



Statement on roles in anaesthesia and perioperative care

1. Purpose

This statement provides a framework for discussions on the roles and responsibilities of health professionals in the anaesthesia and perioperative* care teams.

The following five principles underpin this position statement:

- 1.1 The structure of anaesthesia and perioperative care must support safe, high quality care.
- 1.2 The provision of anaesthesia is a medical role.
- 1.3 Innovation should be based on delegation, not substitution, of roles.
- 1.4 Anaesthesia and perioperative care require a team of highly skilled health professionals.
- 1.5 New or extended roles within the anaesthesia and perioperative care team should be developed, implemented and evaluated in a systematic and consistent way.

2. Background

The healthcare system faces significant challenges, including older, sicker patients, limited funding, a global health professional job market and the drive for more efficient and effective service delivery. These issues demand the examination of options for safe, productive models of care.

The Australian and New Zealand College of Anaesthetists (ANZCA) recognises these challenges and is committed to participating in discussions about the roles of anaesthesia and perioperative care team members. Perioperative care includes all care from the time a patient is advised that a procedure may be appropriate or necessary until specialist medical management is no longer needed. It includes pre-operative assessment, planning and provision of anaesthesia, and post-operative care including pain management, fluid and electrolyte management, resuscitation and relevant medical management.

ANZCA aims to contribute to service improvement, which may include new and/or extended health professional roles within a delegated task model, while ensuring patient safety and high quality care.

* Perioperative care includes all care from the time a patient is advised that a procedure may be appropriate or necessary until specialist medical management is no longer needed. It includes pre-operative assessment, planning and provision of anaesthesia, and post-operative care including pain management.

3. Principles

3.1 The structure of anaesthesia and perioperative care must support safe, high quality care.

Demographic changes and the growing burden of chronic disease in Australia and New Zealand are increasing the number of patients at high risk of life-threatening problems in the perioperative period.

Evidence suggests that patient factors are more closely related to poor outcomes than the type of surgery¹ (though surgical and institutional factors may also play a role). It is essential that anaesthesia and perioperative care are structured to provide safe, high quality care and contribute to the best possible patient outcomes.

International evidence shows that effective pre-operative risk assessment and post-operative care planning have potential to significantly improve the outcomes for higher risk patients.² These assessment tasks are complex and require medical direction, supported by a team with the appropriate skills and knowledge. Workforce innovation may offer opportunities for positive change; however ANZCA's stance is that patient safety must come first when considering any change to the current roles and responsibilities of health professionals involved in anaesthesia and perioperative care.

3.2 The provision of anaesthesia is a medical role.

Australia and New Zealand report some of the best anaesthesia safety statistics in the world.³ In these two countries, anaesthesia is delivered by a team led by specialist anaesthetists: doctors with a minimum of seven years of training after graduation from medical school, with the skills and experience to provide anaesthesia and perioperative care in the full scope of practice and range of settings. In order to meet regulatory and College requirements, specialist anaesthetists must undertake continuing professional development after completing training.

The practice of anaesthesia requires a range of fundamental clinical skills: general anaesthesia and sedation, airway management, regional and local anaesthesia, perioperative medicine, pain medicine, resuscitation, trauma and crisis management, and safety and quality in anaesthesia practice. Specialist anaesthetists fulfil the roles of medical expert, collaborator, communicator, health advocate, manager, professional and scholar.

Specialist anaesthetists are trained to ensure the safety of patients throughout the perioperative period. Specialist anaesthetists provide this care in a wide range of clinical settings including preoperative clinics, operating theatres, day surgery units, medical imaging environments (angiography, magnetic resonance imaging and computed tomography scan rooms), procedure rooms and hospital wards. Responding to medical emergencies and transport of critically ill patients is also a key role for specialist anaesthetists.

While specialist anaesthetists comprise the majority of the medical anaesthesia workforce, there are situations where a specialist is not normally available and where administration of anaesthesia or sedation can be undertaken safely by other appropriately trained doctors. Examples include the work of general practitioners and Fellows of the Australian College of Rural and Remote Medicine who can complete a 12 month course in advanced anaesthesia skills, and must then participate in continuing professional development.

While ANZCA supports the appropriate delegation of medical care from a specialist to a non-specialist doctor, the role must remain a medical one.

3.3 Innovation should be based on delegation, not substitution, of roles.

ANZCA maintains an active role, in collaboration with other health sector colleges and societies, in the development of guidelines for medical, dental and nursing professionals who wish to train in the safe administration of procedural sedation in low-risk patients (see ANZCA professional document *PS09 Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures*). The benefits in terms of improved patient access can be significant. The guidelines require that these tasks are undertaken as a delegated role: the non-medical health professional conducts specific tasks as directed by a medical practitioner. The working relationship between anaesthetist and anaesthesia technician is an example. Delegation is distinct from substitution, where another person replaces the anaesthetist or medical practitioner. The team management of the patient is important in this delegation where the medical practitioner must be available to assume direct clinical care, should the need arise.

Properly implemented, delegated roles can encourage optimisation rather than duplication of different skill sets within anaesthesia and perioperative care, and can provide opportunities for skills development and extension for all healthcare professionals involved. This delegated model is used in perioperative care in other jurisdictions, through roles such as the physician assistant in the US and UK.

Physician assistants have been trialled in Australia and New Zealand, including the trial of a physician assistant role (using a delegation model) in the Perioperative Anaesthesia Care Team at the Royal Adelaide Hospital.⁴ The trial evaluation found that including the physician assistant role resulted in qualitative evidence of improved efficiency in screening patients and managing low-risk cases (for example, reduced number of patients returned to the ward prior to theatre) and improved identification of medical conditions that required better management.

There is good evidence from other countries that perioperative measures such as effective pre-operative risk assessment can improve intra-operative care, and optimise use of limited resources like critical care beds, and improve patient outcomes.² Innovative workforce models could provide the capacity and capability to facilitate improvements in perioperative care in Australia and New Zealand.

The Adelaide example shows that delegation can allow for flexibility according to the skills of team members (what is delegated and to whom) and the facility's needs (caseload and type of patient). Further, delegation can be tailored to work in with existing roles with positive results. This example, and a subsequent Australian summit on physician assistants in Adelaide, highlighted the need for careful and consultative development and implementation. The importance of formal national processes for role definition, regulation, and education and training cannot be underestimated.⁶

3.4 Safe, high quality anaesthesia and perioperative care requires a team of highly skilled health professionals.

The nature of anaesthesia means that anaesthetists work with a range of other health professionals including other specialist doctors, specialist registrars, and general practitioner anaesthetists in training, and nurses and technicians to provide high quality patient care.

Research indicates that the provision of appropriate assistance (including nurses and/or technicians) with anaesthesia-specific training contributes to a significantly lower error rate than when assistants do not have anaesthesia-specific training.⁷ Skilled assistance can minimise harm from adverse incidents; conversely, inadequate assistance has been shown to contribute to or fail to mitigate harm.⁸

Development of new or extended roles requires appropriate training of team members and must be focused on developing the skills necessary to undertake those roles. Studies in various countries have shown that communication, shared understanding of roles and responsibilities, a collegial and supportive culture, and the willingness to speak out and to be advised or corrected are critical in an effective anaesthesia team.⁹ Both technical and non-technical skills are important in ensuring good patient outcomes.^{9, 10}

The way new or extended roles are introduced into the anaesthesia and perioperative care team can have a significant effect on how well people perform in those roles, and on the degree to which the change makes a positive contribution.

3.5 New or extended roles in the anaesthesia and perioperative care team should be developed, implemented and evaluated in systematic and consistent way.

ANZCA recognises the many drivers for innovation in healthcare teams, including the exploration of new and extended roles, and recommends that any policy or operational changes be made on the basis of sound evidence, a consistent rather than ad hoc approach, and using a transparent, consultative and collaborative process.

Development and implementation of a new or extended role can have a significant influence on whether the potential benefits to patients and the healthcare system are fully realised.

Best practice in the specific area of innovation in expanded or new roles dictates that they:

- 3.5.1 Must deliver at least equivalent levels of patient safety and clinical outcomes.
- 3.5.2 Are developed in response to specific, identified needs
- 3.5.3 Result in a sustainable workforce model.
- 3.5.4 Include training institutions, employers and policy-makers in the development, implementation and evaluation of new roles.
- 3.5.5 Involve and are supported by the existing anaesthesia and perioperative workforce.
- 3.5.6 Are supported by clear tasks and guidelines for specialist anaesthetists as leaders, supervisors and task delegators.
- 3.5.7 Include clear role definition and lines of communication and accountability.
- 3.5.8 Have an appropriate legal and regulatory framework to set out delegation mechanisms, supervision and scopes of practice clearly.¹¹⁻¹³

ANZCA strongly recommends that any new or expanded roles in the anaesthesia and perioperative teams are evidence-based and needs-based, sustainable, focused on patient safety, and introduced in collaboration with the healthcare sector.

4. The future

Health workforce policy is necessarily a rapidly developing and changing issue. The College considers this statement to be a foundation for discussions on new and extended scopes of practice in anaesthesia and perioperative care. As a result, this statement will be reviewed on a regular basis.

ANZCA welcomes feedback on this position statement, and the opportunity to discuss the statement with other interested agencies and individuals.

Related ANZCA documents

PS08 Statement on the Assistant for the Anaesthetist

PS09 Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures

PS16 Statement on the Standards of Practice of a Specialist Anaesthetist

PS57 Statement on Duties of Specialist Anaesthetists

This document is accompanied by a background paper (PS59BP) which provides more detailed information regarding the rationale and interpretation of the Statement.

References

1. Story DA, Leslie K, Myles PS, Fink M, Poustie SJ, Forbes A, Yap S, Beavis V, Kerridge R. Complications and mortality in older surgical patients in Australia and New Zealand (the REASON study): a multicentre, prospective, observational study. *Anaesthesia* 2010;65:1022-1030.
2. Findlay GP, Goodwin APL, Protopapa K, Smith NCE, Mason M. Knowing the risk: A review of the peri-operative care of surgical patients. London: The National Confidential Enquiry into Patient Outcome and Death, 2011. From: <http://www.ncepod.org.uk/2011poc.htm>. Accessed 29 July 2013.
3. Australian and New Zealand College of Anaesthetists. Safety of anaesthesia: a review of anaesthesia-related mortality reporting in Australia and New Zealand 2009-2011. Gibbs N, editor. Melbourne: Australian and New Zealand College of Anaesthetists, 2012. From: <http://www.anzca.edu.au/resources/college-publications>. Accessed 1 June 2015.
4. Ludbrook G, Peischl T. Physician assistants in perioperative medicine. *Australian Anaesthesia*, 2009.
5. Health Management Advisors Ltd. Evaluation of physician assistants in SA hospitals: final evaluation report. Adelaide: Department of Health – South Australia, 2010.
6. Ludbrook G. Personal communication, February 2013.
7. Weller J, Merry A, Robinson B, Warman G, Janssen A. The impact of trained assistance on error rates in anaesthesia: a simulation-based randomised controlled trial. *Anaesthesia* 2008;64:126-130.
8. Kluger M, Bukofzer M, Bullock M. Anaesthetic assistants: their role in the development and resolution of anaesthetic incidents. *Anaesthesia and Intensive Care* 1999;27:269-274.

9. Rutherford J, Flin R, Mitchell L. Teamwork, communication, and anaesthetic assistance in Scotland. *British Journal of Anaesthesia* 2012;109(1):21-26.
10. Weller J, Torrie J. The anaesthetist as a team player: speed dating and other useful skills. Paper presented at the ANZCA Annual Scientific Meeting, Christchurch New Zealand, 2010 May 1-5. From: <http://www.anzca.edu.au/events/ANZCA%20annual%20scientific%20meetings/asm2010/abstracts/tuesday/the-anaesthetist-as-a-team-player-speed-dating-and.html>. Accessed 29 July 2013.
11. Frossard L, Liebich G, Hooker R, Brooks P, Robinson L. Introducing physician assistants into new roles: international experience. *Medical Journal of Australia* 2008;188(4):199-201.
12. Farmer J, Currie M, West C, Hyman J, Arnott N. Evaluation of physician assistants to NHS Scotland. Inverness: UHI Millennium Institute, 2009.
13. National Health Service. A toolkit to support the planning and introduction of training for anaesthesia practitioners. NHS National Practitioner Programme, 2007.

Professional documents of the Australian and New Zealand College of Anaesthetists (ANZCA) are intended to apply wherever anaesthesia is administered and perioperative medicine practised within Australia and New Zealand. It is the responsibility of each practitioner to have express regard to the particular circumstances of each case, and the application of these ANZCA documents in each case. It is recognised that there may be exceptional situations (for example, some emergencies) in which the interests of patients override the requirement for compliance with some or all of these ANZCA documents. Each document is prepared in the context of the entire body of the College's professional documents, and should be interpreted in this way.

ANZCA professional documents are reviewed from time to time, and it is the responsibility of each practitioner to ensure that he or she has obtained the current version which is available from the College website (www.anzca.edu.au). The professional documents have been prepared having regard to the information available at the time of their preparation, and practitioners should therefore take into account any information that may have been published or has become available subsequently.

Whilst ANZCA endeavours to ensure that its professional documents are as current as possible at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material which may have become available subsequently.

Promulgated: 2013
Reviewed: 2015
Date of current document: June 2015

© Copyright 2015 – Australian and New Zealand College of Anaesthetists. All rights reserved.

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from ANZCA. Requests and inquiries concerning reproduction and rights should be addressed to the Chief Executive Officer, Australian and New Zealand College of Anaesthetists, 630 St Kilda Road, Melbourne, Victoria 3004, Australia. Email: ceo@anzca.edu.au

ANZCA website: www.anzca.edu.au