Residents' Orientation Manual

for

Freeman Intensive Care Medicine

Department of Anaesthesia, Intensive Care & Pain Medicine
Freeman 2018

Welcome

A warm welcome to the Department of Intensive Care Medicine at Freeman Hospital.

We are a multidisciplinary team of friendly and dedicated professions that strive to deliver the highest standard of care. In addition, we aim to give our trainees valuable teaching and experience for their career development. This handbook is provided to ease the process of settling in to the department and familiarise you with the work in Freeman. We work as a team; so, if you have any difficulties during your stay, please do not hesitate to contact a senior member of staff. We hope you find your stay enjoyable and rewarding.

A Brief Introduction

We are based in Ward 37 in the Institute of Transplantation, Level 3. It has 22 beds spread over two linked bed areas, Base 1 and Base 2. The area linking these two bases is affectionately known as “Costa,” unfortunately there is no coffee-machine but this an area for team briefings and education.

We provide an Adult Integrated Critical Care Unit (ICCU) admitting approximately 1350 patients annually, of whom 65% are post-surgical cases. The majority of the cases are from vascular, hepato-pancreatico-biliary, colorectal, major head and neck and urological specialties, as well as post op liver, renal and pancreas transplant patients. In addition, we also admit patients from haematology, oncology and renal medicine, hepatology, respiratory and general medicine.

We are a fully consultant led unit with 12 consultants. The junior rota is a two tier rota and is covered by a mixture of foundation doctors, overseas fellows, anaesthesia and intensive care medicine trainees and ACCPs (Advanced critical care practitioners). Our ICCU operates a ‘closed’ policy for patient management. Although, a parent surgical or medical team are consulted and involved in their patient’s care, all clinical decisions remain ultimate responsibility of the intensive care team throughout the patient’s stay on the unit to avoid inter-specialty conflict.

The Anaesthetic and Intensive Care Department is based on Level 4 of the Institute of Transplantation. You will find the directorate administrative staff, consultant offices and the residents’ computer area here.

The Team:

Name	Dect No.	Role / Special Interests
Consultants		
Joe Cosgrove		'Deciding Right' Trust Lead
David Cressey		Clinical Governance & Network Lead
John Davidson		Faculty Tutor ICM
Matthew Faulds		ACCP Lead, Information Governance, Resident Rota-maker for ICCU
Nicola Hirschauer		Anaesthesia College Tutor, Departmental Education Lead
Caroline MacFie		Organ Donation, Transfer Lead, Audit Lead, Infection Control Lead
Ian McCullagh		ICNARC Lead
Ian Nesbitt		Major Incident Planning
Suzy O'Neill		TPD ACCS, Outreach Lead
Sharon Scully		Consultant Rota-maker
Jon Walton		ICCU Lead Clinician
Stephen Wright		Research Lead
Trust Fellow		
Rikzing Bhutia		
Directorate Staff		
Linda Sime		Senior Medical Staff
Carol Baggaley		Administration Manager
Anne Smith		Secretary
Kaye Sime		Secretary
ICCU		
Sharon Thompson		ICCU Matron
On-call		
1st Call Anaesthetist		
2nd Call Anaesthetist		
ICCU Resident (cardiac arrest)		
ICCU Resident		
ODP		
ICCU Nurse in Charge		

Advanced Critical Care Practitioners (ACCP's)

ACCPs have been established in Newcastle for around 10 years. They are independent practitioners who have extensive critical care experience and work on the resident rota alongside trainees and fellows. They are all independent prescribers, skilled at line insertion, manage level 2 and level 3 patients, and some are echo-trained. They generally do not hold the cardiac arrest resident phone and therefore do not attend cardiac arrests outside critical care. They are an excellent resource for teaching, advice on standard unit practice and decision-support.

Residents

There are 2 on-call tiers that work on the unit:

- 1st tier residents are generally not airway management competent
- 2nd tier residents are more likely to be senior trainees or senior ACCPs. They carry the cardiac arrest phone.

Nursing Staff

The nursing staff on ICCU are dedicated and well experienced, they are a fundamental part of the ICCU team. The Nurse in Charge co-ordinates the movement of patients on and off the unit. It is important that you communicate with them about any admissions, discharges or transfers especially out of hours.

Colour of Scrubs (a poster can be found on the wall opposite the ICCU coffee room):

Navy Scrubs:	Sister / Charge Nurse
Blue Scrubs:	Staff Nurse
Peach:	Health Care Assistant (some are qualified to monitor & observe patients' observations)

Physiotherapists

All patients are reviewed daily by the physiotherapists. They assist with respiratory rehabilitation / weaning and mobilisation of the patients. Progress and management plans are filed in the patients' notes, blue paper. They operate an on-call service, out-of-hours.

Dieticians

Both general and renal dieticians visit the ICCU daily Monday to Friday. General dieticians review all patients already receiving enteral or parenteral nutrition but do not routinely review short stay patients unless requested. The renal dieticians will review all long term renal patients but they need to be contacted about patients receiving renal replacement therapy or with AKI.

TPN – For routine TPN the dietician will propose the prescription on eRecord, the prescription must be accepted by a prescriber**.** Bespoke TPN bags need to be ordered by 1030. For out of hours TPN (so-called "emergency bag") please prescribe Triomel N4 -700E (unsupplemented), it can be given via central or peripheral routes and the rate for this TPN is 63mls/hour. Remember for patients at risk of refeeding please refer to the "Protocol for avoidance of refeeding syndrome in patients on enteral or parenteral nutrition'.

Pharmacists

Monday to Friday each patient has their medications reviewed by our dedicated ICCU pharmacist(s). After review a "jobs list" is made and entered into the "jobs book" by the pharmacist, found on each base. It is the residents' responsibility to review the list and sign /

date the points as they are actioned. If you feel a point is not valid please discuss with the pharmacists or a senior member of the team. The pharmacists are more than happy to be contacted with any queries concerning medication or points on the jobs list. They also operate an on-call service, out-of-hours.

Critical Care Outreach

We have a 24/7 Critical Care Outreach service staffed by senior ICU nurses. They review patients on the wards, assist on transfers and are part of the cardiac arrest team.

2nd On-Call Anaesthetist

This is a senior anaesthesia trainee whose responsibilities, out-of-hours, extend from theatre to the PACU/ICCU and Outreach. All referrals for ICCU should come via the 2nd On-call. They are often the most senior trainee in the hospital at night and are viewed as the team leader. They will assist in the management of patients and be a contact when needing help. You will meet them at the night and weekend handovers. Generally, out-of-hours it is expected that the 2nd call will be contacted in the event of any unexpected deteriorations or when considering calling the ICCU consultant.

Ward referrals

Please discuss on a daily basis with the consultants on ICCU if you would like to see or receive ward referrals. We actively encourage this experience. There is a separate senior resident phone that can be carried by any trainee who would like more experience of supervised patient assessment and decisions making. However, this opportunity does require residents to be proactive and ask to step up to this role.

House Keeping

ID-Badges

You will be issued with your ID badge during the departmental induction. Your badge should give you access to all clinical areas, especially if you are holding the cardiac arrest DECT phone. If you have any problems with access, please contact Alan Shellard.

However, you will not have access to the pharmacy cupboard on ward 37, only the ward 37 nurses have access here.

DECT Phones

If you are working either a long day or a night shift you will hold one of the two ICCU residents DECT phones, see previous list.

Please ensure they are adequately charged. Rechargeable batteries can be found in the charger above the blood gas machine on Base 2.

Car Parking

Car parking permits are issued after application and are dependent on where you live. The secretaries hold some "on-call" permits for the yellow cardiothoracic car park, located at the front of the hospital.

Rest Facilities

The room opposite the ICU coffee room (Level 4) is equipped with a single bed, toilet, shower and lockers.

Changing Rooms

Both male and female changing rooms are found on Level 4, opposite the ICU coffee room.

Lockers

Lockers are available and can be found in the residents' rest room. Keys are available from Carol Baggaley, with a £10 deposit.

Rota / Leave

Dr Matt Faulds is the rota maker for the ICCU residents. The rota is published on the online CLWrota system. It is available online at http://freeman.clwrota.com or download the app to your mobile device from the App Store / Google Play. The app requires a different address for CLW setup: freeman.clwrota.com/app.

Passwords are obtained from: Linda Sime (linda.sime@nuth.nhs.uk)

The rota on CLW is the working rota and you must check this regularly for any changes. Leave is also requested via CLW. Leave is not authorised until you are notified via CLW. Any swaps must be within the same tier and must be authorised by the rotamaker. Audit meetings are rota'd. Mortality review meetings, ICU teaching and journal club attendance is not compulsory but is encouraged unless you are pre-/post-nights and will be included in your hours.

Those trainees on the new contract are encouraged to report exceptions.

Shifts:

- Short day: 0800-1800
- Long day: 0830-2100
- Night: 2030-0900

Roles and Responsibilities

Freeman ICCU is a busy unit with complicated patients, thus the ethos of team work is adopted. Basically, everyone "mucks" in. Don't worry about asking if you don't know.

Your prime responsibility is to remain on the unit, review the patients and investigations, fill in the daily sheets, and complete admissions and discharges. However, if you would like to take on further responsibilities such as take referrals and review deteriorating patients on the ward please bring it to the attention of the consultants in the morning handover.

During the week the ICCU is covered by two ICU consultants and several residents. At night and on the weekend, there is one ICU consultant and two residents responsible for the unit.

Weekday

Here is a breakdown of a usual weekday and what is to be expected:

0800	Short day resident starts.	Assist with night team or review potential discharges
0830-0900	Day and night residents Day consultants Nurse-in-charge	Handover in Sisters' office
0900~1100	Day residents Day consultants Nurse-in-charge to accompany consultants review	Review patients on the unit with consultant over view and complete the daily sheets
~1100-1200	Day residents Day consultants Microbiology team	Team meet to briefly discuss progress of each patient and highlight jobs. "Costa" with tea and coffee.
Midday	Lunch time	
Afternoon	Day Residents Day Consultants	Ward work: admissions, discharges, relative discussions, review the pharmacy book.
1700 -1800	Day and night consultants	Shift change handover (walk around)
1800	Short day resident day ends	
2030-2100	Day and night residents 2nd Call anaesthetist (night) Night consultant	Handover in Sisters' office
2100-0830	Night residents 2nd Call anaesthetist	Review patients

Nights

Both residents on the unit work as a team and divide up the jobs. You should use this time to familiarise yourself with the patients. If patients are stable and there has been no change or indeed improvements in their condition, just a brief review of their charts and notes is all that is needed, sleep for these patients is very important. Do not write a review simply to demonstrate you have looked at the patient or reviewed the notes.

However, if there are any concerns with the patient's condition a full review is required and early escalation is paramount. Concerns should be escalated to the 2nd On-call anaesthetist and if necessary to the ICU consultant.

What do the consultants want to know about?

- All admissions (unless planned and there are beds available)
- All refusal of admissions
- Any ICU patient unexpectedly requiring to leave the unit (theatre, CT etc)
- Any unanticipated significant changes in a patient's clinical condition
- Unexpected deaths

This is not an exhaustive list, it may be modified depending on consultant and or residents. If in doubt or unsure, the consultant would rather know than not.

Weekends

The unit is staffed with only one consultant and two residents with the possible addition of the 2nd On-Call anaesthetist, theatre dependant. The flow of the day is similar to that of the weekday but can be swayed more easily by the business on and off the unit.

Admissions

There is a formal admission document to be filled in once a history and appropriate examination has been undertaken. All admissions must be reviewed by a consultant within 12 hours of admission.

There are standard order sets for ICCU, found on "E-record," just type in ICU in the order search box and a list will appear for you to pick from. You can add these to your "Favourites" for quicker access.

A VTE risk assessment form must be completed for all patients on the unit, this is an electronic form found on "E-record" in the "adhoc" section (top tool bar). It is just a risk assessment form, it does not automate any prescriptions.

Discharges

Once the ICU consultant is satisfied a patient is suitable for discharge, they will print out a discharge document. The document will need to be completed with a brief summary of the patients stay and what support they are currently receiving - the form is very prescriptive. It is also important to remove any ICU drugs from the patient's prescription (e.g. Propofol infusions, olanzapine!) Lastly, you will be required to handover the patient to the ward doctor before the patient leaves the unit.

Managing the deceased patient

When a patient has died you will be presented with a document pack. There is an ICCU Bereavement Check List that details what needs to be completed. Confirmation of death is documented by "The Diagnosis of Death in Hospital Following Cardiorespiratory Arrest" form. This document is for all deaths in critical care except DCD/DBD donors and replaces the written entry in the medical notes. An electronic death summary must be completed on

eRecord through PowerChart. At present, this is done as a “Discharge Summary”. Please ensure that ICU has been selected as the location and also the correct ICM consultant. Ideally, electronic paper work should be completed with 4 hours.

Death Certificates should only be completed after discussion with the consultant or, preferably and more usually, following written instructions in the notes. Most certificates are issued by the day team in the morning whatever time the death has occurred.

In addition, there is also a NUTH Death Summary sheet that must be completed. It is also contained within the pack and referred to in the checklist.

Documentation / Forms

Both bases have a filing system by the computers that have all the required forms. The cupboards are indexed and the draws are labelled.

Procedures

There will be lots of opportunities to undertake procedures, it is important you have the appropriate level of supervision to your competency level… so, if in doubt just ask. All procedures undertaken require the correct documentation to be completed and placed in the patient's notes.

Equipment

Lines trolley

Currently there is a "lines trolley" on each base. This has all equipment needed for obtaining vascular access, chest drains and tracheostomies. Additional equipment can be found in the cupboard at the entrance of Base 2 ("twirly" cupboard).

The lines trolley will soon be replaces with dedicated procedure boxes and dedicated stainless steel procedure trolleys.

Ultrasound Machines

USS should be used for all central venous access. We have 2 USS machines found in the electronic cupboard at the entrance of Base 1. The SonoSite USS machine is used for line insertion and the Philips USS machine is used for diagnostic scanning; only use this machine once you have been trained.

Resuscitation Trolley / Airway Trolley

There is a resuscitation trolley (standard red trolley) found on each base. This is also used as an airway trolley. It is equipped with all standard airway and resuscitation equipment. In addition, there is an Ambu Scope (single use bronchoscope) on the trolley in Base 2.

The documentation for intubation is found on these trolleys; it should be filled in and stuck in the notes.

Defibrillator

There are two defibrillators, found next to the resuscitation/airway trolley. Take note, only one has pacing capabilities.

Handover

There is a residents' handover sheet which is on the ward37 shared drive. Access can be arranged by calling 21000.

It should be kept up to date on each shift and printed out for handover. Because of the set up the information on the handover sheet is used for the daily sheets when printed by the night team in the morning. Please see the "how to" by P. Hutchinson. A significant amount of confidential information is included on the handover sheets. It is imperative that these are disposed of at the end of shifts into a confidential waste bag so they can be shredded.

Policies & Guideline Resources

Intranet

There is a wide range of policies and guidelines available on the Trust Intranet found easily by clicking on the "Policies & Guidelines" icon on the Trust's Homepage. The directorate to search under is Perioperative Medicine and Critical Care.

ICCU Handbook

This is an extremely handy booklet, giving insight into the surgical procedures that patients on ICCU have undergone and how to manage them on the unit post-operatively.

Trust Approved Apps

There are two free, trust-approved Apps that are useful to everyone with a smartphone working within ICM / peri-operative medicine in Newcastle Hospitals. You will need wifi or 3G/4G to download but after that, they will run fine even if you have no signal or if the phone is on flight mode.

*Ignaz 

This is in the process of being converted onto RxGuidelines. It contains most of the trust approved Critical Care guidelines for Newcastle Hospitals. It is a work in progress so please use the feedback functions on the app. Managed by Dr Matt Faulds, Dr Jon Walton (both FRH) and Dr Barry Paul (RVI). To download:

- Go to http://www.ignaz.nhs.uk
- Click download
- Enter password as 'handwashing' and then click 'go'
- Then open the app and sync with Newcastle Hospitals

You may get a message saying that you can't open it because the developer is not trusted
If using an Apple device, see: https://support.apple.com/en-gb/HT204460
If using an android device, just contact one of us, it's just as easy.

Rx Guidelines 

This is managed by the Trusts microbiologists & contains the most updated trust approved antibiotic guidelines. To download:

- Go to your app store (appropriate to your device)
- Type "Rx" in the search facility, it should come up with "RxGuidelines"
- Click Download and install it
- Open and sync with Newcastle Hospitals

Critical incidents

Critical incidents/near misses should be reported to the consultant on duty. They will decide whether they should be reported via the Datix system to allow review and sharing of learning points. They will also make an assessment of whether the patient/family must be informed under the 'Duty of candour' process.

Emergencies

Airway Emergency

An airway alert is initiated by ringing 2222 and stating 'airway emergency' and the ward. When an airway alert call is made, take the red airway bag from the ICCU entrance to the

emergency. This bag contains an EMMA capnograph. Emergency airway drugs are brought from theatres. Airway team members include:

- 1st on call Anaesthetist
- 2nd on call Anaesthetist
- ICU resident
- Anaesthetic nurse from theatre 15
- Outreach

The ENT registrar is not part of the airway team, as they are not resident on call. If you require them, please ring them via switchboard

Cardiac Arrest

A cardiac arrest call is initiated by ringing Switchboard on 2222. When attending, take the red airway bag from the ICCU entrance (just as above). Cardiac Arrest team members include:

- ICU Resident
- 2nd on call Anaesthetist
- House Officer on take for the Wards CCU SHO
- CCU Nursing Officer
- Portering Manager/Charge Porter
- General Surgery Nursing Officer
- Liver Transplant Sister
- Mrs Patterson (Nursing Support Officer)

Defibrillators are located behind the lifts on every level. Please ensure that you are fully conversant with the usage of these machines. Each ward has an arrest box/trolley.

Pacing defibrillator: one of the ICU defibrillators and one in TH5 have this function.

Major Haemorrhage

The major haemorrhage protocol (MHP) is activate by ringing **48842**, this connects you to the transfusion technician. State you want to activate the Major Haemorrhage Protocol and the patient's location. Activation will initiate the preparation of blood products, essentially a rolling programme of 10 units of RBC with 4 FFP and 1 pool of platelets. Presently, at the time of writing, the MHP is undergoing a transition to be the same across the Trust, but this has not been formally agreed yet.

A porter is available on **31753**.

Liver patients need to be discussed with the liver anaesthetist and the surgical liver team if they are bleeding.

Fire

Break-glass points and fire extinguishers are located around the unit. Fires should be reported by telephoning 333. The fire alarms are tested weekly on a Tuesday morning.

Your Educational Development

Education

Thursday	Costa	1315-1345	Radiology Teaching
Friday	Directorate Training Room on Level 4	0800 -0830	Journal Club
Tuesday / Wednesday	Formal teaching scheduled to start in the summer 2018		
Ad-hoc	Generally, in the afternoon on the unit.		

Meetings

ICM Residents' Meeting	Location TBC prior to the meeting	Monthly Before the Audit meeting	Discuss any training issues in a constructive environment
Audit	Lecture theatre IOT	Monthly You will be rota'd to attend	Themed Opportunity to present
Mortality Review Meeting	Location TBC prior to the meeting Normally seminar room on Level 4	Monday afternoons Monthly	Review previous month's mortality cases. It is beneficial to attend during your stay, especially if you were involved in the case.

Education Meeting

You will be informed of your Education Supervisor before you arrive. Your Initial Educational Supervisor's meeting must take place within the first two weeks of your placement. Please arrange follow-up meetings (interim/final) at this time.

Assessments

Although, it is your responsibility to become familiar with your curriculum and educational needs we are a friendly department and want to encourage you to ask for assessments. All the consultants on the unit are able and willing to complete these.

Consultant Feedback: at the end of your placement you will receive consultant feedback (in addition to a MSF assessment if applicable). The feedback will be discussed with you by your ES.

You will be asked for your feedback on your time on ICCU. Please be honest.

Wellbeing

Working on any ICU can be over whelming, the job can bring both physical and emotional demands. We understand that there are times when things don't go so well and you may feel you can't discuss it but if we don't know we can't help. We want to stress that from our own experiences and observations it is imperative that you bring these worries, concerns, stresses to our attention. As long as you feel able to do so, we ask you to talk to your Educational Supervisor first or secondly the Faculty Tutor but as a team of consultants we are all here to listen.

Many consultants in the department and throughout the trust are trained mentors and are very happy to be approached in this regard.

If you prefer to talk to someone outside the department, the Hospital Chaplain may be able to help (ext 26168, bleep 3277).

The **HENE Trainee Support Service** is provided by County Durham and Darlington NHS Foundation Trust. The service offers a central point of contact by phone, email or fax and after an initial assessment additional support can be arranged with occupational health, a psychotherapist or educational professional. The team has experience of supporting doctors and dentists in a number of areas including:

- Sickness/ill health (physical, mental, emotional)
- Personal factors (dealing with stress and anxiety, family concerns, bereavement)
- Environmental issues (workload, bullying and harassment, difficulties)
- Educational issues and medical education support, which is bespoke and tailored to the needs of the individual

The team also has access to GP advisors who can provide confidential support and advice, in particular to drug and alcohol concerns. **How can I access support?**

Telephone the Support line: **0191 333 2593**

Confidential Email: cdda-tr.TSS@nhs.net

Confidential & Secure Fax: 0191 333 2192

Opening Hours: **8.30am-5.00pm Monday to Friday**

Address: Trainee Support Service, Old Trust HQ, University Hospital of North Durham, DH1 5TW

Sickness

If you are unable to make it to work, please let us know as soon as possible so we are able to arrange cover. This can be done by contacting one of the ICCU residents on-call or by contacting the anaesthesia department secretaries on 0191 2231059. A message can be left on an answerphone on this number out-of-hours. Please only return to work when you are safe to do so. Remember that for D&V this is 48 hours after the last symptoms.