2013

Guidelines: Expanded Practice - Anaesthetic Technicians

MEDICAL SCIENCES COUNCIL OF NEW ZEALAND
TE KAUNIHERA PŪTAIAO HAUORA O AOTEAROA

October
# Table of Contents

1. **Introduction**  
   1.1 Expanded Practice Defined  
   1.2 Principles of Expanded Practice  

2. **Pre-Requisites for Expanded Practice**  
   2.1 Healthcare Facility  
   2.2 Anaesthetic Technicians  
   2.3 Evaluating Appropriateness of Expanded Practice Activity  

3. **Application for Inclusion of Expanded Practice on APC**  
   3.1 Application to Undertake a Training Programme  
   3.2 Application to Practise in an Expanded Practice Activity  
   3.3 Ongoing Expanded Practice Certification  
   3.4 Expanded Practice and Continuing Professional Development  
   3.5 Mobility of Anaesthetic Technicians Approved to Work in an Expanded Practice Activity  

4. **Approval of Expanded Practice Activities**  
   4.1 Expanded Practice Activities Currently Approved  
   4.2 Applying for Approval of a New Expanded Practice Activity  

5. **Peripherally Inserted Central Catheters (PICC Lines)**  
   5.1 Training Programme Pre-Requisites  
   5.2 Training Programme  
      5.2.1 Pre-Insertion  
      5.2.2 Initial Assessment of Knowledge and Skills  
      5.2.3 Insertion Training  
   5.3 Assessment  
   5.4 Monitoring
6. Post Anaesthetic Patient Care Unit (PACU)  
6.1 Training Programme Pre-Requisites  
6.2 Training Programme  
   6.2.1 Airway Management  
   6.2.2 Monitoring Assessment and Care  
   6.2.3 Patient Care Handover  
6.3 Assessment  
6.3 Monitoring
1. **Introduction**

The Medical Sciences Council of New Zealand (the Council) is pleased to present its guidelines for anaesthetic technicians wanting to apply to have a condition added to their scope of practice which will allow them to work in additional practice activities as approved by the Council.

These guidelines have been developed through consultation with key stakeholders, both individuals and groups, and are intended to provide an explicit framework for both anaesthetic technicians and healthcare facilities to ensure anaesthetic technicians working in an expanded practice role will practise in a way that protects the health and safety of patients.

It is important to note that not all registered anaesthetic technicians will move into an expanded practice role. The core role of anaesthetic technicians continues to be within a supporting role alongside anaesthetists within the theatre environments. The total number of anaesthetic technicians approved to work in expanded practice roles is expected to be relatively small.

Approval for expansion of an anaesthetic technician's practice role will be dependent on demonstrated evidence that it will meet identified gaps within health services. Furthermore anaesthetic technicians are limited to working within those expanded practice activities approved by the Council and must be able to provide evidence of having completed a Council-approved training programme that has been credentialed by the healthcare facility, as well as evidence of ongoing assessment and monitoring.

1.1 **Expanded Practice Defined**

Expanded practice is where an anaesthetic technician undertakes activities that are in addition to the minimum competencies of the anaesthetic technician scope of practice, and which have been approved by the Medical Sciences Council. Expanded practice activities must be in the sphere of anaesthesia-related practice within perioperative medicine. All expanded practice activities undertaken by anaesthetic technicians are carried out under the direction of a nominated anaesthetist or intensive care specialist.
1.2 Principles of Expanded Practice

- Expanded practice must be focused on meeting patients’ needs and improving patient outcomes.
- Expansion of an anaesthetic technician's practice must meet an identified gap(s) in health services.
- Anaesthetic technicians working in an expanded role must have the required knowledge and skills and have the necessary supports to continue in that role.
2. Pre-Requisites for Expanded Practice

An anaesthetic technician can only undertake expanded practice activities once they have been approved to do so by the Medical Sciences Council. Application is made to the Council as part of the issue of an annual practising certificate (APC).

2.1 The Healthcare Facility

Prior to instituting any expanded practice training programme for anaesthetic technicians, the Director of Anaesthesia (or the equivalent in a private healthcare facility), in consultation with all relevant staff and stakeholders of the healthcare facility, will ensure there is documented evidence that an evaluation has been undertaken to determine whether an expanded practice activity is appropriate for anaesthetic technicians within that healthcare facility.

Anaesthetic Technicians working in an expanded practice role must be suitably trained and supported by the healthcare facility to carry out the particular expanded practice activities for which they have been approved by the Council.

Training and support of anaesthetic technicians working in an expanded role is to be provided through a specific training and support programme which has been credentialed by the healthcare facility.

The training and support programme is to be overseen by a nominated anaesthetist or intensive care specialist within the specific healthcare facility.

The training and support programme is to be documented and demonstrate evidence of regular review.

2.2 Anaesthetic Technicians

Approval for anaesthetic technicians to undertake an expanded practice activity is a two-step process. Firstly, anaesthetic technicians must apply to the Medical Sciences Council for approval to undertake a training programme in a specified expanded practice activity. Approval will be endorsed through the Council issuing the anaesthetic technician with an APC that contains the condition they work under the supervision of a nominated anaesthetist/intensive care specialist for the duration of the training programme.
Once the an anaesthetic technician has completed the healthcare facility-based training programme they must provide the Council with documented evidence that they have met all the requirements of the healthcare facility's training programme for a specified expanded practice activity.

Moving into an expanded practice role can be achieved via two distinct pathways:

1. Completion of a training programme that has been credentialed by a New Zealand healthcare facility. The training programme must meet the Medical Sciences Council's minimum standards for an expanded practice training programme as stated in these guidelines.

2. The anaesthetic technician has a Council-approved qualification and experience specific to the relevant expanded practice activity. For example, anaesthetic technicians who are qualified and experienced operating department practitioners from the United Kingdom may, at the discretion of the Director of Anaesthesia (or equivalent), not need to complete the full hospital-based training programme in PACU due to their prior learning and experience. From the Council's perspective the anaesthetic technician will still need to provide evidence that they have the requisite skills and knowledge for the particular expanded activity (e.g. PACU), as well as evidence of support of the healthcare facility.
3. **Application Process for Anaesthetic Technicians**

Anaesthetic technicians must seek Council approval before undertaking a training programme for a specified expanded practice activity. They then need further approval from the Council to work in a specified expanded practice role once they have completed their period of training.

3.1 **Application to Undertake a Training Programme**

Anaesthetic technicians wanting to undertake a training programme in an expanded practice activity (that is on the Council’s approved list), must complete an *Application: Expanded Practice Training Programme* form. This is available on the Council’s website at [www.mscouncil.org.nz](http://www.mscouncil.org.nz).

Completion of the application form includes signed confirmation from the Clinical Director (or similar position) of the anaesthesia department of the relevant healthcare facility that the training programme includes all of the requisites as stated on the application form, and that the individual anaesthetic technician meets the pre-requisites of the training programme.

If the Council approves the anaesthetic technician to undertake the training programme, an APC will be issued with the inclusion of a condition that the anaesthetic technician works under the supervision of a nominated anaesthetist or intensive care specialist for the duration of the training programme.

3.2 **Application to Practise in an Expanded Practice Activity**

Once they have completed the training programme, and/or have been certified as meeting all of the required competencies for undertaking a specified expanded practice activity, anaesthetic technicians must apply to the Council to have that included as a condition on their scope of practice.

Initial applications can be made by completing an *Anaesthetic Technician: Expanded Practice Application* form which can be downloaded from the Council’s website at [www.mscouncil.org.nz](http://www.mscouncil.org.nz) and clicking on the *Anaesthetic Technology* button at the upper right-hand corner of the Home Page. The form can then be located under the *For Practitioners/Recertification* button.

From 2014 applications will be able to be made via the Council’s online process when applying for an annual practising certificate (APC). Should anaesthetic technicians wish to apply for approval to practise in a Council-approved expanded activity at a different time from applying for their APC, they will need to do so through completing the *Anaesthetic Technician: Expanded Practice Application* form.
All expanded practice applications are to include supporting documentation:

- Evidence of meeting all training programme requirements; and
- Confirmation of competence to perform all competencies required for the expanded practice independently; and
- Evidence of successfully completing an annual assessment; and
- Completed logbook; and
- Evidence of meeting the minimum number of clinical hours/procedures.

3.3 **Ongoing Expanded Practice Certification**

Anaesthetic technicians who have been approved by the Council to work in an identified expanded practice activity must apply to have that included as a condition on their scope of practice for each APC year they wish to continue working in that expanded practice activity/activities. They are to do that as a component of the APC annual renewal process via the Council’s online application process.

3.4 **Expanded Practice and Continuing Professional Development**

Anaesthetic technicians who have been approved to practise in a Council-approved expanded practice activity will need to provide evidence of continuing professional development (CPD) activities that relate to the expanded practice activity/activities which have been included as a condition on their scope of practice. As a rule of thumb, of the annual requirement for engagement in 20-hours CPD activities, at least 25% of those CPD activities should have a direct relationship to the anaesthetic technician's expanded practice role.

3.5 **Mobility of Anaesthetic Technicians Approved to Work in an Expanded Practice Activity**

Approval for anaesthetic technicians to work in an expanded practice role is not specific to a named healthcare facility. Anaesthetic technicians who have been deemed competent within one healthcare facility to practise in an approved expanded practice activity will be eligible to perform the expanded practice activity (as stated on their current practising certificate) in another New Zealand healthcare facility provided that facility has all the ongoing support, monitoring and credentialing requirements in place as stated in these guidelines. The department to which they transfer will have demonstrated compliance with meeting their obligations in providing training and ongoing monitoring and support for anaesthetic technicians practising in an expanded role (as outlined in sections 2.1 and 4 of these guidelines).
4. Approval of Expanded Practice Activities

Anaesthetic technicians can only work in an expanded practice activity that has been approved by the Medical Sciences Council.

Healthcare facilities that wish to utilise the expertise of anaesthetic technicians in an anaesthesia-related activity within perioperative medicine that has not yet been approved will need to apply to the Medical Sciences Council seeking approval to have the particular activity included in the list of defined expanded practice activities within which anaesthetic technicians can practise.

The opportunity to apply for an addition to the Council's list of approved expanded practice activities will come into effect from 1 September 2013.

4.1 Expanded Practice Activities Currently Approved

As at 1 June 2013 the Medical Sciences Council has approved two expanded practice activities within which registered anaesthetic technicians can practise:

1. Peripherally Inserted Central Catheters - PICC Lines; and
2. Post-Anaesthetic Patient Care Unit - PACU

4.2 Applying for Approval of a New Expanded Practice Activity

A healthcare facility looking to utilise the expertise, skills and knowledge of anaesthetic technicians to undertake an expanded practice activity that is not on the Council's list of approved activities must apply to the Council for inclusion of that activity.

The application is to be supported with evidence that the healthcare facility has applied a consistent framework\(^1\) to determine if the expanded practice role is appropriate. The application is to contain information on all of the following questions\(^2\):

- Is there evidence that the expansion of anaesthetic technician practice will improve the health outcomes for patients?
- Is there an appropriate rationale for anaesthetic technicians to undertake this activity?

\(^1\) The framework has been adapted from the NZ Nursing Council's Guideline: Expanded Practice for Registered Nurses. The Medical Sciences Council extends their appreciation to the Nursing Council for their willingness to share this valuable resource.

\(^2\) All of the questions should be answered with a "YES". If any question receives a "NO" response further planning and consultation needs to be undertaken and consideration given to what needs to occur for the standard to be developed.
• Is the role or activity supported by professional standards and/or legislation?

• Have potential risks been evaluated and strategies developed to mitigate those that have been identified?

• Are there policies and procedures as part of an organisational risk management framework that support this practice?

• Will the change be accepted within the organisation and interdisciplinary team?

• Has a process been established to assess the educational preparation and competence of Anaesthetic Technicians prior to undertaking the expanded practice activity?

• Is there a documented training programme for anaesthetic technicians looking to undertake the expanded practice activity?

• Are there explicit standards addressing the level of accountability for anaesthetic technicians performing the expanded practice activity?

• Is there a process for ongoing education to ensure anaesthetic technicians maintain competence in the expanded practice activity?

• Has a process been established to access other health practitioners to support anaesthetic technicians in the activity?

• Is there a process for the ongoing monitoring and evaluation of anaesthetic technicians undertaking the expanded practice activity?

• Is there a process for regular reviews of the continued appropriateness for the expanded practice activity?
The application must also contain detailed information in respect of:

- The clinical activity/procedure; and
- Required entry-level competencies; and
- Required training programme to ensure anaesthetic technicians have the necessary skills and knowledge
- How the training is to be delivered
- An assessment framework for ensuring an anaesthetic technician is competent to perform the specified activity/procedure
- Minimum ongoing support mechanisms for ensuring continued competence
5. Peripherally Inserted Central Catheters - PICC Lines: Minimum Standards

PICC line insertions are one of the activities approved by the Medical Sciences Council for anaesthetic technician expanded practice.

Anaesthetic technicians and healthcare facilities must ensure all of the following standards are met in respect of PICC Line Insertions.

5.1 Training Programme Pre-Requisites

The anaesthetic technician must have:
- A current practising certificate (APC); and
- Written support from the Clinical Director of Anaesthesia (or Intensive Care) to participate in the training programme; and
- Relevant post-qualification clinical experience; and
- Intravenous cannulation certification and ongoing experience with insertion; and
- New Zealand Resuscitation Certificate Level 6; and
- National Radiation Laboratory Core of Knowledge Certificate.

5.2 Training Programme

All training programmes in PICC Line insertions for anaesthetic technicians are to be credentialed by the healthcare facility and as a minimum (but not limited to) must include the following:

5.2.1 Pre-Insertion Training

- Ultrasound training for vascular access
- CXR education
- Aseptic technique
- Seldinger technique
- Tip guidance technique
- Informed consent, Time Out and documentation
- Simulation training for needling techniques
- Recommended reading material

---

3 Anaesthetic technicians undergoing a training programme in PICC Line Insertions must work under the direct supervision of a nominated registered anaesthetist/intensive care specialist at all times throughout the duration of the training programme - that is, until they have been formally certified as being competent to do PICC Line Insertions and have been approved accordingly by the Medical Sciences Council to have that included as a condition on their scope of practice.
Before moving onto the next phase of Insertion Training, the anaesthetic technician is to be formally assessed on their knowledge and skills pertaining to the pre-insertion training topics. That assessment is the responsibility of the nominated supervising anaesthetist/intensive care specialist.

5.2.2 Insertion Training

After successful completion of the pre-insertion phase of training, the anaesthetic technician can move onto staged training of PICC Line Insertions on patients under the direct supervision of an experienced PICC line inserter (who is a registered health practitioner and has been approved by the Director of Anaesthesia/Intensive Care to take on a trainer role).

Direct supervision means the nominated supervisor provides "over the shoulder" oversight of all insertions performed by the anaesthetic technician who is undertaking the training programme.

During this phase of training the anaesthetic technician must:
- Observe a minimum of five PICC line insertions by the nominated supervisor; and
- Perform double scrubbing, increasing the number of stages independently; and
- Independently scrub and insert a minimum of five PICC lines without difficulty.

5.3 Competence Assessment

At the completion of the insertion training phase, anaesthetic technicians are to be formally assessed on their competence to perform PICC line insertions. The assessment is to include evidence of their:
- Ability to perform all steps of the procedure independently and according to healthcare facility policy; and
- Theoretical knowledge; and
- Documented certification by the nominated supervisor of their successful completion of the PICC line insertion training programme.

5.4 Anaesthetic Technicians Approved to Perform PICC Line Insertions

Once anaesthetic technicians have been formally certified as competent to perform PICC line insertions, and have been approved to have this included as a condition on their scope of practice, they can progress onto performing these procedures under the direction of a nominated anaesthetist/intensive care specialist (as opposed to direct supervision).
Working under direction means the anaesthetic technician must have ready access at all times to a registered anaesthetist/intensive care specialist who is on site at the healthcare facility.

5.5 Ongoing Monitoring
The healthcare facility must have processes in place for the ongoing monitoring of anaesthetic technicians practising PICC line insertions.

Anaesthetic technicians are required to provide evidence of ongoing monitoring support when applying to renew their expanded practice condition as a condition on their APC.

Anaesthetic technicians must be able to demonstrate they have:
• Performed a minimum of twenty PICC line insertions in the preceding 12-months; and
• Have successfully completed an annual assessment of their PICC line insertion competencies and have been certified as meeting all minimum competencies by a registered anaesthetist/intensive care specialist
• Completed a logbook detailing all insertions (both successful and unsuccessful) carried out in the previous 12-months
6. **Post Anaesthetic Patient Care Unit - PACU: Minimum Standards**

Working in PACU is one of the activities approved by the Medical Sciences Council for anaesthetic technician expanded practice.

Anaesthetic technicians and healthcare facilities must ensure all of the following standards are met in respect of working in PACU.

6.1 **Training Programme Pre-Requisites**

The healthcare facility has a formal orientation programme for all practitioners working in PACU services.

The anaesthetic technician must have:

- A current practising certificate (APC); and
- Written support from the Clinical Director of Anaesthesia (or Intensive Care) to participate in the training programme; and
- Relevant post-qualification clinical experience; and
- Cannulation certification and ongoing experience with insertion; and

6.2 **Training Programme**

Anaesthetic technicians undertaking a PACU training programme must work under the direct supervision of a nominated anaesthetist/intensive care specialist. The Director of Anaesthesia may delegate the supervision role to the PACU Charge Nurse. Direct supervision means the nominated supervisor provides "over the shoulder" oversight of the anaesthetic technician who is undertaking the training programme.

All training programmes in PACU for anaesthetic technicians are to be credentialed by the healthcare facility and must comply with the relevant professional standards adopted by the Australian and New Zealand College of Anaesthetists.

---

4 Anaesthetic technicians undergoing a training programme in PACU must work under the direct supervision of a nominated registered anaesthetist/intensive care specialist at all times throughout the duration of the training programme - that is, until they have been formally certified as being competent to practise in PACU and have been approved accordingly by the Medical Sciences Council to have that included as a condition on their scope of practice.

5 PS53: Statement on the Handover Responsibilities of the Anaesthetist
PS04: Recommendations for the Post-Anaesthesia Recovery Room
PS42: Recommendations for Staffing of Departments of Anaesthesia
As a minimum (but not limited to) the training programme must include the following:

6.2.1 Airway Management
- Selection and preparation of appropriate airway equipment; and
- Positioning of artificial airways to maintain respiration
- Removal of artificial airways; and
- Maintenance of Universal Precautions.

6.2.2 Monitoring Assessment and Care
- Communication with patient; and
- Plan of care; and
- Monitoring of support equipment; and
- Monitoring of operation sites, drain and wound care; and
- Drug therapy assessment, assessment of pain; and
- Monitoring of fluid balance, fluid therapy; and
- Monitoring comfort levels and/or adverse reactions; and
- Monitoring of recovery from anaesthesia; and
- Monitoring emergencies - respiratory and cardiovascular; and
- Pharmacology of common drugs used in the PACU phase.

6.2.3 Patient Care Handover
- Documentation requirements; and
- Communication requirements for patient handover; and
- Accepting handover from the anaesthetist; and
- Handing over to ward staff; and
- Handing over to a PACU colleague.

6.3 Competence Assessment
At the completion of the PACU training programme, anaesthetic technicians are to be formally assessed by the nominated supervisor on their competence to practise in PACU. The assessment is to include evidence of their:
- Ability to perform all PACU activities independently and according to healthcare facility policy; and
- Theoretical knowledge; and
• Documented certification by the nominated supervisor of their successful completion of the PACU training programme.

6.4 Anaesthetic Technicians Approved to Work in PACU

Once anaesthetic technicians have been formally certified as competent to work in PACU, and have been approved to have this included as a condition on their scope of practice, they can progress onto performing PACU procedures under the direction of a nominated anaesthetist/intensive care specialist (as compared to direct supervision). While an anaesthetic technician works under the direction of an anaesthetist, they would be directed by the Nurse in charge of the PACU facility for matters pertaining to staff allocation and patient caseloads.

6.5 Ongoing Monitoring

The healthcare facility must have processes in place for the ongoing monitoring of anaesthetic technicians practising in PACU.

Anaesthetic technicians are required to provide evidence of ongoing monitoring support when applying to renew their expanded practice condition as a condition on their APC.

Anaesthetic technicians must be able to demonstrate they have:

• Practised a minimum of 160 hours in PACU in the previous 12-months; and
• Successfully completed an annual assessment of their PACU competencies and have been certified as meeting all minimum competencies by a nominated anaesthetist/intensive care specialist/PACU Charge Nurse
• Completed a logbook detailing all PACU work carried out in the previous 12-months