



# Australasian College for Emergency Medicine Training and Assessment Review

## Recommendations for Change

### Document Background

The ACEM Training and Assessment Review began in early 2010 when there was an extensive consultation process which included a widespread call for submissions and a set of focus-groups.

The consultation process highlighted a number of themes calling for:

- Greater structure.
- More clinical focus.
- Clear learning outcomes.
- Improved relevance of assessments.
- More emphasis on non-technical skills.

The identified goals of the review process were:

- The development of a curriculum framework based on a competency-based methodology.
- The alignment of teaching, learning and assessment within the curriculum.
- Organisation of learning content that provides a sequential approach to knowledge and skill development.
- Greater emphasis on non-clinical skills and appropriate assessment to address these competencies.
- An educationally-sound curriculum document which includes all of the identified key elements.

The results of the consultation process were made available via the College website and have been used to form the basis of the outcomes from the review:

- A draft Curriculum Framework for Emergency Medicine
- A set of recommendations for change to the ACEM Training Programme

### Document Contents

This document contains the Recommendations for Change developed by the ACEM Training and Assessment Review Working Group (TARWG) during the review process. These recommendations were accepted by the ACEM Board of Education (BoE) and by ACEM Council at their meetings in July 2011.

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## Recommendations for Curriculum Change

### 1. General

- 1.1. That the ACEM Training Programme will continue to prepare trainees for the full scope of contemporary practice of Emergency Medicine in Australasia.
- 1.2. That the ACEM will continue to emphasise clinical application and relevance of all aspects of the ACEM Training Programme.
- 1.3. That the ACEM will work towards increasing its role as an education provider for trainees.
- 1.4. That the ACEM will work towards delivering educational content, resources and assessments in the online environment; where this format is feasible, cost-effective and educationally sound.

### 2. Curriculum Framework

- 2.1. That a 'Curriculum Framework for Emergency Medicine' be developed to:
  - 2.1.1. explicitly define, all aspects of contemporary practice of FACEMs.
  - 2.1.2. provide an organised set of learning outcomes and competencies which define the scope of content to be learned, taught and assessed in the ACEM Training Programme.
- 2.2. That the Curriculum Framework for Emergency Medicine include the following domains of practice:
  - 2.2.1. Medical Expertise
  - 2.2.2. Prioritisation and Decision-making
  - 2.2.3. Communication
  - 2.2.4. Teamwork and Collaboration
  - 2.2.5. Leadership and Management
  - 2.2.6. Health Advocacy
  - 2.2.7. Scholarship and Teaching
  - 2.2.8. Professionalism
- 2.3. That the ACEM recognises the need for a curriculum that has appropriate balance and emphasis of all domains within the Curriculum Framework for Emergency Medicine.
  - 2.3.1. That ACEM recognises that emphasis has previously been given to the domain of Medical Expertise and that this should be balanced with development in the other domains in the future.
- 2.4. That the Curriculum Framework for Emergency Medicine be used to plan and deliver all aspects of the ACEM Training Programme (including: content; teaching and learning resources; and assessments).

### 3. Curriculum Structure

- 3.1. That the current structure of the ACEM Training Programme be retained (see Appendix A).

### 4. Assessments

#### 4.1. General

- 4.1.1. That the overall assessment load within the ACEM Training Programme will need to be regularly reviewed to ensure it remains appropriate.
- 4.1.2. That the overall assessment regime in the ACEM Training Programme will include all domains in the Curriculum Framework for Emergency Medicine.
- 4.1.3. That, where appropriate and feasible, the ACEM will work towards ensuring trainees receive feedback for all assessments within the training programme, whether summative or formative in nature.

#### 4.2. Examinations

- 4.2.1. That the Primary and Fellowship Examinations be retained.
- 4.2.2. That the content of the Primary and Fellowship Examinations be subject to continuous regular review and be updated to ensure clinical and practical relevance.
- 4.2.3. That the Primary and Fellowship Examinations be aligned with, and representative of, the Curriculum Framework for Emergency Medicine.
- 4.2.4. That the Primary Examination be amended as follows:
  - 4.2.4.1. That the subjects assessed within the Primary Examination be retained (i.e. Anatomy, Pathology, Physiology, Pharmacology)
  - 4.2.4.2. That the written component be constructed as follows:
    - 4.2.4.2.1. That the written component be retained as separate subject papers.
    - 4.2.4.2.2. That the written component be conducted online.
    - 4.2.4.2.3. That the written component be conducted twice per year.
    - 4.2.4.2.4. That the requirement for invitation to the clinical component be amended to require a trainee to achieve a pass in the written component for each of the four subjects.
  - 4.2.4.3. That the clinical component be constructed as follows:
    - 4.2.4.3.1. That the clinical component of the exam be conducted twice per year.
    - 4.2.4.3.2. That the format of the clinical component of the exam be designed to assess the trainee's ability to clinically integrate and apply the knowledge of all four subjects to a number of clinical scenarios.
      - 4.2.4.3.2.1. The TARWG suggests that a SCE format be considered for the clinical component.

- 4.2.5. That the components of the Fellowship Examination be amended as follows:
- 4.2.5.1. That the written component be amended as follows:
- 4.2.5.1.1. That the quality of the selected-response format questions be improved by increasing clinical relevance and considering the suitability of other items formats (e.g. EMQs).
- 4.2.5.1.2. That the SAQs and VAQs be removed and replaced with other, more feasible and clinically applied forms of assessment.
- 4.2.5.1.2.1. The TARWG suggests investigation and evaluation of how the learning outcomes currently assessed in the SAQs and VAQs could be better assessed with a combination of:
- 4.2.5.1.2.1.1. Improved questions in the written component of the Fellowship Examination.
- 4.2.5.1.2.1.2. Improved and expanded SCEs in the clinical component of the Fellowship Examination.
- 4.2.5.1.2.1.3. WBAs during Advanced Training.
- 4.2.5.2. That the clinical component be amended as follows:
- 4.2.5.2.1. That the Long and Short Cases be replaced with other, more feasible forms of assessment; with a view to increasing validity and reliability.
- 4.2.5.2.1.1. The TARWG suggests investigation and evaluation of how the learning outcomes currently assessed in the Long and Short Cases could be better assessed with a combination of improved and expanded SCEs and WBAs during Advanced Training.
- 4.2.5.2.2. That the SCEs be improved and expanded in number.
- 4.2.5.2.2.1. The TARWG suggests investigation of improvements such as simulation, standardised-patients and assessment of non-technical skills.
- 4.2.5.2.3. That the blue-print for the SCEs covers the whole Curriculum Framework for Emergency Medicine, with appropriate weightings for each of the domains.
- 4.2.5.2.3.1. The TARWG has considered the recommended assessment regime for the revised training programme as a whole, and suggest that the following areas are most appropriately blueprinted to the Fellowship Exam SCEs, to ensure assessment of these skills are covered:
- 4.2.5.2.3.1.1. teaching skills.
- 4.2.5.2.3.1.2. health advocacy skills.
- 4.2.5.2.3.1.3. critical research literature appraisal and the application of evidence-based medicine.

### 4.3. Workplace-based Assessments (WBAs)

- 4.3.1. That a suite of WBA tools be selected and developed for use in Advanced Training.
- 4.3.2. That trainees be required to complete WBAs at regular intervals throughout Advanced Training.
- 4.3.3. That WBAs will be conducted by local WBA assessors.
- 4.3.4. That there should be an investigation of the utility (including educational impact, feasibility, acceptability and resources required) of conducting externally assessed WBAs at specific points during Advanced Training.
- 4.3.5. That each WBA conducted will include feedback to the trainee from the WBA assessor.
- 4.3.6. That all WBA assessors must have completed appropriate training provided by the ACEM.
- 4.3.7. That WBA assessors must be a FACEM, a Fellow from the College relevant to the term being undertaken by the trainee, or an assessor pre-approved by ACEM.
- 4.3.8. That the WBAs be included as part of the summative assessment load for Advanced Training.
  - 4.3.8.1. That successful completion of the WBA requirements be based on a trainee's performance across a specified number of assessments (i.e. not necessarily requiring a 'pass' in each WBA instance).
  - 4.3.8.2. That further work be conducted to determine the best way to integrate the WBAs as part of the overall summative assessment load and their relation to progression rules.
- 4.3.9. That successful completion of a specified proportion of the WBA requirements for Advanced Training will be a requirement for eligibility to sit the Fellowship Examination.
- 4.3.10. That the introduction of WBAs be carefully monitored for its utility and overall impact on trainee learning.

### 4.4. Annual Record of Training - Basic Training

- 4.4.1. That the requirement for an annual training assessment in Basic Training, via the submission of the Annual Record of Training Form, be retained.
- 4.4.2. That the Annual Record of Training Form be updated to align to the Curriculum Framework for Emergency Medicine.

### 4.5. Structured References – Provisional Training

- 4.5.1. That the Structured References process be retained.
- 4.5.2. That the Structured Reference Form be updated and aligned with the Curriculum Framework for Emergency Medicine.

#### 4.6. In-Training Assessments - Provisional and Advanced Training

- 4.6.1. That the current ITA process be retained.
- 4.6.2. That the ITA process continues to be conducted in the online environment, via the Online Training Assessment program (with the exception of trainees in approved overseas posts).
- 4.6.3. That the ITA form be updated and aligned with the Curriculum Framework for Emergency Medicine.

#### 4.7. Trainee Research Requirement - Advanced Training

- 4.7.1. That the Trainee Research Requirement be retained (see Appendix B).
- 4.7.2. That the clinical component of the Fellowship Examination will also include assessment of the trainees' ability to critically appraise literature and apply evidence-based medicine.

#### 4.8. Paediatric Requirement - Advanced Training

- 4.8.1. That the Paediatric requirement be retained (see Appendix C)
- 4.8.2. That the logbook for the Paediatric requirement be moved online as part of the ACEM e-portfolio for trainees.

#### 4.9. Special Skills Logbooks - Advanced Training

- 4.9.1. That the Special Skills Logbooks be retained (see Appendix D)
- 4.9.2. That the Special Skills Logbooks be moved online as part of the ACEM e-portfolio for trainees.

### 5. Clinical Time Requirements

- 5.1. That the definition of an ACEM clinical training 'term' is retained (see Appendix E).
- 5.2. That the leave allowances during training be retained (see Appendix F).
- 5.3. That the current overall clinical training time requirements for Basic, Provisional and Advanced Training are retained (see Appendix G).
- 5.4. That the mix of clinical training time requirements within each stage of training be reviewed and revised:
  - 5.4.1. throughout the curriculum revision process, to ensure alignment with any changes to training requirements; and
  - 5.4.2. on a regular cycle in relation to on-going curriculum change as well as workplace and workforce changes
- 5.5. That the ACEM will work towards including clearly defined learning outcomes for clinical terms in ACEM training, including training time spent outside the ED.

5.6. That the ACEM will investigate alternative options for the attainment of learning outcomes currently achieved through mandatory posts outside the ED (e.g. intensive care medicine and anaesthesia).

5.6.1. The TARWG suggests using a combination of simulation, structured clinical activities, volume of practice requirements and online learning resources to supplement the current methods of attainment of learning outcomes in these posts.

5.6.2. The TARWG also suggests investigation of expanding training site options for ACEM trainees beyond those currently accredited by the relevant Colleges (e.g. ANZCA and CICM).

## 6. Progression

6.1. That requirements to progress from Basic Training to Provisional Training be reviewed as follows:

6.1.1. That the current requirements are retained:

6.1.1.1. Completion of the required clinical training time for Basic Training (*retained*).

6.1.1.2. Submission of satisfactory Annual Record of Training Forms during Basic Training (*retained*).

6.1.2. That the TARWG suggests investigation and evaluation of whether the following additional requirements are feasible and acceptable:

6.1.2.1. Satisfactory Advanced and/or Basic Life Support (ALS/BLS) certification within the two years prior to progression.

6.1.2.2. Satisfactory completion of a 10-week accredited Emergency Department term.

6.2. That the requirements to progress from Provisional Training to Advanced Training be retained (see Appendix H).

6.3. That the requirements to progress from Advanced Training to becoming a FACEM be amended to the following:

6.3.1. Completion of the required clinical training time for Advanced Training (*retained*).

6.3.2. Completion of the Paediatric requirement (*retained*).

6.3.3. Satisfactory completion of the Trainee Research Requirement (*retained*).

6.3.4. Satisfactory In-Training Assessments (*retained*).

6.3.5. Satisfactory completion of WBAs throughout Advanced Training (*additional*).

6.3.6. Satisfactory completion of the ACEM Fellowship Exam (*retained*).

6.3.7. Successful election to Fellowship (*retained*).

## 7. Retrospective Accreditation of Training

7.1. That the maximum amounts of retrospective accreditation for Basic and Provisional Training be retained (see Appendix I).

7.1.1. That the ACEM continue to review, revise and formalise retrospective accreditation for Advanced Training (see Appendix I), with a view to increasing capacity to accept trainees with comparable previous training.

## 8. Resources

### 8.1. Online Learning Portfolio

- 8.1.1. That the ACEM will work towards trainees using an online learning portfolio to document their learning during training
- 8.1.2. That the online learning portfolio will include a logbook function, as required by some Special Skills Posts and the Paediatric Requirement.
- 8.1.3. That the online learning portfolio should be used during the ITA process to provide evidence of learning undertaken by the trainee during each term.

### 8.2. Online Learning Resources

- 8.2.1. That the ACEM will work toward being a source of high-quality, online educational resources for ACEM trainees and clinical teachers which will aim to:
  - 8.2.1.1. Add emphasis to areas not traditionally taught and assessed in the ACEM Training Programme (e.g. domains other than 'Medical Expertise' in the Curriculum Framework for Emergency Medicine)
  - 8.2.1.2. Improve standardisation in the teaching and learning of curriculum content between trainees.
  - 8.2.1.3. Reflect the contemporary practice of FACEMs in designated topic areas of the curriculum.
  - 8.2.1.4. Provide a clear articulation of the standard expected of the trainee in order to pass the relevant summative assessment/s.
  - 8.2.1.5. Be a supplement to, and not a replacement for, the training provided by ACEM training sites.
- 8.2.2. That the online learning resources will be formative, so trainees will not be required to complete the associated activities. Considering the content of the resources will relate directly to summative assessments, trainees would be well advised to utilise these resources.
- 8.2.3. That there is a clear link between the online learning resources and the Curriculum Framework for Emergency Medicine.
- 8.2.4. That guidelines be developed to assist the trainees in making appropriate progress through the online learning resources (i.e. that each online learning resource have a recommended time and/or clinical post for completion).
- 8.2.5. That the online learning resources will be sourced by:
  - 8.2.5.1. Harnessing pre-existing e-learning resources within a quality framework.
  - 8.2.5.2. Developing in-house e-learning resources over time, in prioritised order.

8.2.6. That the list of priority areas for online learning resources would be as follows:

8.2.6.1. Domains other than Medical Expertise in the Curriculum Framework for Emergency Medicine

8.2.6.1.1. Recommended for completion during Advanced Training:

8.2.6.1.1.1. Prioritisation and Decision-making

8.2.6.1.1.2. Communication

8.2.6.1.1.3. Teamwork and Collaboration

8.2.6.1.1.4. Leadership and Management

8.2.6.1.1.5. Health Advocacy (including Cultural Competence)

8.2.6.1.1.6. Scholarship and Teaching

8.2.6.1.1.7. Professionalism

8.2.6.2. Topics within the domain of Medical Expertise

8.2.6.2.1. Recommended for completion during Basic or Provisional Training:

8.2.6.2.1.1. Cardiac arrest protocols (BLS/ALS)

8.2.6.2.1.2. ECG interpretation

8.2.6.2.1.3. Radiology results and interpretation

8.2.6.2.1.4. Laboratory results and interpretation

8.2.6.2.1.5. Patient Safety

8.2.6.2.2. Recommended for completion during Advanced Training:

8.2.6.2.2.1. Advanced Diagnostics

### 8.3. Teacher Training

8.3.1. That the ACEM continue to provide training for DEMENTs.

8.3.2. That the ACEM work towards providing Teacher Training which is accessible to all FACEMs (i.e. not only DEMENTs).

8.3.3. That the ACEM develop and deliver training for WBA assessors

8.3.4. That the ACEM undertake regular evaluation and improvement of all teacher training activities, ensuring continued alignment with the ACEM Training Programme.

### 8.4. Trainee Welfare

8.4.1. That the ACEM continues to improve the provision of centralised support for trainee welfare; both to the individual trainee, and to those providing local support to trainees.

## 9. Transition Process

9.1. That the ACEM will develop a comprehensive strategy for transition to the revised training programme, including:

9.1.1. Detailed planning for trainees still in the current programme, ensuring that no trainee is disadvantaged in the transition.

9.1.2. Communication to all stakeholders, including current and potential trainees, Fellows, EDs, government bodies, AMC/NZMC, Hospitals, other Australasian Colleges, related health professional groups, patient groups, etc.

9.1.2.1. TARWG suggests that particular emphasis be given to clear and transparent communication of assessments (especially in relation to summative aspects of the assessment regime).

9.1.3. Development of administrative and operational systems to support:

9.1.3.1. the implementation of the revised programme;

9.1.3.2. the retirement of the current programme; and

9.1.3.3. the transition between the current and revised.

## 10. Quality Improvement

10.1. That the ACEM will adopt a regular cycle of review, redevelopment, implementation and evaluation for all aspects of its educational provision, including:

10.1.1. ACEM Training Programme

10.1.2. Non-specialist training programmes

10.1.3. CPD Programme

10.2. That the aim of regular review and redevelopment is to ensure:

10.2.1. that both educational content and educational method continues to be contemporary in nature.

10.2.2. that all aspects of ACEM education continue to have clinical relevance.

10.2.3. that there is coordination between ACEM educational programmes.

## Acronyms

ACEM	Australasian College for Emergency Medicine
ALS	Advanced Life Support
BLS	Basic Life Support
BoE	Board of Education
CbD	Case-based discussion (a form of WBA)
CPD	Continuing Professional Development
ED	Emergency Department
FTE	Full Time Equivalent
EMQ	Extended Matching Question
FACEM	Fellow of the Australasian College for Emergency Medicine
SAQ	Short Answer Question
SCE	Structured Clinical Examination
TARWG	Training and Assessment Review Working Group
VAQ	Visual Aid Question
WBA	Workplace-based Assessment

## Appendix A: Curriculum Structure

The current structure of the ACEM Training Programme is as follows:

- A period of 'Basic Training' which has an indicative length of two-years of training; equating to the pre-vocational training years.
- A period of 'Provisional Training' which has an indicative length of one-year of training.
- A period of 'Advanced Training' which has indicative length of four-years of training.

## Appendix B: Trainee Research Requirement

The current Trainee Research Requirement requires each trainee to demonstrate knowledge and understanding of the following:

- The following principles of research:
  - hypothesis design
  - methodology
  - objective outcomes and implementation
  - participation in research
- the concepts of critical literature appraisal and evidence-based medicine;
- the appropriate statistical concepts; and
- the application of database searches in literature.

The current Trainee Research Requirement states that trainees may demonstrate the above by one of the following methods:

- Publish a Trainee Research Project (TRP) in a recognised peer-reviewed journal;
- Present a TRP, either orally or by way of poster, at an approved peer-reviewed scientific meeting to the satisfaction of the Trainee Research Committee;
- Successfully complete a thesis which forms part of a University qualification by research; or
- Successfully complete a minimum of two of the following postgraduate subjects from the same course at an Australasian University:
  - Clinical Epidemiology
  - Biostatistics
  - Research Methods
  - Evidence-based Medicine

## **Appendix C: Paediatric Requirement – Advanced Training**

The current Paediatric Requirement can be met by either:

- Completion of the Paediatric Logbook (reviewed and signed off by the DEMENT); or
- Completion of 6 months in an approved Paediatric ED (including submission of required ITA forms).

## **Appendix D: Special Skills Logbooks**

The current ACEM Training Programme requires trainees to complete Special Skills Logbooks for Category A and C Special Skills Posts:

- Category A: Special posts which require individual ACEM approval, such as retrieval medicine posts.
- Category C: special one-off posts, such as research only posts.

## **Appendix E: Clinical Terms**

The current definition of clinical training 'terms' are as follows:

- In Basic Training, the training terms are defined by the relevant body regulating pre-vocational training.
- In Provisional Training, the training terms are defined as an uninterrupted period of training in a single discipline at a single site, approved by ACEM, for a minimum period of 2 months.
- In Advanced Training, the training terms are defined as an uninterrupted period of training in a single discipline at a single site, approved by ACEM, for a minimum period of 3 months.

## **Appendix F: Leave Allowances**

The current leave allowances are as follows:

- In Basic Training, the leave allowances are defined by the relevant body regulating pre-vocational training.
- In Provisional and Advanced Training:
  - All leave (e.g. annual leave, study leave, sick leave) is viewed identically when training time is accredited.
  - In a 12 month hospital year, the maximum amount of leave that is allowable before the time accredited for the year as a whole is affected is 10 weeks.
  - The maximum allowable leave in any individual term before the time accredited for the term is affected is 40% (subject to the maximum allowable leave in a 12 month hospital year).

## Appendix G: Clinical Training Times – Basic, Provisional and Advanced

The current requirements for clinical training time are as follows:

- Basic Training:
  - Completion of 24 months FTE clinical, pre-vocational training time.
- Provisional Training
  - Completion of 12 months FTE clinical training time, including:
    - A minimum of 6 months FTE of clinical training in a single accredited ED.
    - A further 6 months FTE of clinical training in an optional clinical discipline/s (recommended to be non-ED training).
- Advanced Training:
  - Completion of 48 months FTE of clinical training time, including:
    - A minimum of 6 months FTE in a major referral ED
    - A minimum of 6 months FTE in either an urban referral or rural/regional ED.
    - A further 18 months FTE of clinical training time, including:
      - A minimum of 6 months FTE in either Anaesthesia or Intensive Care Medicine
      - A maximum of:
        - 12 months FTE in Anaesthesia
        - 12 months FTE in Intensive Care Medicine
        - 12 months FTE in Medicine (including a maximum of 6 months in any one sub-speciality)
        - 12 months in Surgery (including a maximum of 6 months in any one sub-speciality)
        - 12 months in a 'Special Skills' post (including a maximum of 6 months in any one sub-speciality), where such posts fall into one of three categories:
          - Category A: Approval required from ACEM (e.g. retrieval medicine)
          - Category B: Approval required from relevant College (e.g. GP, O&G, Radiology, etc)
          - Category C: Approval required from ACEM Board of Education (e.g. special one-off posts, such as research only posts)

## **Appendix H: Progression from Provisional to Advanced Training**

The current requirements to move from Provisional to Advanced Training are:

- o Completion of the required clinical training time for Provisional Training.
- o Satisfactory In-Training Assessments for each term undertaken (or at a minimum of six monthly intervals).
- o Satisfactory completion of the ACEM Primary Exam.
- o Three satisfactory Structured References related to an approved ED term during Provisional Training.
- o Successful selection to Advanced Training through a central selection process, based primarily on the Structured References.

## **Appendix I: Retrospective Accreditation of Training**

The current allowances for Retrospective Accreditation of Training are as follows:

- o In Basic Training, a maximum of 24 months.
- o In Provisional Training, a maximum of 6 months (non-ED training only).
- o In Advanced Training:
  - o Applications are assessed on a case-by-case basis.
  - o Eligible for training undertaken with another specialist College at a level comparable to ACEM Advanced Training.
  - o Rulings are contingent and only come into effect upon successful entry to ACEM Advanced Training.