

Specialist training in rural—does setting impact on quality of training?

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Background

The Australian and New Zealand College of Anaesthetists (ANZCA), which includes the Faculty of Pain Medicine, is the education and training body responsible for the postgraduate medical training programs and continuing professional development in anaesthesia and pain medicine for Australia, New Zealand and parts of Asia. Anaesthesia refers to the practice of administering medications either by injection or by inhalation (breathing in) that block the feeling of pain and other sensations, or that produce a deep state of unconsciousness that eliminates all sensations, which allows medical and surgical procedures to be undertaken without causing undue distress or discomfort.

The Anaesthetic Training Program is a minimum of five years of training. The curriculum is produced and run by ANZCA, and “executed or delivered” by specialist anaesthetists employed at each hospital which has been credentialed and approved for training by ANZCA. ANZCA is credentialed to run the training program for anaesthetists by the Australian Medical Council (AMC). The program consists of 2 years of Basic training, 2 years of Advanced training, and 12 months of Provisional Fellowship training, with trainees not progressing to the next level until all college examinations, assessments and training requirements have been completed for each respective level.

Medical education and training in Australia occurs across a diverse range of settings. For anaesthesia they include both public and private hospitals in both metro and rural locations. A large expansion of medical graduates has occurred in the past five years and this will have implications on the capacity of vocational medical training to cope with this increase. In addition to this challenge there continues to be a persistent geographic maldistribution of the medical workforce. This has been documented in recent reports such as *Health Workforce 2025* (volumes 1 to 3)¹ and the rural health workforce supply Senate Inquiry² into *The factors affecting the supply of health services and medical professionals in rural areas*. Innovative models to support sustainable and effective medical training are essential to addressing the considerable pressure of the growing graduate cohort and to attract more specialists to choose a rural practice location.

The majority of specialist vocational training still occurs in large public sector metropolitan hospitals. The capacity of these hospitals to absorb a significantly increased number of trainees is limited. Over the past seventeen years the Australian Government has undertaken a major expansion of its investment in medical education. This expansion has resulted in medical education being delivered in a range of non-traditional settings such as rural areas and private hospitals. This paper discusses the key elements of the Specialist Training Program and how it is helping to address the shortages of specialist anaesthetists and specialist pain medicine physicians in rural and regional areas as well as addressing whether innovations such as this program are likely to influence the quality of training.

Specialist Training Program

The Specialist Training Program (STP) is an Australian government initiative designed to increase the number of doctors, educated domestically or internationally, progressing to fellowship within Australia as specialists by:

- increasing the capacity within the health workforce to train specialists
- developing networks for specialist trainees and international medical graduate specialist (IMGS) training posts across a broad range of settings beyond traditional teaching hospitals, including a range of public settings (regional, rural and ambulatory settings), the private sector (hospitals and practices), community settings and non-clinical environments
- providing salary support to assist specialist trainees and international medical graduates take up training posts within the network

- developing educational resources that complement medical specialty training initiatives in the states and territories
- increasing international medical graduates access to appropriate training and maximise their workforce contribution.

The Commonwealth Department of Health (DOH) has been supporting the provision of specialist training arrangements in rural and outer metro areas since 1997. The Australian and New Zealand College of Anaesthetists (ANZCA) became a signatory to the current program in November 2011 and now manages 58 positions across the specialities of anaesthesia, intensive care and pain management.

In 2013, ANZCA undertook an evaluation of the implementation of the STP program, the findings of which were summarised in the *Evaluation of the Australian and New Zealand College of Anaesthetists Specialist Training Program Evaluation Report 2012-2013*. In early 2015, the Australian National Audit Office (ANAO) released a report following an independent performance unit on the STP, entitled *Administration of the Medical Specialist Training Program, 2014-2015*. The audit found that although the STP program was making substantial progress in achieving its key objectives and targets it remains unclear to what extent the STP has, or will contribute to an improved geographical distribution of specialist services to meet community need, over the longer term.

Objective

STP expenditure from 1 July 2010 to 31 December 2014 has been \$379 million, however currently there is limited evidence on the quality of the training that is occurring in more diverse training settings such as rural and remote hospitals. The College was keen to understand the impact that the diversification of training settings may have on the quality of service offered in those settings and the quality of training. Factors to be considered included barriers and benefits of training in rural and regional areas and possible safeguards required to ensure high quality training is not compromised.

Some of the key questions that remain unanswered include:

- How does the expansion of post graduate medical training into new settings influence the quality of training and the working conditions of trainees and their supervisors?
- How can we ensure that clinical placements and other aspects of medical education are of consistently high quality in these settings?
- What key factors determine a quality placement?
- What aspects of training in a rural post do trainees value and find appealing? What can the College do to capitalise on these?
- What impact will changes in medical training have on quality of care?
- What factors act as a barrier to training in rural settings (e.g. case load, supervisor support, lack of infrastructure)? What can the College do to address some of these perceived barriers?
- Does STP help trainees interested in rural practice build a career pathway?
- What are the employment outcomes and career trajectories for trainees who have rotated through an STP place?

In late 2014, ANZCA commissioned IECO Consulting to work with the College in undertaking a research project on the qualitative implications of the STP Program, in particular to explore the following:

- Does setting impact on the quality of training

- Identify issues of training in expanded settings for anaesthetists

Methodology

The following activities were undertaken as part of the research project:

- literature review
- preliminary focus group with trainees to identify themes
- formation of a Research Project Advisory Group to refine the research question and methodology
- research undertaken through focus groups and semi structured interviews supplemented by qualitative data generated through exit surveys
- final report documenting findings and recommendations arising.

Literature review

The purpose of the literature review was to inform the development and refinement of the research question with respect to exploring whether setting impacts on the quality of training. In addition to identifying any issues related to training in expanded settings. A preliminary literature review was undertaken using MEDLINE and Embase for articles written since 2004 and using combinations of the following terms: 'anaesthesiology', 'private sector', 'rural health service', 'hospitals/private', 'internship and residency', 'education, medical, graduate', 'postgraduate education'.

The initial approach was intentionally broad given that the purpose of the literature review was to provide background information and support the further development of the research methodology. A total of 793 articles were retrieved during the initial search. The titles (and in some cases, abstracts) were reviewed for relevancy to the research project and articles selected for further review. The selected articles were reviewed to determine their inclusion in the final literature review. It is clear that this is a poorly researched area of public policy in Australia and apart from the Royal Australian and New Zealand College of Psychiatrists, no other College has focused on this question in this level of detail.

Preliminary findings

Focus groups used semi-structured questions around the following six themes:

- clinical experience
- supervision
- quality of education provided
- training service interface
- attitude of consultants/patients
- employment issues.

Key themes emerging from focus groups include the following:

- There are differences between experiences in private versus public setting, relating to: volume; elective versus emergency work; and level of involvement in patient care.
- Rural rotations are viewed as valuable for gaining 'bread and butter' skills.
- There have been issues identified with level of engagement of consultants and supervision at some private facilities.
- Co-location of private facility and interaction with training program in public setting is viewed as preferable to stand alone private facility.

- Access to training infrastructure and resources in rural settings is a concern.
- There are differences in service load, including on-call requirements between private, rural and tertiary facilities.

Conclusions and recommendations

There is general agreement that anaesthetic trainees will benefit from exposure to a broad range of settings, however the value of the experience in rural settings can vary depending on the stage of training (basic or advanced). A preliminary review of data found that specialist anaesthetists who have rotated through a rural STP position were more likely to choose rural practice after finishing their training. Attitudes towards rural training appear to be favourable and well regarded by those who had experienced it.

Examination of the key themes emerging from this project did identify perceived challenges to the delivery of training in rural and regional areas. Some of these include:

- relocation issues – expenses, spouse, children
- capacity for supervisors to train given clinical service load
- costs
- access to education and training resources
- professional and personal isolation.

However on balance, the broader opportunities offered through STP are seen as potentially making a valuable contribution to specialist medical training and most trainees and supervisors involved with the program express support for further development in this area. It is hoped the results of this project will assist the College in determining the best opportunities (be it – identifying workforce distribution, bringing private and rural settings into the training spectrum and/or developing additional College supports for rural training positions) to ensure training is provided in the right place at the right time to ensure that services can meet demand in the future and ensure we have a competent anaesthesia workforce to deliver these services right across Australia.

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Presenter

Donna Fahie is currently the Manager, Specialist Training Program for the Australian and New Zealand College of Anaesthetists. Within this program, for the past three years, Donna has worked to address the maldistribution of and lack of access to specialists across regional, rural and remote Australia by increasing the capacity of the health sector to train anaesthetists, pain medicine and intensive care medicine specialists across Australia. Prior to this position, Donna worked for the Royal Flying Doctor Service (Western Operations), where she managed the Rural Women's GP Program and developed a passion for improving the quality of life of people living in rural, regional and remote areas. Donna has over 16 years work experience in the health and community care sector including the role of State Manager for the National Stroke Foundation responsible for managing service delivery across WA. She has also held a number of high level committee positions focused on stroke, rural and women's health. Donna holds a Bachelors degree in Human Services and has completed postgraduate studies in Health Services Management.