GUIDANCE FOR TRAINING UNITS IN INTENSIVE CARE MEDICINE

This guidance pertains to doctors in training undertaking blocks in Intensive Care Medicine while pursuing the 2021 standalone curriculum for a CCT in ICM either as a single CCT or within a Dual/Triple CCT Training Programme. It is an update of previously issued guidance that has been reviewed considering the updated curriculum and Guidelines for the Provision of Intensive Care Services v2.1 (GPICS) 2022.

PROGRAMME CONTENT

The ICM curriculum, along with training objectives, capabilities for each level of training and appropriate assessment modalities (including SLEs, MSFs etc), 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 patient care plans. As the doctor in training 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.

STANDARDS FOR PROGRAMME DELIVERY

1. All training units must have an educational structure in place to allow the recommendations in the 2021 Curriculum for a CCT in Intensive Care Medicine to be delivered. This should include:
    - A unit induction
    - Named Clinical Supervisor (+/- Educational Supervisor)
    - An educational contract, agreeing a bespoke personal development plan (PDP).
    - The ability to perform the appropriate structured learning events (SLEs) to facilitate the attainment of all capabilities at the relevant level within each designated Stage of training.

2. All consultants responsible for the educational supervision of trainees must be recognised by the GMC for this role and there must be sufficient time allocated in the Educational Supervisor's job plan.

3. All module durations are indicative, bearing in mind this is a outcomes-based programme, but must include full day shifts to be spent on the critical care unit to facilitate daytime ICM training[i] and a proportionate degree of experience working at weekends, evenings, and nights. 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.

   Such rosters must be consistent with the new junior doctors' contract rules, compliant with the EWTD pattern of working and have an increased presence of Consultants in ICM working in the hospital at these times. 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)

4. Training at all stages should be delivered in blocks of a minimum of 3 months duration.

5. Doctors in training must be given the time and opportunity to achieve the objectives set out in their PDP agreed with Educational Supervisor.

INITIAL PLANNING

Formal, consultant-led departmental induction to the unit must include:

- Instructions on how to raise patient safety concerns.
- Instructions on how to raise issues of bullying and undermining.
- Introduction to key members of medical, nursing, allied professional and operational support staff.
- Highlighting key departmental guidelines and how to access all departmental guidelines.
- Explanation and distribution of the doctor's rostered work pattern, and their roles and responsibilities when rostered to work both during the daytime and out of hours.
- Arrangements for access to all IT systems, including passwords, provision of identification badges and tutorials on the use of any clinical IT systems on the day of induction. Assigning each doctor an Educational Supervisor.

Personal development plan

Following an appropriate unit induction[ii] an educational contract and bespoke personal development plan should be agreed between the Doctor and Educational Supervisor / Faculty Tutor (FT) as specified by current FICM standards and SLEs will be carried out according to the current recommendations.

ICM doctors in training must be given the time and opportunity to achieve the objectives set out in this plan. It is good practice for an initial meeting with the FT (and where necessary additional meetings with other facilitators of other relevant aspects of training, such as the regional Training Programme Director or Regional Advisor) 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 STANDARDS

1. Regular signposted educational activity directed to learners' needs should be provided under the guidance of the Faculty Tutor. Such a programme of education should relate to the literature and practice of ICM as well as relevant applied basic sciences. Time to attend teaching should be incorporated into the doctor in training's work schedule such that the time is protected. In smaller units teaching may be arranged in collaboration with other units. Doctors in Stage 2 should participate in the delivery of this teaching and advanced Stage 3 doctors should be encouraged to take an active part in their design.

2. A postgraduate education programme should be in place within the region for specialty ICM trainees with the aim of facilitating preparation for the written and oral components of the FFICM exam. Training units should contribute to regional programmes by releasing doctors in training to attend and by contributing to the design and/or delivery of the programme.

3. Stage 3 doctors should be given enhanced clinical responsibility such as conducting ward rounds with an appropriate level of consultant supervision.

4. There must be regular clinical governance, and morbidity and mortality meetings that are attended by both consultant and non-consultant grade doctors. Stage 3 doctors in training should be encouraged to attend and participate in regular management meetings. It is appropriate for stage 3 trainees to attend the Regional Intensive Care Training Committee meetings.

5. HEE Study leave policy, to attend intensive care-related courses and conferences must be adhered to, to support curricular and PDP requirements.

TRAINING RECOMMENDATIONS

1. Hospitals / Departments should provide access to relevant and up to date Intensive Care Medicine journals and books relevant to the training of all members of the MDT.

2. Critical care units should provide additional access to online clinical resources from within the clinical area relevant to all staff.

3. Study leave, in line with contractual agreements, to attend intensive care-related courses and conferences should be provided where appropriate and reasonable to help meet curriculum and PDP requirements.

4. Where possible, providing 'on call' (as opposed to resident) out of hours opportunities for Stage 3 doctors is to be encouraged. It is not appropriate for Stage 3 doctors to be the most junior member of the resident ICM medical team.

5. Departments are encouraged to provide doctors in training with appropriate access to IT, rest and accommodation facilities. Any hospital with trainees must have appropriate accommodation to support training and education; this may be in the department or elsewhere in the hospital e.g. the Postgraduate Teaching Centre. The Faculty's guidelines are that this accommodation should include:

    - A focal point for the ICU staff to meet so that effective service and training can be coordinated, and optimal opportunities provided for gaining experience and teaching.
    - Adequate accommodation for trainers and teachers in which to prepare their work.
    - A private area where confidential activities such as assessment, appraisal, counselling, and mentoring can occur.
    - A secure storage facility for confidential training records.
    - A reference library where trainees have ready access to bench books (or an electronic equivalent) and where they can access information at any time.
    - Access for trainees to IT equipment such that they can carry out basic tasks on a computer, including the preparation of audio-visual presentations; access to the internet is recognised as an essential adjunct to learning.
    - A suitably equipped teaching area and a private study area.
    - An appropriate rest area whilst on shift.

CURRICULUM COVERAGE

At each Stage of training, all aspects of the curriculum should be deliverable by each region's programme. 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 its doctors in training to gain a broad knowledge of intensive care medicine. Specific elements and capabilities in the curriculum will only be able to be delivered by placements in units providing specific sub-specialty ICU services (i.e. CICU, PICU, neuro-ICU).

TRAINING CAPACITY AND ROSTERING

There should be consideration to ensure that there are sufficient and balanced training opportunities for all doctors allocated to a unit at any one time.

Foundation Programme Doctors

Foundation Doctors 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 all the trainees allocated to the unit at any one time.

Stage 1 and Stage 2 doctors in training

These doctors should have sufficient patient contact to provide enough clinical experience. The case mix and numbers presenting to the unit is the main determinant of this; however, the daytime intensive care resident to patient ratio should not normally exceed 1:8. The ratio may need to be reduced if local arrangements dictate that the intensive care resident is expected to provide

emergency care outside of the critical care unit (e.g. wards and emergency department). The night-time resident to patient ratio should not normally exceed 1:8.

Stage 3 doctors in training

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

ADDITIONAL CONSIDERATIONS

ICU and HDU

It is recognised that many critical care units are a flexible mix of ICU and HDU patients, and so specific numbers of doctor:patient ratios are unhelpful. Similarly, many units have adjacent ICU and HDU facilities, covered by the same medical staff. Here a pragmatic assessment should 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.

ACCPs

As a general principle, consideration should be given to the needs of doctors in training on units where other Allied Health Professionals (e.g. ACCPs) work in a medical role or are being trained. ACCPs may contribute to supporting the education of those new to ICM, or those who are coming from other specialties for mandatory curricula placements. Units may need to be mindful of the similar needs of trainee ACCPs and all doctors training in ICM and so should plan their rotas and work patterns accordingly.

Overlaps in medical and 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.

Special Skills modules

For Stage 2 single CCT doctors who are completing their 'special skill' module, the requirement for being rostered only to a critical care unit does not apply. They should be rostered as appropriate for acquisition of their special skill. However, these doctors must be rostered to clinical work for a minimum of 50% to maintain critical care skills during this year; each Special Skills syllabus details this further.

Partner specialties

Where dual CCT doctors gain capabilities and training time towards the ICM programme while in their partner specialty, care should be taken to ensure they have adequate exposure within the overall programme to meet the required ICM competency.

GENERAL GUIDANCE FOR ROSTERING

All doctors in training must spend at least half of their working time (over a 24-hour period) 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 doctor in training's 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 and weekends since the nature of experience at night is qualitatively different from that during the day. Working overnight and during weekends should therefore constitute a minimum of approximately 1/8 of rostered clinical time.

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 doctors in training and, 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.

As stated in Training Standards above, regular signposted educational activity directed to learners' needs should be provided. And when timetabled, doctors in training should be expected to attend

such organised teaching and not be scheduled to be present on the intensive care unit, so long as it forms part of a work programme compatible with EWTD and the relevant junior doctor contract.

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 upper GI endoscopy. 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 also be facilitated and count towards intensive care training. This should not normally exceed 1 half day per week and may overlap with Educational Development Time. However, pure service attachments outside intensive care will not be permitted during any time of day or night. For example, a doctor in training with an Anaesthesia background will not be permitted to be involved in anaesthesia daytime or out of hours provision, or a doctor from a medicine background will not be permitted to conduct clinics or out of hours provision.

The opportunity to be involved in research, quality improvement and service review should be provided, as they are HiLLO requirements. However, it may be difficult for non-academic doctors in training 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 doctors on the programme and should be identified as early as possible. An ICM consultant with responsibility for coordinating 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.

Doctors are expected to complete smaller worthwhile quality improvement 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 the ability of the department to engage with the current training requirements. To ensure the quality of training the RA will take into account case mix, case numbers, appropriate consultant supervision, and multiple-sourced unit feedback.

Consistently poor feedback from the GMC or ICM training survey should prompt the RA to review training attachments.

The use of smaller units as part of the training scheme is to be encouraged. The duration of attachments and supervisory structure may need to be addressed on an individual basis. FFICM eligible consultants should staff the unit during daytime hours, and appropriate consultant support at all times as detailed in the GPICS V2 chapter on smaller remote and rural units. Again the ethos and enthusiasm of the unit to embrace training is of paramount importance.

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 doctor at any given stage of ICM training. The Regional Advisor and Training Programme Director will tailor the training programme to best suit the doctor in training's requirements. Stage 3 trainees may be seconded to more than one unit so as to ensure a broad complimentary exposure to the needs of this Stage of training, and as befits their training needs and enhanced roles, responsibilities and career preferences.

SUMMARY

It is vital that broad coverage of the curriculum is achieved at all levels of ICM training and regional 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 doctor on the CCT programme.

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 practise independently at consultant level.

Dual CCTs or Triple CCTs may only be acquired jointly with recognised partner specialt(ies). All aspects of training should be geared to enhancing the skills and abilities these doctors will need as consultants. Planning of training appropriate to the individual should take place at an early stage.