

# Anaesthesia A rewarding and challenging career



# Have you considered anaesthesia as a career?

Anaesthetists are specialist doctors with unique clinical knowledge and skills. They have a major role in the perioperative care of surgical patients and are closely involved in other important fields of medicine (see Figure 1).

Core anaesthesia practice involves assessing patients thoroughly and applying both physiological and pharmacological knowledge to best care for them through the trauma of surgery. Associated areas include caring for the very sick in intensive care (critical care) medicine, the management of acute and chronic pain (pain medicine), and resuscitation of acutely ill or shocked patients.

Anaesthetists in Australia and New Zealand work in a range of clinical environments from rural practice to large metropolitan teaching hospitals in both public and private practice, and in the defence forces.

#### Why anaesthesia?

Relief of pain and suffering is central to the practice of anaesthesia – to facilitate surgery and uncomfortable procedures, to aid with recovery after surgery, to administer pain relief in childbirth, and to care for those with acute and chronic pain. Close and empathetic patient contact and interaction is integral to anaesthesia practice.

Clinical anaesthesia practice is built on knowledge of physiology and pharmacology, and understanding how patient responses are altered by their state of health as well as the various manipulations that are part of the anaesthetist's and surgeons' work. There are also many opportunities for teaching and research.

In recent years, advances in anaesthesia have made more complex surgery possible. Anaesthesia has become safer and more sophisticated with technological developments to assist in monitoring the patient through surgery, and the advent of drugs with fewer side effects. Anaesthetists are continually improving their skills to respond to challenges such as the ageing population, where patients present with medical conditions of increasing incidence and severity, and the growing obesity problem. Such developments mean that anaesthesia practice is constantly evolving to present new challenges and opportunities throughout a career.

Anaesthetists may develop special interests in areas such as anaesthesia for paediatrics, obstetrics, orthopaedics, otorhinolaryngology, gynaecology, neurosurgery, cardiovascular and thoracic surgery, trauma management, respiratory medicine, hyperbaric medicine, intensive care medicine, pain medicine, ophthalmology, urology, and vascular and plastic surgery.

By necessity, anaesthesia is a team-focused specialty. Anaesthetists work with other specialist doctors, as well as nursing and allied health practitioners. As team members, anaesthetists have an essential role in promoting the effective coordination and utilisation of medical, nursing and technical resources, especially during the perioperative period. Anaesthetists collaborate with colleagues to ensure the best possible outcomes for patients.

Anaesthesia can be demanding, both during the training period and the subsequent years as a specialist. However, work patterns and training programs can be adapted to suit the needs of practitioners throughout their personal and professional lives.

# Training in anaesthesia

After graduating from medical school, doctors interested in training in anaesthesia must first complete at least 24 months of eligible prevocational medical education and training (PMET), also known as postgraduate year 1 (PGY1) and postgraduate year 2 (PGY2).

In Australia and New Zealand, the specialist training for anaesthesia is provided by the Australian and New Zealand College of Anaesthetists (ANZCA) through a five-year program undertaken through clinical placements in ANZCAapproved hospitals. This training program provides education and training for all clinical environments and contexts, including foundation knowledge and skills for sub-specialised areas of practice. Successful completion of this training results in the award of Fellowship of the Australian and New Zealand College of Anaesthetists (FANZCA) and recognition as a specialist anaesthetist.

The training program has three key elements:

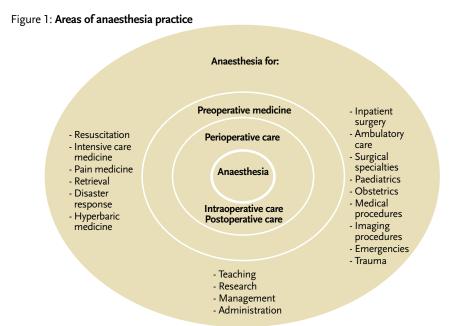
1. The ANZCA Clinical Fundamentals, which cover the fundamental specialty knowledge and skills anaesthetists need for all areas of practice – general anaesthesia and sedation, airway management, regional and local anaesthesia, perioperative medicine, pain medicine, resuscitation, trauma and crisis management, and safety and quality in anaesthesia practice and patient care. Knowledge and skills in these areas are developed throughout training with outcomes to be achieved by the end of each training period. The clinical fundamentals also thread through specialised study units where their application is expressed in a specific context.

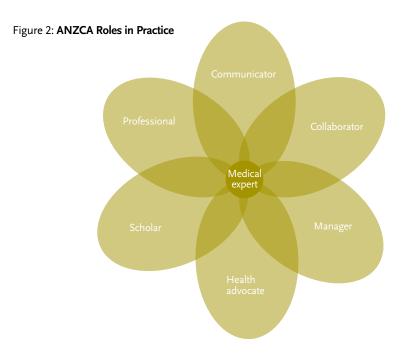
- The specialised study units, which define the further specialised knowledge and skills required for the anaesthetic management of patients in specific contexts.
- 3. The ANZCA Roles in Practice, which are taught throughout the program so that trainees develop medical expertise and gain competency in all the attributes required of a specialist anaesthetist. These roles are depicted in Figure 2.

The full training program is outlined on the ANZCA website (www.anzca.edu.au) in the ANZCA Anaesthesia Training Program Curriculum and the ANZCA Handbook for Training and Accreditation.

The training program, and ANZCA's continuing professional development program for provisional fellows (trainees in their final year of training) and specialist anaesthetists, are accredited by the Australian Medical Council (AMC) and the Medical Council of New Zealand (MCNZ), as are the equivalent Faculty of Pain Medicine programs.

Training in anaesthesia can be associated with training in intensive care and pain medicine. Within the College, the Faculty of Pain Medicine is responsible for specialist training in pain medicine. The College of Intensive Care Medicine of Australia and New Zealand is responsible for specialist training in intensive care medicine.





# Joining the ANZCA training program

ANZCA has a two-stage process for trainee application and registration:

- Application: Those wanting to train in anaesthesia are encouraged to complete an application process with ANZCA before completing PMET – and may do so any time after completing 52 weeks of PMET.
- Registration: Applicants seeking admission to the ANZCA training program must secure a training position with an accredited training department before they can register with the College as a trainee.

With prior approval from the College, flexible (part-time and/or interrupted) training is possible under specified circumstances, as is some overseas training.

# The training program

Training can be completed in 260 weeks (five years). Trainees must successfully complete the initial assessment of anaesthetic competence (IAAC), plus other requirements, during the first 26 weeks of introductory training before being eligible to move into the 78 weeks of basic training.

Trainees can then commence the program's 12 specialised study units in anaesthesia for:

- Cardiac surgery and interventional cardiology.
- General surgical, urological, gynaecological and endoscopic procedures.
- Head and neck; ear, nose and throat; dental surgery; and electro-convulsive therapy.
- · Intensive care.
- Neurosurgery and neuroradiology.
- · Obstetric anaesthesia and analgesia.
- · Ophthalmic procedures.
- Orthopaedic surgery.

- · Paediatric anaesthesia.
- · Plastic, reconstructive and burns surgery.
- · Thoracic surgery.
- Vascular surgery and interventional radiology.

These specialised study units are undertaken during basic training and the 104 weeks of advanced training that follows.

The final 52 weeks of the training program consists of provisional fellowship training, during which trainees are working at a senior level and will be involved in teaching and assessing junior colleagues.

For full information on these training periods, refer to the online curriculum on the College website (www.anzca.edu.au) or email training@anzca.edu.au.

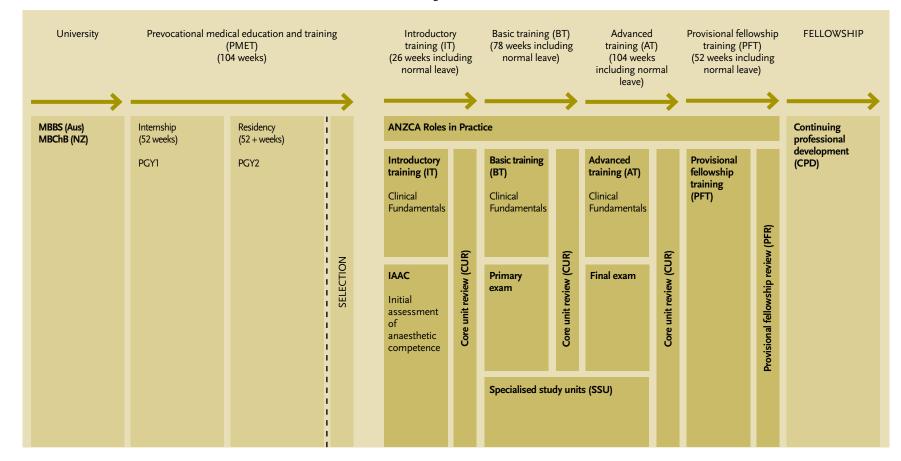
Trainees are assessed through a combination of:

 Regular workplace-based assessments conducted by Fellows of the College as well as other specialists in accredited departments.

- Clinical placement reviews during each placement and core unit reviews at the end of each training period, conducted by supervisors of training located at each accredited department.
- The primary examination and final examination during basic training and advanced training respectively.

There are also some mandated courses such as Emergency Management of Anaesthetic Crises (EMAC) and Advanced Life Support (ALS) courses that must be satisfactorily completed during training.

Figure 3: 2013 curriculum structure – overview



# **Support for trainees**

Anaesthesia trainees are supported by supervisors of training (SOTs) in the training departments and ANZCA provides a web-based training portfolio system (TPS) so that trainees can record their training. Trainees can access the TPS from a computer or mobile device once they are registered with the College. The TPS is the hub for training program data and is where trainees:

- Record their clinical experiences, including volume of practice (cases, procedures, time), clinical placement plans and other achievements.
- View workplace-based assessment results.
- · View clinical placement reviews.
- · Provide details about courses attended.
- View details of examination attempts and passes.

### **Learning resources**

ANZCA learning resources for trainees include:

- Comprehensive video-based podcasts available on the College website. The podcasts are presented by an ANZCA Fellow, or another expert, who presents on different areas of anaesthesia such as subjects covered in the primary or final examinations.
- Interactive webinars delivered online with the associated podcast presenter available to answer questions from participating trainees.
- The ANZCA Library, which offers both hard copy and online texts, many specifically suited to trainee examination preparation, access to many medical journals and assistance with literature searches.
- Examination preparation support materials. Various teaching hospitals also provide preparation courses for both the primary and final examinations and there are simulation centres in both Australia and New Zealand where trainees can develop practical skills.
- Regular conferences, seminars and other learning opportunities throughout Australia and New Zealand.

# Considering a career in anaesthesia

If you are considering a career in anaesthesia, you should attempt to get a feel for the specialty as early as possible. An elective in anaesthesia is often possible during senior undergraduate years. The College and some medical school departments offer prizes in anaesthesia at undergraduate level to encourage trainees.

Gaining some experience in anaesthesia during the first two postgraduate years is valuable so you are encouraged to talk to anaesthetists in the hospitals where you work and, if possible, obtain clinical experience in anaesthesia. Training hospitals have directors of anaesthesia and ANZCA supervisors of training on staff who can tell you about job prospects and contacts in other centres. They can also advise on how to apply for training positions. (As noted previously, while application to ANZCA before completing PMET is encouraged, registration in the ANZCA training program depends on securing a training position within an accredited training department.)

# Continuing professional development

Continuing professional development (CPD) is compulsory for specialist anaesthetists in Australia and New Zealand to maintain their medical registration. The purpose of CPD is to maintain and improve knowledge, skills and attitudes, and to develop the professional and personal attributes required throughout a career as a medical specialist. ANZCA runs a CPD program that is accredited for this purpose and is accessible via PC, laptop and tablet as well as on smartphones for easy recording of activities. It also has a dedicated CPD team available to answer queries.

### For further information

#### **ANZCA Training and Assessment Unit**

ANZCA House 630 St Kilda Road Melbourne, Victoria 3004 Australia

Phone: +61 3 9510 6299 Fax: +61 3 9510 6786 Email: training@anzca.edu.au Web: www.anzca.edu.au

You can also obtain information from the New Zealand National Office and the College's regional offices in Australia's state capitals, as listed below.

#### **New Zealand National Office**

Level 7, EMC House 5 Willeston Street Wellington 6011 New Zealand

PO Box 25506 Featherston Street Wellington 6146 New Zealand

Phone: +64 4 499 1213 Fax: +64 4 499 6013 Email: training@anzca.org.nz Web: www.anzca.org.nz

#### **Australian Capital Territory Regional Office**

6/14 Napier Close Deakin, ACT 2600 Australia

Phone: +61 2 6282 0524 Fax: +61 2 6282 0525 Email: act@anzca.edu.au

#### **New South Wales Regional Office**

117 Alexander Street Crows Nest, NSW 2065 Australia

Phone: +61 2 9966 9085 Fax: +61 2 9966 9087 Email: nsw@anzca.edu.au

#### **Queensland Regional Office**

West End Corporate Park, River Tower 20 Pidgeon Close West End, Queensland 4101 Australia

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# **South Australian and Northern Territory Regional Office**

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