

**Australasian College for Emergency Medicine
Review of the Training and Assessment Program**

Evaluation Report

**prepared for the
Training and Assessment Review Working Group**

July 2010

Executive Summary

This report presents the broad findings of a review into the ACEM Training and Assessment Program. As part of the review's submission process, an online survey collected views about the training from 113 respondents (mainly trainees and FACEMs). Other submissions with detailed comments were provided by nine contributors, and seven focus groups were held in different Australian states.

The survey questions asked contributors to comment on the strengths and weaknesses of ACEM training, as well as desired outcomes, levels of attainment, prerequisites to advanced training and assessment methods. A number of broad themes emerged among the responses for most questions. The main strengths identified were good trainee support and program structure/content. The main weakness identified was exam deficiencies; many comments were also made on trainee selection, lack of trainee support, and lack of specialisation. The leading desired outcome of ACEM training was to produce competent emergency physicians. Training as a progression of skills acquisition was highlighted as an ideal level of attainment, with many respondents providing details of specific technical skills and non-technical skills. Basic clinical skills were seen to be the most important pre-requisite for advanced training, particularly airway skills. For assessment methods, a range of comments were made on in-training assessment, the Primary exams and the Fellowship exams: some respondents thought them to be good as they currently are, while others made criticisms or offered suggestions for improvement.

The innovative ideas also collected in the online survey are predominantly suggestions for improving specific aspects of training. Final comments mainly focus on the content and assessment of training, with many also offering suggestions for improvement. The longest survey comments offer more detailed suggestions on a range of training features; Other submissions also offer comprehensive comments on different aspects of ACEM training.

Suggestions for next steps of the review include looking more closely at the aspects of ACEM training most commented upon in the Submission Process. These are listed in Conclusions (page 37) under the headings: Training-content and structure; Training-assessment; Teaching and Learning Delivery; and Non-clinical skills.

Purpose and Background of Review

This report outlines the submission process and focus group results of a review Australasian College for Emergency Medicine (ACEM) is currently undertaking of its Training and Assessment Program. The aim of this review is to ensure that the curriculum remains contemporary and that ACEM trainees are experiencing the highest quality teaching and learning opportunities, and are achieving optimal clinical competence. The review has been identified as a strategic priority to ensure these optimal training outcomes, in view of the increasing numbers of trainee registrations. It will build on the existing syllabus and enhance the curriculum already in place.

More specifically, the review aims to assess or identify:

- existing provisional and advanced training programs, including assessment methods
- the specific tasks, responsibilities and roles of a competent emergency physician
- the learning needs of trainees, including clinical and non-clinical skills, knowledge and attitudes.

This paper is one of the outcomes of ACEM's review of its training program. It is based on the evaluation process outlined in the following Methodology section.

Other review outcomes include:

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

Methodology

In February 2010 communication with fellows and trainees commenced, regarding the review process. A call for submissions followed, with individuals and organisations interested in contributing to the review invited to make a submission. Invitations were distributed to all identified stakeholders.

As part of the submission process, surveys comprising eight questions and some preliminary information were distributed in an online format (Google doc). Responses were collected until 31 May 2010. A total of 113 respondents filled in at least one question, or made a general comment. Broad results are shown in the sections following, with charts highlighting themes and similarities among the comments for each question. The full list of comments is available as a separate document.

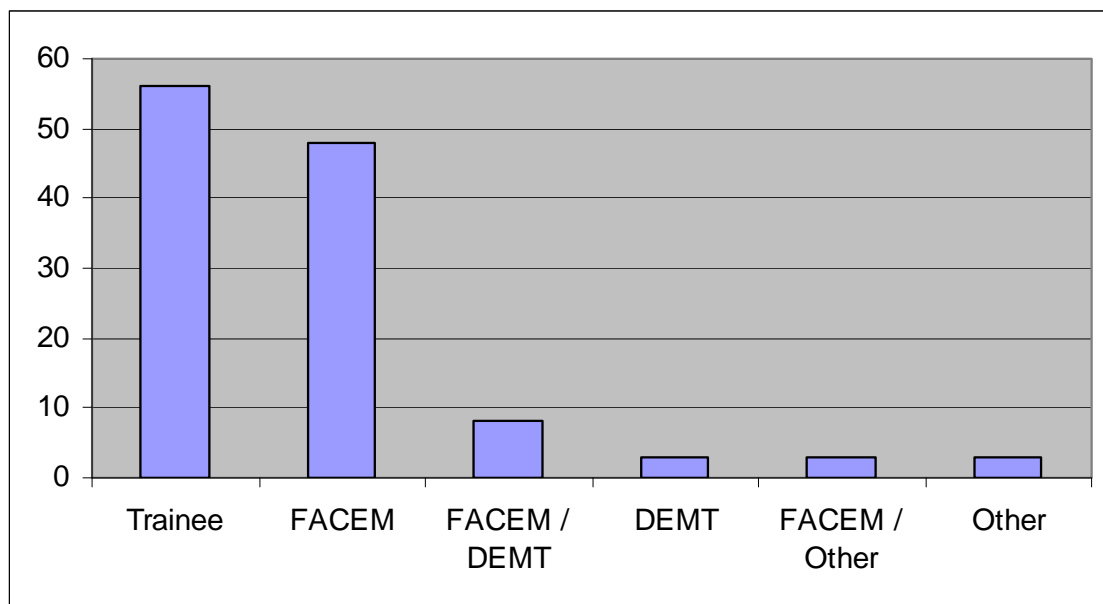
Several submissions addressing specific aspects of the training program were received as separate documents; these are attached in the appendices. Lengthy comments (>200 wds) from the online survey have been extracted and included as an appendix, to also highlight aspects of training contributors thought to be important.

In addition to the survey, several Focus Groups were conducted in: South Australia, Victoria, Queensland, New South Wales and Western Australia in May–July 2010. The purpose of the Focus Groups was to draw out reactions, responses, thoughts and discussion that would not be feasible using the online survey alone. Participants included all those interested in the Training and Assessment Program at ACEM – trainees, DEMTs, specialists and others. This report provides a summary of the views of participants of the SA, WA, Qld, NSW focus groups held to date; findings from Victoria are still to come.

Results: Submission Process—online survey

A range of organisations to which respondents belonged were listed by 57% as preliminary information on the submission form. The other 43% of respondents did not enter this information. The organisations were predominantly hospitals from across Australia, and included health services and networks. For the full list of organisations, see Appendix 1.

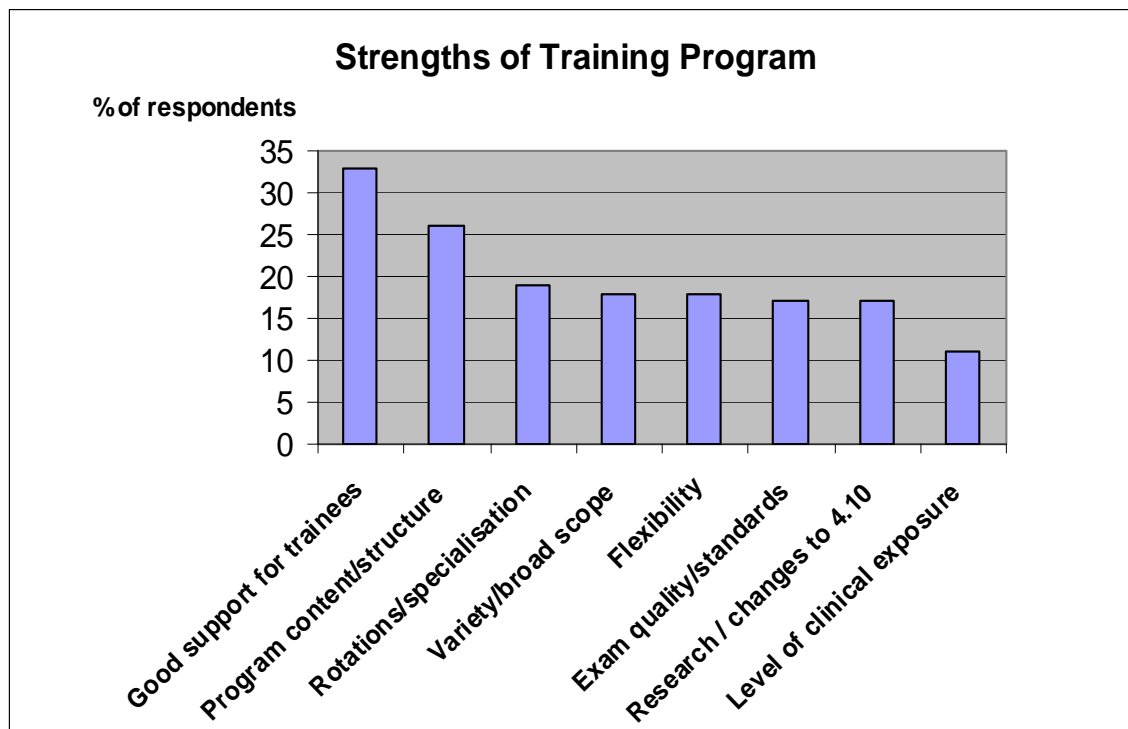
Most respondents (97%) specified whether they were: a trainee, FACEM, DENT or other. This is shown, by numbers, in the chart below.



As the above chart shows, the majority of survey respondents were trainees (56%) or FACEMs (48%). Much smaller proportions were: FACEM/DEMT (8%); DEMTs, FACEM/Other or Other (each 3%).

Strengths of the Training Program

In response to the question ‘What do you consider to be the strengths of the training program?’, a range of views were provided by 85% of respondents. Some addressed the specific elements given on the form and many included more than one strength; some offering suggestions or other comments. A number of themes emerged in the overall responses, some of which were detailed and included several points. Strengths identified by 10 or more respondents are shown below (as % of those who responded to the question), with some of the comments provided in the sections following.



Individual Comments

Support for Trainees

‘The strength of the program is in the trainee support and guidance.’

‘Trainee support from DEMA and in my department is excellent, and delegation of educational responsibilities is fair and agreeable.’

‘A committed DEMA can inspire excellent learning and organise individualised teaching. I also think that most FACEMs I encounter are welcoming, enthusiastic and good teachers - which I appreciate and helps me improve my skills on the job.’

Program Content, Structure and Curriculum

‘Content actually reflects what is ED practice - which is great.’

‘The program is one of the better specialist training programs, with good clear curriculum, appropriate content, decent length of experience required, good support of trainees.’

‘Training program makes sure that everyone reaches the minimum standard.’

‘Duration of training is a great strength. It permits sufficient time for the trainee to do various procedures and mature as a physician.’

Rotations and Opportunities for Specialisation

‘Special skills rotations – excellent.’

‘Training rotations to multiple hospitals, including a rural run, allows trainees to see a spectrum of EM practice unavailable to a trainee who remains at just one academic center.’

‘The mandated sections of the program (anaesthetics/paediatrics/special skills) gives good specialty knowledge.’

Variety and Broad Scope of Program

‘Broad training i.e. registrar training in ICU, anaesthetics, paediatrics and many other disciplines is a real benefit to training as well as better understanding how other disciplines work.’

‘Breadth and depth of knowledge and diverse skills set - practical, counselling, administrative is all good.’

Flexibility of Training

‘I believe the strength of the training programme is in the ability to have some flexibility in training experience, in the capacity to move around and experience different fields of medicine. As a generalist field, it is unrealistic to believe that each emergency physician will have the same experience in all fields. By recognising this, the college programme allows and acknowledges this.’

‘The biggest strength is the flexibility of the program. It allows the trainee scope to influence and design their own program with regards to their own interests and needs.’

Exam Quality and Standards

‘I think the primary examinations give a good basis on which to build practical skills. I think the fellowship examination is a fair exit exam’

‘The major strengths are the quality and standards of the examination process. Standards remain high for Part 1 which is important given that levels of graduate knowledge in basic medical sciences have declined. It is vital that ACEM maintains its standards and does not dumb down.’

‘The current Primary examination, mapped to the Fellowship examination syllabus is well placed to provide candidates with the needed background to further their study in clinical emergency medicine.’

Research / Changes to 4.10

‘The new approach to 4.10.70 requirements will allow true learning and sustainability in the field of Emergency Medicine research.’

‘Inclusion of research 4.10 project into the program gives the ED trainee a better understanding of research during the training years.’

Clinical Exposure in Training

‘Breadth of clinical experience required is valuable and encouragement to vary your place /network of practice. Volume of practice is very good.’

‘Balance of clinical exposure between ED/non ED, critical care rotations and paediatrics is good.’

Other strengths, each listed in the submission forms by several respondents, include:

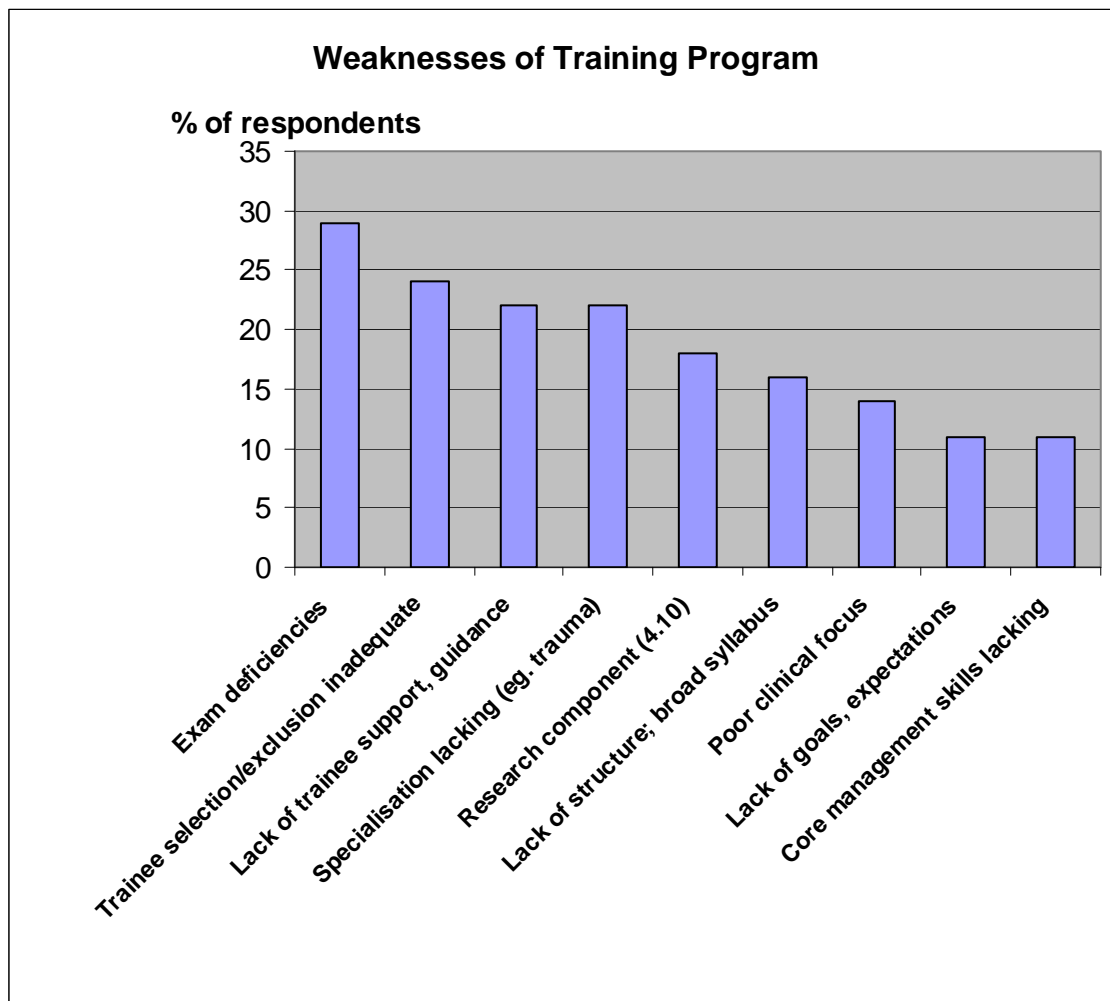
- good volume of practice
- paediatric component
- length of training
- Online Training Assessment (OTA)
- mix of ED and non-ED training
- reviews with DEMENT
- scope for self-directed learning
- open and transparent system
- strong teaching ethos
- on-the-job experience
- handbook / curriculum guide.

Many entries show a range of specific strengths identified once only in the responses, such as: access to past papers; accessible website; skilled examiners.

While many were brief, others were lengthy and detailed. Some comments focused on weaknesses rather than strengths (e.g. the 4.10 component, research or trainee selection), or offered suggestions for improvement. For the full list of comments, see ACEM submission form comments.doc (separate file).

Weaknesses of the Training Program

In response to the question ‘What do you consider to be the weaknesses of the training program?’, a wide range of views were provided by 85% of respondents. Like the strengths, often multiple weaknesses were identified in each response, and overall many could be grouped into broad themes (shown below).



Individual Comments

Exam deficiencies

‘The primary exams are a throwback to the old days of large written exams assessing knowledge that does not necessarily make for a good emergency physician. ACEM needs to look seriously in working on the primary exams to reflect relevant knowledge (i.e. memorising the minutiae of Ganong or Robbins does NOT make me a better doctor).’

‘Heavy reliance on exams as a means of testing, with a resultant culture amongst trainees to develop specific skills to address examination goals rather than the large picture. "It’s only an obstacle everyone has to jump through" is an adage I have heard so many times. A pass–fail structure with only detailed analysis of fail candidates does not give any feedback for the candidates who have passed an examination.’

‘Having a registrar pool including candidates for both primary and fellowship exams in smaller hospitals can make it very difficult to structure a teaching programme that addresses the needs of both groups. The fellowship is still trying to assess some basic clinical skills, whereas I think these should be addressed far earlier in training. A primary exam with very little clinical medicine means many registrars take a backward step clinically (albeit short-term) in order to cram enough basic knowledge to pass.’

Inadequate Trainee Selection / Exclusion

‘I believe that the college should undertake some sort of formal interview as part of the selection process for training. I think that the structured reference component of the provisional trainee selection is a bureaucratic hurdle rather than a rigorous selection process.’

‘Currently trainees seem to select the program, not the converse. Workforce shortages mean that it is not particularly hard to become an emergency medicine registrar. I have watched a few fairly substandard trainees blunder their way through the program and pass the exam and think we could do better at redirecting these people earlier.’

‘I have watched poor candidates for ED training be pushed through the training programme - there needs to be an appropriate way for poor candidates to be encouraged not to continue, rather than encouraged to complete their training and always be weak practitioners but in someone else's dept.’

Lack of Trainee Support, Feedback, Supervision, Guidance

‘Not enough time spent with individual trainees on the floor.’

‘Not a terribly transparent process, where trainees often feel that they are stumbling through the process and largely being left to figure it out for themselves. While there is merit in self directed learning and achievement, some guidance as to how to efficiently go about gaining the relevant experience necessary may be beneficial.’

‘Potential lack of supervision over patient assessment i.e. patients are not necessarily fully assessed by more senior person unless trainee asks for help.’

‘The support for most trainees is not well co-ordinated between different hospitals. There should be easier access to various resources that various departments have within a city or a region to facilitate the development of a trainee.’

Lack of Specialisation / Specific Terms Needed (eg. trauma, paediatrics)

‘Not enough structure and variety of institutions. Trainees can spend nearly all of their training (except 6 months) in one hospital. This turns out hospitalists not specialists. They

do not gain enough exposure to see how different hospitals perform the same tasks to allow critical evaluation of systems.

‘I have always found it frustrating that there is not an expectation to do a basic surgical term as part of ED training. There are a large number of procedures which would be significantly improved for trainees by doing a basic surgical term or plastics term. This would not have to be an advanced term but one sufficient for them to get basic minor surgical procedures under their belt. This is something I have always thought should be broached with the college of surgeons.’

‘There is no requirement to have worked with a number of minor specialties. I think that during AT trainees should attend (say) 4 ENT clinics, 4 Ophthalmology, 4 Fracture 2 Dermatology, 2 Neurology, there will be others’ and be signed off from a consultant as having an understanding of the discipline.’

Research (4.10) Issues

‘4.10 - most trainees are not interested in research, and hence produce research which is hastily done & adds little to clinical medicine. I don't think the 4.10 adds much to us being good FACEMs.’

‘The research component is too heavy - all trainees should understand basic research principles, but full-blown research should be an additional post-fellowship component for those who are interested.’

‘The research component, in its current form, doesn't achieve the aim of improving understanding of research principles, and only seems to clog up the literature with poor quality research which was performed to just "get over the line".’

Lack of Structure; Broad, Difficult Syllabus

‘Largely unstructured with the expectation of learning how to be an independent emergency physician in busy public hospital emergency departments where consultants don't have the time to teach you. Difficult training with too many hoops to jump through ie the primary, secondary, 4:10 and log books - largely left alone until difficult assessments are due.’

‘Curriculum is actually a syllabus which is vast and difficult to incorporate into daily practice. Weakness with regard to non-clinical aspects of training being taught in a practical fashion with lack of resources.’

‘I believe a program of set, smaller and structured training units leading to a uniformity of training – much like the ONG training, or the new psychiatry training programs – would benefit the mental health and competency of trainees.’

Clinical Focus Lacking

‘Assessment is out of kilter with clinical development - early focus should be on clinical skills and survival at work, later focus should be on fine details. The basic sciences should be interwoven with clinical material, not tested separately - this distracts trainees from their clinical work.’

‘From a functional view point, there is a fundamental problem with the structure of the program. As junior trainees are coming to terms with working in the ED they are distracted with non clinical primary exams. They would develop into competent clinician much more rapidly if they were studying clinically relevant material at this stage. This could be resolved by introducing a very clinical 1st part exam. This would also count as a diploma exam for those not wanting to continue with emergency medicine as a FACEM. This would mean at the very time doctors desperately need to increase their knowledge base they would be studying clinically relevant information. The “primary” could be done as the second part and the FACEM exit exam would remain the same.’

Lack of Clear Goals, Expectations for Progress

‘Lack of clear goals during training to ensure adequate progression. Too easy to slip from first year to final year advance trainee with no checks of clinical progress and competence.’

‘There is not enough on-the-job training – supervision is patchy, there is no structure to inform trainees or supervisors about how they should progress in terms of clinical history/examination/procedural skills - it is all too ad hoc and reliant on interested individuals or hospital case-mix.’

Core Skills of Supervision, Management Lacking

‘Needs to be more instruction and assistance in the training of ED management.’

‘Not taught supervision skills - how to get best out of the JMOs.’

‘Need for increased preparation of trainees for life as a 'leader' and 'manager'.’

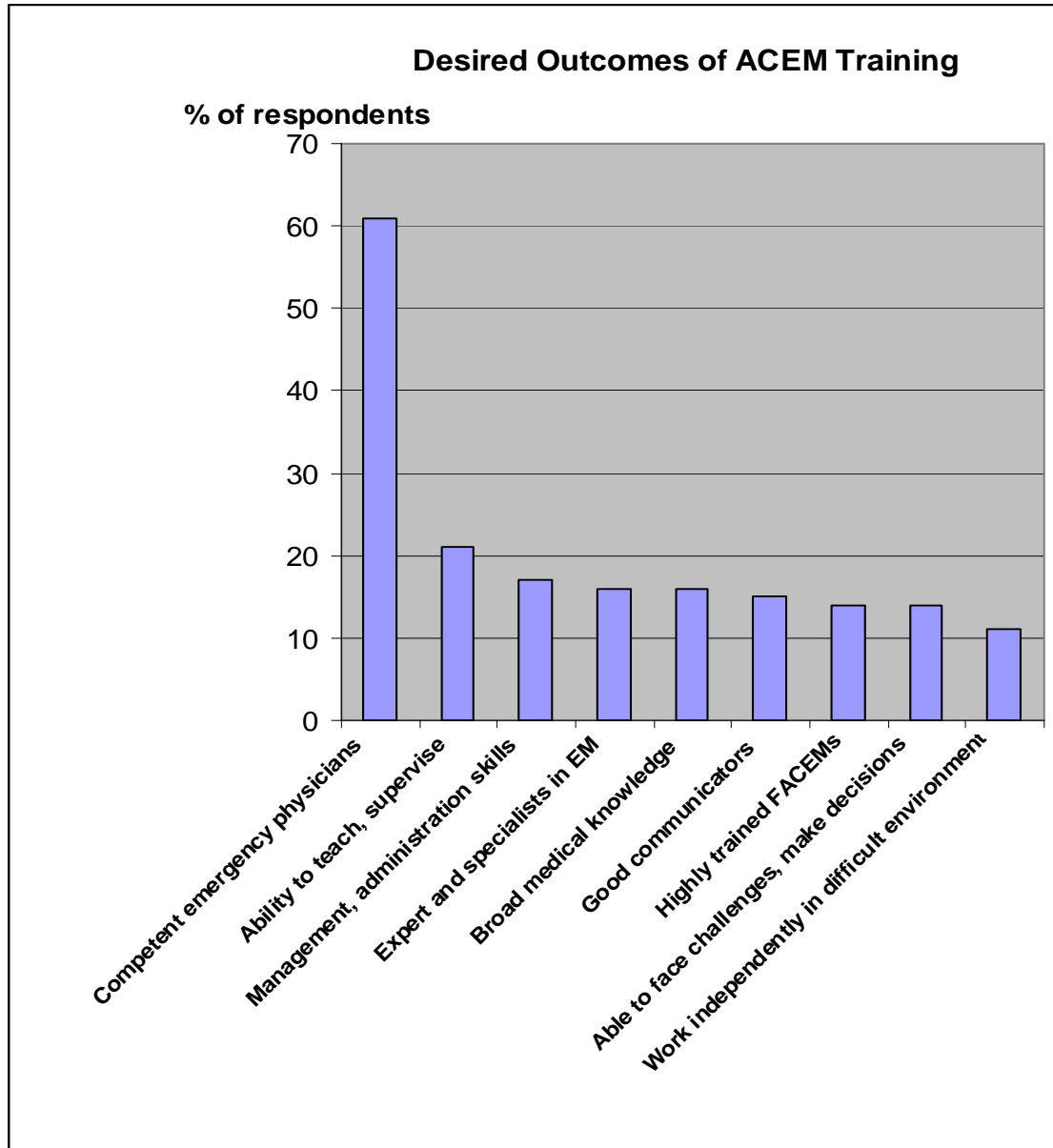
Other weaknesses, each identified by more than several respondents, include:

- previous skills not recognised
- lack of on-the-job training
- wide variation of trainee abilities (upon graduation)
- no exposure to rural or regional practice
- lack of coordination/networking among departments (eg. hospitals)
- more mandatory requirements needed (eg. courses, clinical skills)
- textbook criticisms
- inefficient or inadequate rotations
- disaster response overlooked.

Many other individual and often detailed comments were made on specific issues and were unable to be easily categorised. For the full list, see the table of submission form entries (ACEM submission form comments.doc).

Desired Outcomes of ACEM Training

In response to the question 'What do you believe to be the desired outcomes of ACEM training?', a range of views were provided by 76% of respondents. Many responses were multifaceted, but on the whole several broad themes emerged. The term 'competent' stood out as a popular descriptor for ideal trained emergency physicians. The chart below shows the main categories of responses; note, often comments from one respondent could fit into several themes.



Individual Comments

Competent emergency physicians

‘To produce a competent, confident, caring and compassionate emergency physician.’

‘Competent Emergency Physicians who have a rounded medical knowledge and can apply it. Perform at a level perceived as 'specialist' by other specialties.’

‘High functioning FACEMs. Procedurally competent, communicatively competent, diagnostically competent.’

Ability to teach, supervise

‘A supervisor; a teacher; a mentor. To support their trainees. To continue to inspire and encourage others to continue in this line of work, rather than exhaust trainees and steer them in the direction of other specialties.’

Management, administration skills

‘Be able to carry out the administrative duties of the department with tact and professionalism.’

‘At the end of training, candidates should be able to manage the predictable (and unusual but important) presentations to the emergency department safely and confidently. They should also be skilled to manage other aspects to our work including teaching, communication, research etc. experience and exposure in these areas is currently very variable.’

‘To have a safe competent doctor that functions at a specialist level, with added skills to manage a department, both in terms of staff and logistics.’

Expert and specialists in EM

‘Production of experts with the confidence and skills to be leaders in their hospitals. We teach every intern and medical student who comes through the system at some stage. Most RMOs come through ED as well and our interactions with medical and surgical registrars are a great opportunity for teaching which raises the profile of our specialty in the greater medical community and improves long-term relationships. For this to occur we need to both really be experts in our fields and believe in ourselves as such.’

‘We need to be producing EXPERTS in Emergency Medicine who are up to date with knowledge and practising patient care that is effective, efficient and consistent with evidenced based medicine.’

‘ED physicians need to be systems specialists as well as critical care specialists- i.e. able to juggle busy ED, handle politics of interacting with other depts, apply for funding & have an understanding of budgets & health economics.’

Broad medical knowledge

‘To develop consultants who have both the broad based clinical knowledge and procedural skills to deal with the common lifesaving emergencies which we deal with as well as administrative /management skills to "run the floor".’

‘Well rounded knowledge of medicine to provide sound basis for the practice of emergency medicine.’

‘Broad range of skills/knowledge; ability to function as a FACEM and understand the running of an ED.’

Good communicators

‘A practitioner who has a broad base of knowledge and skills, but the capacity to know their limitations and be a good communicator, teacher and manager.’

‘The program needs to equip them, not only to be an expert clinician in the setting of the undifferentiated patient, but also to be an expert educator, administrator and communicator.’

‘Good communication skills and enthusiasm for continued learning & teaching. Someone who enjoys their work!’

Highly trained FACEMs

‘To become a competent FACEM, who is able to manage an emergency department, regardless of whether that is a rural or metro ED, to supervise & teach junior staff in that environment.’

‘Highly trained Fellows whose training should be at least as good as other international colleagues. We should aim to have an internationally recognised and respected college.’

‘To produce FACEMS who are proud to be FACEMS and who will contribute to many areas of Emergency Medicine including becoming involved in College activities.
To produce FACEMS who are role models for others and who will attract great people into the specialty.’

Able to face challenges, make decisions

‘Well rounded consultant who can cope with literally any situation.’

‘To create a highly skilled doctor, expert in communication, team leadership and participation, with rapid and sensible clinical decision making capacity and appropriate resuscitative procedural skills to support clinical decisions.’

‘Competent decision maker with a broad medical education and specialist emergency skills, including leadership and time management.’

Work independently in difficult environment

‘I think greater emphasis should be placed on the ability to function as lone operators in difficult environments and this should be included in the Fellowship exam. For instance, candidates are told, for the purposes of the exam, to assume that they are in a tertiary hospital with all facilities to hand. They should also be tested for decision making in less resourced environments e.g. retrieval, rural.’

‘Confident skilled physician capable to work independently.’

‘"Turning out" of a competent junior consultant who can independently manage patient flow, complex medical and psychosocial issues, supervise juniors and provide clinical leadership.’

Other desired outcomes each identified by several respondents include:

- similar level of varied skills for all trainees
- ongoing educational opportunities
- recognition from, and communication with, other specialties
- ability to critically appraise research
- promotion or recognition of EM as a specialty
- leadership
- right attitude / reasons for working in EM.

Again, the comments were varied in detail and length. For the full list, see the table of submission form entries.

Levels of Attainment

In response to the form entry on 'Levels of Attainment' a range of comments were provided by 60% of respondents. Comments were invited on what skills/knowledge and attributes should be demonstrated by trainees at different points in their training, e.g. Advanced trainee, Year one; including technical and non-technical skills.

Many respondents commented that throughout the training skills should progress towards proficiency; that the training should be seen as a continuum, as these comments show:

- 'Basically a scaffolding of confidence and competence in these domains across the continuum of training'
- 'Building upon basic learning blocks'
- 'Gradual and ongoing skills achievement'.

Many also emphasised the need of earlier trainees for supervision, but that this should diminish as they acquire skills and learn to work independently.

Individual comments

Other examples of comments on levels of attainment include:

'Ideally it should build from showing competency in the core technical skills - ie. vascular access techniques, airway management, LPs through to advanced techniques - difficult airway drills, advanced vascular access.'

'Non-technical skills should progress from the basics of history taking, physical exam and diagnostic skills through to advanced stages of ED flow management, teaching, research, disaster management, retrieval skills.'

'It is very difficult to set up these goals since they depend very much on the place of training, amount of supervision, number of co-registrars etc. I would rather support a log book system with evidence of training in compulsory core skills and lesser degree of proficiency in non core skill groups.'

'A year one advanced trainee should have a good grasp of the common life threatening ED emergencies and be able to start to lead a resusc team with the consultant present to steer as required - the strength in this role should steadily increase over the course of the advanced training years until in their final year they are competent to run a resusc without consultant involvement.'

‘Advanced Trainees Year One: Should know how to manage most basic emergencies and know where to look who to ask and how to find out further information. Should understand systems of emergency management, disaster management.

Advanced trainees in final year should have advanced airway and other critical care skills, knowledge equivalent to first year consultant. Should be starting to be able to manage the ED on the floor in a leadership role.’

‘The main developmental change that occurs over the 4 years is an increasing ability to work as an independent practitioner, to be responsible not only for their own patients but for those of more junior trainees and to understand the "bigger picture" of being in charge of an Emergency Department.

‘Their clinical knowledge will be developed to Expert Knowledge as determined by the curriculum. Many will also develop sub-speciality skills in areas of interest (toxicology, ultrasound etc).’

‘As one proceeds through advanced training years one should be increasingly capable of independently dealing with both all facets of increasingly complex clinical scenarios and importantly all other aspects of practice such as discussion with senior colleagues and management of the much touted ed department 'flow'. This last aspect is poorly taught in my experience and trainees would certainly benefit from supervising / partnering with consultants in this role and perhaps some formal teaching of overall ed management principles.’

‘Of course skills in different procedures that are required in ED and communication skills as well as to learn how to be an effective trauma team leader.’

‘By the time of completion, trainees should be able to handle complex resuscitations by themselves, maintain flow in a busy ED, and conduct themselves professionally.’

‘Without log booking and probably extending provisional training I think it's hard to give an exhaustive list of skills needed. Maybe a core of technical competencies with an extra suggested exposure list would be useful, but how to examine this without creating a huge extra workload would be hard. Teaching and examining management of a busy department is challenging, but I think this is one of the hardest things that new advanced trainees are expected to do. To go from learning the pharmacokinetics of occasionally used drugs to managing bed block, sick patients and needy juniors is a big step!’

While there were many comments relating to the training overall, a large proportion of respondents differentiated their answers, e.g. Adv trainee 1, Adv trainee 2 etc. Many respondents, however, commented on some points and not others. The results here are separated into the different training points. The table below shows which levels of attainment, at these different points in training, were commonly seen as desirable by the respondents who commented (most often listed first).

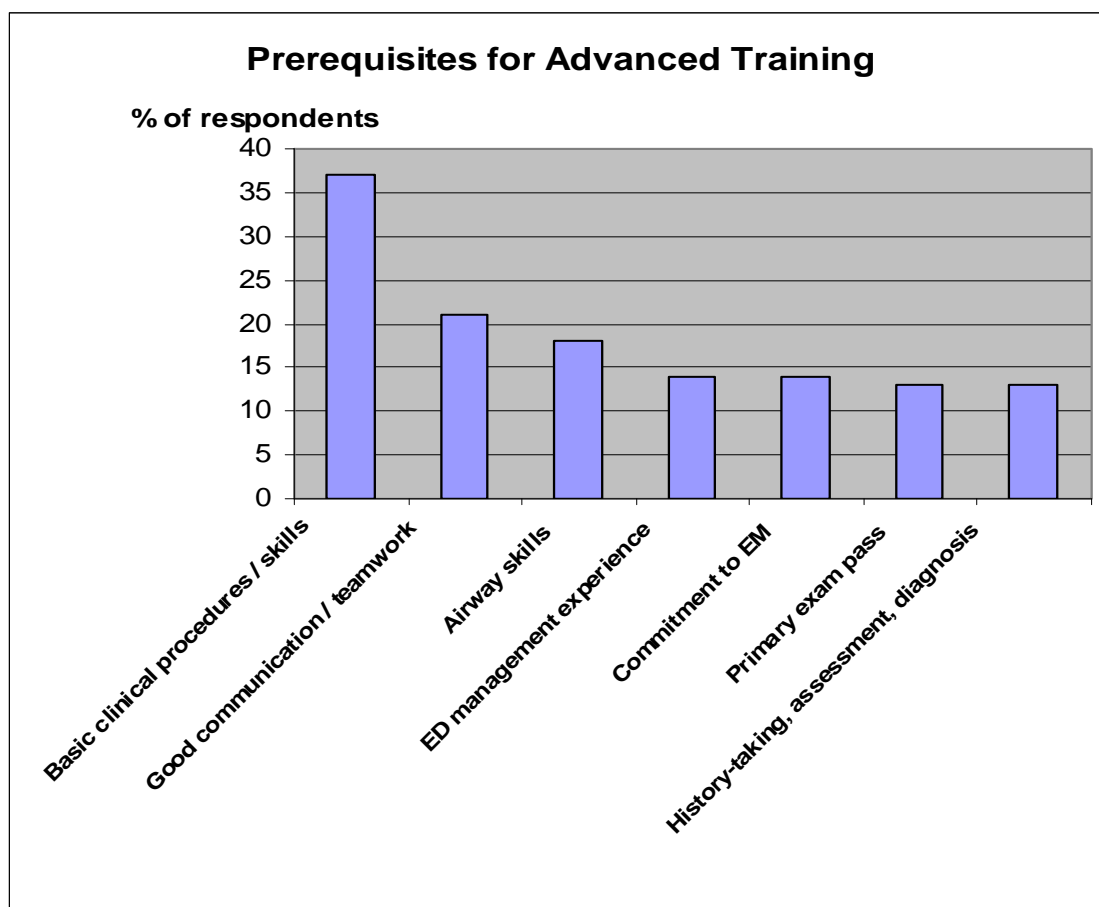
Training Levels	Ideal attainment levels – skills, knowledge, attributes
Basic	<ul style="list-style-type: none"> - history taking, patient assessment / examination skills - developing clinical procedures / skills - problem solving
Provisional	<ul style="list-style-type: none"> - independent assessment / diagnosis of patient - management plan skills - basic clinical procedures
Advanced year 1	<ul style="list-style-type: none"> - clinical procedures / skills - management of common emergencies - asking for help when needed - developing management skills - leading resuscitation team, supervised - developing supervisory skills
Advanced year 2	<ul style="list-style-type: none"> - increased clinical competence - developing supervisory / management skills - continued acquisition skills / knowledge - experience in managing ED - learning to work independently - increased leadership - communication with peers and patients - advanced airway skills
Advanced year 3	<ul style="list-style-type: none"> - experience in ED management, administration - continued acquisition skills / knowledge - advanced airway skills - competent in clinical procedures - skilled management of emergencies - supervisory skills developing - leadership developing - working independently and decision-making

Training Levels	Ideal attainment levels – skills, knowledge, attributes (continued)
Advanced year 4	<ul style="list-style-type: none"> - able to manage ED effectively - being a skilled clinician - teaching / supervisory skills - team leadership - working in administrative role - able to work at consultant level - working independently - advanced resuscitation skills

For the full list of comments on levels of attainment, see the table of submission form entries (ACEM submission form comments.doc).

Ideal Pre-requisites

In response to the question ‘What pre-requisites (skills, knowledge and behaviour) do you feel trainees should have acquired before entering advanced training?’, a range of views were provided by 66% of respondents. Broad categories of responses are shown in the chart below. Basic clinical procedures were emphasised by more than a third of the respondents who answered this question, and many specific procedures were pointed out; however, airway skills were most commonly cited, and a separate category represents this. Similar proportions of comments were apparent for: ED management experience; commitment to EM; passing the primary exam, and patient assessment/ diagnosis.



Individual comments

Basic clinical procedures / skills

‘Baseline procedural skills - every ED advanced trainee should have already acquired airway skills, CV & arterial access + basic procedural skills.’

‘Be able to perform most procedures with minimal supervision.’

Good communication / teamwork

‘Effective communication skills with the view that at some point the trainee will be making decisions and leading a team.’

‘Excellent record in communication, teamwork and professional behaviour, backed up by multi-source feedback data (not just supervisor reports).’

Airway skills

‘Advanced airway skills should be learned early in advanced training.’

‘Basic airway management skills (including familiarity with intubations).’

ED management experience

‘Before entering advanced training, trainees should have had at least 1 year of ED experience, with demonstrated ability to supervise junior RMOS.’

‘Be able to run a department when no consultants are available.’

Commitment to EM

‘Professional attitude; enthusiasm for emergency medicine.’

Primary exam pass

‘I think the current prerequisites of a primary exam pass and a year of provisional training are enough.’

‘Trainees should have passed a Primary Exam that is more clinically relevant.’

‘They need to have some sort of commitment to passing the primary exam and really should be finding their feet on the floor in ED - asking a lot of advice from senior staff and being KEEN to learn.’

History-taking, assessment, diagnosis

‘Thorough history, appropriate exam, basic synthesis and honest presentation. Good communication with patients and families and ability to seem like a doctor.’

‘History taking and basic physical exam skills.’

For this question on pre-requisites, a wider range of smaller grouped responses emerged, each representing around five respondents. This may be because they were asked to include comments on procedural or non-technical skills, and behaviours. Some of these are subsets of the clinical procedures set. They include:

- prerequisites good as they currently are
- understanding of common emergencies
- advanced life support skills
- critical care experience
- surgical skills
- reflective practice – ability to self-assess behaviour
- professional conduct
- multitasking and ability to deal with stress
- problem solving and decision making
- patient care and safety
- completion of prevocational programs
- ability to work and learn independently
- leadership.

For full list of comments, see the table of submission form entries (ACEM submission form comments.doc).

Assessment Methods

In response to the form entry on 'Assessment Methods' and the question 'What do you believe the assessment process for trainees should look like?', a range of answers were provided by 75% of respondents. Due to the variation in responses, it is difficult to categorise them into clear themes. As for Levels of Attainment, the table below shows broadly the most common responses in relation to Assessment Methods.

Major Assessment Methods	Views on assessment process for trainees
In-training assessment	<ul style="list-style-type: none"> - good as it currently is - need to develop clinical modules - need regular, ongoing skills assessment - want more constructive feedback from DEMENTs, FACEMs and others - more structure needed (eg. workplace based) - split workload for DEMENTs
Primary exam	<ul style="list-style-type: none"> - change format—more clinical focus - practical EM approach (eg. simulation) - good as it currently is - increase relevance to EM practice - make smaller in scope; less complex - abolish—not right choice of assessment
Fellowship exam	<ul style="list-style-type: none"> - good as it currently is - would like focus on expertise, not on rote learning/exam skills - more practical skills focus - want option to sit FE earlier in training - suggest use of simulation for learning - need more focus on management, admin. - 4.10 component is important - effective module format (eg. online)

Individual comments

In-training assessment

‘The in-training assessment is biased. If a trainee has a personal disagreement with a consultant or a member of the nursing team, it is automatically counted against the trainee regardless of what the issue was.’

‘In training assessment - how does one standardise the assessment? Have all seen trainees that are "liked" or "disliked" by their departments for reasons other than their skills. Perhaps College teams could visit departments and observe trainees in action (as is done by the RACS - logbooks reviewed, interviewed re satisfaction with progress, etc).’

‘I believe In training assessment is the best way evaluating clinical skills of trainees and exams are good way of assessing their knowledge.’

Primary exam

‘I think the primary exams are good - except certain parts of the Pathology exam are not relevant to our everyday ED practice (ie. such a big emphasis on inflammation at a cellular level is hardly useful when seeing a pt in ED).’

‘I feel that the Primary Exam should be compacted and that it should be mandatory for trainees to sit more than one exam at a time. The exact way this is formulated if not so important to me, but I feel that a significant number of the trainees take too long, and are poorly motivated to pass all four exams in a shorter time frame.’

‘The area of greatest weakness is the primary examination process as it show very little relationship to working practice in the Emergency Department. Does not explore application of knowledge.’

‘Primary does need to be less of a hurdle. General grounding only is required. ED is not a popular profession so having a high part 1 barrier is bad for marketing and attracting trainees. Look at evolution of O&G training - now has no entrance or exit exams.’

‘Primary should be about preparation for fellowship - a lot of the content in primary is not helpful in the assessment and management of the critically ill patient. Instead of learning pharmacology in isolation relate it to care - e.g. learn about antihypertensive agents in the context of managing hypertensive emergencies, anatomy more in the context of radiologic interpretation.’

Fellowship exam

‘Option to sit the fellowship exam prior to the last year of training. Reasons:
To improve knowledge of trainee doctors working in ED
To improve patient safety
To allow doctors to conform their training to suit their other commitments.’

‘Fellowship Exam: Only include short cases that test examination of reliable clinical signs that alter real-world decision-making. Remove non-consultant level testing.

‘Fellowship: scrapping the long case (and possibly the shorts) - or at least in their current form and adding the SCEs in with the writtens (e.g. 4 exams sat over 2 days) would be better. Direct observation of clinical examination skills could still occur at a local level, with formative assessment undertaken by DEMTs. Assuming that the shorts and longs are the only way of ensuring appropriate clinical examination is laborious, and questionable from a reliability (and validity) perspective. Surely by this late stage of training, trainees with clinical examination difficulties have been identified.’

‘The current FELLOWSHIP exam is adequate, but currently does not well examine practical skills and leadership abilities. Though my opinion is biased I believe the college should be exploring simulation as part of the examination process.’

‘Keep the structure the same, but look at the content of the Fellowship exam. Less emphasis should be placed on 19th century examination methods (listening for syphilitic heart murmurs for instance). Much greater emphasis should be placed on modern imaging technology eg interpretation of ultrasound, echo, MRI. There is also definitely a role for high fidelity simulation assessment. ACEM needs to move quickly to catch up with these technologies as it is already outmoded.’

Other

‘Formative assessment through a reflective portfolio would be useful. The portfolio is currently not being used to the best of its potential as a learning tool. This would encourage the creation of a culture of the reflective practitioner.’

‘Possibly more specific clinical "modules" along the way eg ECG interpretation, arrhythmia management, radiology interpretation, biochemical results interpretation. ?component of management training. ?courses/simulation or other- possible mandatory list eg APLS, EMST’

‘Something has to exist within the 4 years of advanced training and definitely at about the end of second year. Standardisation is an issue so the easiest assessment would be a clinical MCQ. Clearly procedural and investigative skills could be targeted in this MCQ. Basic clinical skills should be assessed earlier and the fellowship MCQ should evolve further as a specialist level exit exam. Testing clinical skills earlier or "on the floor" akin to long case and short case is much more problematic and hugely time consuming.’

Many other detailed comments were offered on the question of suitable assessment methods for ACEM trainees. For the full list, see the table of submission form entries (ACEM submission form comments.doc).

Innovative Ideas

In response to the request for 'Innovative ideas for ACEM Training' a range of views were provided by 67% of respondents. Due to the nature of this question, it is possible to group the responses into very broad categories only. Further detail is provided by the comments themselves, some of which are given here. The full list is provided in the table of submission form entries.

Broadly, categories for initiatives or other experience-based inclusions in the training program are shown below, with summaries of individual suggestions and specific comments.

Courses, specific terms

- formal incorporation of courses (ALS, APLS, ATLS)
- surgical term requirement
- course in EM clinical supervision
- resuscitation medicine as separate syllabus
- focused emergency ultrasound (several comments)
- structured emergency airway training
- formal communication/leadership training
- inclusion of USS training
- obligatory rural terms

'Formal incorporation of formal ALS, APLS, ATLS and ultrasound course in College curriculum'

'All clinical schools have simulation training based on team building, effective communication and critical decision-making. Such programs could be offered to ACEM trainees at appropriate stages of their training.'

Online resources

- online patient logbooks
- free online lectures
- EM website creation
- web resources for rural trainees
- progressive modules, online testing

'The paediatric log book should go online, with the ability of the trainee to go online and log patients as they are seen'

'Online teaching would also be great. This could particularly cover those areas which are ideal for online teaching like testing diagnostic thinking skills, or ECG interpretation or ABG interpretation, all keeping it in a clinical context.'

Learning deliveries

- simulation approach (many comments)
- role play patient encounters
- more scenario based training
- develop media platforms (iPhones, podcasts, e-games)
- study e-groups
- clinical training days
- lecture series of conference weeks
- small projects prior to Fellowship preparation

‘Simulation training for trauma and resus situations useful’

‘Use of real patients or actors to demonstrate some aspects of patient care eg paediatric encounters, how to break bad news, difficult patients’

‘It would be possible to develop simple e-games that promote the development of critical thinking in clinical and administrative scenarios - a personal interest of mine’

Overseas training

- time in overseas hospitals
- adopt UK advanced training entry

‘Whilst the UK ED job is very different, many of the skills needed are obviously shared. Having done both the UK and Australian advanced training entry exams, I found the UK one far more useful in my ability to improve as a doctor. When I did the exam their ED MCQ for their primary hadn't been developed so I'm not sure how good/bad it is, but I would much prefer to see basic sciences taught within clinical scenarios.’

‘Humanitarian / International Emergency Medicine: consideration could be given to expanded 'special skills' training with an emphasis on disaster response and international emergency medicine. Current examples include RACP / RACGP recognition of MSF experiences while ANZCA has recognised anaesthetic experience in Vanuatu. This has included senior registrars with daily telephone contact with a supervising Australian consultant anaesthetist.’

Exams

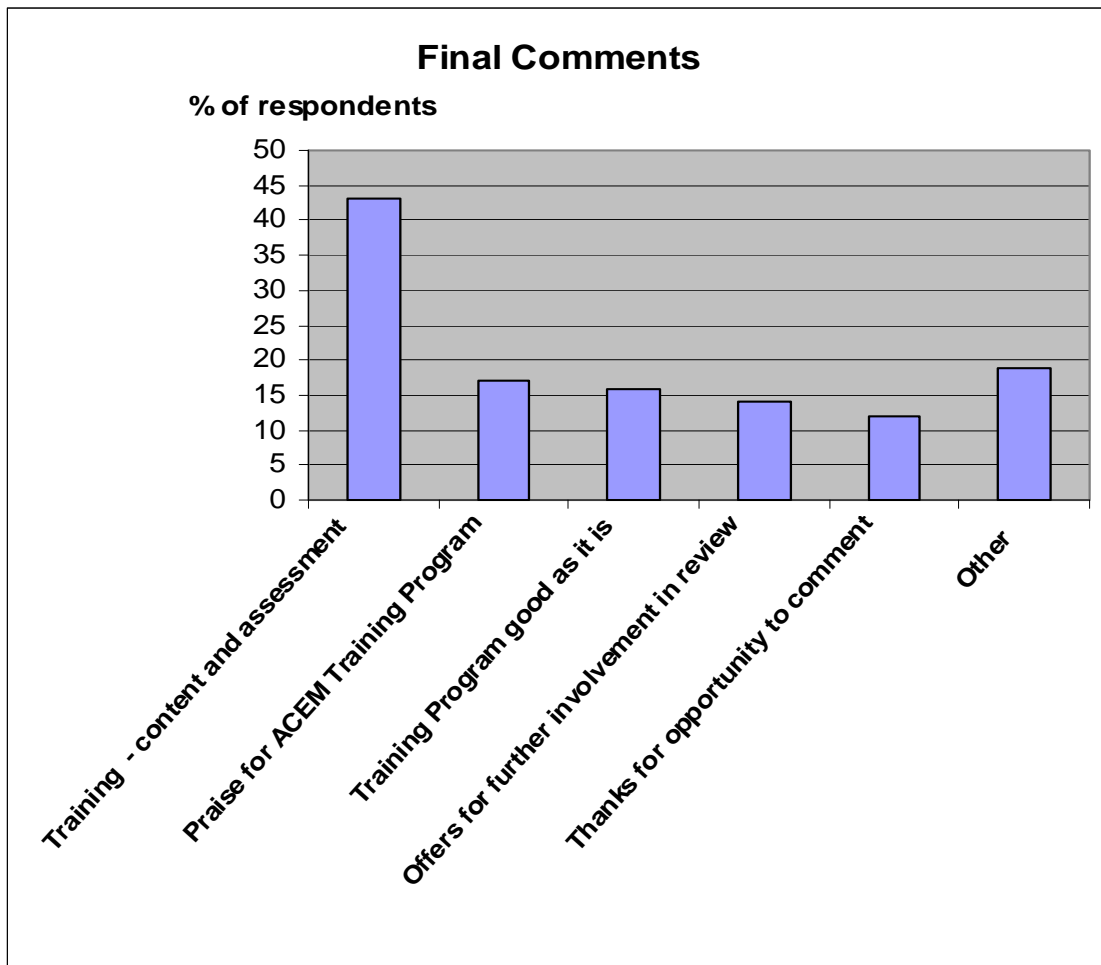
- permission to do Fellowship exam earlier
- change exam format
- less emphasis on exit exam

‘Extend the training program to 5 years with the 5th year as a fellowship year

- allow all trainees who are writing the fellowship exam to be excluded from night shift
- allow candidates regardless of whether they fail or pass the exam to view their individual scores
- increase the no of DEMENT's to 3 at least for ED's’

Final Comments

Over half (52%) of respondents provided other (final) comments in their online submission forms; these were diverse in content and some very long. However, the final comments were able to be broadly categorised, as shown in the chart below (percentages based on those who provided a final comment):



The 'Other' category above included comments on different aspects of training, including:

- patient safety and care should be ultimate goal
- there should be more focus on paediatrics
- overseas networks should be promoted
- 4.10 component 'absolutely vital'
- qualification of FACEMs (several comments)
- retrospective accreditation should be given
- those in rural hospitals need a support network.

For the full list of comments see the table of submission form comments.

Individual Comments

The largest category of final comments – the training program’s content and assessment – encompassed a wide range of points about the exams, teaching models, professional development, skills acquisition and other aspects. Many provided both praise and criticism of different aspects of the training, often giving suggestions or recommendations for improvements. Some of these comments are shown in the sections below. Again, as for the other questions, full comments are provided in the table of submission form entries.

Training—content and assessment

Exams

‘There has been an increasing emphasis on making the primary exam more "clinically relevant". While I agree to a certain extent, the emphasis of this exam is NOT clinical but on basic sciences. Also it is hard to predict what areas will be clinically relevant in the future as new drugs and new therapies develop. By keeping the primary broad and not overly fixated on what is clinically topical this year we better prepare applicants for unpredictable therapies in the future.’

‘There is an urgent need for change if ACEM is to maintain its reputation as a progressive force. The content and structure of the primary exam remains excellent and it is vital that this is not dumbed down, especially because the knowledge base of medical graduates has declined. The training programme needs to incorporate rural medicine on a mandatory basis. The Fellowship exam should move away from assessment of 19th century clinical examination skills and incorporate high fidelity assessment. Fellowship candidates should be able to demonstrate their competence in handling the practicalities of critical care in isolated and pressured environments.’

Flexibility

‘I appreciate the flexibility in hours and multiple locations that emergency trainees can be employed. Compared to other training programs it appears less restrictive on these lifestyle issues. I would be disappointed if these features were to change, and would consider another training program.’

Hospital experience

‘The College should give some thought to ensuring that trainees have adequate experience in managing patients from community hospitals to tertiary. This is assured by minimum experience at particular types of hospital.’

Other

‘Constructing a training program that makes everyone happy is tricky. However, constructing a program that is transparent, purposeful and directive should be attainable. The current FACEM training program does certain things better than others - for instance, there are few others, if any, that give specific attention to the administrative issues that will consume much of a staff specialist’s working day. However, there is room

for improvement and certainly room for being seen by its trainees and others as a College that is interested in producing high quality specialists and providing the resources for it to do so.'

'The training programme currently produces good doctors, but I think the need to formalise/log book abilities and procedures will become more and more necessary as training hours decrease. I'm probably one of the last cohort to have done 100+ hrs/week as an intern and junior in the UK, and would wish that on no-one. But 40 hrs/week for what could be as short as 7-8 years for training time does limit exposure and experience. I know I learn best with hands-on, clinical based teaching - I would like to see more of a move to directly relevant exams testing important basics rather than testing pure recall.'

'Eventually, I would like to see much of the accreditation for FACEM done in the workplace, with sign off from a number of clinics (above), DEMENT/Censor having been involved with a logbook case development (with a couple of Case commentaries of 5000 words reference, regarding difficult /controversial cases) Perhaps a reflective piece of 10,000 words on a department s performance evaluation.'

'1. I believe that we should have some pathway where-by the college assesses doctors with years of ED experience, but who have not in the past been trainees. We are missing out on a number of potentially very good "FACEMs", who have, for one reason or another, chosen to work "outside" the system. This process would need to be incredibly robust and involve some reliable local input. Let's not cut off our nose to spite our face.

2. I think we need to get tougher with ACRRM and others who propret to "train" emergency physicians. No other college woould stand for this, certainly not anaesthetics or O+G. Let's not be seen as a second tier college.'

Praise and Thanks

'It is a very good system and I believe the program will make us very good doctors.'

'Overall ACEM is a highly organised and competent body which I believe genuinely serves the interests of all members regardless of stage of training / experience. Good luck to the TARWG!'

'Thanks for asking the questions'

'Overall, the college should be recognised for its expansive but affordable training program.'

Offers for Further Involvement

A number of respondents gave their contact details, with a desire to be consulted for further comment. These details are provided in a table in Appendix 4.

Other suggestions and long comments from online survey

Comments longer than 200 words include a range of suggestions for change or recommendations about ACEM's training program.

These are listed under subject headings in Appendix 3.

Results: Other Submissions

A number of submissions were made to the review, and they provide comments on a range of aspects of ACEM's training program. They represent the views of relevant committees/councils, a university, hospitals, a FACEM and trainees (one a focus group participant).

As these submissions were lengthy and focused on specific issues, their content is summarised here and the full submissions included in Appendix 2.

Summary of Other submissions
<p>1. Suggestions for updating the training program:</p> <ul style="list-style-type: none">- applying adult learning principles to help trainees maximise their study efforts- look at other specialist training programs for best course design- online resources: modules; exam tips; principles of adult learning/ teaching; clinical guidelines, and other relevant resources (see full submission)- improve culture of trainee support and on-the-floor teaching (reference to RACGP website)
<p>2. Identifies strengths of training program as: flexibility; entry process; requirements and length; assessment; research requirement; trainee input; use of IT; training fees.</p> <p>Weaknesses identified as: lack of defined competencies as trainee progresses; mandatory critical care term (difficulty in accessing ?); primary exam; paediatric logbook; need for more non-clinical skills.</p> <p>Comprehensive comments on other aspects, particularly assessment methods and innovative ideas – see full submission.</p>
<p>3. Emphasises need for emergency physicians to have a good understanding of:</p> <ul style="list-style-type: none">- microbiology specimen collection- chemical pathology issues- autopsy examinations.

<p>4. Comments on Fellowship exam: suggestions provided on MCQs, VAQs, SAQs, long- and short-case examinations, SCEs.</p>
<p>5. Issues from a pre-vocational training perspective to consider:</p> <ul style="list-style-type: none"> - training in supervision and teaching - flexibility in requirements for onsite supervisors - promoting vertical integration.
<p>6. Comments on:</p> <ul style="list-style-type: none"> - trainee selection - Primary Exam Committee innovations (basic sciences, level of clinical focus, sources of information, current exam format) - Royal Melbourne Hospital (comment on 'ensuring that trainees have adequate experience in managing patients from community hospitals to tertiary.') - University of Melbourne (comment on the 'type of graduate that Medicine, hospitals and the community may want')
<p>7. Comment on closing the gap between those who are admitted as a Fellow, through the training process, yet are recognised by their colleagues to be inadequate.</p>
<p>8. Comments on training and assessment by focus group participant:</p> <ul style="list-style-type: none"> - clinical skills teaching resources / models - ultrasound skills important - tailor made training (to maintain flexibility) - primary exam (good as it is, with suggestions for physiology focus)
<p>9. Brief comment to say 'I think some Education on "Human Factors in Team Work " (eg. situation awareness, communication etc) would be a beneficial addition to training.'</p>

Focus Group Findings

A total of seven focus groups were conducted as a part of the review into ACEM's Training Program. Three were held in Queensland, and the others were held in South Australia, New South Wales, Western Australia and Victoria.

The minutes of the focus group meetings indicate the agendas followed a similar format, and covered core aspects of ACEM training as well as other aspects the participants wanted to highlight.

Core aspects include: basic skills; Primary exams and Fellowship exams. Three groups discussed the paediatric logbook (another discussed logbooks in general), while two groups each discussed the following: assessment methods; modules; teaching/study, and mandatory anaesthetic term. Issues each discussed by one of the groups were: non-ED terms; trainee support, leadership, and transition (from registrar to consultant).

Most focus groups also discussed other issues; these were different for each group and, as for the online comments, covered a broad range of training aspects. The other issues discussed include: online modules; rural terms; critical care rotations; 4.10 improvement; UK model; patient focus; teaching skills, skills in short case, and role of DEMENT.

Minutes of each of the focus group meetings are shown in Appendix 5.

Discussion

Clearly the review findings have revealed a large volume and breadth of individual viewpoints about ACEM's training and assessment. However, a number of broad themes have emerged – and these should be looked at further before implementing changes to enhance the program. The following sections summarise the findings of the review to date. A list of training aspects highlighted in the review findings, that need to be closely considered before changes are made, is offered in the Conclusions.

Online survey comments results

A diversity of comments is apparent in the results of the submission process, which forms a large component of the review of ACEM's Training Program. Collectively, the comments show both positive and negative – sometimes contradictory – views; e.g. what some respondents view as strengths have been highlighted as weaknesses by others (ie- trainee support). Individual comments are often multifaceted and of different lengths, some being very brief and others going into a lot of detail about specific aspects of the training.

When the responses to each question of the online survey were assessed, some broad categories of themes emerged. These highlight the aspects of training that survey contributors deem important in the context of a review. While each set of responses (for each question) shows its own categories of themes, across the entire results some themes are recurring.

The points below provide summaries of most of the online survey question responses. Innovative ideas and Final comments are discussed together with Long comments and Other submissions in the following section.

Strengths

The main strengths identified were: good trainee support (a third of respondents) and program structure/content (over a quarter of respondents).

Weaknesses

The main weakness identified was exam deficiencies, commented upon by almost a third of respondents. Large proportions of comments were also made on: trainee selection; lack of trainee support, and lack of specialisation.

Outcomes

The leading desired outcome of ACEM training, identified by over 60% of respondents, was to produce '**competent**' emergency physicians. Smaller proportions commented on other outcomes, including: ability to teach/supervise; management skills, expertise in emergency medicine.

Levels of Attainment

Detailed levels of attainment were outlined by survey respondents, with many commenting on the different years of training. Training as a progression of skills acquisition was emphasised, as was early supervision in training progressing to eventual independence in emergency medicine work. Specific technical skills (e.g. clinical procedures) and non-technical skills (e.g. supervision) made up the bulk of comments for this question.

Pre-requisites

Basic clinical skills were seen to be the most important pre-requisite for advanced training (as identified by over a third of respondents). Airway skills in particular were emphasised. Good communication and teamwork abilities were deemed important by over a fifth of respondents.

Assessment Methods

A range of comments were made on in-training assessment, the Primary exams and the Fellowship exams. For each of these assessment methods, some thought them to be currently good as they are, while others made criticisms or offered suggestions for improvement. A number of comments on the assessment overall were also made.

Innovative and Final comments, Long comments, Other submissions

These detailed and often lengthy contributions to the review reflect issues raised by respondents of the online survey and participants of the focus groups. The innovative ideas collected in the online survey are predominantly suggestions for improving training: mandatory terms (e.g. surgical, rural); developing online resources (e.g. modules, lectures); and developing learning deliveries (e.g. simulation). Final comments mainly focus on the content and assessment of training, with many also offering suggestions for improvement. The longest survey comments (Appendix 3) offer more detailed suggestions on a range of training features, such as: primary exam; core areas; research and an overseas (UK) model. Other submissions also offer comprehensive comments on different aspects of ACEM training; while some make unique comments (e.g. need for pathology/autopsy understanding), most reflect and expand upon the shorter responses of the online survey.

Focus groups

The focus group findings reflect comments made in the submission process, and contribute viewpoints – from a group discussion context – about specific aspects of ACEM training.

Conclusions

In view of the findings outlined in this report, it would be useful for the next steps to include looking more closely at the aspects of ACEM training most commented upon in the Submission Process. These are:

Training: content and structure

- core technical skills
- specific terms and rotations
- flexibility of program
- examples of other training programs for best design

Training: assessment

- exams
- trainee selection / exclusion
- clinical competency

Teaching and learning delivery

- trainee support
- effective module format
- online resources
- adult learning principles

Non-clinical skills

- management skills
- supervisory skills
- communication
- teamwork
- leadership.

Following this evaluation report and further assessment of the comments on the training aspects listed above, it is suggested a Discussion paper with recommendations be prepared. This would assist the working group to achieve the other review outcomes outlined earlier in Purpose and Background (page 2). A number of submission contributors provided their contact details, with an interest in being further involved in the review process (Appendix 4). It is suggested this offer be taken up: possibly another Focus Group could be held with these people; or at least contact made with each of them.

Finally, it is important to keep in mind the ultimate aim of the review: to ensure that the curriculum remains contemporary and that ACEM trainees are experiencing the highest quality teaching and learning opportunities, and are achieving optimal clinical competence.