

Education Services Policy

1. Purpose of Policy

This policy aims to provide a robust and efficient system to support ongoing quality and continuous improvement of academic processes and outcomes. This policy will provide a framework for action to address the provision of education services for trainees undertaking the study of medical perfusion with ASMP, University of Melbourne and their training hospital.

2. Definitions/Key Terms

- ▶ ANZCA Australian and New Zealand College of Anaesthetists
- ▶ FANZCA Fellowship of ANZCA
- ▶ HLM Heart lung machine
- ▶ ASMP Australasian Society of Medical Perfusion Inc
- ▶ Unit Accredited teaching hospital.

3. Objectives

ASMP has the aim of educating medical perfusionists in the high quality, contemporaneous practice of medical perfusion. This will be conducted through the combination of an online theoretical training course combined with supervised practical training in an accredited hospital with a designated supervisor of training.

Evaluation of trainees will occur with a written exam at the conclusion of the theoretical course and continuous evaluation of practice in the training hospital by the supervisor of training.

4. Academic Framework

There will be two streams for training. Firstly, there will be the theoretical component conducted through the University of Melbourne, comprising of four subjects that can be completed over a 1 – 2 year period. Trainees may participate in only this component of the training and upon successful completion will be given a letter attesting to their theoretical understanding of medical perfusion.

Secondly there will be the theoretical combined with practical training. Entry to this stream is the same as that described above. Note that ASMP does not offer or control the training jobs required to complete the practical training. It is the responsibility of the trainee to arrange this aspect of their training. ASMP will oversee the process and award certification upon successful completion of the training.

To ensure quality of academic outcomes, there are several key considerations:

- ▶ Accreditation of hospitals that can serve as training institutions (including the procedures that must be in place for educating a medical perfusionist).
- ▶ Approval of a designated training supervisor at the accredited hospital.
- ▶ Determining suitability of the trainee
- ▶ Defining the training process the trainee is required to follow.

The standards used in accrediting hospitals and assessing trainees will be modelled on those defined in Guideline PS27, as produced by ANZCA. The guideline was authored by the members of ASMP who are practicing medical perfusion in conjunction with the college council.

Guideline PS27 represents what can be defined as the acceptable standards for medical perfusion and refers to the standards of the hospital, the training of medical perfusionists and continued maintenance of standards, the management of the heart-lung machines and the maintenance of clinical standards. The standards are the primary source used for defining the education services policy of ASMP.

5. Hospital Accreditation

The following criteria is mandatory for a hospital to be accredited as a training institution:

- ▶ A designated head of perfusion services who should be a currently practicing medical perfusionist, preferably with an additional registration as a specialist anaesthetist.
- ▶ The unit must have policies in place to guide the key components of running a perfusion service. These must include policies for the management of major extracorporeal emergencies.
- ▶ The unit must be adequately staffed with the ability to offer a comprehensive after-hours service, maintenance of equipment and the conduct of appropriate clinical audit activities.
- ▶ The unit must have adequate physical facilities for the storage of equipment and place to setup and clean the equipment used.
- ▶ The unit should have appropriate facilities and mechanisms to store patient records.
- ▶ The unit should have secretarial facilities and assistance.
- ▶ The participation in research is desirable but not essential.

Hospital accreditation will be conducted through the completion of an online form requesting the relevant information. This process will be conducted every 5 years.

5.1. Training Supervisor Responsibilities

The head of the unit will be the designated training supervisor, with the responsibility of ensuring that each trainee is being trained to the standards required. The supervisor will ensure that:

- ▶ The trainee is registered and participating in the theoretical online training course with the University of Melbourne
- ▶ The trainee is allocated to appropriate lists and provided with adequate supervision.
- ▶ The trainee is interviewed after completing a minimum of 25 cases to ensure they are performing adequately and demonstrating the ability to continue with the training program.

Note that the trainee is required to complete a total of 75 cases to successfully complete the program.

Following the interview, the training supervisor may request for the trainee be removed from the training program if they are unable to meet the required performance criteria.

If completion of 75 cases is not feasible within the designated timeframe, the training supervisor may arrange for the trainee to work in another non-accredited hospital under appropriate supervision.

5.2. Trainee Pre-Requisites

Trainees will be required to have the requisite understanding of physiology, pharmacology and pathophysiology before embarking on the training. This is represented by having completed specialist training in anaesthesia (FANZCA) or equivalent.

Equivalent specialist qualifications include intensive care, cardiac surgery or cardiology. Under certain circumstances, advanced trainees in these disciplines will be permitted to commence their training before completion of the specific speciality.

5.3. Training Process

Each trainee is required to:

- ▶ Register with ASMP and the University of Melbourne.
- ▶ Complete the practical training over a period of not less than 1 year, and no more than 2 years.
- ▶ Undergo an interview by the training supervisor after the performance of a minimum of 25 cases.

The trainee must satisfy the training supervisor that they are making satisfactory progress in gaining the skills required to operate a heart-lung machine. At this stage it will include the ability to set-up and prime a circuit, connect the circuit to a patient, commence cardiopulmonary bypass and be able to wean an uncomplicated patient from bypass without excessive intervention from the supervisor. If the trainee is not demonstrating progress, they may be asked to leave the training program.

The training period will include:

- ▶ The performance of 75 cases (under supervision). Initially the supervision is direct and the trainee will require frequent input from the supervisor but as the experience of the trainee increases, it is expected that they will be able to move gradually to independence with minimal input from the supervisor.
- ▶ Maintenance of a logbook during the training period.
- ▶ Participation in simulated education that includes the performance of major emergency scenarios.
- ▶ Participation in audit and morbidity and mortality activities of the hospital unit.

Upon completion of the training period the trainee will be required to participate in an exit interview, during which the training records will be reviewed and a verbal examination conducted by the supervisor. The aim of the examination is to ensure the trainee has gained the requisite knowledge and abilities to conduct the practice of medical perfusion independently.

5.3.1. Trainees engaged in learning medical perfusion prior to 2018

Prior practical experience will be recognised if it is deemed appropriate. Further training will be conducted under the supervision of the trainer and they will fulfil the training criteria listed above.

These trainees are still required to register with ASMP and the University of Melbourne.

6. Certification

Trainees and currently practising medical perfusionists meeting the criteria described will be awarded a Certificate in Medical Perfusion (ASMP). This certificate will provide evidence that the medical perfusionist has the requisite theoretical knowledge and practical skills to safely operate a heart lung machine in the practice of cardiopulmonary bypass.

7. Continuing Professional Development

Medical practitioners wishing to maintain their practice will be required to satisfy the requirements of the ANZCA continuing professional development program.

These requirements include:

- ▶ Operating the HLM in 40 cases per annum (20 of which must be performed by the practitioner).
- ▶ Participation in a quality assurance program.
- ▶ Simulation and participation in an audit of outcomes.

8. ASMP Executive Committee

The executive committee of ASMP is elected on a biennial (two-yearly) basis at the ASMP general meeting. The committee will be responsible for setting the educational standards and directing the process. The committee will also be responsible for awarding the certification in medical perfusion and all other related activities.

9. References and Related Documents

Australian and New Zealand College of Anaesthetists (ANZCA). (2015). PS27 Guidelines for Major Extracorporeal Perfusion.

Australian and New Zealand College of Anaesthetists (ANZCA). (2015). PS27 BP Guidelines for Major Extracorporeal Perfusion. *Background Paper*.

Policy Administration		
Department	Responsible Person	Next Review Date
Version	Change Effected	Date of Change