, responding to changes in the clinical and structural requirements of local rural practice. They vary across regions, from ad hoc, self-directed and self-negotiated training, to formal pathways with defined selection processes, curricula, end points and governance structures. These features will be discussed in the context of Australian rural training and the Queensland Health Rural Generalist Pathway will be used to illustrate a training pathway tailored to a specific context. There will be a brief discussion of international training pathways and future issues and challenges.

Career pathways to rural practice in Australia

Training for rural practice in Australia has changed dramatically in the past quarter-century. The Family Medicine Programme was established in 1973 by the Royal Australian College of General Practitioners (RACGP) as an optional educational programme. It had no mandatory exit examination, nor a formal rural component. With growing recognition of General Practice (GP) as a specialty, however, a competitive selection process was introduced in 1995 comprising a government-set quota of 400 places nationally with the end point being the RACGP Fellowship examination (1).

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[1] ***Competing interests:*** Tarun Sen Gupta and Andrew McKenzie are both Fellows of the Royal Australian College of General Practitioners (RACGP) and the Australian College of Rural and Remote Medicine (ACRRM) and are involved with assessment processes for both colleges. They have both been co-directors of the Queensland Rural Generalist Pathway.

A rural training stream, introduced in the 1990s, recognised the increasing requirements of rural training, particularly in procedural skills. Rural Health Training Units were established, with advanced rural skills posts providing training to defined standards in specialties such as anaesthetics, surgery and obstetrics and gynaecology. Major concerns within the profession about rural training and the lack of a stand-alone rural fellowship led to a plebiscite conducted by the Rural Doctors Association of Australia. In 1997 the Australian College of Rural and Remote Medicine (ACRRM) was established as an acknowledgment of:

- the importance of rural and remote medicine as a broad but discreet form of general practice;
- the need for well-designed vocational training and continuing medical education for rural doctors; and
- the need to address the shortage of rural and remote doctors in Australia, by providing them with a separate and distinctive professional body (2).

ACRRM developed specific curricula and training pathways for Australian rural practice, and sought Australian Medical Council (AMC) accreditation as a standards body as well as medical education and training provider within the 'specialty of general practice'. The College adopted a broad interpretation of 'general practice', consistent with the history of medical generalism. This definition focused on the community's need for doctors capable of providing comprehensive and continuing care (clinical generalism across the continuum and an ongoing therapeutic relationship) and distinguished between the 'general practitioner' and the 'rural medical generalist' as two professional disciplines working in the general practice domain (3).

ACRRM considered 'rural and remote medicine to be the fullest expression of the specialty of general practice'. In arguing that 'standard GP training does not adequately prepare a doctor for independent rural general practice', they suggested the converse was not true and that doctors trained in rural and remote medicine could function in non-rural general practice. ACRRM concluded 'the discipline of rural and remote medicine therefore encompasses the broad definition of general practice, of which office-based primary care is a subset' (3).

This evolution in the definition, understanding and organisation of rural and remote medicine was accompanied by organisational changes in GP training nationally. In 2001 the regionalised Australian General Practice Training Program (AGPT) was established by General Practice Education and Training (GPET), effectively ending the RACGP's training monopoly. Local consortia comprised of key stakeholders applied for contestable funding as Regional Training Providers (RTPs), based on the principle of using local training opportunities to train GPs to meet local health care needs. The geographic footprints of RTPs varied - e.g. Western Australia formed one RTP, while Victoria hosted five RTPs - demonstrating the range of training environments within a single profession. Following mergers over the following decade, the original 22 RTPs were reduced to 17 RTPs (1).

AGPT registrars[2] initially trained to RACGP standards. However, the AMC interim accreditation in 2007 of ACRRM as a provider of a pathway to the specialty of general practice provided the option of training towards Fellowship of the RACGP or ACRRM, or both.

The Australian General Practice Training Program

Training with AGPT for rural and remote medicine requires a four-year full-time commitment (compared to three years for non-rural trainees) with provision for recognition of prior learning. Training may involve experiences in teaching hospitals, rural and urban practices, extended skills, procedural and academic posts, and in Indigenous health and other under-served populations. Training must be undertaken in ACRRM- or RACGP- accredited training posts with accredited supervisors. Supervision and support is provided within the practices and hospitals and by RTP medical educators. Training includes self-directed learning, face-to-face educational activities and in-practice education (4).

The AGPT rural pathway provides for doctors who wish to undertake the majority of their training in rural and remote locations, as defined by the Australian Standard Geographical Classification – Remoteness Areas system (5). Generous financial incentives are available for rural pathway registrars through the General Practice Rural Incentives Program, with additional reimbursement of student loans for each year of training undertaken in designated rural and remote areas (6)

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[2] A registrar – or resident – is a qualified doctor who is part of a structured specialist training programme, be it vocational or postgraduate.

Selection

A national selection process is held annually comprising a written application, referees' reports, a paper-based situation judgement test and a mini-multiple interview. The Australian Government entry quota means there is a competitive application process, with 1 000 new positions available in 2012. Doctors who identify as being of Aboriginal and Torres Strait Islander origin may elect to be considered for priority shortlisting for the interviews (4).

Standards

The RACGP and ACRRM have defined the standards required by registrars' training towards their respective Fellowships (7, 8). Rural medical educators with the RTPs support registrars to meet these requirements.

Curriculum and training pathway

Both colleges have a four year (minimum) rural training programme, summarised in Figure 1 below. Both require experience in internal medicine, emergency medicine, surgery and paediatrics, with ACRRM requiring rotations in obstetrics and gynaecology, and anaesthetics. ACRRM and RACGP trainees complete a fourth year of advanced specialised skills (4).

ACRRM's Primary Curriculum outlines the core learning outcomes for graduates to function as safe, confident and independent doctors across a full range of Australian generalist practice, including rural and remote environments (8). The Primary Curriculum provides a definition of rural and remote general practice, and includes 22 curriculum statements organised around seven domains (see Table 1).

The Primary Curriculum underpins extended skills development which is reflected through the Advanced Specialised Training Curricula. As shown in Figure 1, ACRRM requires three spheres of learning and experience:

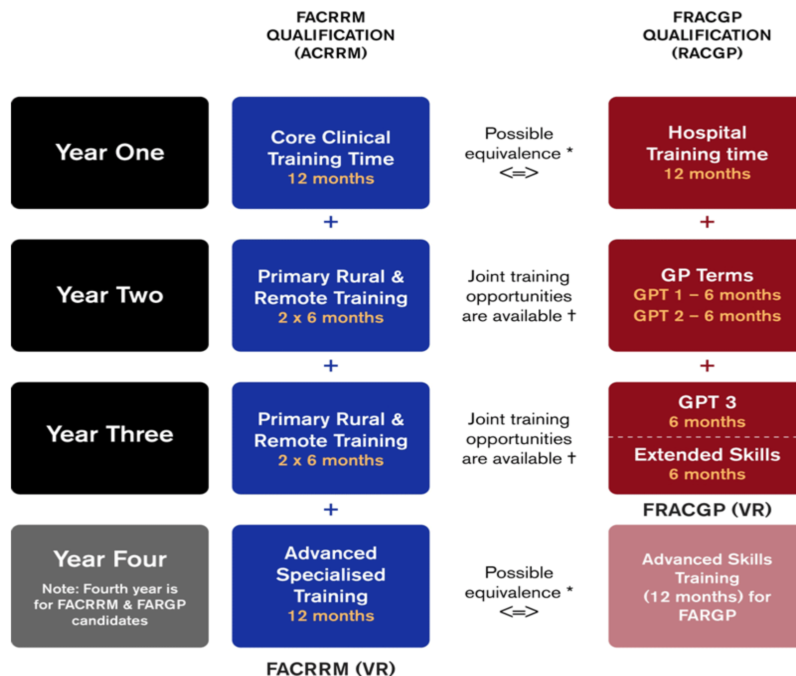
1. Core clinical training (one year);
2. Primary rural and remote training (two years, including six months in a community primary care setting which is not restricted to office-based general practice); and
3. Advanced specialised training (one year).

Through this programme ACRRM aims to provide flexibility in training to suit differing registrar circumstances, profiles and lifestyle choices (8).

Table 1: Curriculum domains

ACRRM Primary Curriculum domains	RACGP domains of General Practice
1. Core clinical knowledge & skills 2. Extended clinical practice 3. Emergency care 4. Population health 5. Aboriginal and Torres Strait Islander health 6. Professional, legal and ethical practice 7. Rural and remote context.	1. Communication skills and the patient-doctor relationship 2. Applied professional knowledge and skills 3. Population health and the context of general practice 4. Professional and ethical role 5. Organisational and legal dimensions

Figure 1:
Australian General Practice Training (AGPT) Program



* Credit given for AGPT training already undertaken towards one Fellowship, prior to undertaking a second or third Fellowship

† Can be achieved in dual accredited practices or posts

The RACGP curriculum for Australian General Practice is structured around five domains of general practice representing the knowledge, skills and attitudes necessary for competent unsupervised general practice (see Table 1 above) (7).

Again as shown in Figure 1, RACGP trainees undertake 12 months of hospital training, 18 months of general practice placements in rural or regional areas and six months of extended skills, in a range of approved placements.

Advanced Skills Training

Advanced Skills Training, usually lasting 12 months, is available for registrars training with both colleges in the following disciplines:

- anaesthetics
- obstetrics
- surgery
- Aboriginal and Torres Strait Islander health
- mental health
- paediatrics
- emergency medicine
- adult internal medicine

In addition, ACRRM registrars can undertake training in population health and remote medicine, and the RACGP offers training in small town general practice and other individually designed programmes - e.g. palliative care and musculoskeletal/sports medicine - subject to approval (4). All advanced training posts have defined curricula and assessments, in some cases negotiated with the respective specialist college.

Exit points and certification

The assessment process for Fellowship of ACRRM (FACRRM) was developed by rural doctors and academics with the aim of allowing candidates to undertake all examination components in or near their home location. The modalities, described in the assessment chapter, include a written paper, in-practice assessment and the innovative videoconferencing-based StAMPS[3] examination (8).

[3] StAMPS = Structured Assessment using Multiple Patient Scenarios

RACGP registrars complete the RACGP Fellowship (FRACGP) by sitting two written papers and an OSCE-style clinical exam. They are then eligible for the Fellowship of Australian Rural General Practice (FARGP) but must first complete additional educational requirements including a FARGP portfolio comprising core modules (working in rural general practice and emergency medicine) and elective educational activities, and completion of 12 months Advanced Rural Skills Training (7).

External recognition and credentialing

Both FACRRM and FARGP training pathways are accredited by the AMC and recognised by hospitals for credentialing as a Visiting Medical Officer. Completion of advanced skills training allows credentialing in that procedural skill with a defined scope of practice.

Both Fellowships provide vocational recognition as a general practitioner, enabling work in general practice anywhere in Australia.

Governance

The governance of GP education in Australia has changed from the involvement of two key organisations in the 1970s to six in 2011, moving from a college-focused model to a regionally-focused model. Changing focus, increased complexity and a move from a 'direct' to a 'direct + delegated' decision-making model was accompanied by initial 'confusion and mistrust regarding the demarcation and devolution of governance and decision making roles'. Both models had seen growth in the recognition and support of the specialty of general practice, and growing numbers of registrars and junior doctors training in general practice (9).

Kamien highlights the importance of governance, suggesting, 'the North American model has embraced diversity and led to a cohesion and breadth of educational endeavour while the UK/Australian model continues to foster self interest with its never ending battle for control of vocational training'. While, 'it may improve the quality of education and rural retention by giving ownership to local groups', he also cites a number of concerns. These include 'reform without change and expensive overgovernance', risks that 'competitiveness can also override cooperation', and 'the lack of a collegiate underpinning impedes the development of a much needed sense of general practice community and belonging' (10).

Other authors suggest regionalisation has not sufficiently addressed a social accountability mandate, and is not yet providing a sustainable general practice workforce for rural Australia (11). They highlight the significant impact of GP registrars on rural workforce (11% of the workforce in 2008) and argue that sub-optimal retention rates mean that rural and remote Australia will continue to depend on doctors trained overseas. While the number of registrars trained has increased[4] and this is proportional to growth in the total number of registrars, these increases are insufficient to meet the needs of rural populations given the well-documented gap in the rural workforce.

They make three priority recommendations to maximise the opportunity presented by the growth in Australian medical school graduates:

- AGPT selection processes and policies should be evidence-based, designed to ensure recruitment of doctors with an interest in a rural career.
- The 'rural pipeline' should be strengthened to ensure vocational training programmes are part of a training continuum involving rural-origin medical students, rural medical undergraduate programmes and rural pre-vocational training programmes.
- Current vocational training structures should provide appropriate training pathways that equip graduates with the skills for rural practice, especially 'rural generalist' and procedural practice (11).

Alternative training pathways

The Remote Vocational Training Scheme (RVTS) Pathway is a structured distance-education pathway providing a flexible way for ACRRM and RACGP registrars working in remote communities to train and meet the requirements for vocational registration (12). Both the Vocational Preparation Pathway through AGPT and the RVTS are government funded. ACRRM Independent Pathway is a full-fee pathway delivered by ACRRM offering a flexible pathway towards the FACRRM qualification and vocational registration, suitable for experienced practitioners who prefer self-directed learning (8).

[4] In 2003, 19 registrars trained in anaesthetics and/or obstetrics and gynaecology compared to 57 in 2010, and the total registrar numbers training in rural areas increased from 627 in 2003 to 1 237 in 2009.

Case study: The Queensland Health Rural Generalist Pathway

The Rural Generalist Pathway is a fully supported, incentive-based career pathway for junior doctors wishing to pursue a vocationally registered rural generalist medicine career. The programme was established in 2007 in response to concerns about a rapidly declining medical workforce withdrawing critical core procedural skills from rural communities. The pathway provides an opportunity to align rural scholarship holders and those with a desire to practise in a rural environment, with training, certification, credentialing and work-life balance.

The industrial recognition of rural generalist medicine, an attractive remuneration package, quality leadership and support, strong stakeholder engagement and quarantined training positions, now provides Queensland with a succession of highly skilled rural generalists. By 2011, 188 trainees were practising across 48 rural and regional locations, with ten achieving fellowships and 61 having completed or completing advanced specialised training.

The pathway is an example of an innovative, self-sustaining approach to addressing a key workforce problem (13).

International perspectives

International models of training for rural practice vary according to local context. For example, in the United States, family medicine is one of several 'primary care' specialties while other models, commonly seen in the developing world, see general practice as a 'weak, low-status occupation for doctors without specialty training and patients who cannot access specialists'. In areas of extreme workforce shortage - e.g. in sub-Saharan Africa - doctor:patient ratios may mean that personal continuity with individual patients is nearly impossible, so continuity of care relies on protocols established by the primary care team (15).

More rural doctors are needed in all areas with a need to expand approaches beyond traditional apprenticeship or residency programmes in order to meet global demand. More countries are developing formal career pathways to rural practice, for example, the recent development of a six-year Fellowship in Rural Hospital Medicine in New Zealand.

Hays and Morgan summarised key features of the training and governance of selected general practice training systems (Appendix 1) and describe global challenges - including changing population demographics and co-morbidity, increasing costs of technology-based health care, globalisation of health, and workforce shortages (14). Roberts et al suggest that as the organisation, delivery and funding of family medicine changes, so must training, which must acknowledge emergence of primary care health teams using electronic records and funding by blended payment schemes.

Growing interest in socially accountable medical education is leading to interest in recruiting and supporting students and registrars who can meet the needs of underserved populations, and sharing models of international good practice. Training programmes are moving towards being competency-focused rather than time-based, with an expectation that graduates will undergo periodic assessment of their competency.

Practice pearls

What to do

- Pathways to rural practice should be responsive to the local health care system, community needs, and scope of 'rural practice'.
- Design training pathways as a programme including selection, curriculum, educational activities, assessment, certification and governance.

What not to do

- Don't miss opportunities to be innovative or flexible.
- Don't compromise education standards or principles in the interests of 'good governance' or short-term workforce solutions.

Conclusion

Career pathways to rural practice have developed significantly in recent years. They need to be responsive to the clinical and structural requirements of rural practice locally. Training pathways should be designed as a programme including selection, curriculum, educational activities, assessment, certification and governance etc.

More work needs to be done in order to meet rural workforce needs globally.

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Appendix 1: Comparison of key features of selected general practice training systems (14)

	TRAINING DETAILS						GOVERNANCE		
	Mandatory	**Entry** PGY = postgraduate year.	**Duration**	**Defined curriculum**	**Formal assessment**	**Regional**	**University affiliation**	**Funding source**	**Assessment independent**
Australia	Yes	PGY 2	3 years	Yes	Yes	Yes	Weak	Government	Yes
New Zealand	Yes	PGY 2	3 years	Yes	Yes	No	Weak	Mixed	Yes
Hong Kong	Varies	PGY2	6 years	Yes	Yes	No	Weak	Self	No
Philippines	No	PGY 1	3 years	Yes	Yes	No	Strong	Self	No
Malaysia	No	PGY 4	2 years	No	Yes	No	Weak	Self	No
Singapore	No	PGY 2	1–6 years	Yes	Yes	No	Strong	Self	No
United Kingdom	Yes	PGY 3	3 years	Yes	Yes	Yes	Weak	Government	Yes
Ireland	Yes	PGY 2	4 years	Yes	Yes	Yes	Weak	Mixed	No
Northern Europe	Yes	PGY 2	3–5 years	Yes	Yes	No	Weak	Government	Varies
Central & southern Europe	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Canada	Yes	PGY 1	3 years	Yes	Yes	Yes	Strong	Government	Yes
United States	Yes	PGY 1	3 years	Yes	Yes	Yes	Strong	Government	Yes

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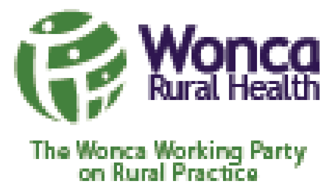

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