

The Faculty of Intensive Care Medicine

ICM Unit Brief

Part 1 Hospital Details

1.1 Hospital name

WREXHAM MAELOR HOSPITAL

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

CROESNEWYDD ROAD
WREXHAM
LL13 7TD

1.3 Hospital Telephone number

01978 291100



Part 2 ICU Department contact details

2.1 Direct telephone number to Department

01978 725955 / 56

2.2 Faculty Tutor name

Dr. Andy Campbell

2.3 Faculty Tutor Email address

Andy.Campbell@wales.nhs.uk

Part 3 Unit Structure

3.1 Number of Beds

12 – (Level 3 = 5 Level 2 = 7)

3.2 Number of admissions

670 - 700 / Year

3.3 Percentage of elective vs emergency admissions

Average = 20% elective vs 80% emergency

3.4 Overview of case mix within the unit

- 12 bedded unit with a mixed medical and surgical case mix. (65%vs35%)
- We are the North Wales tertiary referral unit for Upper GI surgery and working towards Teir 2 Liver Unit status
- 5 beds are designated for level 3 patients and 7 for level 2. The unit adapts to the needs of the hospital, and we can ventilate at all 14 bed spaces as we have had to during the pandemic.
- 35 % of our admissions are acute admissions from the Emergency Department
- We provide all organ support expected in a DGH Critical Care Unit and have close links with nearby tertiary units.

3.5 Names of Consultants, roles and areas of interest

Name	Role (eg clinical lead, consultant)	Areas of Interest
Dr Andy Campbell	Critical Care Consultant Clinical Lead Critical Care	Education (Faculty Tutor ICM) Ultrasound (FUSIC Mentor Welsh ICM Lead)
Dr David Southern	Critical Care & Anaesthetic Consultant <i>Critical Care Network Lead</i>	Organ donation (Lead) Research (Lead) Ethics (CLEG Member)
Dr Sam Sandow	Critical Care & Anaesthetic Consultant <i>Deputy Medical Director</i>	Perioperative care, CPET testing. Organ Donation Leadership & Management
Prof Arpan Guha	Critical Care Consultant <i>Deputy Medical Director for the Health Board</i>	Clinical Leadership, Medical Education, Healthcare Quality
Dr John Harris	Critical Care & Anaesthetic Consultant <i>Associate Medical Director</i>	PACU Lead Consultant Rota ACSA Lead (Critical Care)
Dr Harsha Reddy	Critical Care & Anaesthetic Consultant <i>CD Medical Education PG Faculty Lead</i>	Education (RCOA College Tutor) Upper GI Surgery ACCP and Outreach Lead Wellbeing
Dr Graham Mayers	Critical Care & Anaesthetic Consultant <i>EMRTS (Prehospital HEMS)</i>	Major incident lead Prehospital Medicine Prehospital Trauma Anaphylaxis Lead
Dr Khaled Elfituri	Critical Care & Anaesthetic Consultant <i>Clinical Lead Anaesthetics</i>	Upper GI Surgery (Lead) Critical Care Clinical Governance
Dr Paul Hughes	Critical Care & Anaesthetic Consultant	Emergency Dept Link Trauma Lead Consultant
Dr Rama Vyakernam	Critical Care & Anaesthetic Consultant	Sepsis Management & RRAILS

3.6 Details of research projects being undertaken within the unit

Current Research Projects

Remap-Cap – Randomised, embedded, multifactorial, adaptive platform trial for community-acquired pneumonia for COVID-19. The primary aim of the study is to identify the effect of a range of interventions to improve all-cause mortality at 90 days.

Recovery – Randomised evaluation of Covid-19 therapy. Aim of the study is to identify effective treatments for hospitalised patients with Covid-19. Unlike REMAP-CAP, this trial is not specific to Critical Care.

Genomicc – The aim of the study is to understand the genetic factors that change outcome in critical illness and is at present focussing on Covid-19.

UK-ROX – A UK trial of oxygenation in ventilated patients. The aim of the study is to investigate ideal Oxygenation targets in mechanically ventilated patients.

Closed Research Projects

COVIP – data collection for older critically ill patients with COVID-19. The data has informed a number of papers and may well be reopened to allow the opportunity for further data collection.

Recovery RS – randomised control trial into respiratory support in patients with COVID-19.

3.7 How is the unit staffed

Critical Care in Wrexham is a Consultant led service,
 Two Consultants cover the unit during 08:00-17:30
 One Consultant runs the unit from 17:30- 20:30
 A dedicated non-resident consultant is available from 17:30 until 08:00
 We provide excellent training opportunities to the junior doctors and ACCPs on the unit (twice daily consultant ward rounds, insitu simulation, ultrasound and microbiology teaching) The junior rota has a minimum cover of two per shift.

4.1 Details of training opportunities on the unit

Two of our consultants have won national awards for training and education including two Welsh Denary and the FICM Trainer of the year award. All consultants have an interest in education supported in their Job Plans. The week is divided into Ultrasound ward round on a Monday (the unit is in the process of supporting these with a teaching sonographer) a formal dual consultant lead ITU Teaching Ward round on a Wednesday, and Microbiology Teaching round on a Thursday.

We are actively involved in National Audit projects such as ICNARC, NELA and NAP series. Internal Audit projects mapped to GPICS2 and include fluid management, use of lung protective ventilation, sedation holds etc.

We have a strong research base, with a dedicated Critical Care Research Nurse and strong links with various national research groups and frequent publications. The unit has been one of the highest volume contributors to REMAPCAP in Wales over the pandemic.

Many of our trainees will play an active role in our research activities and obtain an introduction to good clinical practice and research during their placement.

4.2 Details of departmental teaching days

- Thurs afternoon journal club.
- Thurs afternoon (3 hr) basic/clinical science teaching.
- Monthly North Wales regional teaching program.
- 10 Wales ICM study days per year.
- TEAMS meeting on a Tuesday afternoon
**Tuesday
 Education
 And
 Management**
- ICU MDT twice a week at which the trainees present the cases they have assessed.
- Brand new state of the art high fidelity simulators supporting learning in clinical decision making, human factors and practical procedures (e.g. Chest Drains, Central Lines).
- A brand-new Heart Works™ and Body Works™ simulator to teach whole body point of care ultrasound.

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

- Monthly departmental audit / governance day which includes anaesthetic M & M.
- Monthly Critical Care Quality and Safety Meeting, which includes Case Reviews, ICNARC outcomes, M&M, Learning from Excellence (Part of the TEAMS Learning Series)

Part 5**Future Planning**

The Wrexham Critical Care team look forward to several exciting developments in 2022.

New Critical Care Unit

We are moving into a 20 bedded Critical Care unit, with 2 negative pressure and a further 4 isolation rooms. The unit will be co-located with the Respiratory Unit a 15 bedded unit with 7 segregation rooms, this unit is working towards the status of Respiratory Support Unit, and currently manages acute CPAP and NIV.

Critical Care Rehabilitation Garden:

This year we start work on our designated Critical Care Garden, as a unit we are keen on our rehabilitation goals as a key part of patient recovery. We frequently take patients outside to enjoy the motivation of seeing a non-medical environment. Following many year of fundraising we our ready to start work on our own garden area to take patients.

Research:- Upcoming trials for 2022

Signet – Statins for improving organ outcome in transplantation.

Mosaicc – Multicentre evaluation of sodium bicarbonate in acute kidney injury in critical care.

Squeeze – Multicentre international observational study of postoperative vasopressor use.

Elect-2 – early exercise in blunt chest wall trauma. This will be supporting Physio in early intervention.