

The Faculty of Intensive Care Medicine

ICM Unit Brief

Part 1 Hospital Details

1.1 Hospital name

Queen Elizabeth Hospital Birmingham (University Hospitals Birmingham)

1.2 Full address (you **must** include postcode)

Mindelsohn Way
Edgbaston
Birmingham
West Midlands B15 2WB

1.3 Hospital Telephone number

01213713000

Part 2 ICU Department contact details

2.1 Direct telephone number to Department

01213717887

2.2 Faculty Tutor name

Dhruv Parekh, Randeep Mullhi,
Mansoor Bangash, Abigail Ford

2.3 Faculty Tutor Email address

d.parekh@bham.ac.uk
dhruv.parekh@uhb.nhs.uk

Part 3 Unit Structure

3.1 Number of Beds

67 Level 3 equivalents, potentially up to 100 physical

3.2 Number of admissions

220 per month

3.3 Percentage of elective vs emergency admissions

Emergencies 65% of total admissions

3.4 Overview of case mix within the unit

Approximately 80 beds in a one-floor unit divided into 4 areas (A-D).

Area A houses elective and emergency liver medicine and surgery patients including liver transplants (approximately 200/yr) and is a tertiary referral centre for liver medicine including acute liver failure, liver surgery and transplant patients; also accepts upper GI elective, surgical (including complex sarcoma and thoracic surgery) and medical emergencies. Haematology and oncology patients, including post CAR-T therapy.

Area B accepts trauma (major trauma centre), burns (tertiary referral centre), medical critically ill patients and a few elective major plastics, maxillofacial and ENT patients. This area also takes all seriously injured soldiers for the RCDM from international war zones.

Area C accepts patients for neurosurgical and neurological management from around the region (tertiary referral centre). The unique 24/7 embolectomy service for stroke patients is also supported by critical care unit on daily basis.

Area D is the cardiothoracic area mainly comprising of post-operative elective cardiac surgery but is also a tertiary referral unit for emergency cardiac surgical patients such a dissecting thoracic aneurysm as well as patients for heart or heart-lung transplants. Significant number of patients receives mechanical cardiac support

3.5 Names of Consultants, roles and areas of interest

| Name | Role (eg clinical lead, consultant) | Areas of Interest |
|-------------------|--|--|
| Julian Bion | Past Dean FICM, Professor of ICM; Freedom to Speak up Guardian, non-Clinical | Health services research and service organization & delivery |
| Tom Clutton-Brock | Consultant, Professor of ICM, non-Clinical | Education, e-learning, simulation, extra-corporeal systems |
| Abby Ford | Consultant, M and M Lead | Liver and surgical CC, M&M |
| Alex Barrios | Consultant, Anaesthetic Audit Lead, HGS ICU Audit lead | Heart failure, TOE, education |
| Andy Johnston | Consultant, Defence Consultant Advisor in CBRN Medicine | Military Critical Care, Weapons of Mass Destruction, Disaster response |
| Anwar Shah | Consultant | Cardiac CC, TOE |
| Bill Tunnicliffe | Consultant; Associate Medical Director – Appraisal and Revalidation | Advanced Ventilation, Research |
| Brian Pouchet | Consultant, WM ICM Regional Advisor | Liver, surgical CC, teaching |
| Carla Richardson | Consultant, Critical Care Ultrasound Lead | ECMO, severe respiratory/cardiac failure, FUSIC |
| Catherine Snelson | Consultant, Senior Workforce Lead | Liver, rehabilitation, research |
| Claire Scanlon | Consultant | Cardiac CC, Cardiac ICU Education |
| David Balthazor | Consultant | Trauma, ECHO, pre-hospital care, major incident management and emergency airway management |
| David Hume | Consultant | Cardiac Critical Care |

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| David Riddington | Consultant | Cardiac CC, Risk management |
| Deborah Turfrey | Consultant | Cardiac CC, End- of-life care, teaching |
| Dhruv Parekh | Consultant, Associate Professor (UoB); Faculty Tutor, Lead for IMT Programme in ICM, Academic Training Lead, FICM Board Member | Respiratory Failure, Sepsis, Liver, Research and Education |
| Fayaz Roked | Consultant | Neuroanaesthesia and neurocritical care |
| Gregory Packer | Consultant Governance Lead | Liver critical care, simulation, education |
| Harjot Singh | Consultant | Blood conservation, haemodynamic monitoring, organ transplantation and assisted circulation. |
| Jaimin Patel | Consultant and Honorary Senior Lecturer (UoB). Deputy CSL for Critical Care and clinical research specialty lead for peri-operative medicine -West Midlands CRN | Sepsis, ARDS, Liver Critical Care, Major Trauma, Research |
| Jeremy Willson | Consultant, Deputy Medical Director (Critical Care, Radiology, Pharmacy and Laboratory Services) | Cardiac CC, Information technology |
| John Kelly | Consultant | Cardiac and General Critical Care, TOE |
| Kaye England | Consultant, Lead Medical Examiner | Burns CC, trauma |
| Laura Tasker | Consultant; ACCP Programme Lead | Teaching, trauma critical care |
| Mansoor Bangash | Consultant; Clinical Guidelines Lead, Chair of CC Research M&G, Chair Birmingham Liver failure research group | Liver critical care and research |
| Mario Cibelli | Consultant | Cardiac, ECHO, TOE, teaching. |
| Mav Manji | Consultant | Renal, Fluids, Trauma and Neuro |
| Mohammed Asif Arshad | Consultant, Audit Lead, WM ICM TPD | Liver Anaesthesia and Critical Care, TOE |
| Nandan Gautam | Consultant, Associate Medical Director (Appraisal and Revalidation) | Ultrasound, teaching, simulation |
| Neil Abeysinghe | Honorary Consultant & Associate Professor (UoB), Deputy Head of Academy Undergraduate Education | Trauma, pre-hospital care, neuro critical care, education |
| Nicholas Talbot | Consultant | Neuro-critical care, neurosciences research |
| Nick Murphy | Consultant; Assistant Medical Director – The consultant workforce, Honorary Reader | Liver critical care, research |

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| | (UoB), Chair BASL ALF Special Interest Group | |
| Nilesh Parekh | Consultant | Education |
| Phillip El-Dalil | Consultant, Critical Care Operational Lead | Simulation, Education and Governance, Liver and Trauma critical care |
| Phillip Howells | Consultant | Cardiothoracic Anaesthesia and Critical Care |
| Randeep Mullhi | Consultant; Faculty Tutor, Lead for Anaesthetic Programme in ICM, Medical Examiner | Burns, Trauma, Vascular, Education, Patient Experience, Spinal cord injury |
| Ravi Chauhan | Consultant, deputy CSL for Anaesthesia, Lead for Fellowship Programme | Military. Prehospital Care, Neuro and Trauma |
| Ravi Heballi | Consultant | Cardiac, ECHO, TOE, teaching |
| Richard Browne | Consultant, National Critical Care Transfer Lead | Prehospital Care, Burns and Trauma, ACCOT |
| Samuel Denham | Consultant | Cardiac Critical Care, Carcinoid Heart Disease, ACHD |
| Sandeep Walia | Consultant | Neuro CC |
| Sid Khan | Consultant | Teaching; Liver Critical Care |
| Steffen Kroll | Consultant | Trauma and burns critical care, neuro- critical care |
| Tessa Oelofse | Consultant, Clinical Service Lead | Cardiac CC, TOE |
| Tomasz Torlinski | Consultant, Trust Deputy CESR Lead, ESAIC Scientific Forum | Teaching and Education, Burns and trauma critical care |
| Tonny Veenith | Consultant; Associate Professor (UoB), Deputy director of RD&I | Neuro critical care, Neuro Sciences / Critical Care Research, Multi Modal monitoring of the brain |
| Tony Whitehouse | Consultant; Honorary Professor (UoB), Deputy National Critical Care CRN Lead | Research, liver critical care |

3.6 Details of research projects being undertaken within the unit

The ITU is the lead centre for the SoS Trial (hyperosmolar therapy in TBI), VITDALIZE UK, a study of high dose vitamin D replacement in severely deficient critically ill patients and ERASER Trial (serratus anterior block vs usual care). It was lead site for the recently published STRESS-L trial. It also participates in several portfolio studies including MARCH, REALIST, PHIND, MOSAICC, SQUEEZE, ADAPT-Sepsis and others, including locally led translational studies delivering a broad and rich portfolio. We are one of the largest critical units in the UK and are using multimodal brain monitoring to understand the mechanisms of neuronal loss and the impact of neuro-therapies. We currently have 3 research registrars, 8 research nurses, 3 ACFs and 3 clinical research fellows. There are several grant applications for projects in progress. Interests amongst our research group include sepsis, ARDS, ventilation, burns, ALF and liver transplantation, rehabilitation and neuro-imaging, post-ICU care and outcomes. We have been significant recruiters to many national and international trials, and there are opportunities for trainees to undertake postgraduate research in order to develop an interest in aspects of ICU. We encourage clinic research training including GCP. We actively encourage trainees to partake in the NIHR Associate PI Scheme. It is possible to work towards masters or PhD programmes in conjunction with the University of Birmingham with appropriate OOPR. We have close working relationships with groups within the University of Birmingham, especially the Acute Care Research Group. We host the Acute Care and Infection Theme NIHR BRC.

3.7 How is the unit staffed

The Critical Care Unit is subdivided into 4 Areas.

Each of them staffed with 2 consultants during the day, with total of 3 consultants out of hours covering the on call activities.

Across the Unit the team of resident care providers consist of 8 members: 2 FY/CT, 4-5 ST, and 1-2 ACCPs across the floor 24/7 with additional 1 FY/CT on twilight shift. On most of the days, although rarely on the weekends, the minimal staffing levels are significantly exceeded.

Part 4

Training

4.1 Details of training opportunities on the unit

The hospital offers all adult specialities, so there is very wide range of patients to manage. As the largest solid organ transplant hospital in Europe there is ample opportunity to learn about transplant medicine, liver medicine, cardiology, renal medicine and burns. As a tertiary haematology-oncology centre there is opportunity to learn about the management of complex patients post advanced therapies including CAR-T. As a major trauma centre and a burns centre, trainees regularly manage trauma under consultant supervision, attend trauma calls in the A&E, and look after soldiers with injuries not seen elsewhere in the UK.

There are opportunities to visit theatres and see transplants; use skills learnt to manage complex critically ill patients; in-house teaching on general critical care topics and speciality topics such as advanced cardiac support, advanced ventilation techniques and management of major trauma and head injuries, burns, blast lung and related topics. There is the opportunity to gain FICE and CUSIC training. There are many opportunities to gain and consolidate skills in resuscitation, stabilization, team working, team-leading, communication with teams, relatives and patients, and end-of-life care and organ donation. There are also opportunities to take part in research (active research department), simulation, teaching, management and quality improvement projects. We have formal positions to gain this experience in our trainee service, education and governance lead roles.

4.2 Details of departmental teaching days

Mondays Critical Care Lecture
 Tuesdays Journal Club
 Fridays FICM unexpected / Cardiac Teaching

2nd Wed /month regional ICM teaching hosted at our hospital

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

Wednesdays audit and medically challenging cases
 Thursdays– M& M meeting

4.4 Number of trainees on each tier of the rota

Across the floor 8 tiers of junior doctors' rota in Critical Care are run.
 Each of the tiers is staffed 1:8

Part 5

Additional information

5.1 Please provide any additional information about the unit

We are an extremely supportive department with an extremely rich educational programme and case mix. We run monthly Junior Doctors Forums and are responsive to the needs of all non-consultant grade doctors. Every doctor has an educational and clinical supervisor relevant to their grade and requirements. We have expanded our education faculty with 2 full-time Faculty Tutors and 2 who job-share. As a team we understand the needs of single and dual trainee specialty trainees from anaesthesia, EM and medical specialties.