

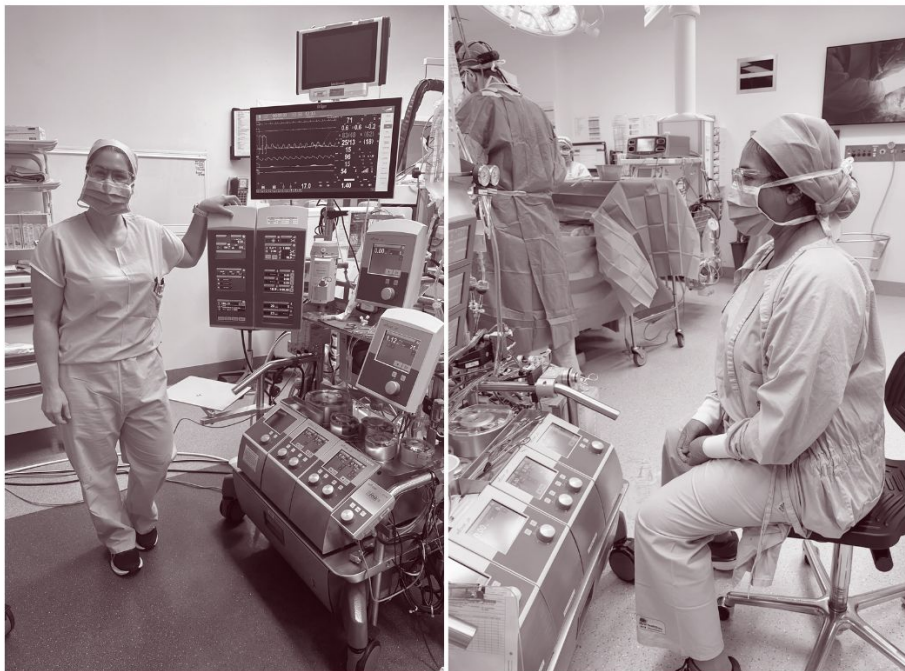


Australian and New Zealand
College of Perfusionists



Clinical Trainee Guidelines

Trainee Perfusionist Manual





Australian and New Zealand Board of Perfusion Clinical Trainee Guidelines

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Any inquiries regarding the content of this document should be directed to abcpcoordinator@anzcp.org



Australian and New Zealand Board of Perfusion Clinical Trainee Guidelines

1. Introduction

The Australian and New Zealand Board of Perfusion (ANZBP) is the recognised certification and education body for clinical perfusionists in Australia and New Zealand. We are committed to ensuring the highest standards of clinical practice and education. Our mission is to:

- **Promote excellence in clinical perfusion:** We establish and uphold rigorous standards for education, training, and practice.
- **Protect the public:** By certifying qualified perfusionists, we ensure patients receive safe and effective care.
- **Advance the profession:** We foster ongoing professional development and research to continuously improve the field of clinical perfusion.

As a registered trainee, you also can join the College as a Clinical Trainee member. Membership of the college give you access to journals, Perfusion and JECT, discounted conferences held by ANZCP, as well as the Autotransfusion Course at no cost.

1.1 Message from the ANZBP Chair.

Dear Students,

I would like to formally welcome you to the clinical perfusion trainee program. We are extremely excited to have the opportunity of further educating you on your journey to become a clinical perfusionist. Over the next 2-3 years, you will gain the knowledge and clinical skills necessary to make you a competent perfusionist. We will work closely with you and your supervisors to ensure you have the support you need to thrive during the training program and afterwards.

We encourage you to be active contributors to the perfusion community, especially as trainees. The perspective and enthusiasm you bring is invaluable and may challenge many experienced perfusionists ways of thinking. The Board offer a mentoring program that you can opt in to if you desire. You will be paired with a senior perfusionist somewhere within Australia or New Zealand and be able to lean on them for advice, support and guidance outside of your training institution.

Please read these guidelines and all training supporting documentation carefully and reach out to Neesha, the course coordinator, if there is anything you need.

All the best,

Jessica Cantrick
Chair ANZBP

1.2 Message from the ANZBP Course Coordinator

Dear Trainee Clinical Perfusionists,

On behalf of the Australian and New Zealand Board of Perfusion (ANZBP), I extend a warm welcome to you, the aspiring perfusionists embarking on this exciting career path. These guidelines serve as a comprehensive resource throughout your training program, outlining expectations and the requirements needed for you to complete your training.

The ANZBP is dedicated to fostering a supportive learning environment and providing you with the tools and support necessary to become highly skilled clinical perfusionists. We encourage you to actively engage in your training, ask questions, and seek guidance from your supervisors and colleagues. Their expertise and mentorship are invaluable assets during your learning journey.

As your Course Coordinator, I'm here to support you every step of the way. I've been in your shoes as a trainee myself, so I know how important it is to have someone to turn to. Feel free to reach out with any questions, big or small. I'll be in touch regularly with updates, reminders, and information about the certification exams.

We are thrilled to welcome you to the perfusion community and wish you all the best in your academic and professional endeavors.

Sincerely,

Neesha Ghedia
ANZBP Course Coordinator

2. Purpose of this document

This document outlines the expectations for students enrolled in a certified Clinical Perfusion program within Australia and New Zealand. These guidelines ensure a consistent and high-quality educational experience, preparing graduates for successful careers in clinical perfusion.

3. Points of Contact

3.1 Supervisor

Your supervisor should be your first point of contact with concerns regarding your training within your individual unit.

3.2 Course Coordinator

Neesha Ghedia
abcpcoordinator@anzcp.org

The Course Coordinator is your main point of contact with any concerns/questions about your training, specific content, and the certification process.

3.3 Student Mentor Program Manager

Casey Edwards
abcpsec@anczp.org

As part of your training, you will be connected to a senior member of the perfusion community who is external to your employing hospital, to act as a mentor for you throughout training. This initial connection will be facilitated by Casey and your ongoing frequency of engagement will be at the discretion of yourself and your mentor.

4. Administrative Responsibilities

4.1 Program Completion

Students and supervisors are jointly responsible to complete their clinical requirements within 3 years of starting the training program.

Students are responsible to ensure they complete the educational requirements of the course. If you fail a course subject, you may need an extra year to complete the course, depending on the subject delivery.

An extension to the 3 years may be granted in extenuating circumstances, such as documented medical illness. The extension process should be initiated by you, the trainee contacting the course coordinator as early as possible when completing clinical requirements within 3 years seems unlikely.

Extensions will be granted at the discretion of the ANZBP. We will review your application and supporting evidence provided.

4.2 Remediation Policy

If a student's academic and/or clinical performance is below the expectations of the supervisor, the ANZBP will support the supervisor in a structure approach to remediation.

1. Course Coordinator will notify student of need for remediation.
2. Student will meet with both the course coordinator and supervisor to identify academic/clinical difficulties and explore potential solutions.
3. Course coordinator will develop an individualised remediation plan catered towards the student and areas they need to focus on.
4. Remediation methods may include, but is not limited to:
 - a. Review of study material
 - b. Review of course content and identify areas for concern
 - c. Participation in meetings with course coordinator and supervisor to review student's progress toward successful remediation
 - d. Completion of identified assessments, which may include a comprehensive exam, a written assignment, demonstration of competency, etc.

4.3 Leave of Absence

When personal circumstances necessitate a temporary absence from the program and return is evident, a leave of absence may be granted to students up to the discretion of the ANZBP.

Students considering a leave should first consult with their supervisor and Course Coordinator regarding options to see if the demands of their training program can be scaled back temporarily to reduce pressure.

Students who are subject to dismissal for academic or disciplinary reasons are not eligible for a leave of absence.

Students who fail to return at the end of the approved leave will have their status changed from leave of absence to withdrawal from their training program/position.

4.4 Withdrawal

If a student wishes to withdraw from the program, the Course Coordinator or the Chair of the ANZBP must be notified in writing from the student and/or the supervisor. Feedback may be

sought by the Course Coordinator from both the withdrawing trainee and their supervisor. The goal of this feedback is to identify ways the ANZBP can better support the training journey and identify the challenges students and supervisors face.

4.5 Registering as a Trainee and providing the required documentation

It is your responsibility to ensure you register as a trainee with the ANZBP and that we have the correct contact details.

On our website, there is a Trainee Registration Portal, which streamlines the documentation side of the training process for both students and supervisors.

<https://anzcp.org/education/trainee-registration-portal/>

You will receive a hard copy work booklet of these guidelines, and the case evaluation and reflections to complete, scan and send through every 20 cases.

The following documentation must be sent via the portal or to the Course Coordinator

- I. Registration Form: (For registering with the ANZCP) upon commencement of your training program
 - Certified Copy of proof of identity
 - Certified Copy of degree qualification
 - Certified Copy of academic transcript
 - As described in Page 3, point 2 (g) of the Certification Policy found under the College Document section of the ANZCP website [here](#).
- II. Trainee Evaluation/Reflection Uploads:
Every 20 cases, you will be able to fill out the following in your hard copy workbook, and scan and upload to the portal;
 - Case Evaluation forms signed by supervisor and student
 - Case Reflection document

You will also be required to upload your case logbook at every 20 cases, as well as at the end of 200 cases with the case observations included. The digital template of the logbook is found on the ANZCP website on the trainee portal.

- Case Logbook – every 20 cases
- Final Case Logbook – complete 200 cases and observation cases
- Supervisor Attestation of Logbook Document

5. Clinical Responsibilities

5.1 Clinical Experience

Students must complete and document **all** cardiopulmonary bypass cases completed within their training period before being eligible to sit certification exams.

A minimum case number of 200 is required for certification eligibility.

Students are expected to complete at least 3 days in the operating room per week, with at least 1 day per week allocated to non-clinical/study time.

Completing a variety of case types with varying complexity, where possible, will also enrich your training, and add to your success within certification exams/viva exams.

Students must be directly supervised for a minimum of 125 cases.

5.2 Case Observations

Students are to observe 15 cases at another perfusion unit comprised of the following:

- I. 10 paediatric cases if from an adult perfusion unit; **or**
- II. 10 adult cases if from a paediatric perfusion unit; **and**
- III. Minimum 5 cases from another perfusion unit(s)

Following the completion of case observations, an observation reflection must be completed for each site visited and sent to the Course Coordinator.

These case observations must be completed for eligibility to sit certification exams and must be included within the case log.

The purpose behind these observations is that it will allow students to gain a more diverse knowledge of cases and perfusion techniques that they may be examined within the certification exams.

Students will not be able to sit certification exams until all training requirements are met, including these case observations.

5.3 Case Logbook, Procedure Score and Trainee Assessment Sheets

It is the trainees' and supervisors' joint responsibility to provide all the required documents at the appropriate time throughout the training period and be aware of what is required of them to present for certification examinations.

It is advised to fill out the case logbook as soon as you start performing cases, to allow you to keep track of the number of cases and know when case reviews need to be performed.

The logbook must contain a minimum of 200 cardiopulmonary bypass cases, and all cases performed until the conferral of CCP certification must be recorded.

At every 20 cases, up to 200 cases, your supervisor must fill out case evaluation feedback forms. These should be uploaded via the Trainee Portal on the ANZCP website, or alternatively emailed to the course coordinator.

If you are >10 cases away from the case logbook requirement of 200 cases, your board certification exams will need to be delayed. If you feel that projected numbers may not reach

200 cases in time for the exams, please contact the Course Coordinator at the earliest opportunity to discuss a pathway.

See [Appendix A](#) for a rough timeline of when cases should be completed.

If you believe you are not tracking to the suggested timeline, please contact the Course Coordinator so we can make note of where you are up to and offer support where possible including the delay of exams.

There are a number of clinical supervision requirements that the student and lead/clinical supervisor must abide by, which are in detail within the Clinical Supervision document found in the College Documents section of the ANZCP website [here](#):

These include;

- I. The lead supervisor must hold a current CCP (ANZ) or OTP (ANZ) and have at least five years' experience post board certification or have at least five years' experience in perfusion post perfusion qualification (OTP)
- II. The clinical supervisor must hold a current CCP (ANZ) or OTP (ANZ) and have at least two years' experience post perfusion qualification
- III. For any unit where this is not possible, the head of department and/or lead supervisor must apply to the Board with suitable documentation, detailing the supervisor experience, and the suitability of supervisors will be determined by the Board on a case-by-case basis.

5.4 Visiting other perfusion units

Visiting other units gives students exposure to a wide array of equipment and techniques that may not be employed routinely at your unit, which, whilst given in your theory learning, could help solidify your application of this examinable knowledge.

Viva exams will test your knowledge of general perfusion techniques, not just the techniques employed in your individual unit. Examiners may ask you questions about techniques that you may not be familiar with from your routine practice. For example, visiting a unit that uses soft-shell reservoirs, or one that employs circuit minimisation or retrograde autologous prime techniques for blood conservation would be advisable if these are unfamiliar to you. If you are from a unit that does not choose cannula, the knowledge of cannula size/flow characteristics and choice for certain procedures is still examinable.

Your supervisor or Course Coordinator can connect you with other heads of departments to arrange visits if sought.

Knowledge of ECLS and support devices/technology such as ECMO, VADS and IABP are also examinable. If you are from a unit that does not perform any of these types of cases, it is highly recommended to visit a unit that does, even if just for the theory of the circuit and how the equipment works.

5.5 On-Call Responsibilities

Students may participate in the unit's on-call roster but must always be fully supervised. Students must never be on-call alone.

The amount of on-call is dependent upon the clinical site; however, the on-call responsibilities should consider exam periods to ensure the student is supported during their education.

5.6 Research Project

As a requirement during the program, you will need to complete a research project.

The project can be any of the following:

1. Original clinical research
2. Clinical Audit
3. Literature Review

Advice or guidance on topics of the research project can be provided by the Course Coordinator if required.

The research project must be presented in person at the ANZCP Annual Scientific Meeting, which is usually in November each year and alternates between a location in Australia and New Zealand.

Abstracts for the student presentations must be sent to the ASM Organising Committee and to the Course Coordinator prior to the conference when 'call for abstracts' occurs. The College sends out emails notifying you of this.

Presenting in person at the conference is a **mandatory requirement for certification**.

Presenting virtually will only be granted in extenuating circumstances, such as during a pandemic or with severe documented illness, at the Board's discretion and with documented evidence of incapability to attend.

For students presenting at the ASM following the completion of their certification exams (ie their certification exams happen before the ASM), they will be awarded their CCP provisionally, on the basis that they will present, and must declare their intention to present by signing a Trainee Research Project Declaration.

Failure to fulfill the presentation requirement may result in the individual's certification being placed on a provisional status until it is completed and revoked if failure to complete.

6. Certification Exams

6.1 Certification Eligibility

To be eligible to sit final certification exams, a student must have provided the following documents and meet the following requirements prior to sitting certification exams;

- a. Successfully complete all course work as provided by the approved training provider as designated by the ANZBP.
- b. Submit certified copies of the following;
 - i. Undergraduate Transcript
 - ii. Undergraduate Qualification/Degree
 - iii. Photo Identification
 - iv. Postgraduate Perfusion Program Transcript
 - v. Postgraduate Perfusion Qualification/Degree
- c. Submission of the following documents every 20 cases:
 - i. Case Logbook
 - ii. Case Evaluation forms signed by supervisor and student
 - iii. Case Reflection document
- d. Submit clinical case logbook containing;
 - i. All cases performed during training period (a minimum of 200 cases)
 - ii. Case observations and completed reflections
 - i. Observed 10 paediatric cases, if from an adult unit
or
 - ii. Observed 10 adult cases, if from a paediatric unit
and
 - iii. Minimum 5 cases observed at another unit
- e. Submit supervisor declaration document for attestation of logbook.
- f. Complete and present a research project at the Annual Scientific Meeting.
 - i. Or if presenting after CCP exams, complete a research project declaration to present
- g. Familiarise yourself with the following policies and guidelines of the ANZCP found [here](#) and understand the inherent requirements within each policy;
 - i. ANZCP Rules
 - ii. ANZCP Standards and Guidelines
 - iii. Code of Ethical Standards and Professional Conduct
 - iv. ANZCP Mandatory Declaration Policy
 - v. ANZCP Competency Standards
 - vi. ANZCP Certification Policy
 - vii. ANZCP Continuous Professional Development Program
- h. Payment of certification exam fee

Communicate with the Course Coordinator about any issues affecting your ability to provide any of these documents.

Failure to complete these may result in you not being able to sit certification exams.

6.2 Certification Exam Process

The student will be eligible to sit their CCP exams after the completion of the approved course in perfusion and completion of all clinical requirements set by the ANZBP.

The CCP examinations are held twice per year (usually mid year and the end of the year, with time, dates and location to be set by the ANZBP). Students will be notified no less than 3 months prior to exam dates. They will take place over two consecutive days:

Day 1 Written Exam

Multiple Choice Exam

- 120 questions
- 2-hour duration

Short Answer Questions

- 10 Questions
- 3-hour duration

Day 2 Oral (viva) Examination

- Two examination rooms / two-three examiners per room
- Two questions per room
- Approx 3 –5 minutes of pen to paper time to write down ideas/thoughts
- Approx. 15-20 minutes per question

The student and supervisor will be informed of the examination results within 3-4 weeks of exam completion.

Upon successful completion of the certification exams the new graduate will receive their CCP certificate and be required to complete ongoing CPD to maintain their currency, as per the ANZBP Continuous Professional Development Program policy.

The certification exam process carries a cost, which must be paid in full by the student/employer, according to their arrangement, prior to the sitting of the exams. Failure to do so, may result in the candidate deferred to the next set of exams.

6.3 Examination Pass Requirements

A minimum score of 60% in each section is required to pass the certification exams, with an overall score over 60%.

In the event of an appeal of results, the student can request a copy of their exam answers by contacting the ANZBP Course Coordinator and arranging a virtual meeting to view responses and discuss. All exam questions are copyrighted material and are property of the ANZBP and ANZCP.

In the event the student fails a section of their examination, they will be provided with the option to re-sit the exam within two weeks, at the cost of the student/employer.

6.4 Payment of Certification Exams

The certification exam fee must be paid prior to the sitting of exams.

<https://anzcp.org/product/trainee-ccp-board-exam-fee/>

6.5 Required Knowledge for Certification Exams

The ANZBP certification exams assess a comprehensive understanding of clinical perfusion practice. The examinations are based on topics deemed essential knowledge by the ANZBP.

This encompasses the following areas;

1. **Anatomy:** In-depth understanding of the structures associated with key physiological systems related to cardiovascular perfusion.
2. **Perfusion Technology:** a general understanding of the history & principles of perfusion technology, as well as understanding of perfusion hardware and disposables.
3. **Physiology:** In-depth knowledge and understanding of physiological processes of the key physiological systems related to cardiovascular perfusion.
4. **General Sciences;** Knowledge and understanding of the scientific principles underlying perfusion
5. **Pathology:** Understanding of disease processes affecting the heart, lungs, and other organ systems relevant to perfusion practice.
6. **Perfusion Equipment** – Thorough knowledge of the operation and troubleshooting of cardiopulmonary bypass circuits and associated equipment
7. **Pharmacology** - Knowledge of medications used in cardiopulmonary bypass and their mechanisms of action, indications, and side effects.
8. **Perfusion Techniques:** Detailed understanding of perfusion techniques during various surgical procedures.
9. **Clinical Applications of Perfusion Techniques:** Detailed understanding of advanced perfusion techniques and their applications in complex cases including patient assessment, hemodynamic management and the application of specific considerations for managing patients with unique conditions or undergoing complex procedures.
10. **ECLS:** Detailed knowledge of extracorporeal life support therapies and modalities and their applications.
11. **Paediatric/Congenital Perfusion;** Detailed knowledge and understanding of the anatomical and pathophysiological variations encompassing paediatric/congenital perfusion. As well as detailed knowledge of the application of paediatric perfusion techniques and surgical procedures used in the paediatric population.

6.6 Suggested Texts

The following texts are suggested for study for certification examinations;

Gravlee, G. P., Davis, R. F., & Stammers, A. H. (2011). *Cardiopulmonary Bypass* (3rd ed.). Wolters Kluwer Health

Extracorporeal Life Support Organization. (2022). *Extracorporeal Life Support : The Elso Red Book* (6th ed.). ELSO.

Moore, K. L. (2024). *Moore's clinically oriented anatomy* (Ninth edition, revised reprint). Wolters Kluwer.

Read all of the PIRS Reports on the ANZCP Website, to help familiarise yourself with perfusion issues and how problems/issues can be rectified.

The Journal of Extracorporeal Technology (available for free with ANZCP Membership)

Perfusion Journal (available for free with ANZCP Membership)

ANZCP Documents including Standards and Guidelines for Perfusion Practice and Competency Standards

6.7 Guide to approaching certification exams

You will be provided with practice exam content from the Course Coordinator.

Success in the ANZBP exams requires a strategic approach tailored to each format:

MCQS

Solidify your grasp of core perfusion concepts.

Utilise textbooks, course materials, and practice questions to identify areas needing extra focus.

Short Answer Exam

Focus on important perfusion related techniques

It is expected that short answer responses demonstrate a detailed understanding of concepts. Short sentence or dot point style responses will not warrant full marks.

Use Diagrams - labelled diagrams are a great way to show you knowledge and can help supplement your answers.

Viva

A viva is an oral examination where your knowledge and clinical reasoning are evaluated through a conversation with experienced perfusionists from our community.

Examiners will pose questions related to specific cases or scenarios, allowing you to demonstrate your understanding and decision-making abilities.

Think of the viva as an extension of your daily practice. It is designed to assess how you approach real-world scenarios.

The examiners will be paying close attention to:

Pre-bypass Considerations: Be prepared to discuss patient assessment, medical history review, and potential risks.

Communication is Key: Explain your findings, plan of action, and potential complications.

Procedural Expertise: Confidently explain the steps involved in specific procedures, perfusion techniques, your equipment choices, and circuit configuration rationale.

7. Student Expectations

These guidelines outline the expected behaviours for trainee perfusionists throughout their training program. Students are expected to follow both the ANZCP Code of Ethical Practice and Professional Conduct and the ANZCP Competency Standards, which can be found on the College Document part of the ANZCP website [here](#).

Key domains of importance are:

7.1 Provision of Clinical Care

This domain covers the knowledge, skills and attributes a clinical perfusionist needs to practise as a member of the health care team, to develop and manage patient-specific perfusion plans and to safely operate perfusion equipment and instrumentation, to provide safe, high quality, patient-centred care.

- I. Collect, analyse and interpret patient information relevant to planning and clinical decision-making.
- II. Apply knowledge of biomedical and physical sciences and pump and perfusion technology in planning and clinical decision-making.
- III. Use clinical information management systems appropriately.
- IV. Assess the patient's capacity to receive care and prepare patient-specific perfusion plan.
- V. Select and set up appropriate perfusion-related equipment, instrumentation, drugs, fluids and consumables.
- VI. Deliver patient care.
- VII. Prepare, assemble, operate and maintain perfusion equipment and instrumentation.
- VIII. Deliver patient care in accordance with perfusion standards and guidelines.
- IX. Deliver safe and effective administration of pharmaceutical drugs.

In addition to these, it is essential for the trainee, and future perfusionist to:

- to prioritise patient safety and well-being in all aspects of care.
- demonstrate a strong understanding of cardiopulmonary bypass technology and its application in various surgical procedures.
- actively participate in pre-operative assessments, case planning, and post-operative patient management under the supervision of a qualified perfusionist.
- expected to demonstrate proficiency in sterile technique, monitoring equipment operation, and blood conservation strategies.

7.2 Communication and Collaboration

This domain covers the clinical perfusionist's responsibility to communicate clearly, effectively and appropriately with patients and to work effectively with other health practitioners, to provide safe, high quality, evidence-informed and patient-centred care.

- I. Communicate clearly, sensitively and effectively with patients, in accordance with the perfusionist's role in the patient care team.
- II. Collaborate with other healthcare workers and work effectively as part of a multidisciplinary patient care team.

In addition to these, it is essential for the trainee, and future perfusionist to:

- to prioritise patient safety and well-being in all aspects of care.
- use respectful language and avoid discriminatory or offensive remarks
- actively listening to others and acknowledging their contributions.

- be comfortable enough to communicate concerns with your supervisors or if you don't feel comfortable doing something.
- work effectively as part of a team and demonstrating a willingness to help others.
- respect the expertise and experience of senior colleagues.
- accurately and meticulously document all patient care activities as per institutional protocols.

7.3 Professional and Ethical Conduct

This domain covers the clinical perfusionist's responsibility and commitment to act in a professional and ethical manner and to practise within the current medico-legal framework, for the health and wellbeing of their patients and the community. It addresses their responsibility to ensure that patient confidentiality and privacy is maintained at all times, while recognising the potential need to act as patient advocate.

- I. Practise in an ethical and professional manner, consistent with relevant legislation and regulatory requirements.
- II. Treat each patient with respect, dignity and care.
- III. Take responsibility and accountability for professional decisions about patient care.
- IV. Advocate on behalf of the patient, when appropriate.
- V. Seek opportunities to progress the profession.

In addition to these, it is essential for the trainee, and future perfusionist to:

- uphold the highest ethical standards and act with integrity in all interactions with patients, colleagues, and other healthcare professionals.
- maintain confidentiality of patient information and adhere to all relevant privacy laws.
- foster a collaborative and respectful work environment, treating everyone with courtesy and dignity.

7.4 Evidence-Informed Practice and Professional Learning

This domain covers the clinical perfusionist's responsibility to engage in evidence-informed practice and to critically monitor their actions through a range of reflective processes. It also addresses their responsibility to identify, plan for and implement professional development to meet their ongoing professional learning needs.

- I. Resolve challenges through the application of critical thinking and reflective practice.
- II. Identify ongoing professional learning needs and opportunities.

In addition to these, it is essential for the trainee, and future perfusionist to:

- actively engage in ongoing learning activities to stay updated on the latest advancements in perfusion practice. This includes attending educational seminars, workshops, and conferences relevant to the field.
- demonstrate a commitment to self-improvement and a willingness to learn from experienced perfusionists.

7.5 Safety and Risk Management

This domain covers the responsibility of clinical perfusionists to protect patients, others and the environment from harm by managing and responding to the risks inherent in perfusion practice. It also addresses the responsibility for providing safe, effective and high-quality professional services, for the benefit of patients, their families or carers and the patient care team.

- I. Perform and provide safe perfusion practice.
- II. Protect and enhance patient safety.
- III. Implement quality assurance processes to ensure perfusion related equipment and instrumentation are operational and fit for purpose.
- IV. Maintain safety of the workplace.

In addition to these, it is essential for the trainee, and future perfusionist to:

- be aware of the risks to themselves and those around them, including the patient and multidisciplinary team. i.e. handling of blood or cytotoxic material
- understand the consequences of actions to patients/other team members

8. Personal and Professional Development

8.1 Personal Responsibility and Accountability

It is your responsibility to ensure you meet the requirements for your training. Whilst your supervisors are guides and support, the onus of responsibility to submit any required documentation, such as certified copies of your qualification/undergraduate transcript is your own.

It is your responsibility to complete your clinical requirements with the support of your supervisor.

- I. Case requirement
- II. Case observations
- III. Presenting at the ASM Conference

If unsure, please communicate with the Course Coordinator, and they will be able to guide and direct you through certain processes.

Any extenuating circumstances or requests for leniency should be communicated as soon as possible to the Course Coordinator and/or ANZBP Chair.

8.2 Goal Setting and Reflective Practice

It is encouraged to set personal and professional goals throughout your training program.

This could involve setting goals for the number of cases observed or performed, specific skills to master, or areas of knowledge to deepen understanding.

Regular case evaluations, including debriefing, are an important method of reflecting on clinical practice and the development of skills over time. Reflective practice will reinforce strengths and identify weaknesses and allow for the mastery of clinical perfusion techniques, knowledge and communication skills.

8.3 Time Management

Given the nature of a work-based education arrangement, it is important to employ time management skills to balance clinical responsibilities, coursework, and personal commitments.

Certain activities may need to be planned in advanced and it is your responsibility to plan for certain requirements. For example;

- I. ensuring paediatric/adult case observations at another hospital are planned/expenses allocated
- II. Time/expenses are allocated to attend the conference for your presentations

Time management skills that may be useful to employ throughout your training include;

- I. **Planning and Prioritisation:** Develop a weekly or monthly schedule to plan your activities. Prioritise tasks based on deadlines and importance. Utilise tools like calendars, to-do lists, and project management apps to stay organised.
- II. **Setting Realistic Goals:** Break down large projects into smaller, more manageable tasks. Set realistic daily and weekly goals to avoid feeling overwhelmed.
- III. **Time Blocking:** Allocate specific blocks of time for studying, reviewing course content, completing assignments, and completing your clinical responsibilities.

8.4 Stress Management

Perfusion is an incredibly demanding profession with the added responsibilities of critical nature of work, and on-call responsibilities. On top of this, as a trainee, you also have the demands of course work and exams.

Stress is a natural response to these demands but left unchecked, it can lead to burnout.

Here are some strategies to manage stress and maintain well-being:

- I. **Healthy Habits:** Prioritise a healthy lifestyle to support your physical and mental well-being. This includes regular exercise, getting enough sleep, maintaining a balanced diet, and staying hydrated.
- II. **Relaxation Techniques:** Practice relaxation techniques such as deep breathing exercises, meditation, progressive muscle relaxation, or yoga to reduce stress and improve focus.
- III. **Maintain a Support System:** Build a strong support network of friends, family, and colleagues who can offer encouragement and understanding during challenging times.
 - i. The Mentor Program is a great start!
 - ii. Course Coordinator can facilitate quarterly virtual meetings with other students to discuss course work/exam practice
- IV. **Seek Help:** Don't be afraid to seek help from the Course Coordinator or anyone else from the Board or Executive

8.5 Get Involved/Networking

It is in your benefit to join our professional organisation to give you the ability to stay current in the field, discounted annual certification costs, attend conferences at discounted rates to network with other perfusionists.

Membership of the college is found here <https://anzcp.org/membership/>

Trainees receive 1-year free membership.

Attending conferences is a great way to meet other perfusionists and gain contacts to go visit other units for your training.

Contribute to the Gazette, with written articles such as 'around the pump room', day in the life of a trainee or interesting cases you have encountered.

Follow the ANZBP on LinkedIn to keep up to date with things like recertification, research, and perfusion week.

9. Post Certification

9.1 Support/Help

Once you are qualified, the Executive and the Board are still great resources for whenever you need help or support.

9.2 Annual Certification and Continuing Professional Development Program

As a qualified perfusionist, documentation needs to be kept for annual certification which requires CPD points for clinical cases and non-clinical components, such as training/attending conferences. Points are collected according to the calendar year (01 January to 31 December) and submitted in the following year, retrospectively.

The Continuing Professional Development Program can be viewed [here](#) or on the anzcp.org, and states *“Clinical Perfusionists who become certified for the first time by the ANZCP, are required to comply with the CPD requirements in the year in which they become Certified and to demonstrate compliance at Re-Certification. The exception to this requirement, is Clinical Perfusionists who become certified from 1 September onwards in a CPD year and who are only required to comply on a pro rata basis”*

This means, that as a newly qualified perfusionist, you will need to submit your first annual recertification in the first year of practice.

This can include cases that you have already submitted for your trainee case logbook.

9.3 Ability to Supervise

Once you have 2 years of experience post CCP qualification, you will be able to supervise students when you feel you are ready to so. For some, it may take longer, depending on your own confidence and comfort factor of being responsible for trainees.

Liase with team/head of department on your ability to be mentored into educating and training where possible.

9.4 Get Involved with Professional Development

Once you've completed your training, consider ways to stay engaged with the perfusion community. This can include participating in research projects, volunteering for leadership roles on the Executive or Board, contributing articles to the ANZBP Gazette, or advocating for the profession. These opportunities will not only enhance your professional development but also contribute to the growth and advancement of perfusion.

Appendix A

This appendix provides a suggested timeline for completing the case requirements of the perfusion training program. It is intended as a general guide and may vary depending on the individual training program and the complexity of available cases.

Defer to supervisor, as they also may have a tried and tested method of training.

Case prioritisation is important as you will not be eligible to sit certification exams until a minimum of 200 cases and case observations are completed.

Important Notes:

- There may also be a difference in time between gaining a trainee position and when the course commences, so take this into account and adjust for this.
- This timeline is a suggestion and may be adjusted based on individual progress and program structure.
- The complexity of cases performed will increase throughout the training program.
- Trainees should prioritise completing all required number of cases to meet certification eligibility.
- Regular communication with supervisors is crucial to ensure a well-rounded training experience.

Additional Considerations:

- This timeline does not account for case observations required outside the trainee's primary area of practice (e.g. adult vs. paediatric).
- Trainees should factor in time for attending educational conferences, workshops, and completing research projects as required by the program.

By following a structured approach to case completion, trainees can ensure they gain the necessary experience and competency to excel in their future perfusion careers.

Year	Months	Tasks
1	1 - 2	<p>Focus on observation and assisting in a variety of surgical procedures involving cardiopulmonary bypass.</p> <p>With assistance, observe and perform tasks such as:</p> <ol style="list-style-type: none">1. Looking at patient notes and calculate flows and circuit requirements.2. Circuit selection3. Using sterile technique, help building circuits and understanding the different aspects of the circuit.4. Understand the purpose of associated perfusion equipment such as heater coolers.5. Help prime the circuit6. Get familiar with perfusion record keeping7. Cannula selection (flow dynamics/characteristics of cannula) <p>Aim to observe 20-30 cases during this period.</p>

		It could be useful to scrub up for a case to see what is happening at the surgical field, so enable you to understand the importance of what perfusionists do to assist the surgeon.
1	3 - 6	<p>Begin participating in simpler perfusion procedures under direct supervision.</p> <ol style="list-style-type: none"> 1. Performing circuit selection and set up without much assistance. 2. Drawing up drugs 3. Priming circuit 4. Taking lines 5. Dividing lines 6. Performing blood gases/ACTs and performing alterations in response to results 7. Performing record keeping <p>Performing a case can be broken down into the following components, allowing a student to only perform on aspect of the procedure to ensure complete understanding of the component in isolation</p> <ol style="list-style-type: none"> 1. Going onto bypass 2. Cardioplegia delivery 3. Main pump 4. Weaning <p>Begin understanding when blood gases/ACT's need to be performed and performing alterations in response to results.</p> <p>Strive to perform 15 - 25 supervised procedures.</p>
1	7 - 9	<p>Gradually increase responsibility for the following tasks, slowly adding the aspects of bypass together;</p> <ol style="list-style-type: none"> 1. Going onto bypass 2. Cardioplegia delivery 3. Main pump 4. Weaning <p>Target 15 - 25 supervised procedures during this timeframe.</p>
1	10 - 12	<p>Transition towards greater independence of simple procedures (eg. CABG, ASD, AVR etc) under close supervision.</p> <p>Begin managing more of the case with supervisor oversight.</p> <p>Aim to complete 15 - 25 partially independent procedures.</p>
2	1 – 3	<p>Further develop independent decision-making skills under supervision.</p> <p>Manage more complex aspects of cases with supervisor oversight but little intervention.</p> <p>Target 15 - 25 procedures with increasing independence.</p>
2	4 - 6	<p>Focus on refining clinical judgment and technical proficiency, as well as managing communication without much supervisor intervention.</p>

		<p>Manage a majority of the case aspects independently, consulting with supervisor as needed.</p> <p>Aim to complete 25 - 30 independent procedures, with minimal supervision.</p>
2	7 - 9	<p>Solidify independent practice under limited supervision.</p> <p>Begin to perform more complex cases independently (complex valves, aortic procedures, and cases requiring DHCA)</p> <p>Demonstrate competence in managing a wide range of perfusion procedures.</p> <p>Target 30 – 40 independent procedures with minimal supervision.</p>
2	10 - 12	<p>Focus on mastering complex procedures and maintaining clinical skills.</p> <p>Aim to complete 30 – 40 additional cases, prioritising areas requiring further development.</p> <p>Perform perfusion troubleshooting simulations, such as oxygenator changeouts, tubing ruptures etc.</p> <p>Aim to also have case observations completed by this time. Note, the completion of these observations is a eligibility requirement for sitting certification exams.</p>
3		<p>Maintain clinical competency and gain additional experience in areas of interest.</p> <p>Utilise this time to further refine skills, potentially focusing on specific procedures or patient populations.</p> <p>If the minimum of 200 cases has not been completed by this point, priority should be made to complete the clinical logbook.</p> <p>If the minimum of 200 cases has been completed, continue to fill out the logbook with all cases completed until presenting for CCP exams. This is to capture all cases performed during the training period.</p>

Appendix B – Progress Checklist

Print/Use this document for your own reference of your progress and tick off tasks as completed

Trainee Documentation		Date
Submit Trainee Registration Form and following associated documents		
Certified copy of your identification		
Certified copy of undergraduate degree qualification		
Certified copy of undergraduate degree transcript		
Certified copy of postgraduate Perfusion degree qualification		
Certified copy of postgraduate Perfusion degree transcript		
Cases Documentation		
Submit case evaluation, reflection and logbook at 20 cases		
Submit case evaluation, reflection and logbook at 40 cases		
Submit case evaluation, reflection and logbook at 60 cases		
Submit case evaluation, reflection and logbook at 80 cases		
Submit case evaluation, reflection and logbook at 100 cases		
Submit case evaluation, reflection and logbook at 120 cases		
Submit case evaluation, reflection and logbook at 140 cases		
Submit case evaluation, reflection and logbook at 160 cases		
Submit case evaluation, reflection and logbook at 180 cases		
Submit case evaluation, reflection and logbook at 200 cases		
Complete and submit completed logbook (including observations)		
Submit signed supervisor logbook declaration		
Case Observations		
Organise 10 case observations at a paediatric/adult unit (opposite to own unit)		
Complete 10 case observations		
Complete and submit case observation reflections		
Organise a minimum 5 case observations at another unit/s		
Complete a minimum 5 case observations at another unit/s		
Complete and submit case observation reflections from another unit/s		
Research project		
Determine the research project topic and begin to complete		
Submit abstract to ANZCP when ASM call for abstracts occur		
Present your research findings at the Annual Scientific Meeting of the ANZCP		
Ensure leave for conference/pay for conference		
Perfusion disaster simulations with your supervisor or at ASM Simulation Session		
Changing out an oxygenator		
Responding to a pump boot rupture		
Crashing back onto bypass		
Attending the ASM Simulation Course (optional but strongly encouraged)		
Prior to Certification Exams		
Completing practice exam material under exam conditions		
VIVA Exam Practice with supervisor/unit		
Visiting other units to see other perfusion practices that may be examinable		
Payment of CCP Exam Fees		

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