**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 (which 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!