The Faculty of
Intensive Care Medicine

ICM Unit Brief

Part 1 Hospital Details

1.1 Hospital name
Surrey and Sussex Healthcare NHS Trust

1.2 Full address (you must include postcode)
East Surrey Hospital
Canada Avenue
Redhill
RH1 5RH

1.3 Hospital Telephone number
01737 768 511

Part 2 ICU Department contact details

2.1 Direct telephone number to Department
01737 768 511 ext 1670

2.2 Faculty Tutor name
Dr Alice Myers

2.3 Faculty Tutor Email address
alicemyers@nhs.net

Part 3 Unit Structure

3.1 Number of Beds
16

3.2 Number of admissions
1100

3.3 Percentage of elective vs emergency admissions
62% medical, 16% elective surgical, 22% emergency surgical
3.4 Overview of case mix within the unit

East Surrey hospital has a 16 bed mixed medical and surgical adult intensive care unit. There are 1100 admissions to the unit every year. Approximately 36% of patients are mechanically ventilated and more than 30% require renal replacement therapy.

The hospital has a large catchment area, including Gatwick airport and a portion of the M25, looking after a population of approximately 720,000. Elective admissions mainly derive from major colorectal surgery for cancer or inflammatory bowel disease, and complex ENT surgery.

The hospital has a busy Emergency Department resulting in a large number of unplanned admissions to critical care, both medical and surgical. A substantial number of overseas patients and patients from outside our catchment area are frequently brought by ambulance from Gatwick airport which contributes to the wide range of acute medical pathologies dealt with by our critical care department each year.

There are twice weekly multidisciplinary team meetings and alternate day microbiology ward rounds. We have monthly senior staff meetings, frequent M&M meetings and regular joint anaesthetic-ICM clinical governance meetings. The service is part of the Surrey Wide Critical Care Network and takes an active part in its activities. The critical care service is supported by 10 consultants, over 70 nursing staff, ICNARC audit nurses and 16 junior doctors.

The intensive care unit is in the process of moving to a paperless notes system. As part of this transition, each bedspace has been equipped with an individual computer system. Critical care equipment includes Hamilton G5S ventilators, Nikkiso Acquarius haemofilter machines capable of running renal replacement therapy with heparin and citrate, and several Nasal High Flow Oxygen machines. We regularly use prone positioning for patients who are difficult to oxygenate. We also have a new state of the art GE Vivid S70 R2 echocardiography machine with reporting station installed within the ICU. We have strong links with St Thomas’ Lane Fox REMEO unit, a long term domiciliary ventilation unit. All our consultants hold honorary consultant contracts with St Thomas’s hospital to facilitate this.

Critical Care Outreach provides a valuable 24h service 7 days a week. A follow up clinic is in place for patients to revisit the ICU and discuss their stay with consultants and senior nursing staff.

Full support areas for visitors and staff are also available, including a seminar room and an interview room.

Our unit has consistently scored highly in Friends and Family surveys.

3.5 Names of Consultants, roles and areas of interest

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<tr>
<th>Name</th>
<th>Role (eg clinical lead, consultant)</th>
<th>Areas of Interest</th>
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<tbody>
<tr>
<td>DR SYED ALI</td>
<td>Intensivist &amp; Anaesthetist</td>
<td>ICU Finance and workforce management</td>
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<tr>
<td>DR MATYAS ANDORKA</td>
<td>Intensivist &amp; Anaesthetist</td>
<td>ICU Audit Lead CUSIC Supervisor</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Roles/Responsibilities</td>
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<tr>
<td><strong>DR RAVI KUMAR</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Deputy Lead for Anaesthetics Director for European EDIC Examination</td>
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<tr>
<td><strong>DR FIONA LAMB</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Chair of Resuscitation Committee FICE Mentor</td>
</tr>
<tr>
<td><strong>DR CLAIRE MEARNS</strong></td>
<td>Clinical Lead for Critical Care</td>
<td>FRCA Finals Examiner FICE Mentor</td>
</tr>
<tr>
<td><strong>DR PATRICK MORGAN</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Lead for Critical Care Outreach Organ Donation Lead Hospital lead for Sepsis</td>
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<tr>
<td><strong>DR GORDON MORTON</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Emergency Department Linkman FICE Mentor</td>
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<tr>
<td><strong>DR ALICE MYERS</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Faculty Tutor for ICM Co-lead for research in ICM FICE Examiner</td>
</tr>
<tr>
<td><strong>DR SAMEER RANJAN</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Lead for digitalisation London Centre Director for EDIC examination</td>
</tr>
<tr>
<td><strong>DR THEOPHILUS SAMUELS</strong></td>
<td>Intensivist &amp; Anaesthetist</td>
<td>Director Critical Care ultrasound programme &amp; ICU Echocardiography Lead FICE Supervisor</td>
</tr>
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<td></td>
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<td>CUSIC Mentor Co-lead for research in ICM ICNARC lead Statistical advisor</td>
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**3.6 Details of research projects being undertaken within the unit**

EASY-CCRG (EAst SurreY Critical Care Research Group) has developed during recent times due to the combined interest and enthusiasm of the ICU consultant body. Our active weekly journal club has inspired trainees to submit letters for publication in *Thorax* and *Anaesthesia*, and also to carry out various research and quality improvement projects on the intensive care unit (abstracts published in *Critical Care* and *Intensive Care Medicine*). One of our critical care consultants is also a qualified statistician and performs all statistical analyses required for publication of original research.

Peer reviewed publications in 2018: 18 abstracts, 3 letters, 1 review article. Several further articles and case reports have been submitted and are awaiting publication. During 2018, 11 intensive care trainees will have also achieved international presentations following work done in the East Surrey critical care unit.

Peer reviewed publications and research activity in 2019: 15 abstracts published. 11 trainees and 2 nurses presenting at international conferences.

The unit has a long history of participating in NIHR portfolio multi-centre studies more recently including: POETICS, TEST-IT, A-STOP, EPIC III

The EASY-CCRG team are awaiting ethical approval for several original research projects.
3.7 How is the unit staffed?

There are 10 consultants in intensive care medicine who take turns in leading the unit on a weekly basis. 3 further consultant intensivists support the daily running of the intensive care unit. During normal working hours, the “consultant of the week” is supported by a second consultant intensivist.

There are two tiers of junior doctors working in critical care. 8 doctors with airway skills work on a rolling rota comprised of anaesthetic trainees (CT2 to ST7 level), clinical fellows with at least 1 year anaesthetic experience. We have two dedicated echocardiography fellows who partake fully in the senior on-call rota.

Our critical care unit is GMC approved for ICM training at all levels and we currently have one allocated slot within the region for advanced ICM training (Stage 3).

The junior tier rota is comprised of 8 doctors who are not proficient with advanced airway management. 4 core medical trainees and 2 foundation year one doctors spend 4-month placements on ICU. We have two dedicated echocardiography / ultrasound fellows who partake fully in the junior on-call rota.

Out of hours, the 16-bed critical care unit is staffed by one senior tier doctor and one junior tier doctor supported by a consultant intensivist on call.

Critical care doctors work alongside RCoA trainees, anaesthetic clinical fellows and specialty doctors working on call for theatres and obstetrics.

Echo / ultrasound fellows are allocated one half day per week for echo / ultrasound training. Trainees at ST5+ are allocated one SPA per 2 weeks in accordance with training requirements. All rotas are EWTD compliant.

4.1 Details of training opportunities on the unit

ADVANCED ICM TRAINING
Our critical care is GMC approved for ICM training at all levels. Within KSS, we are allocated one slot for advanced training in ICM (Stage 3). Advanced trainees are encouraged to use their time on the unit to prepare for working as a consultant with support to lead ward rounds, take on leadership roles and develop both clinical and non-clinical management skills. All ICM trainees will be taken through FICE, if not already obtained during their training. Advanced trainees should take part in one 5-day Rapid Process Improvement Workshop, part of the Virginia Mason Institute, to develop their management CV. Trainees are expected to take an active role in journal club and teaching, lead MDTs, and attend Trust Board meetings. Regional ICM teaching takes place at East Surrey Hospital and the advanced trainee would be encouraged to help organise this. The critical care unit at East Surrey hospital supports the Lane Fox Remeo satellite unit. We have an integrated teaching programme with input from respiratory specialist consultants from St Thomas’ Hospital. Interested trainees have the opportunity to spend time on the Lane Fox satellite unit learning specifically about domiciliary weaning, obesity hypoventilation syndrome, NIV for COPD, neuromuscular disease, etc.
ECHO FELLOWSHIPS
Our critical care unit currently employs 4 echo fellows: 2 with advanced airway skills on the senior tier rota; 2 on the junior tier rota who are not required to have advanced airway skills. Amongst our consultant intensivists we have 7 FICE mentors, 1 FICE supervisor (fully BSE accredited), 2 CUSIC mentors and 1 CUSIC supervisor. Echo fellows are expected to complete FICE and CUSIC at the very least but enthusiastic fellows are encouraged to achieve Level 1 BSE during their fellowship year. We have a successful record of training fellows to achieve their Level 1 BSE. Particularly dedicated trainees are able to begin or complete Level 2 BSE accreditation. There are opportunities to spend time in echo clinic with a fully BSE accredited critical care consultant. “Echo school” takes place on a monthly basis. It is designed for critical care echo fellows but is open to anyone practicing echosonography within the hospital. The ICU is equipped with a dedicated GE Vivid S70 R2 echocardiography machine and reporting station. A FICE course is run twice yearly on site at East Surrey Hospital.

ANAESTHETIC TRAINEES
Anaesthetic trainees completing a module in critical care take full part in the senior on call rota including daytime and out-of-hours cover. Any anaesthetic trainees working within the critical care on call rota but not completing a module in critical care are NOT expected to spend normal working daytimes in ICU - they are protected in attending their anaesthetic training lists. Anaesthetists are encouraged to take full advantage of their time in critical care to develop their technical and non-technical skills as detailed below. Many of our trainees have been able to achieve publications and international presentations through work completed in ICU.

CORE MEDICS AND FOUNDATION DOCTORS
Core medical trainees and FY1 doctors are a valuable asset to our unit and very much encouraged to take full advantage of all training opportunities in critical care. Many of our trainees have been able to publish original work with our support. Even those trainees focussed on careers outside critical care are able to use their time to develop essential clinical and non-clinical skills. There are ample opportunities to complete quality improvement work and get involved in clinical governance.

SUMMARY
We have consistently received excellent feedback for training and support on our critical care unit. In addition to the specific training elements detailed above, the following training opportunities are available to all doctors working in the ICU:

CLINICAL
* Procedures regularly performed on intensive care (tracheostomy, bronchoscopy, chest drain insertion etc)
* Echocardiography – although we have specific echo fellows, there is ample support for non-fellows wishing to learn or improve their echo / ultrasound skills including learning FICE.
* Ultrasound – regular chest, abdominal and vascular ultrasound is performed on the unit. Enthusiastic trainees may wish to aim to complete CUSIC accreditation.
* Resuscitation and stabilisation skills – a large proportion of our admissions are emergency medical admissions requiring resuscitation and advanced ventilatory, cardiovascular and renal support.
* Advanced respiratory techniques – we regularly use prone positioning and APRV
NON-CLINICAL
* weekly journal club (all junior doctors are expected to present at least once per 4 months)
* weekly ICM teaching (delivered by consultants. Enthusiastic trainees can arrange to present specific teaching / simulation sessions)
* regular M&M – with the opportunity for trainees to present cases
* research – the majority of trainees working on intensive care achieve at least one publication and presentation at national or international level.

4.2 Details of departmental teaching

*Weekly journal club (Wednesdays 13.15 – 14.00)
*Weekly consultant led teaching (Wednesdays 14.00 – 14.45)
*Regular M&M on Wednesday lunchtimes
*Monthly echo school (last Wednesday of every month 18.00 – 19.00)
*Monthly ICM / anaesthetics teaching including sessions delivered by consultants from Lane Fox (first Friday of every month 13.30 – 16.30)
*Frequent ad hoc bedside ultrasound and echocardiography teaching
*Annual ICM regional teaching day

4.3 Details of clinical governance meetings days and / or M & M

Fortnightly M&M led by Consultants with the opportunity for trainees to present cases
Monthly M&M data presentation, consultant led
Monthly senior staff meetings
Monthly combined anaesthetics and ICM clinical governance afternoons

4.4 Number of trainees on each tier of the rota

8 junior tier (831 bleep): non airway trained
8 senior tier (830 bleep): advanced airway skills