**Changeover booklet**

Updated 29/6/22

Welcome to the Royal Liverpool University Hospital (RLBUHT), part of Liverpool University Hospitals NHS Foundation Trust (LUHFT).

This guide is made by foundation doctors, for foundation doctors. It is intended to give you information that we wished we knew when we started as an F1 or rotated onto a new speciality.

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# Bleeps & MET calls

Most F1s will have their own bleep. You often keep this one for your 4 month block so you are always contactable on the same number.

* Make sure it’s switched on at the start of the day
* Make sure it’s switched off when you finish the shift otherwise it can still go off even miles away from the hospital!
* To bleep someone else, dial 84, wait for the automated voice to tell you to dial.
* Dial the person’s bleep number (4 digit code) followed by the extension of the phone you want them to call you back on (another 4 digit code).
* Wait for them to call you back- give them a few minutes before bleeping again.

When you get bleeped, the bleep will display a 4 digit number- this is the extension to call back.

If you get bleeped and you’re in the middle of doing something, consider writing it at the top of your jobs list in case you get bleeped again and the previous extension to call back is lost.

Bleeps will also play an emergency tone if a medical emergency call/cardiac arrest call is put out. It will state that there is an emergency, followed by where it is. If you hear the emergency tone, listen carefully to where it is.

All F1 bleeps should play the emergency tone when one is put out. You should attend if you are on the MET team that day, if the emergency call is for a ward/speciality that you are covering (regardless of if you are medical or surgical- if it’s your ward- go to the call), or if you have another reason to attend. Consider if your fellow F1s need any help/support!

If you are on the MET team for the day, you will pick up the MET bleep at morning medical handover and pass it on at night time medical handover- it is a baton bleep- don’t go home with it! Your rota will tell you if you’re on the MET team for the day (one F1 at once)

Handover

Even if you have nothing to hand over, you should still go so that the team knows you are ok and that there is nothing they need to know about from your ward(s). You can just say “I was covering ward… and I have nothing to hand over”

On the dashboard computer system, there is also an electronic handover system that you should also check.

## If you are on surgery:

There is no morning handover for F1s on surgery. The night F1 can go to the ward to tell the F1s starting that morning about anything they need to handover.

There is a handover for the on-call surgical team (ANPs, SHOs, registrars, consultant) at 8am on ESAU (Emergency surgical assessment unit). The F1 covering ESAU should attend this.

Surgical Afternoon handover

When? 15:30

Where? 4Z link room

Who? Attended by F1s and ANPs

Intended for surgical F1s finishing for the day to let the F1s who are on call that evening about items they need to handover.

Surgical night handover

When? 20:30

Where? 5C link room- Code for door: C1350X

Who? Attended by all on-call surgical team members

Intended for surgical day team F1s up to SPRs who have been on-call that day to handover to the night team.

## If you are on medicine:

Morning handover-

When? 9am

Where? ED seminar room (1st floor above ED, accessible from ambulance triage corridor in ED).

Who? Only attend if you are on the MET team and need to pick up your MET bleep from the night F1, who should also attend this handover.

Medical afternoon handover

When? 16:30

Where? 4Z link room

Who? Attended by F1s and ANPs

Intended for medical F1s finishing for the day to let the F1s who are on call that evening about items they need to handover.

Medical night handover

When? 21:00

Where? 4Z link room

Who? Attended by all on-call medical team- if you are on call for medicine that evening, you should go to this.

Intended for entire medical on-call finishing for the day to let the night team about items they need to handover.

# On-calls

After 4pm on surgery and 5pm on medicine, people start going home and the on-call team starts covering the wards.

Your rota will tell you if you are on call.

Whether you are on medicine or surgery, you will typically cover 2 or 3 wards until night time handover when you will hand over to the night team.

You may not always be covering your regular ward.

You will take handover from the F1s working on the wards which you will be covering.

You should also keep an eye on the handover section on dashboard, as wards may put new items on here!

Once handover’s finished, now is a good time to have something to eat & drink before making a start on jobs. This is also a good time to prioritise the jobs you’ve got so far.

The ANPs help filter and triage bleeps, they are also part of the MET team. They are highly trained, skilled and experienced. You will work closely with them whilst you’re an F1 and maintaining a positive working relationship with them will be very beneficial to you. Listen to what they have to tell you.

## ANP bleeps

ANP covering medicine: 4221

ANP covering surgery 5095

Though there is a bleep for medical & surgical, ANPs may often team up and spread the jobs between them. Try contacting the applicable bleep first, but if needed, get in touch with either ANP, who will help direct you.

Find an office to base yourself for the on-call e.g. 4Z, 7A/B. The mess is a little further from the wards.

Take your breaks. Previous years’ mess committees have ordered pizza at weekends as a treat for people who are on call.

# Hospital directory

Download the ‘Induction’ app ©- it contains bleeps and extensions for the trust.

To call switchboard, dial 0 from an internal phone.

If you need to get in touch with another hospital e.g. Liverpool Womens’ Hospital, Clatterbridge Cancer Centre, it may be quicker to search for their number and dial it directly yourself, rather than asking switchboard to put you through- it saves waiting for switchboard to answer- which can take a while!

|  |  |
| --- | --- |
| **Hospital** | **Number** |
| Liverpool Womens’ | 0151 708 9988 |
| Clatterbridge Cancer Centre | 0151 556 5000 |
| Walton Centre for Neuro | 0151 525 3611 |
| Aintree Hospital | 0151 525 5980 |
| Broadgreen Hospital | Same switchboard as RLUH |
| Liverpool Heart & Chest (LHCH) | 0151 600 1616 |
| Alder Hey Children’s Hospital | 0151 228 4811 |
| Whiston Hospital | 0151 426 1600 |
| Arrowe Park Hospital | 0151 678 5111 |
| Countess of Chester Hospital | 01244 365 000 |
| Warrington Hospital | 01925 635 911 |
| Southport Hospital | 01704 547 471 |
| Ormskirk Hospital | 01695 577 111 |
| Merseycare (community & mental health) | 0151 473 0303 |

# Doctors Mess

The doctors’ mess is in the Linda McCartney Centre, first floor. Go up the stairs/lifts which are directly in front of you as you go through the Linda McCartney entrance doors by the car park.

The code for the first door, if needed, is C4568Z, go through this door, go left and you will see the door which says ‘doctors mess’, the code for this door is 2274.

In the mess is a kitchen stocked with snacks, coffee machine, plenty of computers, a television, table tennis/pool/air hockey and some individual rooms. There are also lockers- bring your own padlock.

# Food

**24hr hot food cafe**

The bistro is open 24hrs, 7 days a week and is found on the ground floor corridor linking the main hospital foyer to the A/B end of the long corridor at the back of the hospital.

On the first floor of the foyer, there is also a Costa Coffee and WH Smith open normal daytime hours.

In the Linda McCartney centre there is also a café open until 2pm weekdays.

Across the road from the Hospital is also a Tesco, Subway, Pizza Hut & Papa Johns.

# Layout of the wards

|  |
| --- |
|  Y |
|  X |
|  B |
|  A |

 Z

 Elevator Foyer

 Elevator Foyer

 C

Wards are found on A, B, X and Y, the C and Z areas are typically offices etc. This layout starts from the 2nd floor upwards. The ground floor is A&E, AMU, clinics etc. and the first floor is ITU. Theatres are on the 11th floor.

You can’t cross over between B and X on every floor. The tenth floor is a maintenance corridor that you can cross all the way over. You can also cross over on ground floor. Crossing between wards on certain floors has been subject to change due to factors including covid.

# Clinical tips

The Royal Liverpool Emergency Medicine Handbook (RLEMH) is available as an app- type RLEMH into your app store. This is a useful place to find hospital guidance when seeing acutely unwell patients.

Additionally, there is a resource made by junior doctors and ratified by HEE called Asked to see patient. It contains a handbook with a page on most of the common things you might be asked to see whilst you’re on call. Consider saving the handbook as a link on your home screen.

[www.askedtoseepatient.co.uk](http://www.askedtoseepatient.co.uk)

Prioritise sick patients first

Always consider if you need to ask for help or advice- if you think you need help, you probably do. Escalate early.

If the nursing staff on a ward are kindly helping you when you’re seeing an unwell patient, let them know the urgency of things you might ask for help with e.g. if you think an ECG needs performing now rather than a few minutes time.

Everyone is working in the best interests of patients. Everyone is busy. Be kind to each other.

If you are calling someone, it can be worth spending a minute to write a quick sentence or paragraph re: what you’re going to say, including questions you’re asking and relevant history, examination & investigations.

Form positive working relationships with all ward staff- Nurses, pharmacists, ward clerks, HCAs, domestics, students, porters, dietitians, physios, OTs, SALT, everyone. There will come a time where their help will be invaluable!

Listen to concerns of nursing staff.

Listen to pharmacists and work closely with them when it comes to reviewing prescriptions and TTOs, they are very knowledgeable and helpful.

The MDCalc © app is very useful for a lot of validated clinical severity scores etc. which you may wish to make use of to support your practice.

## Antibiotic formulary

The hospital antibiotic formulary is accessible from the intranet home page and gives the hospitals standard choices for infections related to presumed source. It often gives a first and second line choice, with the second choice often being more applicable for someone with a penicillin allergy.

Pay attention to the dose, frequency and duration. Prescribe antibiotics with a stop date of an appropriate duration.

If it is decided that a patient needs gentamicin e.g. if they are thought to have sepsis, the formulary also contains a link to a gentamicin dose calculator. Do not prescribe gentamicin indefinitely.

There is also a teicoplanin dose calculator too.

When using these calculators, aim to have an up to date weight, height & renal profile for the patient.

You could save the formular as a link on your mobile phone’s home screen for quick access.

# Bloods

Phlebotomists will often come early in the morning, perhaps before you start or whilst you’re doing ward round for example.

If you know which patients will require blood tests the following day, you may wish to print the blood forms requesting the appropriate blood tests and place them in the phlebotomy folder (which most, if not all wards should have).

The blood forms should be placed in the applicable day for which they should be taken on.

You should write the bedspace for the patient at the top of each blood request form, so that the phlebotomists can more easily & efficiently take the bloods.

On a Friday, you may wish to pre-plan and print appropriate blood forms for Saturday, Sunday and Monday (if you know patients will need them), as the on-call F1 covering the ward over the weekend will not have much time to print bloods.

If phlebotomists can’t take blood from a patient, they may place the blood forms back in the folder- it’s worth checking the folder. Ensure the blood form folder is safely stored behind the nurses station.

# Referrals

## Neurology & neurosurgery

Typically, a referral is made through Orion Cloud.

<https://orioncloud.org/>

You need to make an account to login to this- make a note of your login for future use.

Once logged in, you will select the type of referral e.g. neurology, neurosurgery. You input relevant information & clinical questions as well as contact details for yourself +/- a senior.

Orion will give you an access code and PIN specific to the case you just submitted- If this code & pin are saved in the notes, other team members can then access the Orion updates too.

When advice/updates is added to the notes, Orion will send an automated email to the email addresses you entered, prompting you to check back and enter the code & pin it previously gave you to access the advice.

You can also call the Walton Centre and ask to be put through to the applicable on call team should you wish to chase or discuss in further detail.

## Clatterbridge cancer centre

Clatterbridge have an on-call registrar who you can speak to through their switchboard.

There is also an acute oncology referral on ICE, this is often more for keeping oncology team updated, if you need advice asap, speak to the oncology registrar on the phone.

## Liverpool Women’s Hospital

The quickest & easiest way to get advice is to call their switchboard and ask to speak to the on-call obstetric or gynaecology registrar (as applicable)

## Orthopaedics

Orthopaedics are based at Aintree, you can ask switchboard to be put through to them.

## Endoscopy

The royal has an Endoscopy unit, there is an endoscopy/gastroscopy tab on ICE, but there are several options and if you make the wrong request, the endoscopy unit might reject the request. If unsure, contact the endoscopy nurses who can give advice. Their bleeps are:

Gastro endoscopy: 5130

HPB endoscopy: 5109

## Ophthalmology

St Pauls’ eye centre is at the Royal, to speak to ophthalmology on call, contact them through switchboard and if they wish to see the patient, they may ask for them to be brought down to St Pauls’. The St Pauls’ emergency room is accessed by the A&E waiting room.

If ophthalmology document on PENS, they may paste it in as a document which you then have to open, make sure you check attachments etc. on PENS.

## Palliative care

There is an ICE referral for palliative care, there is also extension 2274 and bleep 4191. Out of hours their number is 08452232900 (this is an external number as they cover more than one hospital).

## Mental health

There is a mental health liaison team referral on ICE. You can also ask to be put through to the on call psychiatry registrar through switchboard or through Merseycare switchboard (the community & mental health trust- 0151 473 0303).

## Pain team

Pain team can be referred to on ICE and are contactable on ext. 3198 or bleep 4531.

## Stroke team

ICE referral, stroke specialist nurses are people to let know if you see someone who may be having a stroke, they will come & see the patient. They are in hospital 24/7. Ext. 3023, bleep 4209.

## Community anticoagulation

If you need to contact the community team about a patient’s anticoagulation, there is an ICE referral and you can contact them on 0151 247 6066.

## Chest pain team

Cardiology referral can be made on ICE, cardio registrar can be contacted on bleep 5235 and chest pain specialist nurse team can be contacted on ext 3242, bleep 4909.

## Haematology

Haematology are now largely based at Clatterbridge Cancer Centre. Currently there is also the Roald Dahl anticoagulation centre on the ground floor of the Royal (ext. 3390/3391)- double check the status of this once the Royal moves to the new hospital.

To get in touch with haematology for advice, it is usually by contacting the on-call haematology registrar via switchboard

## Therapies

Referrals for SALT, dietitians, PT, OT etc. are available on ICE. Lots of wards will have regular physios & OTs who you can keep in work closely with about patients on your ward and they may already be aware of who they should see.

## Microbiology

You can make a microbiology referral on ICE to involve the microbiology team in a patients’ care. If you need advice on tailoring a patient’s antimicrobial regimen then you can book in for a call for the microbiology team to call you back.

You can call extension 4410 where one of the admin team will take details from you. When leaving your contact details, you could leave more than one way of them getting in touch with you e.g. your bleep and your mobile number or the ward extension etc.- you don’t want to miss them calling you back.

In preparation of the conversation, consider making a note of items including:

* The question you wish to ask
* Summary of history
* Relevant past history
* Relevant investigations- bloods, cultures, imaging
* How well is the patient, what is there current status and what is their baseline?
* What infection is being treated and aim of treatment.
* What antibiotics are they currently on, and for how long?
* Have they responded to current antibiotics- why do you want to change them?

# Useful bleep numbers for speciality SHOs & registrars

Cardio reg- 5235

Respiratory reg- 5196

Gastro reg- through switchboard

Renal reg- 4381

Renal SHO- 4389

Infectious diseases reg- 4578

Surgical reg- 4960

Surgical SHO- First on SHO (covering general surgery): 4954,

Second on SHO (covering urology, ENT): 4438

Vascular reg- Through switchboard

Urology reg- Through switchboard

Med reg for wards- 4990

Med reg for AMU/A&E- 4950

Med SHO- 5211

# Pharmacy

Learn your ward pharmacist’s bleep.

Pharmacy extension 2085 & 2092

Pharmacy is open until approx. 8pm on weekdays and approx. 5pm on weekends.

Get TTOs done early so there is time for issues to be identified & rectified, and for it to be issued. If they are left too late, they may not be done in time and this may affect the patient going home.

If a controlled prescription is on the TTO, you may be asked to go down to pharmacy to sign the prescription.

Pharmacy can be found on the ground floor. Accessible on the corridor on the AB side as if you were turning right if coming into the main hospital foyer.

# ECGs

You can request an ECG on ICE, you should indicate the urgency of this in the request note on ICE e.g. if it’s for chest pain it is likely urgent. One of the ECG technicians from the cardiorespiratory department will come to perform the ECG, but you may not know exactly when.

Wards, or the ward next door may also likely have an ECG machine, if you want an ECG doing immediately, this can be used. Still put a request on ICE so that the ECG is uploaded onto the ICE system. Previous ECGs are available to view on ICE.

# Implanted pacemakers & defibrillators

If you see a patient and need an implanted pacemaker checking or deactivating etc. or if you need information on the pacemaker e.g. to check if it’s safe for an MRI scan, you can ask the patient if they have the information card that comes with their device. You can also ask them where they had the device inserted e.g. Liverpool Heart and Chest, and you can call them for further information too.

To check or deactivate a pacemaker, you can contact cardiorespiratory who can bring up a machine to do this. Make sure you do this with plenty of time. A referral is also available on ICE.

Cardiorespiratory department extension: 2710

# IT & Computers

You will get used to using dashboard, PENS, ICE, EPMA/JAC etc.

Make sure you do VTE assessments on dashboard

Discharge letters are also done on dashboard, TTOs on EPMA.

When clerking in patients, e-xchange can be useful to check a patient’s primary care record for their regular medications (access primary care record using button near top right of e-xchange home screen). You may need to contact IT to get access to this- check and arrange this promptly.

Mob carts can be easier to use than tablets when documenting for ward round. Make sure it’s got enough charge to last for ward round.

# Exception reporting

If you finish late, or have to come in early, or miss F1 teaching due to clinical demands, then you should exception report.

Once reviewed you should get paid for the extra time or get time off in lieu.

The link to exception reporting is below

<https://www.healthmedics.allocatehealthsuite.com/Core/?ReturnUrl=/exceptionreporting/>

# Locums

If you wish to register for the internal locum bank to do extra locum shifts, contact medical temporary staffing and they will supply relevant paperwork.

Make sure you always have plenty of time to relax and are rested for your normally timetabled shifts.

MedTempStaff@liverpoolft.nhs.uk

Extension: 3313 or 5338

# Payroll

If you need to get in touch with payroll, their email address is:

payrolluh@sthk.nhs.uk or liverpoolftpayroll@sthk.nhs.uk

Number: 01512904940

HMRC can also be helpful with tax code queries.

# Changeover

## No more grey Wednesdays

When you change over onto your next job, get in touch with the F1s on the job you’re about to change onto to get initial tips e.g. where to go on the first day, IT resources, structure of the day etc.

Also arrange to pick up your new bleeps from the current F1s

Additionally make sure you give a similar changeover handover to the F1s incoming into your current speciality, and arrange to give them your bleeps.

# PENS proformas

PENS is the system used at the trust to type medical notes e.g. your ward round notes. You can access PENS directly from the desktop or through dashboard too.

However, PENS has multiple useful proformas which can only be created using PENS directly, not through dashboard as of yet.

There is an option to create forms, once this is clicked, make sure you check the box which says ‘search all forms’, then start typing the form you want and it will open up a new form which you can start inputting into.

Examples of useful and important pre-made forms include:

* Mental capacity & best interests
* Consent for blood transfusion
* Counselling for initiating DOACs
* Catheterisation (if you search ‘Houdini’, this comes up)
* NG tube insertion & checking
* Death verification

Some forms require patient and/or clinician signature, this can be done by using a tablet to complete the form on PENS or by using a mouse on a mobcart/computer.

# Tablets/iPads

Tablets can be found on numerous wards, particularly surgical wards and some people use them to document ward round. This has it’s advantages of being more mobile if you’re going ward to ward, but can be quite clunky to check results etc.

If you use tablets, make sure they are put on charge once you’ve finished using them. You don’t want it to run out of charge halfway through ward round!

# Imaging

If you request an xray etc, especially out of hours, first check if it needs vetting or not, then call down to xray, CT etc. and check when the patient can come down and if you need to organise the porters or if you want a portable xray to come up to the ward.

If you request an MRI, you may need to also complete the MRI safety form on ICE, which asks to consider patient’s past medical history, presence of metallic items.

Main xray 2745

A&E xray (may be the xray area used out of hours)

If you need imaging vetting in hours, you can try contacting radiology clinic on ext. 5450 or 2730.

If you need imaging vetting out of hours, you can contact the radiology hub on 2738. They may ask to speak to a registrar or above.

CT/MRI radiographers- 5488

Radiology appointments (in hours)- 2759

# Porters

Porters are contactable on ext 2010, 2020 or at night time on bleep 4600.

Oxygen porters are on bleep 4602

Lab porters are on bleep 4256

# Pods

X and B wards, as well as A&E and AMU are connected to the pod system to send samples to the labs. Make sure everything is labelled properly before putting it in the pod.

Before you put the pod in the tube, open the door, put the code for the lab in (this should be on the door of the tube) and the put the pod in the tube, ensuring the door is properly closed.

If the tube machine starts sounding a loud beep/ringing noise, there is an issue, try removing the pod and restarting the process.

Stay at the tube until your pod goes- don’t leave it and then wonder what’s happened to the sample you’ve just left- make sure it’s on its way to the lab.

Red pods go to the labs, green pods are for use by pharmacy.

If there aren’t any pods left, you can call the lab to ask for more to be sent to the ward. You can contact the biochemistry labs on ext. 4235 or 4251. Haematology labs are on ext. 4333.

# Supervisor meetings

Ahead of changeover, you will find out who your next clinical supervisor will be. Plan to contact them in advance of changing over to introduce yourself and to start looking at days you may both be available for your initial meeting.

Also ahead of changeover, plan to contact your academic supervisor and current clinical supervisor plan your end of placement meetings with plenty of time- don’t leave it to the last minute!

Ahead of your meetings, make sure you have completed your relevant forms e.g. PDP, summary narrative, make sure you’ve got your mini-cex’s & CBDs signed off and that they’re applicable to your PDP and the curriculum.

During your meetings, ask your supervisor if you can discuss points that are mappable to the curriculum e.g. career planning, and ask them to write this in the notes for the meeting on Horus.

For linking your evidence to your curriculum, Mr Webb has made a really useful document titled ‘Evidencing the portfolio’. This will likely be distributed to foundation doctors. If you don’t come across it, contact the Foundation admin team or Mr Webb to get a copy of this.

# Bereavement office

If you were involved in the care of a patient who subsequently passes away e.g. you saw a patient on ward round and so know about the patient, you may be asked to go to the bereavement office to complete the death certificate. Though you can be the doctor to sign the certificate, you also need to state the name of the consultant who was responsible for the consultant.

Often it is clear as to what you should write in the cause of death section. But if you aren’t certain as to what you should write, you can discuss this with your consultant and/or seniors who have also been looking after them. There is often also medical examiners at the office (consultants who spend part of their time with the bereavement team) who can also help advise.

The bereavement office may bleep you or call the ward to discuss with you and ask if you’re able to come down to bereavement office to complete the documentation.

The bereavement office is found opposite the multi-storey car park near to the Linda McCartney centre entrance/exit.

The certificate should be completed promptly. Before going to the bereavement office, you should ensure the patients on your ward are safe and there is adequate medical cover to look out for them e.g. making sure that all the doctors aren’t off the ward etc. Often there is a time after ward round or in the afternoon where you may be able to go to the office.

If you are part of the team looking after a patient who is approaching the end of their life, it may be worth considering what their religious or spiritual needs are e.g. some religions have funerals, ceremonies etc. very soon after death, and therefore the death verification, certificate & other paperwork may need completing very promptly. Considering this may help the team plan in advance to give someone the availability to go down to the bereavement office promptly.

You may also be asked to complete paperwork relating to cremation. If you do this, as part of this you may need to review the patient and their notes for any presence of items such as implanted cardiac pacemakers/defibrillators which can affect cremation etc. The bereavement team can take you to see the patient. This form is longer than the death certificate, therefore make sure you have time to complete it.

If you are at the bereavement office, make sure you are contactable by the ward.

## Coroner

Deaths can be reported to the coroner for reasons including reasons such as:

* Cause of death appears unknown
* Death occurred during surgery or whilst still recovering from effects of anaesthetic
* Death occurred at work or was due to industrial disease/poisoning
* Death was sudden or unexpected
* Death was unnatural
* Death was due to neglect or violence
* Death occurred in other suspicious circumstances
* Death occurred in custody, prison or other detention

This list is not exhaustive, there may be another reason.

If one of these or another reason to report the coroner is identified, this will be discussed by the ward team.

If you need to make a coroner referral, the bereavement office team will be able to direct you to accessing the coroner’s portal where you can input the information it asks for.

The bereavement office has computers for you to access the notes of the patient who you are completing the paperwork for.

# Speciality specific guides

## Cardiology (Dr D Kimber F1, June 2022)

**F1 jobs and logistics – Cardiology**

* There are 2 cardiology wards – Ward 3A and the Acute Cardiac Unit (ACU / 3B)
* Ward 3A:
* Starts day with “board round” in staff room at approximately 9am
* This is attended by nurse-in-charge (NIC), PTs, OTs, pharmacist, doctors and sometimes the consultant
* NIC will provide updates on issues / plans with patients and helps you get a sense of each patient, so they’re not completely unknown to you when the round starts
* At the end of the ward there is a locker to store bags – code 1942X
* Nursing staff are friendly but less skilled / trained than their counterparts on ACU, so you will find yourself with plenty of bloods, cannulas, ABGs to do throughout the day
* There is a phlebotomy folder near where the ward clerk sits – remember to print out necessary bloods for the next day to save yourself doing extra bloods!
* ACU / 3B:
* Doctor’s office is at the end of the ward, near the doors to cross onto 3X (crossing technically isn’t allowed as that is an infectious diseases ward)
* No board round on this ward, advise to start prepping notes in the office until the consultant arrives
* Depending on who it is, this can be anytime from 9-10am
* There is no phlebotomy folder on this side, just inform the nurses which bloods the patient needs taking
* You may still occasionally be asked to do difficult bloods / cannulas that the nurses have failed, but it is far less frequent than 3A
* Extra points:
* Ask one of the registrars or outgoing F1s to send you a spreadsheet link to the rota, which tells you the ward you’ll be on that day
* The cardiology registrars’ office is the thin door on the right just before you enter the double doors to the foyer to the ward
* There’s usually a registrar in the office who are happy to help if you have concerns over a sick patient, booking a scan correctly, etc
* If you are asked to expedite cardiac imaging requests (CTCAs or cardiac MRIs), you can email Dr Balazs Ruzsics who vets all the requests (his email should come up when you search)
* Referring to Liverpool Heart and Chest (LHCH):
* A lot of patients are referred here for TAVIs, valve replacements, stents, etc
* <https://urgentreferrals.lhch.nhs.uk/> is the website, or just search “LHCH referral” on google and click the top link
* You’ll have to link and verify your trust email to the website first
* The referral form is pretty straightforward, but choose “priority 2” when asked to decide the urgency
* How to prep ward round notes:
* WR “insert Consultant / Reg name and grade” at the top
* Age and sex of patient
* Date of and reason for admission
* Past medical history
* Relevant investigations – recent bloods, CT scans, Echoes, etc
* Use the button on dashboard at top right of notes to implement latest obs
* Leave some space here for writing what is discussed / observed during the round
* Finally sign your name and grade
* Viewing investigations / using the systems:
* Can either use ICE or dashboard, but be aware that things like ECGs and echo reports open up much more quickly on dashboard
* One of the consultants, Dr Fisher, helped create dashboard. Wouldn’t advise using ICE or criticising dashboard during his rounds!
* Ordering investigations
* Open ICE -> select patient -> view requests -> new request
* Select “services” tab
* Select the “cardiac” side tab that opens
* Here you’ll find echos, ECGs, cardiac tapes, loop recorders, DC cardioversions and most other things you could possibly be asked to order
* Common cardiac bloods:
* Troponin – enzyme used to assess presence of and degree of myocardial damage. A rise doesn’t always mean ACS. Other potential causes include PE, sepsis, prolonged tachycardia, renal failure and more
* A singular troponin is not very useful, a 2nd should usually be taken around 6hrs afterwards. A rise of >20% of the original is considered “dynamic” and should be discussed with one of your seniors
* NTproBNP – protein released by the ventricles of the heart when the walls of the heart are stretched or there is pressure overload within the heart
* A level < 400pg/ml effectively rules out heart failure, and the level rises the worse the heart failure becomes
* It can be raised by renal failure, COPD, hypoxia, ischaemia, diabetes
* It can be artificially lowered with use of ARBs, ACEi, diuretics
* CKMB – another cardiac enzyme. Rises along with troponin in myocardial damage
* However, CKMB only stays elevated for 1-2 days compared to troponin staying elevated for 1-2 weeks
* Therefore, can be useful to assess for new re-infarction if patient has already had an ACS event and there is suspicion of a new one
* Common abbreviations:
* CTCA – CT coronary arteries (to assess how calcified / blocked the coronaries are essentially)
* CTPA – CT pulmonary angiogram (to assess for any PE)
* CT AP – CT abdomen-pelvis (less commonly used in cardiology)
* CMR – Cardiac MRI
* MIBI – Cardiac stress MRI
* TTE – Transthoracic echo (normal echo)
* TOE – Transoesophageal echo (only for when you couldn’t see enough on the normal echo)
* ARB – angiotensin receptor blocker (Losartan, Candesartan)
* ACEi – angiotensin converting enzyme inhibitor (Ramipril, Enalapril)
* ARA – aldosterone receptor antagonist (Spironolactone, Eplerenone)
* ISMN – Isosorbide Mononitrate
* ISDN – Isosorbide Dinitrate
* Drug conversions
* Furosemide – twice as potent IV as PO
* Therefore, 40mg PO = 20mg IV
* 40mg PO Furosemide = 1mg PO Bumetanide (both loop diuretics)
* Learning opportunities:
* Cardiology is an interesting field, and all the consultants are happy to provide teaching and explain certain aspects of patients’ care if asked
* The aforementioned rota will also show you which registrars are in imaging departments, clinics, angiography lists, etc
* If you want to attend some experiences away from the ward, ask either the Reg or Consultant who are usually happy to provide these opportunities
* Recommendations:
* If haven’t already, would recommend reading a book from the “ECG made easy” series, as you’ll often be provided with ECGs to interpret on the ward
* Familiarise yourself with common cardiac medications and dosing, such as diuretics, ACE inhibitors, beta-blockers, etc.
* Briefly read-up on the management of congestive cardiac failure, ACS and AF, as these are by far the 3 most common conditions you will see on a day-to-day basis
* Enjoy the rotation!