## GENERAL SURGERY GUIDELINES

<table>
<thead>
<tr>
<th>Mr Mohammad Aslam</th>
<th>Mr Tim Campbell-Smith</th>
<th>Mr Andrew Day LGI</th>
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<tbody>
<tr>
<td>LGI</td>
<td>LGI</td>
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<tr>
<td>Mr John Grabham</td>
<td>Mr Alan James UGI</td>
<td>Mr Paras Jethwa UGI</td>
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<td>LGI</td>
<td>UGI</td>
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<tr>
<td>Mr Ian Maheswaran</td>
<td>Mr Simon Monkhouse</td>
<td>Mr Neil Smith LGI</td>
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<td>UGI</td>
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<tr>
<td>Ms Shamaela Waheed</td>
<td>Mr Thomas Loosemore</td>
<td>Mr Alex Rodway Vascular</td>
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<tr>
<td>Breast</td>
<td>Vascular</td>
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<table>
<thead>
<tr>
<th>DAY</th>
<th>AM</th>
<th>PM</th>
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<tbody>
<tr>
<td>Monday</td>
<td>o Mr. A. James UGI - (alternate weeks) Crawley DSU</td>
<td>o Mr. J. Grabham / A.Day Colorectal All day main theatres. <strong>Extended list until 1900</strong></td>
</tr>
<tr>
<td></td>
<td>o Mr. P. Jethwa UGI - (alternate weeks) Crawley DSU</td>
<td>o Mr. T. Campbell-Smith (alternate weeks) Colorectal Crawley DSU <strong>extended list until 1900</strong></td>
</tr>
<tr>
<td></td>
<td>o Mr. J. Grabham / A.Day Colorectal All day main theatres. <strong>Extended list until 1900</strong></td>
<td>o Mr. I. Maheswaran UGI ESH until 19:00</td>
</tr>
<tr>
<td>Tuesday</td>
<td>o Miss. S. Waheed Breast - All day list at ESH</td>
<td>o Miss. S. Waheed Breast - All day list at ESH</td>
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<tr>
<td></td>
<td>o Mr. I. Maheswaran UGI (alternate weeks) ESH until 19:00</td>
<td>o Mr. I. Maheswaran UGI (alternate weeks) ESH until 19:00</td>
</tr>
<tr>
<td></td>
<td>o Mr. Aslam / Day ESH</td>
<td>o Mr. A. Day (alternate weeks) Colorectal ESH</td>
</tr>
<tr>
<td>Wednesday</td>
<td>o Mr. A. James UGI (alternate weeks)</td>
<td>o Mr. A. James UGI - (alternate weeks) All day list at ESH</td>
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<tr>
<td></td>
<td>o All day list at ESH (Vascular)</td>
<td></td>
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<tr>
<td>Thursday</td>
<td>o Mr. A. Rodway - Crawley DSU (Vascular)</td>
<td>o Mr. K. Reddy (alternate weeks)</td>
</tr>
<tr>
<td></td>
<td>o Mr. K. Reddy (alternate weeks)</td>
<td>o Mr. S Monkhouse UGI ESH (alternate weeks)</td>
</tr>
<tr>
<td></td>
<td>o Mr. S Monkhouse UGI ESH (alternate weeks)</td>
<td>o Mr. A. Day (alternate weeks) Crawley DSU</td>
</tr>
<tr>
<td></td>
<td>o Mr. J. Grabham / Mr. M. Aslam All day colorectal at Crawley DSU</td>
<td>o Mr. I. Maheswaran Endoscopy Crawley</td>
</tr>
<tr>
<td></td>
<td>o Mr. N.Smith / T.Campbell-Smith All day main theatres. <strong>Extended list until 1900</strong></td>
<td>o Mr. J. Grabham / Mr. M. Aslam All day colorectal at Crawley DSU</td>
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<tr>
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<td></td>
<td>o Mr. A. Day (alternate weeks) Crawley DSU</td>
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<td></td>
<td></td>
<td>o Mr. N.Smith / T.Campbell-Smith All day main theatres. <strong>Extended list until 1900</strong></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td>o Mr. S Monkhouse UGI ESH (alternate weeks)</td>
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<tr>
<td></td>
<td></td>
<td>o Mr Jethwa ESH until 7pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Mr N Smith/ T Campbell-Smith – Colorectal ESH</td>
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<tr>
<td></td>
<td></td>
<td>o Theatre list at ESH (Vascular)</td>
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<tr>
<td></td>
<td></td>
<td>o Miss Naseem (Locum Cons Breast) (alternate weeks) Theatre list at ESH</td>
</tr>
</tbody>
</table>
## CLINICS AT SASH
**TRAINEEs WELCOME TO ATTEND ANY OF THESE CLINICS**

<table>
<thead>
<tr>
<th>DAY</th>
<th>CONSULTANT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>AM – Miss Waheed (Breast)&lt;br&gt;Breast MDT 1.00 pm to 3.00 pm&lt;br&gt;PM – alternate weeks Mr. Smith (Colorectal)&lt;br&gt;PM – alternate weeks Mr. Campbell Smith (Colorectal)</td>
<td>ESH</td>
</tr>
<tr>
<td>Tuesday</td>
<td>AM – Miss Choudhury (ENT)&lt;br&gt;PM – Mr. Khemani (ENT)&lt;br&gt;PM – alternate weeks Mr. Campbell Smith (Colorectal)</td>
<td>ESH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Horsham</td>
</tr>
<tr>
<td>Wednesday</td>
<td>AM – alternate weeks Mr. Monkhhouse (UGI)&lt;br&gt;AM – alternate weeks Miss Waheed (Breast)&lt;br&gt;AM – alternate weeks Mr. Smith (Colorectal)&lt;br&gt;AM – alternate weeks Mr. Campbell Smith (Colorectal)&lt;br&gt;PM – alternate weeks Mr. Smith (Colorectal)&lt;br&gt;PM – alternate weeks Mr. Rodway (Vascular)&lt;br&gt;PM – alternate weeks Mr. John (UGI)&lt;br&gt;PM – Miss Babar Craig (ENT)</td>
<td>ESH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crawley</td>
</tr>
<tr>
<td></td>
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<td>ESH</td>
</tr>
<tr>
<td>Thursday</td>
<td>AM – Mr. Loosemore (Vascular)&lt;br&gt;AM – Mr. Maheswaran (UGI)&lt;br&gt;AM – Miss Choudhury/Mr. Kapoor (ENT)</td>
<td>ESH</td>
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<tr>
<td></td>
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<td>Crawley</td>
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<tr>
<td></td>
<td></td>
<td>ENT</td>
</tr>
<tr>
<td>Friday</td>
<td>AM – Mr. Rodway (Vascular)&lt;br&gt;AM – Mr. Maheswaran (UGI)&lt;br&gt;AM – Mr. Jethwa (UGI)&lt;br&gt;AM – Mr A Day (LGI)&lt;br&gt;PM – Miss Choudhury/Mr. Kapoor</td>
<td>Horsham</td>
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<td>ESH</td>
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</tbody>
</table>
**GENERAL POINTS**

There are four subspecialties covered in General Surgery.

1) Colorectal - There are two teams:

   Mr Grabham / Aslam / Day  
   2 FY1s  
   1 CST  
   Share of 3 SpRs

   Mr Smith / Campbell-Smith  
   1 FY1  
   1 CST  
   Share of 3 SpRs

2) Upper GI - There are two teams:

   Mr James, Mr Mahaswaran, Mr Marredagarya, Mr Mazook  
   2 FY1s  
   Share of 3 CSTs  
   Share of 3 SpRs and 2 Middle Grade Trust Drs

   Mr Jethwa, Mr Monkhouse  
   1 FY1 (1 PA)  
   Share of 3 CSTs  
   Share of 3 SpRs and 2 Middle Grade Trust Drs

3) Breast - Ms Waheed Substantive Consultant  
   Mr Suleiman is the breast Associate Specialist.  
   One registrar  
   1 GPST Trainee, 1 FY2

4) Vascular - There are two part-time consultants, Mr Loosemore (who also works at St.Georges) and Mr Rodway (who also works at Brighton).  
   One registrar
1. The FY1 is encouraged to attend all theatre lists.
2. Please review the drug sheets on a daily basis so that IV drugs can be stopped or converted to oral substitutes.
3. Check that patients discharged on a Friday have sufficient TTO’s (including dressings) to last the weekend and do not have to bother their GP unnecessarily.
4. Contact the GP by phone if there is a strong possibility that the GP will need to see the patient before a discharge summary has been issued.
5. Post-op haemoglobin is measured at 48 hours. It is unnecessary after minor ops, for example appendicectomy or hernia repair, and in other cases should be done after discussion with the Registrar. Daily full blood count and U&E’s are not helpful.
6. Any difficulty obtaining radiological investigations out of hours should be discussed with the on-call Consultant Surgeon. It is not Hospital policy for emergency radiological investigations to be carried out at other Hospitals.
7. Remember that good communication with the nursing staff is vital. Make sure they are aware of any changes to be made with the patient’s care.
8. Nurse led discharge occurs on some wards for certain patients.
9. Please keep up to date patient lists for your firm, and prepare Weekend plans for each patient on a Friday.
10. Try to ensure all patients have enough IV fluids to last overnight, plus any Warfarin prescription is done to prevent the night SHO being asked to complete this.
11. Make sure all TTOs are prepared on Friday for any patients due to go home over the weekend.

**FOLLOW-UP CLINICS**

Uncomplicated patients following hernia repair, appendicectomy, varicose vein operations, laparoscopic cholecystectomy do not generally need routine follow-ups made. They will be seen by their GP. Otherwise, please discuss with your team whether or not a follow up is required, and at which OPD it should be.

There is a ‘hot clinic’ on SAU that can be used for patients who do not need to be admitted during the on-call, but who the SHO would
like a more senior review, or a delayed review (to see how the patient is progressing). In addition there are two hot clinic USS slots most days that people can be booked into. These cannot be used for children, hernias or testicles.

E.g. Pt with RUQ pain and normal bloods - hot clinic USS slot to look for gallstones.

E.g. Pt with mild RIF pain and normal bloods - hot clinic appt for senior review the next day so see if pain has settled.

**NOTE:** Vascular follow-up

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Discharge</th>
<th>SOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermittent claudication</td>
<td>No op.</td>
<td>1st visit/ Vas. Lab</td>
<td>6/12</td>
<td>Discharge</td>
</tr>
<tr>
<td>AAA</td>
<td>Post-op</td>
<td>6/12</td>
<td>12/12</td>
<td>Discharge</td>
</tr>
<tr>
<td>Occlusive disease above inguinal lig. No distal disease</td>
<td>Post-op</td>
<td>6/12</td>
<td>12/12</td>
<td>24/12</td>
</tr>
<tr>
<td>With distal disease</td>
<td>Post-op</td>
<td>6/12</td>
<td>12/12</td>
<td>24/12</td>
</tr>
<tr>
<td>Fem./pop synthetic graft</td>
<td>Post-op</td>
<td>3/12</td>
<td>6/12</td>
<td>12/12</td>
</tr>
<tr>
<td>Fem./pop vein graft</td>
<td>Post-op</td>
<td>3/12 vasc lab</td>
<td>6/12 lab</td>
<td>12/12 lab</td>
</tr>
<tr>
<td>Diabetes Renal grafts Carotid grafts</td>
<td>Long term 12/12</td>
<td></td>
<td></td>
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</tbody>
</table>
GUIDELINE 1 - DVT Prophylaxis

1. All patients must have DVT prophylaxis considered and assessment completed.
2. All patients should receive TEDS and Clexane except those < 40 undergoing minor surgery who require early mobilisation only; (Write this up when admitting patients)
3. Early mobilisation is to be encouraged in all cases.
4. Patients undergoing major surgery should be discussed with the Anaesthetist as those having epidurals should be given their first dose of heparin after the epidural catheter has been placed in Theatre.
5. Only one dose of heparin should be given pre-operatively in planned surgery
6. Patients with peripheral vascular disease should not receive TEDS.
7. All general surgical patients should have thigh-length graduated compression stockings unless specifically contraindicated.
8. All patients with any risk-factor (see NICE guideline 46) should have LMWH.
9. Patients should receive written and verbal advice pre- and postoperatively about oral contraceptives, travel and signs of DVT.

Post operative DVT Prophylaxis
To be prescribed for 6 PM usually.

Low Risk Group:
Early Ambulation

Moderate Risk Group (2 or more risk factors):
Enoxaparin (Clexane) 20mg s/c o.d (unless contraindicated). First dose at 6pm on day of surgery, ensuring it is at least 2 hrs post-op plus Graduated compression stockings.

High Risk Group (3 or more risk factors):
**Enoxaparin (Clexane) 40mg s/c** (if creatinine clearance <30ml/min then give 20mg s/c). Usually given at 6pm, however ensuring it is at least 2 hrs post operative plus Graduated compression stockings

**Heparin Protocol (iv)**
Load with heparin 5000 units in 5 ml iv. bolus.  
Then set-up initial infusion:  
20,000 units heparin in 20 ml (pre-made, do not dilute)  
Start at 1.5 ml per hr  
Check APTT at 6hrs then adjust according to chart below.  
Recheck 4 hours after any adjustment.  
Always check at least once every 24 hours.

### ADJUSTMENT TABLE

<table>
<thead>
<tr>
<th>APTT(Sec)</th>
<th>Infusion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 45</td>
<td>Increase rate by 0.4ml / hr</td>
</tr>
<tr>
<td>46 - 54</td>
<td>Increase rate by 0.2ml / hr</td>
</tr>
<tr>
<td>55 - 90</td>
<td>No change</td>
</tr>
<tr>
<td>91 - 102</td>
<td>Reduce rate by 0.2ml / hr</td>
</tr>
<tr>
<td>121 - 140</td>
<td>Reduce rate by 0.5ml / hr</td>
</tr>
<tr>
<td>&gt; 140</td>
<td>Stop infusion for 1 hr, recommence at 0.8 ml /hr</td>
</tr>
</tbody>
</table>

A DVT Nurse Specialist is available at ESH for advice and follow up.  
For details visit [www.nice.org/CG046](http://www.nice.org/CG046).
GUIDELINE 2 - EMERGENCY ABDOMINAL SURGERY

1. In cases of severe shock with major trauma or respiratory obstruction (for example after thyroidectomy), the most Senior Resident Anaesthetist and Surgeon should be contacted immediately.

2. All patients >65 undergoing major emergency abdominal surgery are to have a CVP line + urinary catheter preoperatively. Seriously ill patients require a triple lumen line.

3. No anuric/uraemic (urea >18) patient is to proceed to theatre without discussion with the Consultant first.

4. Adherence to CEPOD guidelines is encouraged, but major surgery should not be delayed in cases of peritonitis once resuscitation has been achieved. The Consultant should be involved in such decisions.

5. The standard investigations for suspected peritonitis are: FBC, U&E, G&S, amylase, erect CXR and supine AXR. Apart from amylase, these are the same for suspected obstruction.

6. Physical rather than chronological age will determine which patients receive an operation and patients may well be transferred if stable and no on-site Specialist Vascular Surgeon is on-call.

7. The regional vascular centre is at St George’s Hospital and all acute emergencies should be discussed with them. The vascular team at ESH can be contacted for advice during daytime hours.

8. All cases of post-operative oliguria (<20mls in 2 consecutive hours) are to be referred to the SHO, Registrar or Consultant. Frusemide should only be given when hypovolaemia can be confidently excluded.

9. If the patient was taking frusemide on admission, the dose should continue parenterally throughout admissionTheatre guidelines dictate that only life-threatening surgery is performed out of hours (after 10 p.m. on weekdays and ‘out of hours’ at weekends). Such cases must be booked via liaison with the consultants in surgery and anaesthetics as per the theatre guidelines.

10. No inpatient should be transferred to another hospital without discussion with the Consultant and preferably only once the Consultant has seen the patient.

11. As a general rule, any seriously ill patient must be discussed promptly with the consultant.
GUIDELINE 2 ADDENDUM
Ruptured spleen

1. Splenic rupture should be suspected in trauma patients with left upper quadrant tenderness, and shoulder tip pain, especially if there are fractured lower ribs.

2. Hypotension may be delayed and a tachycardia should be treated with suspicion. Patients should be kept on ½ hourly observations, nil by mouth until a scan has been done.

3. 90% of children can be successful managed conservatively avoiding the risk of lifetime sepsis.

4. Criteria for conservative management are:
   a) blunt trauma
   b) isolated splenic trauma (grade 1-3 on CT)
   c) no haemodynamic instability
   d) alert (no head injury/intoxication)

5. Patients treated conservatively should be kept on a high dependency unit, nil by mouth for 24 hours after transfusion stops. CT is undertaken at discharge and at 3 months.
GUIDELINE 3

Deaths, Complications and Audit
1. Post mortems should be considered in all cases of death and its necessity should be discussed with the Consultant in each case.
2. The Registrar or Consultant will indicate where a case needs to be discussed with the Coroner; if in doubt discuss.
3. A post mortem must be obtained if the cause of death cannot be given on the death certificate.
4. The cause of death should be written in the notes as it appears on the death certificate to help with audit.
5. All complications and “near misses” are to be collected by the SHO. These are to be presented at each monthly meeting. These and the deaths will be discussed. The deaths will be presented using a standard format, which will allow constructive criticism for the management of each case with identified insufficiencies to be incorporated into the team Guidelines at their next revision.
6. At the Audit Meeting notes will be kept of these complications and they will be reported to the Clinical Risk Management Group if need be.
7. All of the Guidelines in this book may be audited where problems in management are identified.
GUIDELINE 4

Preoperative check list
1. Theatre list checked to be correct. It is the bed manager’s task to ensure that theatre is informed of any changes in ward status from the published list.
2. Preoperative investigations available and recorded in red in notes. **(ALWAYS READ LETTERS IN NOTES)**
3. Consent obtained (see Consent Guideline 11).
4. Operation site (or stoma site on both sides) marked with indelible marker
5. Blood available if necessary (see General Guideline 9).
6. Per-operative tests booked (viz. X-ray, cholangiogram, frozen section)
7. Heparin prophylaxis written up (see Guideline 1)
8. Antibiotic prophylaxis written up (see Guideline 5)
9. Implants available in Theatre
10. Bowel preparation complete (see Guideline 5)
11. Sickle cell in relevant cases
12. Cancellation. The Junior Anaesthetist is not able to cancel patients unless they have first discussed this with their Senior and the Surgeon whose operating list it is. Children are to be seen on the Ward before they are cancelled.
13. Patients who are seen in the pre-op clerking and do not seem any longer to need their surgery, should be discussed with
   a) The Surgeon concerned if it seems their surgery is no longer indicated, or
   b) The anaesthetist administering the list if they are medically unfit, or failing this the on-call Registrar in Anaesthetics.
14. Aspirin must be discontinued if undergoing pelvic surgery.

**Scheduling lists**
1) Children and diabetics first
2) Day cases first on afternoon lists
3) ”Dirty” cases last

**Preoperative investigations**
**FBC** Hb only when anaemia is suspected or significant bleeding is expected.
GUIDELINE 4 (Continued)

Preoperative investigations (Continued)

**U & Es** Only when indicated e.g. on diuretics, patients with renal failure or electrolyte disturbance or i.v.i. > 24 hours.

**CXR** Only if history or examination reveals significant cardio-respiratory symptoms or signs, in which case lung function tests are more appropriate.

**ECG** Unnecessary unless over 65 years or significant cardiac symptoms. Previous ECG within one year acceptable if no change in cardiac status during that period.

**Clotting studies**
- All patients on anticoagulants (if screen send INR only)
  - Jaundiced patients
  - Patients for ERCP/PTC
  - Patients for percutaneous biopsy

**LFTs** Known or suspected malignancy
- Jaundiced patients
- Chronic illness
- Gallstone disease

**CEA** Bowel malignancy (CA 19.9, CA 125 may be needed)

Pre- and Post-operative Investigations for Thyroid and Parathyroid Surgery

**Pre-Op**
Patients should have a vocal cord check in ENT outpatients (this may well have been investigated when the surgery was booked).

**Post-Op**
Patients should have calcium results on the afternoon of the surgery. Any hypocalcaemia should be treated accordingly with supplements. Patients should have a blood form for repeat calcium and thyroid function tests at four weeks to bring to their six week follow-up appointment to check on further need for supplementation of either thyroxine or calcium.
GUIDELINE 5

Antibiotic prophylaxis

The microbiology department publish up-to-date antibiotic guidelines, including a small quick guide to keep to hand. This should be consulted for surgical prophylaxis.

Bowel preparation

Before colonoscopy and **some** large bowel surgery, clear fluids from 24 hours pre-op, with an IVI running from midnight the night before the operation. Consent and venflon.

<table>
<thead>
<tr>
<th></th>
<th>Preparations</th>
</tr>
</thead>
<tbody>
<tr>
<td>For small bowel or right sided resections (ileocaecectomy, right hemicolecotomy or transverse colectomy) or reversal of loop</td>
<td>No prep required</td>
</tr>
<tr>
<td>For left sided colonic resections (sigmoid colectomy, left hemicolecotomy, elective Hartmanns, total colectomy, proctocolectomy) and APER, sphincter repairs, rectoceles, Delormes</td>
<td>Phosphate Enema x1 (0.7.30am for morning or 12.00pm for afternoon list)</td>
</tr>
<tr>
<td>All anterior resections and colonoscopies</td>
<td>Full bowel prep with senna x10 at 11am and Citramag x2 (i.e 1 b.d at)</td>
</tr>
<tr>
<td>For reversal of Hartmanns or closure of loop colostomy</td>
<td>Senna x 10 at 11, Citramag 1 bd at 2pm &amp; 6 pm (on pre-op day) and Phosphate enema on morning of surgery</td>
</tr>
<tr>
<td>Flexible sigmoidoscopy (inpatient)</td>
<td>Phosphate Enema x 2 (7.30 and 8 for AM and 12 and 12.30 for PM list)</td>
</tr>
</tbody>
</table>
Check with the Consultant if in doubt as inappropriate bowel prep may result in surgery being delayed or postponed.

**Outpatient colonoscopy booking**

All request forms filled in completely with hospital number and telephone details and either discussed and booked on the endoscopy unit or given to secretary if non-urgent.

**High Yield Indications**

Rectal bleeding/ Iron deficiency anaemia; inflammatory bowel disease with increased bowel frequency; or colorectal cancer diagnosis or surveillance -Investigation of choice is colonoscopy

**Low Yield Indications**

Altered bowel habit; constipation; or abdominal pain
if < 55 years Barium enema first ? then flexible sigmoidoscopy
if > 55 years d/w consultant as total colonoscopy may be more useful (it should discover the polyps found incidentally in 20-30% of this age group).

There is a long wait for endoscopy so please indicate this to the patient. All urgent cases should be discussed.

**NB.** Stop aspirin and iron one week before procedure. Discuss diabetics and patients on warfarin.

**Inpatient Endoscopy Referrals**

In addition to the booked day case endoscopy lists, the unit operates an inpatient referral system. This requires completion of an inpatient request form, which should be taken to the unit. Patients are added to the next appropriate list. The endoscopy unit will telephone the ward concerned or instruct the referring doctor as to when the procedure may be carried out.
It should not be assumed that the procedure will be carried out immediately a request form has been completed, also these procedures may be deferred at short notice if there is no available time left in a session.

**It is critical to the safe running and management of the endoscopy unit that they are notified, in advance, of any infection risk posed by an inpatient.** The unit may refuse to carry out a procedure if this practice is not rigorously adhered to. Any suspicion of MRSA, Clostridium Difficile, HIV, Hepatitis, T.B., CJD or any other communicable disease has implications for the reprocessing or endoscopes and potential cross infection of patients. It also protects your colleagues.

In the event of an Emergency procedure being required, i.e. variceal bleeding, bolus obstruction, any list may be interrupted but the Consultant must liaise with the Nurse in Charge of the Unit or the clinician undertaking the endoscopy list at that time.

Following an inpatient endoscopy a report will be filed in the patient’s notes, with a summary of the findings and recommendations for future management.
Medical notes
1. All entries should be in black ink.
2. Every page must carry the patient’s name and number/or d.o b.
3. All entries should carry a date and time.
4. All entries must be signed and carry identification and bleep number and GMC number.
5. Details of source of admission should be recorded.
6. Details of source of history should be recorded.
7. Social circumstances should be documented
8. A list of drugs and doses should be recorded.
9. A flow-chart of investigations should be recorded and ticked with comments on significant results.
10. Management policies should be recorded.
11. The operation sheet must be completed.
12. The time of operation should be recorded in the notes.
13. An entry should be made every day even only ISQ.
14. Resuscitation policy should be recorded after discussion with relatives.
15. Discussions should be recorded in the notes with relevant names.
16. Drug charts should be completed in capitals
17. Allergies should be recorded in the notes and on the drug charts
18. The discharge form must be completed
19. Details of a death certificate should be recorded in the notes.

Standard note keeping audit
The audit co-ordinator will audit the quality of note keeping monthly by selecting at random a set of notes for discussion at audit meeting. The notes will be audited according to a defined list of criteria:

1. Patient’s name, date of birth, hospital number on each page
2. No blank spaces
3. All pages clearly numbered
4. Entries written in black
5. Entries dated and timed using 24-hour clock
6. Entries clear and legible
7. Each first entry has designation and name printed
8. Entries signed with name (no initials)
9. Alterations and additions made correctly
10. Recognised abbreviations
11. Accurate and complete
12. Are all entries relevant and appropriate?
13. Allergy status recorded
14. Weight recorded
15. Drugs prescribed in capital letters on the prescription chart

The audit forms will be retained.
GUIDELINE 7

On call Duties

Handover

A patient may be handed over to another team once seen by the consultant on the PTWR. Until such a handover has taken place the patient remains the responsibility of the admitting doctors.

Each team should complete a weekend handover sheet for each patient, and these placed in the relevant section of the weekend handover folder. This is then taken on the round and written in on Saturday and Sunday. Completed sheets are collected on Monday morning and filed in each patient’s notes during the ward round. If any patients were discharged over the weekend, the handover sheet should still be filed.

Any unwell patients or patients who may need to go to theatre over the weekend must also be verbally handed over to the on-call team so that they are aware of them.

Any patient who may possibly go home over the weekend MUST have a TTO completed on Friday as the weekend FY1 will be too busy to do TTOs.

Handover on Saturday occurs at 8 a.m.

GUIDELINE 8

Warfarin protocol

See separate warfarin guidelines for dosing regimes.

Consider whether the patient needs Enoxaparin cover whilst their INR is subtherapeutic.
GUIDELINE

Cross matching

1. **Group and save only**
   - Below knee amputation
   - Wide local excision and axillary dissection
   - Laparoscopic or open cholecystectomy
   - Closure of loop ileostomy
   - ERCP
   - Haemorrhoidectomy
   - Thyroidectomy
   - Liver biopsy HSV or
   - V&P Laparoscopy
   - Parotidectomy
   - Parathyroidectomy
   - Simple mastectomy

2. **Cross match**
   - Above knee amputation 2 units
   - Panproctocolectomy 4 units
   - AP resection 4 units
   - Anterior resection 4 units
   - Hartmann's procedure 2 units
   - Sigmoid colectomy 2 units
   - Mastectomy and reconstruction with LD flap 4 units
   - Partial gastrectomy 2 units
   - Reversal of Hartmann’s 2 units
   - Hemicolecotomy 2 units
   - Mastectomy and tramflap 6 units
GUIDELINE 10

Resuscitation policy

1. This decision is made at Consultant level. Decisions should be discussed with relatives in all cases and must be clearly written in the notes with time and date. Red DNR forms are on every ward.
2. Where clinical condition improves, any alteration to the resuscitation status must also be clearly recorded.

Nurse Practitioner’s roles

Nurse practitioners are now established in the trust. They provide help and experience to the medical team for patient care. They provide skills in advanced life support; prescribing within formulated guidelines; the ordering of blood tests; venepuncture and iv cannulation; ordering ECG’s & plain X-rays.
GUIDELINE 11

Consent

1. This is the responsibility of the Surgeon placing the patient on the waiting list, but the form can be signed after further counselling by the Registrar or occasionally the SHO. Please check the outpatient letter, as this may indicate where special points should be recorded.

2. Each operation requires adequate consent, which should include a description of the procedure involved, a brief list of general and specific complications and the chance for the patient to ask questions.

3. This should be aimed at a level which the patient can understand.

4. The age for informed consent is 16, although mature younger teenagers can give consent if the doctor feels they understand the proposed procedure and its problems.

5. No person may legally consent for any other and in emergency cases no such consent from relatives is necessary. It is, however, good practice to keep relatives informed, with the patient's consent, of all proposed actions and operations if they can easily be contacted.

6. For all major operations the need for possible blood transfusion should be explained to the patient. Similarly for bowel surgery, the need for a stoma should be indicated and recorded.

7. Specific operations and their consent (these points should be noted on the consent form and recorded in the clinical case notes where time allows

   a) **Thyroid surgery**: calcium supplementation, thyroxin and hoarse voice.

   b) **Cholecystectomy**: choice of open or laparoscopic technique explained, need to convert procedure if started as
laparoscopic in 1 in 20 cases, need for cholangiography, possibility of bile duct injury.

c) Hernia repair: recurrence in 3 to 5% of cases, ilioinguinal nerve injury, ischaemic orchitis 1 in 300 cases. In recurrent hernia repair there is an increased risk of recurrence and ischaemic orchitis and in addition the possibility of orchidectomy needs to be written on the consent form.

**GUIDELINE 13**

**Paediatric surgical**
These children are managed jointly by the Paediatricians and Surgeons.

Children <5yrs are not operated on at ESH and are transferred to St Georges’ Hospital, but in cases of extreme urgency, the Surgeons available will assist in any resuscitation required.

Similarly opinions should be provided for the under 5’s in A&E if needed.
ASSESSMENT AND MANAGEMENT OF ACUTELY ILL PATIENTS

There is considerable evidence that the early identification of acutely ill and physiologically compromised patients, and their appropriate management involving transfer to high dependency, or intensive care units, improves patient outcome.

One method used in this trust to identify early a sick patient is the Early Warning Score.

<table>
<thead>
<tr>
<th></th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temp</strong></td>
<td>&lt;35</td>
<td>35-37.5</td>
<td>37.6-38</td>
<td>&gt;38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Systolic BP</strong></td>
<td>&lt;70</td>
<td>70-80</td>
<td>81-100</td>
<td>101-150</td>
<td>151-200</td>
<td>&gt;200</td>
<td></td>
</tr>
<tr>
<td><strong>Heart rate</strong></td>
<td>&lt;40</td>
<td>41-59</td>
<td>60-100</td>
<td>101-110</td>
<td>111-130</td>
<td>&gt;130</td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory rate</strong></td>
<td>&lt;8</td>
<td>9-20</td>
<td>21-29</td>
<td>30-39</td>
<td>&gt;40</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CNS</strong></td>
<td>Agitated or Confused</td>
<td>Alert</td>
<td>Rousable to voice</td>
<td>Rousable to pain</td>
<td>Not rousable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Urine output** | No output in last 12 hours | <30 mls in last 2 hours | <30 mls in last hour | >200 mls per hour |
| **New symptoms** | Acute/ Sudden onset of pain | | | Nurse concerned |
# Early Warning Score - Referral Pathway

<table>
<thead>
<tr>
<th>Score</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>Observe</td>
</tr>
<tr>
<td>3</td>
<td>Repeat TPR, BP, CNS and calculate urine output if known, after one hour and recalculate score. Bleep Critical Care Outreach/Nurse Practitioner.</td>
</tr>
</tbody>
</table>
| 4     | Bleep patient's HO.  
   *To attend within 30 minutes* |
| 5 - 7 | Bleep patient's SHO  
   *To attend within 15 minutes*  
   Otherwise bleep Registrar |
| 8 or more | Bleep Registrar |

*For all patients who score more than 3, Critical Care Outreach or Nurse Practitioner to be notified*
<table>
<thead>
<tr>
<th>Score</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3</td>
<td>Ensure repeat observations. Calculate urine output. Review score in 2 hours.</td>
</tr>
<tr>
<td>8 or greater</td>
<td>Inform Consultant Surgeon Anaesthetist informed ICU informed</td>
</tr>
</tbody>
</table>

*Critical Care Nurse also available for advice and support.*
GUIDELINE 15

Preoperative assessment

Objectives
To establish that the patient is fully informed and wishes to undergo the procedure
To establish that the patient is fit as possible for the surgery and anaesthetic

Questions to be asked
- Does the patient still want surgery?
- Has there been any change in the clinical condition of the patient with regard to that particular surgery (e.g. If a patient is put on the waiting list for inguinal hernia please make sure the patient has an inguinal hernia)
- Any comorbid conditions which would increase the risk of anaesthesia and surgery

Please check list of current medications
- Warfarin
- Aspirin
- C.Pill
- Steroids etc.

Please make sure all the relevant investigations are available

There is no substitute for thorough general and systematic examination.

If in doubt, please ask
SOME COMMON SURGICAL CONDITIONS AND THEIR MANAGEMENT

Acute Appendicitis

Algorithm for managing acute appendicitis

Calculating the Alvarado score has been found to assist decision-making in suspected acute appendicitis.

ALVARADO SCORE

<table>
<thead>
<tr>
<th>Score</th>
<th>Activity</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>DISCHARGE</td>
<td>with advice to return if</td>
</tr>
<tr>
<td></td>
<td></td>
<td>no improvement, subject</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to social circumstances</td>
</tr>
<tr>
<td>4-6</td>
<td>REVIEW AFTER 12 HRS</td>
<td>if score &lt; 4 as for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>score 0-3</td>
</tr>
<tr>
<td>7-10</td>
<td>CHILD</td>
<td>- open appendicectomy</td>
</tr>
<tr>
<td></td>
<td>ADULT</td>
<td>- laparoscopic appendicectomy</td>
</tr>
</tbody>
</table>

Symptoms

- RIF pain 1
- Anorexia
- Nausea/vomiting 1

Tests

- Leucocytosis 2
- Left shift 1

Signs

- RIF tenderness 2
- RIF rebound 1
- Pyrexia 1

The ‘Score’ should be recorded in the notes of all patients with suspected or later confirmed appendicitis.
Acute pancreatitis

Acute pancreatitis is a potentially fatal condition.

1. All patients to have FBC, U&E, BG, calcium, amylase, blood gases, CXR and supine AXR on admission, at whatever time, and CRP and LFTs at earliest opportunity. Consultant to be informed of abnormal results.
2. All patients to have biochemistry flow-chart with Modified Glasgow Score or Ransom on admission
3. Modified Glasgow Score = number of factors positive on admission. A score of 3 or less indicates mild pancreatitis and > 3 indicates severe pancreatitis
4. CT scan for patients with pancreatitis is indicated after the first 72 hrs unless there is suspicion of infected necrosis.
5. All patients to have Significant IV fluid resuscitation as pancreatitics tend to be very hypovolaemnic due to intra- abdominal oedema.
6. All patients to be considered for urinary catheter and hourly urine measurements, with nursing instructions to report hourly volume < 20 ml for 2 consecutive hours or <10 ml/h. to doctor on call.
7. All patients to have hourly obs. of P, BP & T.
8. Senior Anaesthetist and Consultant on-call to be informed of any patient causing concern on clinical / biochemical grounds, without delay.
9. An urgent ultrasound should be requested. If this demonstrates a dilated pancreatic duct, then an ERCP is indicated within the first 24 hours, after than it is managed as above.

Ranson Score - Score one point each:
Age: > 55; WBC: > 16; Hct: fall > 10% (@ 48 hrs); Urea rise: > 10 (@ 48 hrs); glucose: > 11; ALT: > 60; LDH: > 600; Ca: < 2.0; PO2: < 8; Base xs; <-4; Fluid loss estimated: > 6L
Acute cholangitis

Acute cholangitis is a surgical emergency which can cause death in hours.

1. Consultant to be informed of any jaundiced patient with a fever immediately, irrespective of time.
2. Patient to be treated with iv fluids, Antibiotics and vitamin K without delay. Seek advice from microbiologist on call if inadequate initial response to those antibiotics in the protocol
3. Ultrasound to be obtained as emergency on first available list. ERCP and stent to be arranged ASAP. If patient deteriorates consider ntranshepatic drain under US.

ERCP

Contact via Dr J Stenner & Mr A. James

Ask to book ERCP and be ready to provide the following information:

☐ Patient’s name and address
☐ Patient’s GP name and address
☐ Indication for ERCP
☐ USS or CT results
☐ Co-existing medical disease
☐ History of any previous surgery (particularly gastric)
☐ Blood results (FBC, U & E, clotting & LFT’s)
☐ Urgency

They will give a time for the procedure either Tuesday or Thursday. Venflon in right hand; no food from midnight, clear fluids till 2 hours before Ciprofloxacin 750mg po on morning of procedure; Vit K 10mg IV for 3/7 before if jaundiced. Consent will be done in the department. Day after check amylase and FBC.
Urological Emergencies

Patients with a diagnosed urological emergency should be transferred to the on call urologists after discussion.

Post-Op Analgesia Guidelines

Generally it should be the responsibility of the anaesthetist to prescribe post-op analgesia. Current philosophy is to use three different analgesic methods wherever possible.

1) Local anaesthesia.
2) An opioid drug.
3) An anti-inflammatory agent.

Major cases often have an epidural infusion of local anaesthetic + a small dose of opiate or a patient controlled analgesia device (usually 1mg. morphine as the unit dose, maximum 30mg. in 4 hours).

Most anaesthetists give an anti-inflammatory agent during surgery. If pain is a problem post-op follow the analgesia step ladder approach and combination of analgesics for effective control. Seek advice from acute pain team if required.

Beware NSAIDS & patient with poor renal function/ elderly patients

There is a Pain team who do a ward round who are happy to advise on “pain” issues during the week. At weekends discuss acute problems with the on-call anaesthetic SpR.
GUIDE-LINE 16

Head Injuries
The initial management of head injuries is undertaken by the Emergency Department, unless there are concomitant general surgical problems that require intervention (see: Emergency Care Guidelines under Policies & Procedures on the hospital intranet).

After 24 hours patients requiring further management/observation are transferred to the general surgical team on-call.

Patients with positive head CTs following trauma should be discussed with St. George’s Hospital Neurosurgery (often done by A&E) and may require observation on the surgical wards.

Patients may also be transferred back from neurosurgical centres after completing treatment.

INFECTION CONTROL & ANTIBIOTIC STEWARDSHIP

Dress Code
In any clinical area:
1. White coats should not be worn.
2. Nothing should be worn below the elbows apart from wedding bands. Watches should be removed.
3. Ties (apart from bow-ties) should not be worn.
4. Gloves and aprons should be worn in ITU.

Hand hygiene:
Thorough hand hygiene with soap and water or alcohol hand rub using the six-step technique according to Trust policy must be undertaken:

1. Before and after examining any patient
2. Before and after donning disposable gloves
3. on entry and exit from every clinical area

**Daily ward rounds:**

The following should be considered integral to the daily assessment and plan for every patient, and should be documented as a dated entry in the medical notes –

- **IV lines**
  - Insertion sites should be examined for signs of phlebitis
  - The need for on-going IV access should be assessed

  Peripheral IV lines should be changed every 72 hours

- **Antibiotics**
  - The indication for starting antibiotics should be cogent and stated
  - The need for on-going antibiotics should be assessed (duration should be as short as possible)
  - IV antibiotics should be switched to oral within 48 hours unless clear clinical reasons require ongoing parenteral therapy
INCOMPETENT ADULTS AND INDEPENDENT MENTAL CAPACITY ADVOCATES

(Also see consent policy section on intranet) NHS bodies must instruct an IMCA whenever they are proposing to take a decision about 'serious medical treatment', if:

- the person concerned does not have the capacity to make a decision about the treatment, and
- there is no-one appropriate to consult about whether the decision is in the person’s best interests, other than paid care staff.

Instructions of how to contact an IMCA are available on the wards but you should involve your consultant. The only situation in which the duty to instruct an IMCA need not be followed, is when an urgent decision is needed (e.g. life saving) - in such cases the decision must be clearly recorded with full reasoning.

Remember the five statutory principles of the Mental Capacity Act are:

1. A person must be assumed to have capacity unless it is established that they lack capacity.
2. A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success.
3. A person is not to be treated as unable to make a decision merely because he makes an unwise decision.
4. An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests.
5. Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person’s rights and freedom of action.
Assessing capacity
Anyone assessing someone’s capacity to make a decision for themselves should use the two-stage test of capacity.

- Does the person have an impairment of the mind or brain, or is there some sort of disturbance affecting the way their mind or brain works? (It doesn’t matter whether the impairment or disturbance is temporary or permanent.)
- If so, does that impairment or disturbance mean that the person is unable to make the decision in question at the time it needs to be made?

Assessing ability to make a decision
A person is unable to make a decision for himself if he is unable—

- a. to understand the information relevant to the decision,
- b. to retain that information,
- c. (to use or weigh that information as part of the process of making the decision, or
- d. to communicate his decision (whether by talking, using sign language or any other means).
INCIDENT REPORTING AND SUIs

“We can only make the NHS safer if you speak out when things go wrong”

James Johnson, BMA

The purpose of incident reporting is to make an organisation aware of where its systems and processes may not be supporting patient and staff safety.

A patient safety incident is one in which the patient was harmed as a result of their clinical care or would have been harmed had an error reached the patient.

All harm and no harm incidents must be reported. SASH currently have paper incident forms but has plans to introduce an electronic version soon. Information extracted from the incident forms is used for trend analysis by the Trust and nationally by the NPSA so that lessons can be learned and shared.

YOUR DUTY

It is the responsibility of every member of staff to report an incident immediately.

Definition of a Serious Untoward Incident (SUI)
There is no single definition of a serious untoward incident. In general terms, it is:

2.1 An accident or incident when a patient, member of staff, or members of the public suffers serious injury, major permanent harm or unexpected death on hospital premises or other premises where health care is provided;

2.2 Where actions of health service staff are likely to cause significant public concern;

2.3 Any event that might seriously impact upon the delivery of service plans and/or may attract media attention and/or result in
litigation and/or may reflect a serious breach of standards or quality of service.

Such events include:

- Inappropriate surgery performed
- Unexpected death
- Death where a Healthcare Acquired BloodStream Infection (BSAI) is identified as a cause
- Suicide or serious self harm
- Exclusion/suspension of a health care professional or manager if the impact will mean that a service cannot be adequately provided.
- Events that affect multiple patients e.g. bogus staff, outbreak of infection such as Clostridium Difficile, Legionella, incorrect interpretation of specimens
- Significant misdiagnosis eg delayed cancer.
- Large scale theft, fraud, data protection and confidentiality breaches or major litigation
- Significant media interest
- The Serious Untoward Incident Procedure (immediate response) should be adopted in the event of any of the above being identified.

**Notification** of an SUI should be made immediately to any of the Executive Team via a Consultant or General Manager. An ad-hoc sub
group will convene to discuss the incident and immediate actions. The sub-group includes the Medical Director and/or the Director of Nursing or Deputy, Risk Manager and other personnel appropriate to the incident.

The purpose of the sub-group is:

- To assess the seriousness of the incident and specifically to confirm whether it meets the definition of a ‘Serious Untoward Incident’.
- To decide if immediate action needs to be taken to protect patients or others from any further harm and to ensure that any resulting decision is then implemented.

Please refer to the Incident Reporting Policy and Procedure and Serious Untoward Incident Policy on the Trust Intranet for further information.