

ICM Training- Sheffield Teaching Hospitals

ICM training is delivered across 4 critical care areas and 2 hospitals in this large Teaching Hospital that has been 'Trust of the Year' twice recently. Critical Care services in Sheffield were awarded a rating of "outstanding" by the CQC in 2015. It is one of the largest acute medical trusts in the country with 1900 inpatient beds, tertiary and quaternary services and the main teaching centre for the University of Sheffield Medical School.

Casemix

Major Trauma Centre for South Yorkshire

Regional Centre for Haematological Oncology, Hepatobiliary Surgery and Interventional Vascular Radiology.

National Centre for Pulmonary Hypertension

Tertiary obstetric unit with >8000 deliveries per year

Affiliated specialist oncology hospital- Weston Park

Surgery includes upper GI surgery, Colorectal, Bariatric, Urology and Gynae Oncology

General Critical Care

Northern General Campus:

18 mixed level 2 and 3 beds on D Floor

16 level 2 beds with facilities to provide haemodialysis on E Floor

This site has the Accident and Emergency Department and Major Trauma Centre and the majority of acute medical and surgical services.

Royal Hallamshire Site

8 mixed level 2 and 3 beds.

This site has specialist Haematology, Pulmonary Hypertension, Infectious Diseases, Head and Neck surgery and Obstetrics.

Organisational Structure

19 full time consultants in Intensive Care Medicine

Dedicated cross city ICM on call, with 7 day Consultant presence at both sites

Established Outreach services with psychological follow up

The units currently train FY2, ACCS, Anaesthesia and ICM medical trainees.

There is also an active ACCP training programme and qualified ACCPS work alongside medical staff on both general units.

Established electronic clinical management system (Metavision) to facilitate patient reviews, audit, research etc and also electronic prescribing via the Metaorders systems.

Procedures

Experience in all invasive lines, bronchoscopy and percutaneous tracheostomy

Echo capability within Cardiac and General Critical Care to FICE accreditation

Cardiac output, BIS monitoring

Simulation and team training for airway emergencies and FICM syllabus procedures

Clinical Governance

Monthly MDT M and M meetings with training in mortality review techniques

Unit workstreams for quality improvement eg VAP, Renal, Tracheostomy Care

Hospital also provides in house QI training at several levels

Management

Monthly clinical management meetings

Trainees are supported to develop their independent clinical practice, leadership and professional interests

Education

Strong support for personal career development: previous trainees have completed a NICE Scholarship, ICM Research Foundation Scholarships and ESICM Scholarships.

Regional and local teaching programme

4 FFICM Examiners, EDIC examiners and support for trainees to prepare for FFICM and other exams

Financial support available (on application) for presentation at overseas ICM meetings

Research

Professor of ICM in department, many consultants are research and publication active eg recent involvement in CaLories and Ethicus 2 trials.

BMedSci students located in department

Neurosciences Critical Care

Royal Hallamshire Campus with 7-8 level 3 neurointensive care beds

Dedicated neuro-specialist cover. Acute and elective work covering neuromedicine, neurosurgery and interventional neuroradiology including acute stroke.

Research active neurosciences projects eg Center TBI

Cardiothoracic Critical Care

Northern General Campus with 11 level 3 beds

Dedicated cardiac-specialist cover. Cardiothoracic surgery and Interventional radiology.

Stage 3 Intensive Care Medicine training opportunities in Sheffield Teaching Hospitals NHS Foundation Trust – October 2017

Introduction

Sheffield Teaching hospitals consists of The Northern General Hospital (NGH) and the Royal Hallamshire Hospital (RHH). The general ICU at NGH has 36 level 2 and 3 beds and is a recognised unit for stage 3 training. There are also three other separate specialty intensive care units in STH: Cardiac ICU at NGH, Neurosciences ICU at RHH and General Critical Care Unit at RHH.

According to Faculty of ICM suggested figures, NGH ICU has the capacity to take up to 4 stage 3 trainees at any time. STH has been able to successfully train 4 advanced trainees at the same time in the past and provided them all with broad clinical experience, and also a wide range of non-clinical activities without any concerns about capacity for training. STH has also prided itself on producing high quality trainees with excellent clinical experience, and CVs that have allowed them to be competitive at consultant interviews around the country. The department also has a very impressive rate of exam success, ARCP progression and appointment of trainees into substantive posts in ICM, and was rated as being “Outstanding” by the CQC in 2016.

Clinical specialties

STH is a regional centre for a number of specialties and also the Major Trauma Centre for South Yorkshire. Training in ICM provides a wide exposure to a number of important clinical specialties, including:

Trauma specialist Orthopaedic surgery	Hepatobiliary surgery
Vascular surgery	Plastics and Burns surgery
Upper and lower GI surgery	Bariatric surgery
Renal medicine including transplant	Spinal injuries
Vascular radiology	Cardiothoracic surgery
Acute medicine	Cardiology (regional PCI service)
Respiratory medicine	Gastroenterology
Immunology	Microbiology

STH also has a number of specialist services predominantly located at RHH but with frequent crossover of patient care at NGH seen:

Pulmonary hypertension	Haematology Oncology
Rheumatology	Dermatology
Infectious diseases	Neurology
Neurosurgery	Head and Neck surgery
Urology	Obstetrics and Gynaecology

Opportunities are provided for trainees to undertake short daytime training attachments at RHH ICU to gain increased experience in managing patients from the above RHH based specialties which are not represented as frequently at NGH.

Other relevant information

The Critical care Units operate an electronic patient data management system – Metavision – which along with the Metaorders prescribing system makes the unit effectively paperless for notes and prescribing and also provides access to a huge amount of readily accessible data for research, audit and review purposes. The unit also has a Consultant led Pharmacist, 7 day a week, prescribing Pharmacy service and an active prescribing education programme. The unit also benefits from a number of other allied professional services which all lead to improved delivery of care, including critical care outreach, rehabilitation and physio services and an on unit psychology service.

The unit operates a system of twice daily ward rounds with a Consultant present until 10pm daily during the week to ensure safe delivery of care but also teaching and supervision of trainees. There are also daily Microbiology ward rounds (weekends included), and a strong Consultant presence at weekends.

Sheffield Teaching Hospitals Critical Care units are all part of the North Trent Critical Care network, and the local network lead (Dr Chris Scott) is a member of the consultant body. There is also a highly successful ACCP training programme, with one of the consultant body (Dr Andy Temple) a member of the national advisory group for ACCP training. The consultant body includes 4 FICM examiners, and an additional 2 consultants who have authored an exam preparation book. Furthermore all members of the consultant body are committed to providing exam preparation and the department has an excellent record of exam success.

Patient safety and governance opportunities

The department of Critical Care in Sheffield has a strong ethos of patient safety. There is a departmental consultant governance lead (Dr Steve Webber); additionally 1 to 2 dedicated senior trainees are identified per year to fulfill the role of trainee governance lead and participate actively in meetings and projects.

Successful initiatives in the last few years include: introduction of monthly M and M meetings (utilizing a patient case note review method), the production of quarterly quality reports, weekly "5:5 briefs" which highlight areas for improvement in practice on a daily basis and the introduction of daily team briefs following handover. The trainee governance role has proved to be a very rewarding and prestigious position for ICM trainees in recent years.

The department also has a Trust Associate Medical Director for patient safety (Dr Paul Whiting). This has previously provided ICM trainees with the opportunity to be involved in trustwide safety improvement workstreams pertinent to ICU practice such as DNACR and end of life care treatment pathways, recognition and management of AKI, sepsis management, tracheostomy management and deteriorating patient pathways.

Quality improvement (QI)

The department of Critical Care has a wide range of quality improvement groups and ongoing projects led by highly motivated multidisciplinary groups. Trainee involvement in these groups is actively encouraged, and has provided numerous excellent opportunities for personal and professional development for trainees, as well as improving the quality of care provided to our patients. We strongly feel as a department that our commitment to QI and the activity of the groups (all of which meet monthly or bimonthly and have ongoing QI initiatives) listed below is sufficient for a special study module (SSM) in Critical Care related QI to be deliverable in STH.

- CVC PSF group
- VAP PSF group
- Rehabilitation group
- Tracheostomy weaning group
- Ventilation group
- Renal group
- Metavision group

We also have a large body of enthusiastic, driven individuals with particular areas of clinical interest and an established track record of delivering high quality projects that contribute greatly to QI within our unit:

- Pharmacy (Dr Richard Bourne)
- Cardiac arrest management (Dr Andy Temple)
- Noninvasive ventilation (Dr Alastair Glossop)
- Renal medicine and CRRT (Dr Ajay Raithatha)
- Teaching and simulation (Dr Alastair Morgan and Dr Helen Ellis)
- Organ donation (Dr James Wigfull)
- Ethics (Dr Danny Bryden)

Research

The department has Professor Gary Mills as the research lead, who has a very strong research background and output.

<https://www.sheffieldclinicalresearch.org/about/our-directorates/oscca/prof-gary-mills/>

Several other members have informal research and academic interests, and the department enjoys an impressive rate of publications in peer reviewed journals and acceptance of abstracts for international meetings.

Education

The department has an education lead (Dr Vinu Paul) who co-ordinates a wide programme of educational activities within the unit. These include a monthly protected afternoon teaching programme, monthly Mobility and Mortality meetings, monthly PGME meetings, weekly radiology meetings and a monthly journal club. In addition the unit Clinical Management Group Meetings occur monthly, and trainees are expected to attend in stage 3 training to gain exposure to some of the key elements of management in ICU practice.

There are also several consultants with a strong interest in simulation based teaching leads (Dr Alastair Morgan and Dr Helen Ellis). Simulation stations are frequently used as part of the local FICM OSCE preparation course (see below) and also during scheduled sessions for monthly teaching and induction.

FICE training and mentorship

STH has a number of enthusiastic FICE mentors who are available to provide mentorship, guidance and support for trainees undertaking training in Echocardiography. These are:

- Alastair Morgan
- Jon Rosser
- Ali Parnell
- Kris Bauchmuller
- Akos Marko

Exam teaching and preparation

There are 4 FICM examiners (Prof Gary Mills, Dr Danny Bryden, Dr Andy Temple, Dr Sarah Irving) in the department and many more experienced in helping to prepare trainees for the examination. Also a local OSCE practice session is run twice per annum (Dr Kris Bauchmuller) in STH and regular viva sessions are provided prior to each exam sitting.

Trainee choice weeks

Stage 3 trainees are provided with up to 4 weeks of training days per annum where they are encouraged to seek training opportunities in units outside of STH. This has been a very popular and useful training opportunity, and strong links have been forged with a number of specialist centres including: Glenfield Hospital (ECMO), Great Ormond Street Hospital (Paediatric ICU), Royal Victoria Infirmary (Transplant ICU), St James Hospital (Liver unit).