

## Queensland Rural Generalist Pathway: impacts on rural medical workforce

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### Introduction

Queensland Health's Rural Generalist (RG) Pathway, which commenced in 2007 as a new approach to vocational training in rural medicine, has changed the face of rural medical recruitment and training across the jurisdiction. This paper will briefly describe the operation of the pathway, detail the findings of an external evaluation of the pathway, and outline early impacts of the pathway on rural medical workforce across the state.

While there is always a lag time between a training reform and outputs from the educational program, some impacts of the pathway are beginning to be felt, with a noticeable increase in the numbers of junior doctors training and staying in rural locations, the skillsets they are able to deliver, and a corresponding reduction in job vacancies across the jurisdiction. The supply of graduates interested in training on the pathway remains strong, and, combined with the encouraging early workforce trends, suggests that the pathway is starting to meet Queensland's rural medical workforce needs.

### Operation of the Pathway

The Rural Generalist Pathway was predicated on the formal recognition of Rural Generalist Medicine as a medical discipline in Queensland since May 2008. This recognition by the State enabled development of a specialist career pathway for rural generalists and remuneration at specialist rates of those serving with scope of clinical practice in Rural Generalist Medicine. It further provided a framework for junior doctors (including government scholarship holders with return-of-service obligations), which integrated training and industrial recognition.

A Rural Generalist is a rural medical practitioner who is credentialed for:

- hospital-based and community-based primary medical practice
- hospital-based secondary medical practice:
  - including advanced skills in emergency medicine, Indigenous health, internal medicine, mental health, paediatrics, obstetrics, surgery or anaesthetics
  - without supervision by a specialist medical practitioner in the relevant discipline
- hospital and community-based public health practice.

The Rural Generalist Pathway (RGP) provides guidance and support to medical officers seeking a career in Rural Generalist Medicine. The pathway was designed to provide attractive, supported training pathways to support and supplement vocational training with Regional Training Providers and the Remote Vocational Training Scheme to the endpoints of Fellowship of the Australian College of Rural and Remote Medicine (FACRRM) and/or Fellowship of Australian Rural General Practice (FARGP).

The aims of the Rural Generalist Pathway are to:

- provide a premier health career pathway to rural practice with good career options beyond rural practice
- increase the supply of health professionals fit for practice in rural and remote Queensland, Australia
- provide appropriate preparation, training and support
- assist in filling vacant positions in rural health facilities.

A distributed state-wide network of educators, clinicians, academics and administrators work together with professional and technical staff to deliver the pathway. Trainees apply to the pathway while at medical school, and pathway staff provide vocational training advice, negotiate access to training posts, and arrange additional educational programs including prevocational workshops in the first two postgraduate years. Trainees also need to apply to undertake formal postgraduate training in rural medicine with a recognized training provider. Figures 1 and 2 summarise how the RG Pathway articulates with standard GP training, and with other milestones such as Queensland Health appointment levels, and return-of-service obligations.

Figure 1 Operation of the Rural Generalist Pathway

### Operation of the pathway

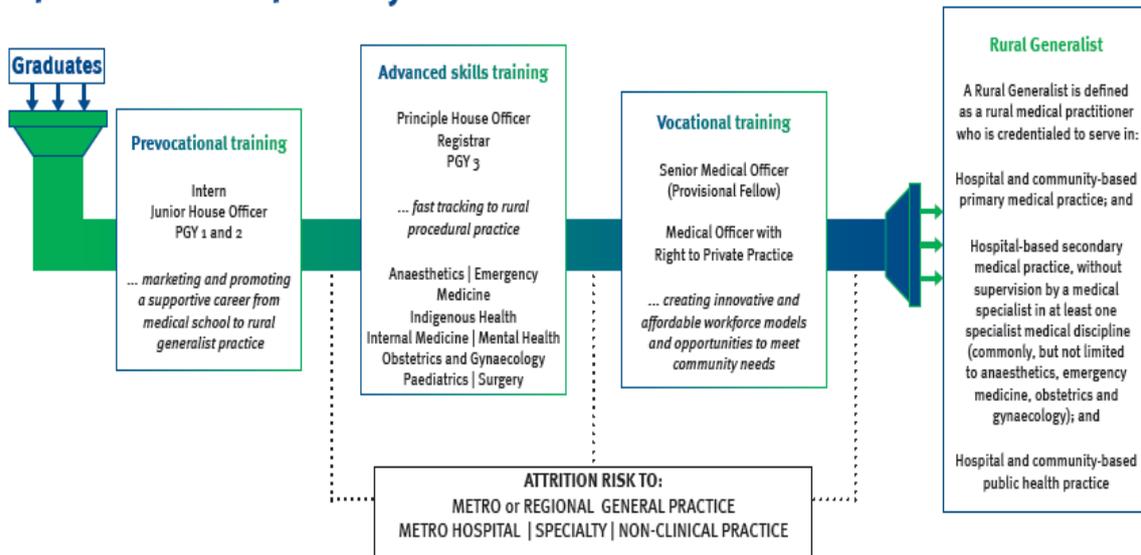


Figure 2 Rural Generalist Pathway – Training Progression Table

PG Year	Rural Generalist Pathway	Queensland Hospital & Health Service Appointment	Salary Status	Qld Rural Generalist Pathway Scholarship	Australian General Practice Training	RVTS	Australian College of Rural & Remote Medicine (ACRRM)	Royal Australian College of General Practitioners (RACGP)
1	Prevocational Training	Intern	Level 1	ROS*	Apply	-	-	-
2		Junior House Officer (JHO)	Level 2	ROS*	Yr 1	-	Core Clinical Training	Hospital Training
3/3+	Advanced Specialised/Skills Training	Registrar / Principal House Officer (PHO)	Level 4	Deferral unless training in location approved for ROS	Yr 2	Apply	Advanced Specialised Training	Advanced Skills Training
4/4+	Vocational Training	Senior Medical Officer (SMO) (Provisional Fellow)	Level 13	ROS to be completed in approved location	Yr 3	Yr 1	Primary Rural & Remote Training	GP Terms
5/5+		Medical Officer with Private Practice (MOPP)			Yr 4	Yr 2	Primary Rural & Remote Training	GP Terms
6/6+	Continuing Professional Development	SMO	Level 18 – 25	-	-	-	FACRRM Inc. Advanced Specialised Skills Certification	FRACGP/FARGP Inc. Advanced Skills Certification + Certified Women's Health
7/7+		Medical Superintendent With Private Practice (MSRPP)		-	-	-		
8/8+		Visiting Medical Office (Advanced Practice)		-	-	-		

## Evaluation of the Pathway

In 2012, Ernst and Young reported an external evaluation of the Rural Generalist Pathway. The *Evaluation and Investigative Study of the Queensland Rural Generalist Program* explored the pathway's conception, implementation and progress. The report discussed trainee feedback, cost analysis and efficiency of the pathway, identifying four transformational pillars:

1. Recognition of the profession
2. Value of practice
3. Pathway
4. Workforce redesign

Trainee feedback was very positive: they valued the supported pathway, the opportunity for rural work and the expedited 'fast-track' approach. They appreciated the variety that the pathway offered, and felt that it had a strong reputation.

Analysis of the efficiency of the pathway recognised that it was in an implementation phase, with a planned transition to a greater emphasis on workforce planning. Some issues were identified in relation to the management of the interface and relationship between the Rural Generalist Pathway and the various Hospital and Health Services. The cost-benefit analysis suggested the Pathway represented value for money with a 120% return on investment, derived principally from reduction in the cost of transfers due to an increased local skillset and capability to manage cases that might otherwise be transferred, particularly obstetric cases. This economic analysis did not seek to measure the other benefits to communities and patients of having maternity and other services available closer to home.

The Ernst and Young evaluation concluded that the Rural Generalist Pathway has:

- provided an exceptionally high quality training program valued by trainees and graduates
- reflected the commitment of senior clinicians to the program through high quality supervision and support
- operated at an efficient level, with improvements to be made in: information system management, policy / process consolidation and key stakeholder communication protocols
- demonstrated a high degree of flexibility and responsiveness to trainee needs
- yet to realise its potential to support workforce planning activities undertaken by State Hospital and Health Services
- met the needs of local communities through the reduction of critical medical vacancies, enabled health services to expand service delivery and is making services more accessible and affordable to local residents
- represented value for money with a return on investment ratio conservatively estimated to be in the vicinity of 1:2.

The evaluation further identified the following critical success factors:

- early immersion in rural medicine during the prevocational years (*first two postgraduate years*)
- due recognition being given to the profession by Queensland Health (*associated industrial and remuneration packages*)
- the fast track nature of the program - attractive to trainees but also addresses the workforce needs of rural communities in a timely fashion

- the quality of the training and supervision offered
- the effective quarantining of training placements in rural locations and the preference given to Rural Generalist Medicine trainees
- career opportunities presented throughout the training period, albeit currently perceived as limited to the State of Queensland.

### Impact of the Pathway

One impact of the pathway is in the numbers of doctors training. Apart from the promise of workforce supply, Rural Generalist trainees contribute to the workforce in the second half of their training, typically in Post Graduate Years (PGY) 4 and 5. Many trainees at this stage of training are in their practice of destination, with a credentialed Advanced Skill, and recognized as Provisional Fellows.

237 trainees were enrolled with the pathway as of April 2015, with 55 in PGY 4-5, and a further 47 in PGY 6 and above. 53 trainees are currently in their first year of training, with the intake expected to rise to close to 80 in 2016. A total of 48 trainees have completed Fellowship of ACRRM and/or RACGP with 30 practising in rural and remote Queensland, 5 in rural parts of other States / Territories and one in New Zealand. The geographic distribution of Rural Generalist trainees is illustrated in Figure 3.

Over 220 trainees have completed or are completing Advanced Skills Training (ASTs), with Anaesthetics, Obstetrics and Emergency Medicine being the most popular, in that order. These three skills account for around 90% of the 135 ASTs completed to date, and just over two-thirds of the posts currently being undertaken, as a number of trainees are now undertaking posts in surgery, internal medicine, paediatrics, Indigenous health, and mental health. 20 trainees have completed multiple ASTs, most commonly a combination of Emergency Medicine, Anaesthetics and Obstetrics & Gynaecology (70% of this total).

The pathway is also having an impact on local communities and health services. As trainee numbers increase in rural sites, numerous examples have emerged of innovative models of service redesign in sites like Longreach, Cooktown, Emerald, Mt Isa, and Stanthorpe.

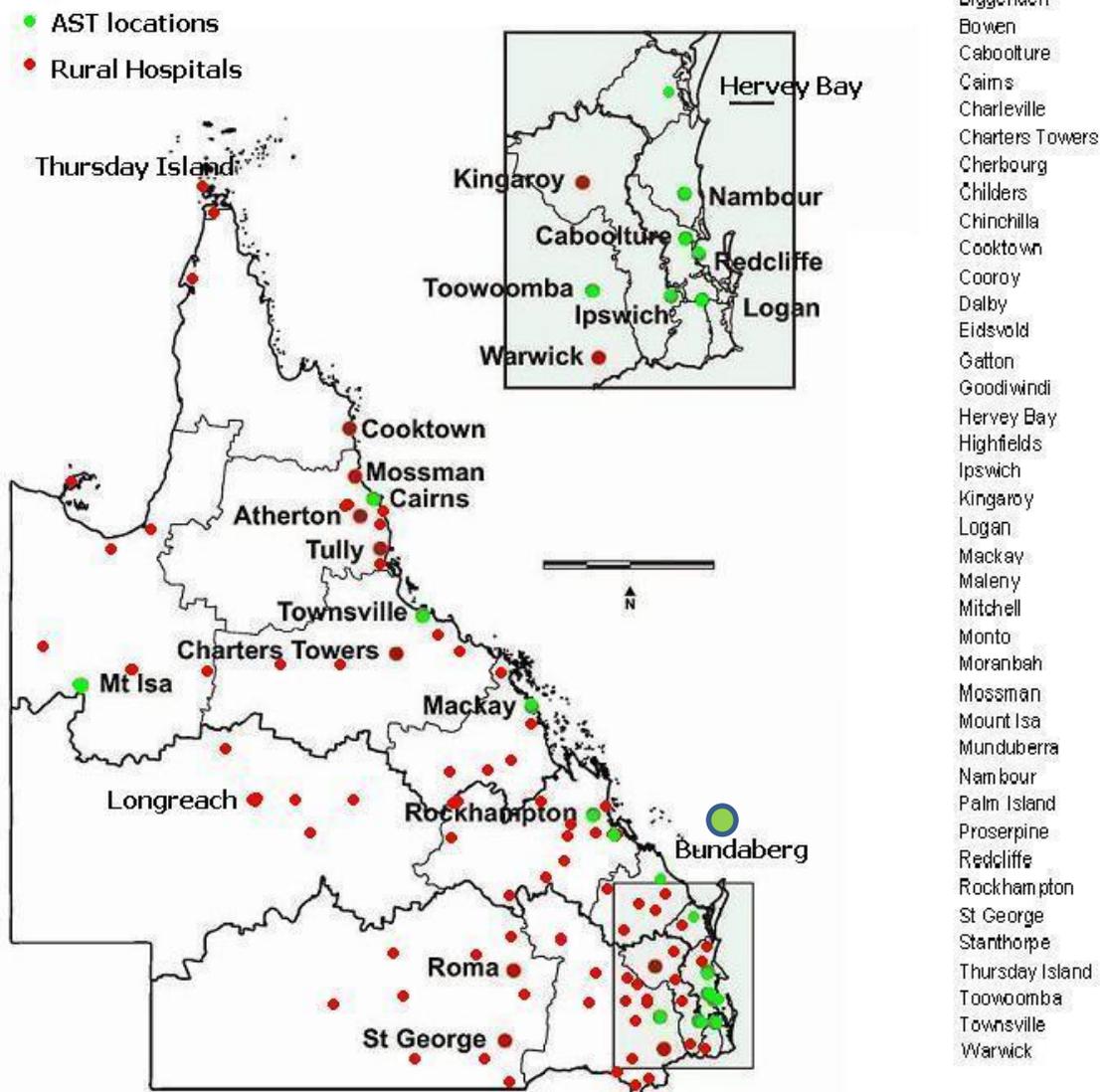
In Mt Isa, for example, there are currently 9 trainees, compared with none in 2009. These trainees are making a substantial contribution to the local workforce, including advanced skills developed *in situ* or earlier in their training, and numbers of them indicating their willingness to continue in local practice beyond the end of training.

The Central West Hospital and Health Service, based around Longreach, has undergone a service redesign across the entire HHS, which has attracted numerous medical students, junior doctors and Rural Generalist trainees. Again, trainees contribute to the workforce and may bring an advanced skillset, thereby enhancing the local capacity and capability, being able to contribute to the afterhours / procedural without supervision. This redesign has seen the local dependence on locums decline drastically, with substantial budgetary savings e.g. a \$7M locum budget is now around \$1M.

These hospitals and others are developing vertically integrated educational models that are attracting learners at all levels with cascading models of supervision. This transformation to a series of teaching and research intensive health services – in a sense replicating the traditional metropolitan model of a teaching hospital in rural and remote locations – is accompanied by stronger local workforce and clinical capacity, enhanced models of clinical governance with a focus on quality and patient safety, and a self-sustaining approach to developing local workforce.

Figure 3. Rural hospitals which may have RG trainees (●); AST locations (●)

# Queensland Health RGTP



Future challenges for the pathway include additional Intern / Junior Medical Officer training positions (which have already increased from 30 in 2007 to 80 positions in 2016) and expanding Advanced Skills Training capacity. While the pathway is primarily focused on the public sector, many trainees spend time in the private sector, and there are positive benefits on the total local workforce and skillset. However, there is still a need to look at strengthening private practice training models. The pathway is also implementing innovative training solutions such as the 'Prevocational Integrated Extended Rural Clinical Experience' (PIERCE)', which allows junior doctors to undertake longer accredited rural placements, gaining additional rural exposure and opportunities to undertake experiences not always available in crowded city hospitals.

## Conclusion

The Queensland Rural Generalist Pathway was founded on embedding into Queensland medical workforce planning processes four key transformational pillars:

- recognition of rural generalist practice
- practice value for its true worth

- a supply line/pathway to vocational practice
- service and workforce redesign to rematch community need and expectation to the capacity and aspiration of the next generations of medical rural generalists.

As these reforms are implemented, changes are being felt throughout the jurisdiction in terms of an enhanced workforce and a stronger secure supply of graduates interested in a career as a Rural Generalist as well as enhanced workforce recruitment and retention in larger regional training hospitals. Some positive effects on workforce are apparent within the Rural Generalist Pathway's first decade. While longer-term evaluations are needed the initial indications are promising. If this trajectory continues then the pathway may indeed realise its vision to :

Develop and sustain an integrated service and training program to form a career pathway supplying the Rural Generalist workforce that the bush needs.

## References

Rural Generalist Training. <http://www.health.qld.gov.au/ruralgeneralist/default.asp>.

A brief history of the Rural Generalist Pathway.

<http://www.health.qld.gov.au/ruralgeneralist/content/history.asp>.

ACRRM Vocational training. <https://www.acrrm.org.au/vocational-training>.

The RACGP National Rural Faculty. <http://www.racgp.org.au/rural>.

Australian General Practice Training. <http://www.agpt.com.au/>.

The Remote Vocational Training Scheme. <http://www.rvts.org.au/>.

Meeting the health needs of rural and remote Australia through an integrated strategic framework – an Advanced Rural Training Program.

[http://www.rdaa.com.au/Uploads/Documents/NARTP%20Key%20Principles%20-%20final%20-%20February%202012\\_20120305123719.pdf](http://www.rdaa.com.au/Uploads/Documents/NARTP%20Key%20Principles%20-%20final%20-%20February%202012_20120305123719.pdf).

Murray RB, Wronski I. When the tide goes out: health workforce in rural, remote and Indigenous communities. *Medical Journal of Australia* 2006; 185: 37-38.

[http://www.mja.com.au/public/issues/185\\_01\\_030706/mur10288\\_fm.html](http://www.mja.com.au/public/issues/185_01_030706/mur10288_fm.html)

Sen Gupta TK, Murray RB, Beaton NS, Farlow DJ, Jukka CB, Coventry NL. "A tale of three hospitals: solving learning and workforce needs together". *Medical Journal of Australia* 2009: 191; 105-9

Sen Gupta TK, Manahan D, Taylor N, Lennox D. "The Roma Agreement: Changing the Face of Rural Generalist Training In Queensland". Proceedings of the 12th National Rural Health Conference, Adelaide. Available at [http://nrha.org.au/12nrhc/wp-content/uploads/2013/06/Sen-Gupta-Tarun\\_Manahan-Dan\\_ppr.pdf](http://nrha.org.au/12nrhc/wp-content/uploads/2013/06/Sen-Gupta-Tarun_Manahan-Dan_ppr.pdf)

[http://nrha.org.au/12nrhc/wp-content/uploads/2013/06/Sen-Gupta-Tarun\\_Manahan-Dan\\_ppr.pdf](http://nrha.org.au/12nrhc/wp-content/uploads/2013/06/Sen-Gupta-Tarun_Manahan-Dan_ppr.pdf)

Sen Gupta T, Manahan D, Lennox D, Taylor N. "The Queensland Health Rural Generalist Pathway: providing a medical workforce for the bush." *Rural and Remote Health*. 13: 2319. (Online) 2013.

Ernst and Young. Evaluation and Investigative Study of the Queensland Rural Generalist Program. Queensland Health, February 2013, available at

<http://www.health.qld.gov.au/ruralgeneralist/content/background.asp>

Kitchener S. Rural Generalism and the Queensland Health pathway – implications for rural clinical supervisors, placements and rural medical education providers. *Rural and Remote Health* 13: 2359. (Online) 2013. Available: <http://www.rrh.org.au/>

## Presenter

**Tarun Sen Gupta** is Director of Medical Education and Professor of Health Professional Education at the James Cook University College of Medicine and Dentistry in North Queensland. He has worked in undergraduate and postgraduate medical education since 1993, with interests in rural medicine, small group teaching, community-based education and assessment. He is a co-Director of the Queensland Health Rural Generalist Pathway and has previously worked in solo remote practice. He is a director of the Postgraduate Medical Council of Queensland, a member of the Australian Medical Council Board of Examiners and the current President of the Rural Doctors Association of Queensland. He has been involved in the national assessment committees of both the RACGP and ACRRM and currently chairs the ACRRM assessment committee. He is married to Wendy; they enjoy the company of two thriving teenage children, a pair of disobedient golden retrievers and a neglected cat.