

EACTAIC-ESAIC Consensus Statement on Adult and Paediatric Fellowship Training in Cardiothoracic and Vascular Anaesthesia and Intensive Care

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Background

Cardiothoracic and vascular anaesthesia is a subspecialty of anaesthesiology dedicated to perioperative care of patients undergoing cardiac, thoracic and vascular surgery and related interventional procedures. [1] Paediatric cardiac anaesthesia is a subspecialty of cardiac and paediatric anaesthesiology dedicated to perioperative care of patients with congenital heart disease (CHD) ranging in age from the neonatal period to adulthood. [2]

The European Society of Anaesthesiology and Intensive Care (ESAIC), the leading European society in the field, provides high-quality training and education in adult and paediatric anaesthesia and intensive care, endorsed by a robust and uniform system of examination aiming to prepare the anaesthesiologist with the knowledge and skills needed to provide the best care for their patients. [3]

The European Association of Cardiothoracic Anaesthesiology and Intensive Care (EACTAIC), the leading European specialised society in cardiac, thoracic, and vascular anaesthesia and intensive care, supports a well-grounded training specifically in cardiac, thoracic and vascular anaesthesia as well as critical care in the form of

- (A) the *Adult Cardiothoracic and Vascular Anaesthesia and Intensive Care [CTVAIC] Fellowship Programme*, which comprises of 12-month Basic and Advanced Certification, currently in 16 institutions that EACTAIC has accredited to date. It aims to improve the quality of perioperative patient care by promoting and harmonising both training and education in cardiac, thoracic and vascular anaesthesia and critical care within Europe and beyond. [1]
- (B) the *Paediatric Cardiac Anaesthesia [PCA] Fellowship Programme*, providing 12-months of training in PCA, is currently delivered in 3 institutions that EACTAIC has recognised to date. It aims to educate anaesthesiologists to follow a defined training programme that will improve their knowledge and skills in the perioperative care of patients with CHD. [2]

The details of the recognised hosting centres for the EACTAIC adult and paediatric fellowship programmes can be accessed on the EACTAIC website. [4] [5]

The EACTAIC fellowship training is open to all physicians irrespective of their country of origin, age, religion, gender or sexual orientation. [1] [2]

In most European countries, anaesthesia is recognised by the regulatory authorities as a single speciality, and a diploma or other qualification is provided in recognition of specialist status to identify qualified specialists. This ensures equal standards throughout a given nation-state. Alternatively, a national specialist qualification may be awarded by a single authority or College. [6]

The basic qualification in anaesthesia is the only qualification recognised by the national regulatory authorities, [6] EACTAIC and ESAIC have no current intention to change this rule. However, a number of jurisdictions recognise the value of additional subspecialty training. With this in view, both societies will recognise the graduates from the accredited EACTAIC training programmes. This recognition is a confirmation that these graduates have good standing knowledge, skills, and experience in adult CTVAIC and PCA.

History of Developing the Consensus.

There is a history of collaboration between EACTAIC and the ESAIC as represented in the agreement drafted by Feneck et al. [6] and the Memorandum of Understanding signed by the two societies in Vienna, June 1st, 2019. The current consensus between EACTAIC and ESAIC builds on previous discussions between the two societies.

Objectives

This document is a consensus statement between the EACTAIC and ESAIC on the structure and standards for high-quality Fellowship level education and training appropriate for specialised practitioners in "Adult" cardiac, thoracic, and vascular anaesthesia and intensive care (CTVAIC)" and "Paediatric cardiac anaesthesia (PCA)".

The ESAIC will recognise the EACTAIC certification for anaesthesiologists who have completed the required training at accredited EACTAIC centres hosting Fellowship programmes. EACTAIC would guarantee that the graduates of these programmes meet the training standards required by the CTVAIC and PCA curricula.

Benefits of this consensus

- Training in cardiothoracic and vascular anaesthesia education will become more harmonised across Europe.
- National and international collaboration in cardiothoracic, vascular and paediatric cardiac anaesthesia will increase under the aegis of the ESAIC and EACTAIC.
- The profile of ESAIC and EACTAIC will be enhanced as two thirds of current Fellows come to EACTAIC fellowship centres from countries that do not offer structured specialist training in cardiothoracic and vascular anaesthesia.
- The programme is an incentive for specialists and trainees in cardiothoracic, vascular and paediatric cardiac anaesthesia to become members of ESAIC and EACTAIC.
- Members of ESAIC who have a paediatric certificate will find access to the EACTAIC PCA helpful for their future professional activities.

Duration of Fellowship Training

The CTVAIC fellowship programme has a overall duration of 12-to-24-months.[1] The programme comprises two sequential and complementary levels of training referred to as Basic and Advanced. Each level consists of 12-months of training. Advanced training is optional and may be undertaken at a different centre to basic training as described below. The Basic training year includes a basic training rotation in the operating room as well as in the intensive care unit (ICU) or postoperative anaesthesia care unit (PACU) where the fellow provides care for patients undergoing cardiac, thoracic, and vascular surgery. It is expected that fellows have received previous training in a general ICU. Advanced training in cardiothoracic and intensive care can be undertaken as part of an advanced fellowship.

The PCA fellowship training programme has a total duration is 12 months of continuous, uninterrupted training, including a one-month rotation through the Paediatric Intensive Care Unit (PICU). [2]

Where training is interrupted by illness, maternity or paternity leave or other circumstances, the Board of Directors and EduCom of the EACTAIC have approved a list of suggested solutions for mitigation of the interruption in fellowship training. [1, 2]

The details on the structure, certification processes, learning objectives, knowledge, skills, and competencies required, assessment of the fellows, exit interviews and evaluation of the programme can be accessed on the EACTAIC Adult CTVAIC and PCA curriculums which are updated two-yearly. [1] [2]

Requirements of Recognition of the EACTAIC Hosting centres

Hosting centres are regulated as per the White Paper of the EACTAIC's Board of Directors. [7] The criteria are also given in the application forms to host the adult and paediatric fellowship programmes. [8] [9] A summary of these regulations is as follows;

- The EACTAIC host centre should fulfil the number of annually performed cases in each speciality accredited. [1-2, 7-9]
- EACTAIC can accredit the host centres to offer training in CTVAIC or only in cardiac, cardiothoracic, cardiovascular, or thoracic and vascular anaesthesia if the host centres cannot guarantee sufficient case numbers in a selected group. In the latter cases, the 12 months of basic training is devoted to the specialities offered. This approach applies to the basic and the advanced CTVAIC fellowship programme.
- EACTAIC encourages collaboration between accredited host centres. This includes exchanging fellows for predetermined periods of the advanced cardiac, thoracic and vascular anaesthesia training programme if appropriate facilities are lacking in specific host centres or a host centre cannot guarantee sufficient case numbers in a selected group to fulfil fellowship training requirements.
- The EACTAIC host centre must provide authorisation for the fellow to deliver direct patient care during their training programme, under the supervision of the legal representative of the hosting institute. "i.e., hands-on practice".
- There should be a signed consensus between the hosting centre and trainee regarding both parties' financial arrangements and responsibilities.
- Local and national hours directives should be adhered to. Overtime work must be compensated.
- The head of the department of the hosting centre must approve participation in the accredited EACTAIC fellowship programme.
- Structured site visits by two EACTAIC officers are mandatory for accrediting all applying hosting centres. [7]
- Recognition is typically granted for up to four years for all hosting centres.
- Re-recognition is regularly considered every four years based on the fellows' evaluation and feedback reports from the graduates. A site visit might be required for reaccreditation if the fellows' evaluation and feedback reports are unsatisfactory.

Matching the Candidates [1-2]

- Before being accepted as a fellow, candidates must have a valid license to practice medicine and a specialist degree qualification in anaesthesiology which is recognised in the host country.

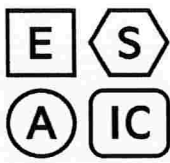
- Candidates must be members of EACTAIC and associate ESAIC members in good standing.
- Appropriate language skills are required per national and international regulations as defined by the host centres (generally level B2 or as per national regulations).
- Applying candidates to the EACTAIC PCA fellowship programmes must provide evidence of their prior "fellowship training" or "work experience" in A) adult cardiac anaesthesia for a minimum of 1 year and B) general paediatric anaesthesia for a minimum of 1 year at a nationally or internationally recognised centre with dedicated care for this patient population. Ideally this training will have taken place within the framework of a fellowship, e.g., adult cardiovascular and thoracic (CVTA) fellowship programme of EACTAIC. [2]
- Candidates are selected by the local programme directors and faculty members. Selection is by application form and interview. ESAIC and EACTAIC strongly support equal opportunities and local and national standards for transparency and equality of access must be followed.

Responsibilities of the Programme Directors and Faculty Members. [1, 2, 7, 10]

- The programme directors and faculty members, and trainees should be in good standing with regards to EACTAIC and ESAIC membership throughout the duration of accreditation.
- A mentor who may be the programme director, a faculty member, or a supervising consultant in charge, must personally provide the fellow with one-on-one clinical supervision during the first four months of training. Supervision of the fellow by a mentor should then become more remote, however, with the mentor available within a reasonable period.
- The programme director and a minimum of two faculty members declare in writing that they will dedicate sufficient time (i.e., minimum 10% of working time) to attend to their responsibilities.
- At least one of the faculty must be certified in transoesophageal echocardiography (TOE) (e.g., EACVI-EACTAIC joint accreditation, Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC) or National Board of Echocardiography (NBE)).
- The programme director should notify the EACTAIC educational chair if there is (a) a new starting fellow, (b) a new nominated programme director or faculty member, (c) if any trainee does not complete fellowship training for any reason, or (e) there is a change in the national or local regulations or requirements. This is done by making changes to a standard reporting spreadsheet which has been developed to reduce the administrative burden associated with the fellowship programme.
- The programme directors should submit a regular standard structured documentary evaluation for each fellow at least once every four months or at the end of each advanced rotation.
- The programme directors should ensure that the fellow keeps records of all Clinical and Educational activities in a monthly portfolio or logbook.

Evaluation of the Fellows. [1, 2, 10]

- At four-month intervals and at the end of each training rotation or at the end of advanced training modules, the faculty members who are responsible for training submit to the



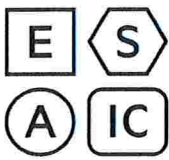
CTVAIC Programme Director a critical evaluation of competencies that fellows have acquired using a standardised format including:

- Anonymised record of patients managed by fellows during their fellowship. (eLogbook).
 - Reports of TOE exams that must comply with the European Association of Cardiovascular Imaging (EACVI) reporting requirements
 - Results of the evaluations on clinical skills.
 - Personal reports from the faculty (if available).
 - Reflection and self-assessment by fellows.
 - Learning goals for the next four months.
 - Feedback from fellows on the quality of the education and any aspects of the curriculum that are not being addressed by their training.
- Fellows are required to undertake 360-degree evaluation.
 - The evaluations are designed to assess the level of knowledge, clinical judgment and psychomotor skills, and specific procedural skills needed for patient management and critical analysis of clinical situations.
 - To receive certification, fellows must obtain a satisfactory overall evaluation on completing their basic training.
 - Fellows must pass the external structured evaluation/assessment by two external interviewers at the end of each training year. This may be undertaken virtually.

Evaluation of the Programme and Quality Improvement. [1, 2, 10]

- The fellows provide confidential written evaluations of the faculty and programme to the EACTAIC educational chair.
- The fellows who experience difficulty during the training period may turn for advice to their programme director, faculty members, or the head of the department at their host centre.
- The fellows can contact the EACTAIC educational chair with general questions via email, telephone or in-person.
- Participation in quality assurance activities including clinical audit is mandatory. The fellows must be involved in continuous quality improvement and risk management. [1-2]
- The fellows will actively participate in the periodic evaluation and reassessment of the fellowship training goals and objectives.
- Should unforeseen circumstances arise, such as a personal conflict between a fellow and one or more tutors, this should be reported immediately to the educational chair. The board of directors then has the right to appoint an independent EACTAIC officer as a "mentor" to assist and help resolve the circumstances and protect both parties.
- Should a conflict arise, for example, between fellow and Programme Director or Programme Director and EACTAIC Education Committee, then de-escalating measures will be instituted. Restrictions may only be placed on a hosting centre if all avenues to resolve disputes have been exhausted.
- EACTAIC undertakes measures for (1) quality assurance after completion of the fellowship Programme, including the collection of feedback from all graduates; (2) a graduate questionnaire to facilitate the search for suitable post-graduate job opportunities and; (3) reaccreditation of host centres every four years to ensure maintenance at the required educational standard. [1-2]

EACTAIC Fellowship Certification [1-2]



- EACTAIC recognises the completion of the 12-months training periods as either a Basic EACTAIC adult fellowship, advanced EACTAIC adult fellowship, or EACTAIC PCA fellowship.
- EACTAIC will issue the training certificate after completing the 12 months of dedicated training and after passing the exit interview.
- Completing the EACTAIC basic fellowship training is a prerequisite for progression to the EACTAIC advanced fellowship training programme.
- Fellows may undertake advanced training either at the host centre where basic training has been completed or at any of the other institutions accredited by EACTAIC.
- Extended absence from training due to sick leave or personal circumstances will require a proportionate extension of the training period to meet the minimum required training rotations, caseload, and competency levels.
- EACTAIC educational chair may allow suspension of the training programme for a maximum of 12 months in cases of legitimate prolonged sick or personal leave or absence.
- Appeals for exceptional circumstances because of illness or personal circumstances that have resulted in repeated or prolonged interruption of training will be reviewed by the EACTAIC educational chair or forwarded to their delegates for arbitration.
- The certificate of completion of the EACTAIC fellowship will be countersigned by the host site's programme director or chief of the anaesthesia department and EACTAIC's educational chair and president.

Shaping the updated proposed "EACTAIC-ESAIC Consensus" on Fellowship Training in CTVAIC and PCA

EACTAIC commits to

- maintain a host centre database.
- provide quality assurance/accreditation/reaccreditation.
- communicate with centres and fellows and provide feedback.
- regularly update the EACTAIC curriculums according to the needs of the fellows and faculty's feedback.

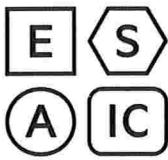
ESAIC commits to

- Recognise the graduates from the EACTAIC fellowship programmes at the accredited host centres.
- Countersign the EACTAIC accreditation certificates to the host centres.
- Countersign the EACTAIC graduation certificates.
- ESAIC will be updated on the maintenance and improvement of the quality of the EACTAIC fellowship training through periodic updates from the EACTAIC educational chair on the status of training fellows, an anonymous summary of the graduates' feedback, and the progress of the programmes, and new accredited training host centres. In case of concerns, both boards will liaise to discuss.

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