The Faculty of
Intensive Care Medicine

GUIDANCE FOR TRAINING UNITS IN INTENSIVE CARE MEDICINE

This guidance pertains to trainees undertaking blocks in Intensive Care Medicine while pursuing the 2011 standalone curriculum for a CCT in ICM either as a single CCT or within a Dual CCT Training Programme. It is an update of previously issued guidance which was reviewed within the Joint FICM/ICS Guidelines for the Provision of Intensive Care Services 2015.

Programme delivery

All training units must have an educational structure in place to allow the recommendations in the 2011 Curriculum for a CCT in Intensive Care Medicine to be carried out. This includes a unit induction, named Clinical Supervisor (+/- Educational Supervisor) an educational contract, and ability to perform the appropriate workplace based assessments (WPBAs). This should facilitate achievement of all competencies at the relevant level within the designated training periods.

All module durations are indicative, bearing in mind this is a competency based programme, but must include full time ICM for daytime ICM training[i] and a proportionate degree of experience working at weekends, evenings and nights consistent with an EWTD compliant pattern of working and the increased presence of Consultants in ICM working in the hospital at these times. [ii]. At Stage 3 the OOH (Out Of Hours) component should be organised to deliver a senior role while on-call[iii]. Stage 1 training should be delivered in blocks of minimum 3 months duration.

Programme content

The ICM curriculum, along with training objectives and competencies for each level and appropriate WPBA, are available on the Faculty website and will underpin all ICM training programmes. The objective of the training programme is to move from a level of training and ability where an initial diagnosis, resuscitation and stabilisation of a patient is safely undertaken, to a point where the trainee is able to run an intensive care or critical care unit managing and directing overall care plans. As the trainee progresses through each level, the degree of responsibility should increase as should their opportunity to teach and supervise junior colleagues and other staff members. To achieve this certain specific and general aspects of training will be required.

Initial Planning

Following an appropriate unit induction an educational contract should be agreed between the trainee and Educational Supervisor / Faculty Tutor (FT) as specified by current FICM standards and WPBA will be carried out according to the current recommendations. It is good practice for an initial meeting with the FT and/or RA (and where necessary additional meetings with other facilitators of other relevant aspects of training) to take place well in advance to help plan aspects of training, such as periods of attachment and facilitation of audit or research projects.

Training opportunities

A weekly programme of teaching should be provided and supervised by a named ICM consultant on a recognised teaching unit[iv]. Such a programme of education should relate to the literature and practice of ICM. A postgraduate education programme should also be in place within the region with the aim of facilitating supervision for the written and oral components of the FFICM exam. Training units should contribute to regional programmes by releasing trainees to attend and also by contributions to the

design and/or delivery of the programme. In addition, Stage 3 trainees should be given enhanced clinical responsibility such as conducting ward rounds with an appropriate level of consultant supervision.

An appropriate, regular management meeting should be identified for Stage 3 trainees to attend and trainees should contribute to other unit meetings eg M&M. It may also be appropriate for stage 3 trainees to attend the Regional Intensive Care Training Committee meetings.

Curriculum coverage

At each level of training all aspects of the curriculum should be deliverable. It is recognised that the importance of some areas of practical training will vary with time as medical knowledge advances. However the programme within a region must allow trainees to gain a broad knowledge of intensive care medicine.

Training capacity and Rostering

Foundation Trainees

Foundation Trainees form a valuable part of the Critical Care team. Rostering of this group varies between units but care should be taken that there are sufficient training opportunities for the trainees allocated to the unit at any one time.

Stage 1 and Stage 2 trainees

Trainees should have sufficient patient contact to provide enough clinical experience. The case mix of the unit is the main determinant of this however as a general rule an Intensive Care Medicine trainee at this level should look after a minimum of 3 patients and a maximum of 8 during daytime hours. Local considerations, such as the frequency of nocturnal admissions and the degree of instability of the patients will determine appropriate ratios at night.

Stage 3 trainees

Units of eight or fewer beds should have only one Stage 3 trainee rostered to be on duty at any one time, excluding handovers. Stage 3 trainees may be rostered to be on-call from home. This may allow additional opportunities for training appropriate to this level of trainee but it is recognised that it is increasingly common for ICM to be delivered by consultants who are resident themselves.

Additional Considerations

It is recognised that some units are critical care units i.e. a flexible mix of ICU and HDU patients. In these situations the average level 3 occupancy should be related to bed numbers. Similarly many units are adjacent ICU and HDU facilities, covered by the same medical staff. Here a similar calculation could be applied. Geographically separate units, for example separated by several floors or considerable horizontal distance of more than a few yards should not be normally regarded as one unit.

As a general principle, consideration should be given to the needs of trainees on units where other Allied Health Professionals (eg ACCPs) work in a medical role or are being trained. ACCPs may be contributing to supporting the education of trainees new to ICM eg Foundation doctors, but units may need to be mindful of the similar needs of trainee ACCPs and junior doctors in some areas of ICM practice and so should plan their rotas and work patterns accordingly.

Minor overlaps in trainee medical and trainee ACCP rostering should be at the discretion of the RA for ICM to consider if the training needs of both groups are able to be met.

General Guidance for Rostering

All trainees must spend at least half of their working time during periods when consultants are rostered to be on site. If consultants have programmed activities on the Intensive Care Unit at other than usual office hours, these times may be counted towards the trainees' normal daytime hours, as direct consultant supervision is the deciding factor.

It is important that a minimum proportionate degree of training time is spent at night since the nature of experience at night is qualitatively different from that during the day.

It is accepted that there will be a need, particularly in smaller intensive care units, for the first line of call at night to be drawn from a pool of resident doctors comprised of trainees and non-trainees, not all of whom may be attached to intensive care during the day. Local arrangements must be made in these circumstances to ensure that appropriate induction and lines of reporting are in place, that the cover is provided by those with adequate competencies and that an appropriate skill mix is always available. Within the limits of the EWTD there is no requirement for a working day to be of any particular duration.

More formal lecture and tutorial based teaching may be most effectively organised in larger blocks of perhaps 4 hours to be held when none of the trainees are scheduled to be present on the intensive care unit. Trainees should be expected to come to work solely to attend such organised teaching so long as it forms part of a EWTD compatible work programme.

Additional requirements for Stage 3 training

Training in additional areas of expertise has been a common feature of ICM training programmes, such as the acquisition of experience in echocardiography, bronchoscopy or gastroscopy. These types of activities encourage new developments on intensive care units and should be strongly encouraged. The acquisition of relevant experience by attachment to other areas such as microbiology or radiology should be allowed and should count towards intensive care training. This should not normally exceed 2 half days per week. However, pure service attachments outside intensive care will not be permitted during any time of day or night[v].

The ability to be involved in research, quality improvement and service review should be provided. However, it may be difficult for non-academic trainees to do original research and that "research awareness" may be easiest to obtain via an established research programme. Therefore, this should be part of an existing programme of research rather than individual projects specifically developed for trainees, and should be identified as early as possible. An ICM consultant with responsibility for coordinating trainee allocation to these projects should be identified. It is possible that this coordinator could be the Faculty Tutor or another individual; whatever the arrangement close liaison should occur between the Tutor and coordinator/researcher at an early stage to avoid delays and missed opportunities.
Trainees should be encouraged to complete smaller worthwhile projects as well as contribute to programmes with a longer timescale for completion and dissemination.

Defining an appropriate training environment

In order for training in Intensive Care Medicine (ICM) to be recognised and approved the Faculty of Intensive Care Medicine (FICM) have issued guidance to assist in the maintenance and development of training programmes by Deaneries, Regional Advisors (RAs) and Faculty Tutors (FTs).
Regions vary in the arrangement of training units and the Regional Advisor is best placed to maximise the training opportunities within their region's resources. In making this decision, the RA will take into account the ability of the unit to deliver the curriculum. Emphasis will be placed on the ethos of training within the unit, in particular consultant support for training and ability of the department to engage with the current training requirements. To ensure the quality of training there must be an appropriate case mix and adequate consultant supervision.

The table below outlines an example system to facilitate the allocation of trainees to match their training needs to available resources.
The table is a guide rather than an absolute rule.

ICM Stage of Training	Level 3 admissions/ year	Availability of organ supports	Daytime Consultant cover (PAs/week)	All consultants covering ICU are FICM eligible
1	<120	Respiratory Cardiovascular	<10	No
1	>120	Above + Renal	10	No
2	>200	Multiple for 2+ patients	15*	Yes
3	>350	Multiple for 4+ patients	≥15	Yes

*15 sessions to include daytime weekend working

While a mix of Intensive Care Units is essential for a broad training programme, care should be taken to ensure an appropriate environment for the trainee at a given stage of ICM training. The Regional Advisor and Training Programme Director will tailor the training programme to best suit the trainee's requirements. Stage 3 trainees should be based in grade 4 units with a comprehensive teaching capability, many of which will be located in a major trauma centre. However Stage 3 trainees may be seconded to other units for their training if required.

Summary

It is vital that broad coverage of the curriculum is achieved at all levels of ICM training and training programmes must accommodate this. The overall running and structure of the programme should be determined by the TPD and RA taking local knowledge of hospital and service structures into account to ensure that the curriculum is fully covered by each trainee.

The objective of the training programme is to produce high quality patient-centred doctors skilled in ICM with appropriate knowledge, skills and attitudes to enable them to practice at consultant level.

Dual CCTs may only be acquired jointly with a partner specialty. All aspects of training should be geared to enhancing the skills and abilities trainees will need as consultants therefore service provision for other specialities will not be permitted. Planning of training appropriate to the individual should take place at an early stage.

Notes

[i] An element of flexibility may be accepted but should not average more than 1 half day every 2 weeks of training time for duties outside of Critical Care unless for specific ICM training purposes.

[ii] Within a conventional 1 in 8 trainee rota pattern this would equate to at least 12.5% out of hours' experience .

Immediate cover for emergencies outside Critical Care may be acceptable but there should be arrangements in place to ensure that Critical Care cover is not compromised for example Senior ICM trainees may be one of the more senior resident doctors in a hospital and may be in a position to deal with emergencies outside of the ICU, but during ICM training this should only be to deal with life/limb threatening time critical emergencies pending the arrival of another appropriate member of staff (usually a consultant)

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[iii] It is not appropriate for this level of training to be the most junior member on the ICM team.

[iv] Trainees at intermediate level should participate in the delivery of this teaching and advanced trainees should be encouraged to take an active part in their design.

[v] For example a trainee with an anaesthesia background will not be permitted to be involved in anaesthesia daytime or out of hours provision, or a trainee from a medicine background will not be permitted to conduct clinics or out of hours provision.