

The Faculty of Intensive Care Medicine

ICM Unit Brief

Part 1 Hospital Details

1.1 Hospital name

Cardiac Intensive Care Unit (CICU) – University Hospital Southampton NHS FT

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

Cardiac Intensive Care Unit (CICU)
University Hospital Southampton NHS Foundation Trust
Tremona road
SO166YD
Southampton
Hampshire

1.3 Hospital Telephone number

0238 0777222

Part 2 ICU Department contact details

2.1 Direct telephone number to Department

0238 1206121

2.2 Faculty Tutor name

ICM Cardiac Clinical Supervisor –
Francois Wessels

2.3 Faculty Tutor Email address

francois.wessels@uhs.nhs.uk

Part 3 Unit Structure

3.1 Number of Beds

16 (14 funded level 3)

3.2 Number of admissions

1060 per year

3.3 Percentage of elective vs emergency admissions

Medical (mainly cardiology) – 25%
Emergency surgery – 15%
Planned surgery (whiteboard & elective) – 60%

3.4 Overview of case mix within the unit

Southampton cardiac ICU predominantly admits postoperative cardiac surgical patients, except for transplants. Typically, postop CABG and valve replacements, but complex multiple redo surgery patients with balloon pumps, pulmonary artery catheters and multiorgan support is common. Although not funded

for adult ECMO, we have a few patients each year. The adult congenital population is expanding and complex and forms an integral part of our work. Similarly interventional cardiology and EP procedures occasionally require CICU. There is also a Fast Track cardiac surgery programme for more straight-forward cases and being co-located with General ICU and Neuro ICU, we help care for non-cardiac patients when required to do so. Some typical patients we care for are listed below.

Cardiac surgery:

- Adult Acquired e.g. CABG, valve replacement/repair, AF surgery, Frozen elephant trunk aortic arch repair, Thoracoabdominal aortic aneurysm repair with left heart bypass, Type A Aortic dissection repair, cardiothoracic trauma, endocarditis surgery.
- Adult Congenital e.g. Ross procedure, Fontan revision, RV to PA conduit, valve repair/replacement. Usually, multiple redo surgery and significant pathophysiological disturbance.
- Transapical TAVI

Medical

- Emergency Cathlab procedures e.g. OOH cardiac arrest with PCI and Intra-aortic balloon pump.
- Planned Cathlab procedures e.g. high-risk EP VT ablation, PPM extraction, MTEER.

3.5 Names of Consultants, roles and areas of interest

Name	Position	Roles/Areas of Interest
Dr David Hett	Consultant (Anaesthesia). Adult cardiac.	Medical leadership.
Dr Mike Herbertson	Consultant (Anaesthesia). Paediatric & adult cardiac.	NHS leadership, Research.
Dr Crispin Weidmann	Consultant (Anaesthesia). Adult cardiac & neuroanaesthesia.	Education.
Prof Charles Deakin	Consultant (Anaesthesia). Adult cardiac.	PHEM, South-central Ambulance MD, Research.
Dr Paul Diprose	Consultant (Anaesthesia). Adult cardiac.	TOE, Research, Interventional, Education, Fitness to practice.
Dr Andy Curry	Consultant (Anaesthesia). Paediatric & adult cardiac.	Congenital & ECMO lead. Education, TOE.
Dr Kirstin Wilkinson	Consultant (Anaesthesia). Paediatric & adult cardiac.	Education, Fellow co-lead, Appraisal, CCAN.
Dr Omar Al-Azzawi	Consultant (Anaesthesia). Paediatric & adult cardiac.	Research, Rostering.
Dr Nicholas Goddard	Consultant (Anaesthesia). Adult cardiac.	Cardiac ICU lead. Transfusion, TAAA, TOE.
Dr James Montague	Consultant (Anaesthesia). Paediatric & adult cardiac.	M&M, TOE.
Dr Stephen Sandys	Consultant (Anaesthesia). Adult cardiac.	Cardiac anaesthesia lead, TAAA, TOE.
Dr Jonathan Huber	Consultant (Anaesthesia). Paediatric & adult cardiac.	Fellow co-lead, Hon Sen clinical lecturer UoS, Education.
Dr Peter Wicks	Consultant (Anaesthesia). Adult cardiac.	Cardiac RCoA ES, Education, TOE, TAAA.
Dr Francois Wessels	Consultant (Anaesthesia & ICM). Paediatric & adult cardiac.	Cardiac ICM CS. Education. TOE.
Dr Issa Asshab	Specialist (Anaesthesia). Adult cardiac.	Clinical information systems.

3.6 Details of research projects being undertaken within the unit

ACTACC Aortic dissection national audit
 NAP 7 perioperative cardiac arrest
 Fibrinogen concentrate study
 Reducing postop AF – SCTS study
 TRICS IV
 Red cell transfusion in patients undergoing cardiac surgery – Cochrane review
 Drugs to reduce bleeding and transfusion in adults undergoing cardiac surgery: a systematic review.

3.7 How is the unit staffed?

To paraphrase the 2022 Wessex & Thames Valley Adult Critical Care Operational Delivery Network (ACC_ODN) report “The Southampton Cardiac Intensive Care Unit team is an extremely cohesive and highly functioning team with strong clinical leadership. There are excellent, effective working relationships within the team.”

There is 24/7 consultant adult & paediatric cardiac cover with consultant handover happening at 08:00 & 17:00. All doctors in training and fellows are airway trained, with three rostered during the day and two at night. All doctors are rostered for normal days, long days and nights on CICU and normal days in theatre during the week. The daily MDT further consists of two nurse-in-charge band 6/7 RNs and multiple allied health professionals, including an early mobilisation team. We are very fortunate that all major tertiary services are located within the hospital footprint.

Medical (Permanent): 13 Substantive Consultants, 2 Locum Consultants, 1 Specialist, 4 Specialty doctors.

Medical (Rotation): 13 Cardiac Fellows, 1 Advanced Cardiac Anaesthesia/ICM ST6, 1-4 ICM St5-7, 1-4 Anaesthesia ST4-7, 1-2 CESR.

ACCP: 1 Qualified, 1 trainee.

Nursing: 110 WTE funded Band 2 to 7 nursing posts. Strong senior CICU nursing team Band 6-7. 1 CICU Matron.

Pharmacy: 1.6 WTE critical care pharmacist, 1 WTE pharmacy technician.

Physiotherapy: 1.4 WTE

Psychology: 0.5 WTE

Part 4**Training****4.1 Details of training opportunities on the unit**

We are well established in delivering Stage 2 Cardiac ICM training, Stage 2 Anaesthesia training, Advanced Cardiac Anaesthesia & ICM training and we are an accredited European Association of Cardiothoracic Anaesthesia & Intensive Care Medicine (EACTAIC) training centre with fellows joining to learn the skills required to be a cardiothoracic anaesthesia specialist. Despite these established training pathways, we can offer flexible training e.g. for a Special Skills Study (SSY) year.

Our strengths include:

Advanced cardiovascular monitoring.

Transfusion and haemostasis in cardiac surgery.

Transoesophageal echocardiography.

Mixed congenital and acquired cardiac experience.

Major acute and elective thoracic aortic surgery experience.

Medical leadership and management.

Medical education - undergraduate and postgraduate.

Collaborative education across ICUs – Cardiac, Neuro, Paediatric and General.

4.2 Details of departmental teaching

6 Monthly cardiac induction (with MS Teams induction as catch-up resource).

Weekly cardiac teaching programme consisting of 3 sessions: cardiac anaesthesia & ICM curriculum teaching, echocardiography teaching (focussed on exams) and Friday department meeting with journal club.

We actively participate in the UHS FICM VIVA exam revision, regional Wessex ICM teaching, regional Wessex Anaesthesia & local UHS primary and final exam days, Southampton TOE, OneHeart, CALS and UHS SHoCCS simulation courses, etc.

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

Monthly Cardiac ICU M&M meeting.

Weekly cardiac MDTs e.g. mitral, paediatric EP, aortic, revascularisation, congenital cardiac, obstetric cardiac MDTs, etc.

4.4 Number of trainees on each tier of the rota

Fellows, ICM STs, Anaesthesia STs operate on a single tiered rota.