General Surgery Handbook for Foundation Year 1 2021

RSCH

Disclaimer: The content in this 'Survival Guides' section has been written by other trainees as an introduction to day-to-day working.

It has been informally peer-reviewed. It does not contain clinical guidance and is not Trust-approved policy or protocol.

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Location

The General Surgery wards are located on Level 9 of the Millennium Wing in Royal Sussex County Hospital (RSCH). Level 9 is a busy ward with over 54 patient beds, the ward has recently been halved with Surgical Patients on West (Bays 4-9) and medical Gastro patients on East (1-2, 10-12). (Bay 3 is Theatre Admissions Unit)

Outliers: due to capacity of L9 ward or joint care of some patient with other teams or need for ITU/HDU support, there will be patients in AAU (L5), A&E (L5), HDU (L5), ITU (L7), and other wards across the hospital. The location should be on handover lists, and the clinical assistants will check to confirm these in the morning.

Endoscopy suites are located on the same level in the Thomas Kemp Tower. The Thomas Kemp Tower can be accessed via a connecting Bridge between Millennium wing on level 9.

Princess Royal Hospital (PRH) is in Haywards Heath. There are no General Surgery inpatient wards at PRH, therefore only day case surgery happens here e.g. Cholecystectomies. There is also no General surgical on call cover at PRH, meaning that if patients are seen in the Emergency Department at PRH and are surgical they will usually be transferred across to RSCH to be seen by the General Surgical team.

Team

The ward staff are divided into two teams: Lower GI surgery and Upper GI Surgery.

Each team is led by an on-call consultant for the week, one ward registrar and one to two ward SHOs*. Each team should also have one ACP, one clinical assistant and 2 FY1s. A ward pharmacist joins each ward round on alternate days.

Note – the Lower GI and Upper GI consultant are on-call on alternate days for the week

In addition to the ward staff there are elective lists, the emergency (CEPOD) list and the on-call team. The CEPOD team consists of the CEPOD consultant of the week, one surgical registrar and one SHO. The on-call team consists of one surgical registrar and one SHO. FY1s will also be rota'd for several days on-call and CEPOD but do often get pulled back to the ward if they are understaffed.

*The ward registrar and SHO will be on a specific team for the ward round however they should be available to both teams for advice and to help with jobs, especially when the ward is understaffed.

UGI consultants	LGI consultants
Prof Mansoor Khan (Educational Lead)	Mr Marc Lamah (Clinical Lead)
Mr. Antonios Athanasiou	Mr. Christie Swaminathan
Mr. Goldie Khera	Mr. Etienne Moore

Mr. Krish Singh Mr. Muhammad Sajid Mr. Phil Ridings Mr. Shameen Jaunoo Mr. Tarek El-Houssari	Ms. Heena Patel Mr. Jeremy Clark Mr. Mokhtar Uheba Mr. Sayed Zaidi

Typical Day

Morning handover begins at 8am in the level 9 seminar room (through the endoscopy department) *. The on-call team presents all patients seen within the past 24 hours, those who have been DTA (Decision to admit) are allocated to either the UGI or LGI ward team.

- It is useful to have a mini handover with the night FY1 in the doctor's office before this as you will have more time to discuss issues/ jobs and most of these will not require a discussion with the whole team and just need to be brought up on the ward round.

Ward Round starts immediately after the morning handover so make sure you have discussed the FY1 staffing of both teams prior to this, it is useful to find out which FY1s are on the ward all week and allocate one per team to ensure continuity of care.

- Patient numbers are most commonly between 35-60, this can lead to a long and fast paced ward round. Most consultants are willing to slow down if you let them know you are struggling to keep up.
- The order of the ward rounds is dependent on which consultant is leading them. There are three main components:
    - New take patients who have just been allocated during handover. They are usually found on L5- A+E, AAU and EACU. This is often done first.
    - Patients on Level 9.
    - Outliers, the number of outliers has increased since the ward has split, most commonly they will be found in: AAU, HDU, ITU, Trafford, Level 8 and Level 11.
- We have found it useful to alternate between patients on ward round and prepare notes for every other patient. Clinical assistants are used to assisting in preparing the notes as well.

Post ward round meetings are common, during this the team will go through each patient and discuss the jobs required and create a team jobs list. Not all consultants attend this, but it is very useful as it rare one staff member has a record of all jobs for all

patients. This is a good time to ensure there is an even distribution of jobs and to ask the registrar/ SHO which jobs they will take off you.

Updating and reviewing the blood results should ideally occur at 3pm. The clinical assistants very kindly update the handover lists with the results of the day and at 3pm ask one member of the team the review these results and let them know which bloods are required for the following day (you can indicate thes in the appropriate column using the coding i.e.: FUCLT)

Updating the handover list (found under the Team drive, Medicine Junior Doctors, Surgery List) should ideally occur at 4:30pm. This is a good opportunity for the team to review any non-urgent scans or procedures the patients have underwent that day. It is critical to update the list in detail adding the results of any confirmed diagnoses, scan/ procedure results, pertinent clinical updates, and outstanding jobs for the following day. The Clinical Assistants update the bloods on the list and any new patients)

- Any jobs that need to happen that day needs to be handed over to the evening FY1 who will carry both bleeps.

Evening handover, one FY1 from the day stays until 8:30pm and will be responsible for the patients from both the UGI and LGI teams. Only handover jobs that cannot wait until the following day, this includes but is not limited to: chasing and reviewing critical bloods and imaging. Also provide the details and a summary for any unwell patients or patients to be aware of that may deteriorate overnight.

- DO NOT handover routine jobs such as TTOs and non-critical discussion with other teams.
- The evening FY1 should have a copy of the handover list for both teams.

Night handover, at 8pm the evening FY1 should handover to the night FY1 in the L9 doctor's office. This handover should be similar to that if the evening handover above.

- After this the Night FY1 should go down to the main surgical handover in Level 4 EACU (the medical team also have their handover here, do not join this, the surgical handover is in a clearly marked office on the right-hand side).
- This is very useful as you can introduce yourself to the night registrar and SHO, swap contact information with them as this will be your main form of communication when you need advice. This is also a good opportunity to alert them to any unwell patients on the ward and ask any questions you have from the day team's handover/jobs.

*On Fridays this is held in the doctor's office

Points of contact throughout the day

Jane Dunn

- Jane is usually found sat outside the level 9 doctor's office and is incredibly helpful with any quick query you have or will point you in the direction of the best person to ask.

Ward Registrar/ SHO

- They should remain on the ward until 5pm but are not always found in the doctor's office so often are most easily contactable via whatsapp (you can get their numbers from the general surgery whatsapp group).

On-call team

- This team is who you contact with any questions/ issues when working after 5pm.
- Bleeps: 8614 On-call SHO and 8613 On-call registrar.
- This team is responsible for all take patients until they have been discussed in morning handover the following day.
    - If you are working the late make a note in morning handover who the on-call team is as they are often more accessible via whatsapp.

Night team

- This team is your point of contact on nights.
- Go to level 4 EACU at 8:30pm for evening handover and introduce yourself and ask any questions you have from the FY1 day team handover.
- Bleeps: 8614 On-call night SHO and 8613 On-call night registrar.

CEPOD team

- This team run the emergency theatre list; they do not carry bleeps so any queries should be directed to the CEPOD theatres extension 64364.

Consultants

- If you need to contact a consultant from 8-5pm this should be the consultant of the team you are working under, however you should escalate to your SHO/registrar first.
- They can be found in the consultant's office in endoscopy (first door on the left after reception).
- If you need a contact a consultant out of hours, you should contact the consultant on-call. The two ward consultants for the week (UGI and LGI) alternate days in which they are on-call from 8am-8am the following day. You should try and escalate to your SHO and registrar first but if they are unavailable/ in theatre the on-call consultant is your next point of contact.

Pharmacists

- There are 2 ward pharmacists every day before 5pm, a very useful source of information for all medication queries. They will also help with the medication

component of TTOs. They are usually sat near bay 10-12 or can be found on 8262/ 8483.

Booking investigations

Radiology

- Plain X-rays: Plain radiograph requests are submitted via Bamboo under image requests and do not need to be vetted.

- Ultrasounds: Must be booked on bamboo and vetted by radiology (must be NBM for USS abdomen).

- CT or MRI scans: Booked on bamboo, radiologists will automatically vet these, however if the scan is clinical urgent (must be conducted within the next few hours) they must be discussed with the troubleshooting radiologist, (ext 64239). If you can't get hold of the radiologist or CT and the scan is urgent, then the radiology registrar has an office in Level 5 near theatres. If CT aren't picking up and the scan is urgent, radiographers are also available in the CT department on Level 5.

- MRCPs technically need vetting, but if you call L4 MRI they tend to just do them for you without vetting (patient must be NBM).

- Contrast Swallow: Comes up as Water Soluble Contrast Swallow on Bamboo (under fluoroscopy section), and is the gold standard test to check for oesophageal leak/perforation. This is done in Fluoroscopy in the Barry building.
    - This is often referred to as barium swallow on the ward round however these are rarely done now as the barium is very toxic if there is a leak so if you are unsure, clarify this.
    - It can also be referred to as a Gastrograffin swallow which is not to be confused with a Gastrograffin X-ray (in which you prescribe 100mls of gastrograffin and send the patient down for AXR 4 hours later) which is used in ****CHECK****

- Interventional Radiology: Any interventional procedure (e.g. US- or CT-guided drainage) should be discussed with an Interventional radiologist – this should be done by a registrar or consultant. If no one is available go via troubleshooting radiologist. This also needs to be requested on bamboo.
    - Needs up to date clotting (INR usually below 1.4 is okay) and clarify if they need to NBM (this is procedure dependant).

Endoscopies

- Any endoscopy procedure is now requested via a Bamboo referral form.
    - You will need an up to date clotting.

- ERCP: These require authorisation from a Gastroenterology Consultant who can perform the procedure (Dr Tibble, X, X) . Make sure anyone having an ERCP has clotting checked the day before the procedure (INR needs to be <1.4).
    - Consultants this need to be discussed with are:
    - EUS: Done via Dr Austin or IR only, should be discussed in endoscopy and can use the inpatient endoscopy form and make it clear what you're requesting.
- OGD/ERCP: As per the normal general anaesthetic procedure - no food 6 hours before and clear fluids (i.e. water) only up to 2 hours before.
- Ensure bowel prep has been prescribed if required
- Ask consultant about procedure points when booking Colonoscopy/ flexible sigmoidoscopy (1-4) as this is required on the booking form.

Routine Bloods

- Bloods are requested by adding them to the list using the code below and the CAs print the forms.
- Key:
- F – FBC
  U- U&Es
  C – CRP
  T – TPN bloods (Bone, Mg2+) L – LFTs
- Clot – Clotting
  G&S – Group and save

- Generally, all new admissions need FUC, with LFTs and Amylase if they are an uppers patient.
- All post-op patients need FUC at least for the first 2 days, then can switch to every other as long as doing well.
- Patients on TPN need bloods as per the TPN prescription.
- Need to request G+S and clotting before procedures.
- The phlebotomists will take the bloods as long as the form is there, however check with the CAs that no forms have been given back otherwise you might be waiting a while for them. Nurses will take blood from PICC lines, phlebotomists will not.

CEPOD

CEPOD theatre runs 24 hours. Monday to Friday there is an assigned CEPOD consultant and at least one CEPOD registrar. At weekends and out of hours i.e. 17:00 – 08:00, the on-call SpR/consultant does the emergency operating.

You can check the CEPOD list on 'Emergency Surgery Live' found under BSUH applications

CEPOD booking forms

- To book a CEPOD case, you need a CEPOD booking form- these are yellow forms, often found in the 9a doctor's office but also available from level 5 theatres
- The form needs to be accepted by CEPOD coordinator who sits in the second office on the left in Main Theatres)
- Complete an emergency booking form with all the patient details. You will need to indicate on the form if relevant investigations such as blood tests, ECG and CXR have been completed.
- Either you or a senior member of the team should discuss with the anaesthetist and the surgical consultant/registrar covering CEPOD.

Before the operation

- One of the anaesthetists will review the patient on the ward prior to surgery
- All patients requires 2x GROUP & SAVES taken 30 mins apart.
    - If the patient has one historical G+S, they only need one more that has been taken within the last 72 hours.
    - You should also ensure the patient has had a recent coagulation screen done.
- The patient should be NBM
    - Pre-op fasting: 6hrs for solids and 2hrs clear fluids, although not always possible in emergency cases.
- The nursing staff will often request that you prescribe IV fluid to prevent dehydration while the patient is NBM.
- Patients can still take their usual tablets with small sips of water, even while NBM.
- Stopping medications pre-op
    - You should consult the BNF for the latest advice regarding the pre-op management of medications especially for management of oral anti-hyper-glycaemics and insulin.
    - Patients on anticoagulants may require reversal- this should be discussed with the CEPOD consultant/registrar, who may wish for haematology input.
- If the patient is going to have a stoma then please contact stoma nurses 8267/8231 (can also be done by the nurses)

Consent

- The patient should be consented prior to booking for CEPOD
- Consent forms can be found in the doctor's office on 9a and often in the sides of notes trolleys in the bays on the ward
- As per the Royal College of Surgeons, "consent is obtained either by the person who is providing the treatment or by someone who is actively involved in the provision of treatment. The person obtaining consent should have clear knowledge of the procedure and the potential risks and complications."
    - Therefore, foundation year doctors should not consent patients for CEPOD.

- Most often it will be the consultant or registrar who will consent the patient for CEPOD.
- If the patient lacks capacity then a Type 4 consent form is required

NELA

- All laparotomies require a NELA (national emergency laparotomy audit) form done online https://data.nela.org.uk/
- This should take no more than 10 mins providing you have the patient's observations and recent blood results to hand.
- There is a generic login which you can request from the CEPOD registrar/coordinator and ask them if you have any queries.

Patients

On-take

Patients admitted to general surgery are officially under the care of the on-call team until they are handed over to the ward teams at handover the following morning.

Elective operations

These happen on the same day each week at both sites (RSCH and PRH). You can get the patient details from Careflow or Bluespier systems. Clinical Assistants usually add these patients to the list.

CEPOD (Emergency operations)

A daily emergency list takes place at CEPOD theatre by our CEPOD team. If any of those patients need to stay in, they will be added to the list to be seen on ward round the following day. Otherwise, day case surgeries should be discharged by the CEPOD team.

Urgent patient transfers from PRH

Patients who have been operated on at PRH usually are day case surgeries, e.g. laparoscopic cholecystectomy, hernia repair etc. Sometimes they may need to stay in and this is usually best dealt with at the RSCH, as PRH has no surgical cover out of hours. These are your patients once they get to RSCH. They should be accepted by the on-call Registrar prior to transfer.

Referrals for an upper GI/lower GI surgical opinion

Sometimes your team will provide others with a specialist surgical opinion. It will either opinion/recommendations, joint care, or to take over fully. In the situation of joint care, be sure to liaise with your colleagues on the other team about who's arranging and checking on investigations. Consultants are the only ones to decide if you will fully take over care. This is a very important point of distinction as responsibilities for patient jobs may fall among different teams i.e. Neurosurgery, Orthopaedics, Urology etc. *It is not the*

FY1's/SHO's responsibility to accept or review new patients after the ward round. This should go through the on-call team for new referrals or directly to a consultant.

Admitted from or for an outpatient procedure or from clinic

You will be told about this directly. For example, a complication following endoscopy or inability to cope with bowel prep or social issues to name a few. These are uncommon but again if these interventions or investigations are requested then traditionally the patients are yours.

Jobs

Microbiology discussions

They come for a 'ward round' every Tuesday to review any relevant patients. This is a good time to ask them for any questions about antibiotic escalation or antibiotic duration.

Dietician referral

If a patient has had a prolonged time without eating (for whatever reason e.g.: NBM for surgery and complications post-op), they should be referred to dietitians (a MUST score should be calculated before).

Dietitians will review patient's nutrition requirements and will recommend different types of feed e.g.: NG/NJ (if enteral feed adequate) or TPN

Starting TPN

- All patients who are being considered for TPN need to be referred to the dietitians as the first point of call.
- The dietitians will write up the TPN prescription and a member of the patients' team need to sign the treatment.
- The Nutrition Team does a ward round on Monday afternoons and Friday mornings with the dietitians, a pharmacist and Dr Ziva Mrevlje. All patients on TPN will be reviewed then.

Access for TPN

- All patients on TPN need a central line; we generally use dual lumen PICCs, where the purple lumen remains dedicated to TPN only. Referral needs to be made to the IV access team. Nursing staff or dietiticians should be able to do the referral but this has to be documented on the ward round.
- The position of the PICC needs to be confirmed with a CXR and the correct position needs to be confirmed by an FY2 or above and this needs to be clearly documented in the notes and on the actual TPN prescription.
- All patients on TPN need a central line; we generally use dual lumen PICCs, where the purple lumen remains dedicated to TPN only. Referral needs to be

made to the IV access team. Nursing staff should be able to do the referral but this has to be documented on the ward round.
- The position of the PICC needs to be confirmed with a CXR and the correct position needs to be confirmed by an FY2 or above and this needs to be clearly documented in the notes and on the actual TPN prescription.

Things to monitor with TPN

- Baseline Bloods: Baseline bloods should include 'TPN' profile (U&E, Mg, Ca, PO4 and FBC) as well as CRP and LFTs. PN bloods are then repeated daily until stable and then may be reduced to 2-3 times per week or according to clinical need. LFTs should be repeated weekly.
- LFTs: It is not necessary to stop PN for abnormal LFTs
- Every day you will be asked to 'sign TPN bloods' – this involves checking 2 main things
    - Electrolyte replacement: FY1s will be expected to check the bloods for each PN patient daily (a requirement on the PN prescription). If the electrolytes are out of range correct as appropriate while the feed continues ie.it not necessary to withhold PN for abnormal electrolytes. Guidelines for electrolyte replacement can be found on Microguide.
    - Fluid balance: FY1s will be expected to assess the fluid balance status of each PN patient daily as part of the PN prescription.

Refeeding syndrome

- There is a re feeding guideline on the intranet on the Nutrition Support Team site.
- On this site there is also the template for prescribing a phosphate polyfusor. There are also guidelines on hypophosphatemia on Microguide.
- Blood sugars need to be monitored carefully.

TPN summary – to start checklist

- Refer to dietitians.
- Refer to PICC team for double lumen PICC
- Put out blood form for baseline TPN profile
- Sign prescription from dietitians for TPN
- Check PICC position (with senior) and document in notes if line can be used
- TPN can be started
- Check TPN profile bloods daily until electrolytes stable then 2-3 times a week
- Correct any electrolyte imbalances and ensure adequate fluid balance

Contact details

L9a Dietitians: Sean (8183) and Alice (8289)

L9a Pharmacists: Currently hang out in Bay 11 in north. At the weekend 1 pharmacist covers the millennium building (8103).

Palliative care referral

Information about the specialist Palliative Care and End of Life teams can be found on the intranet and on Microguide. If you are starting someone on EOLC or requiring advice then you can refer the patient to Palliative Care via a referral form on Bamboo. It is important to do this even if the decision has been made to start EOLC/syringe drivers by the surgical consultants as the palliative care team will be able to give specialist advice on meds, discharge and the patients care needs. If in doubt ring the palliative CNS or put in a Bamboo form.

Patients who are discharged on palliative medications will need a regular and PRN syringe driver prescription as part of the TTO which can be found in Microguide. Palliative care and pharmacists can help you with this.

MDM additions

You will be told by the consultant if this needs to happen. Generally, any cancer or suspected patient should be discussed at the Multidisciplinary Meeting (MDM) to decide their treatment plan.

These are held on Wednesday mornings so get your request in by Monday afternoon for the case to be discussed on that week's MDM. This is to allow for the notes, imaging, and pathology to be available at the meeting.

Complete a PANDA form (under referrals) with all the relevant patient details as they will help the MDT make decisions. NB: make sure to select the correct MDT team, UGI/Colorectal surgery, Haem, Urology, etc.

For last minute referrals, e.g., on the morning of the MDT, the ACPs are usually able to email the MDT coordinator with patient details. Please note that direct emails from FY1s to book patients onto MDTs will not be accepted by the MDT co-ordinator.

Before an MDM, most consultants will ask for a staging CT scan (usually CAP) and tumour markers (CEA, CA 19-9, AFP)

Guildford HPB referrals:

For patients with complex hepato-pancreato-biliary issues i.e., pancreatic pseudocysts, GB cancer etc., our upper GI team usually sends a tertiary care referral to East Surrey Hospital, Guildford. This is usually done by email: rsc-tr.pancreatitis@nhs.net.

MDT Meetings

Overall you should have one UGI and LGI MDT meeting, you will be rostered for these. This is a 2-3h meeting on a Wednesday morning which you can join online via a Teams link. You can get this link from the ACPs who go to it weekly.

After the 2-3h meeting you can use the remaining day for self-development.

Handover/On-call duties

This is an 8-5pm shift where you join the on-call team who are based in EACU Level 4 and work in A&E, EACU and AAU. The day starts with handover in L9A seminar room as normal.

This is an educational opportunity where you can pick up plenty of cases to be used for CBDs, mini CEX etc. to enhance the foundation portfolio. You will have around 2-8 days of this in your rota, however, take into account you might be pulled to the ward if the ward is understaffed.

Duties of F1 on take

- Clerk patients
- Support the registrar and SHO e.g. by scribing, carrying out certain jobs for each newly admitted patient e.g. ensuring specific bloods are done, discharge paper work, ordering scans etc.
- Update the list throughout the day
- You are **NOT expected** to take referrals as an FY1

Nights

Nights start at 8pm, you will get a handover from the Long Day F1 who should handover any urgent tasks to be done overnight and make you aware of unwell patients.

The handover with the SHO/ Reg at Night happens in EACU Level 4. It is useful to get their number then in case you need any support overnight, make them aware of any unwell patients and ask any questions you have from the handover.

The duties of the night team are as follows

FY1	Ward cover: taking care of all ward patients including the surgical outliers, from both the upper and lower GI surgery team. - take handover from long day FY1 - complete outstanding jobs handed over by long day FY1 - review unwell patients over-night, prescribe medications and respond to any other overnight bleeps.
SHO / Reg	Clerking patients in A&E & EACU **Maintaining on-call list** – _this will mean ensuring that time is taken before end of shift to ensure the list is updated with details and location of patients NB: the take includes all patients over the 24 hour period (8:00 – _8:00) As well as General Surgery you will also admit chest injury patients, and head injury patients not requiring immediate neuro-surgical intervention. A trauma ward specific for all such patients is on L8a

General Tips

- TTO overall structure
    - One sentence on how they presented.
    - What investigations they had and findings.
    - What they were treated for and with what.
    - Any issues during admission or did they progress well?
    - Any intra-operative issues/ post-op issues to highlight.
    - Date of MRFD and any follow up/ new medications to go home with?
- When completing a patients TTO ensure you detail their outpatient follow up, most commonly they are:
    - Follow up scans (book via bamboo as per inpatient guidance but select routine opposed to urgent)
    - EACU follow up (referral on bamboo)
        - Tip – use the narrative from the discharge summary for the EACU referral
    - TCI (to come in) Card
        - This is the elective surgery booking form, found on bamboo referrals.
        - Ask the consultant the estimated length of procedure and the urgency (will decide code type), and if they can be done in PRH (elective day cases)
    - Endoscopy as outpatient
        - This is found under bamboo referrals, same as inpatient
    - Outpatient UGI/LGI clinic follow up, this is usually 6-8 weeks post discharge (cancer patients 4-6 weeks post discharge)
        - If you are unsure about followup, you can ask the consultants (e.g.: appendicectomies usually don't require any followup)
        - You can specify the consultant for follow-up, usually the operating consultant
- Patients discharged following cancer resection will require 28 days of LMWH (unless contraindicated) from their operation date.
- New anticoagulation guidelines - 7 days of LMWH from admission for any post-op patient if patient is not high risk of bleeding

Exception reporting

- Exception report for any time you stay over 5pm as this allows the department to acknowledge lack of staffing which can then be addressed for future rotations

Teaching

- Tuesday F1 teaching
- Thursday F1 Surgical teaching – organised by Jane

Author Details

Guidance Information

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Added:

Review Date:

If you would like to be involved with updating this guide please contact bsuh.microguide@nhs.net

For an example (with variation!) see:
https://viewer.microguide.global/guide/1000000242#content,bc9abd74-846e-40d0-8f62-8b6f6955bf11