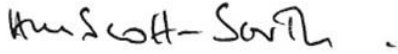


ENDOSCOPY OPERATIONAL POLICY

Approved by:	Trust Executive Committee
On:	26 June 2018
Review Date:	April 2021 Extension agreed Oct 2022
Corporate / Directorate:	Medicine
Clinical / Non Clinical:	Non Clinical
Department Responsible for Review:	Endoscopy
Distribution:	Endoscopy Managers Endoscopists Endoscopy Nursing Staff Endoscopy Booking Staff
<ul style="list-style-type: none">• Essential Reading for:• Information for:	Clinical Directors Matrons and Head Nurses Clinical Staff
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Burton Hospitals NHS Foundation Trust

Endoscopy Unit Operational Policy

Title:	Endoscopy Unit Operational Policy
Original Issue Date:	October 2008
Date of Last Review:	September 2017
Reason for amendment:	Review
Responsibility:	Unit Manager & Clinical Lead for Endoscopy
Stored:	Intranet Site – Policies Tab
Linked Trust Policies:	Consent Policy Incident Reporting Policy Health Record Keeping Policy Access Policy Complaints Policy and Procedure Patient Information Policy Decontamination Policy Transfer of Patients Policy Safeguarding Adults Policy Eliminating mixed sex accommodation Policy
E & D Impact Assessed	EIA 429
Consulted	Consultant Stakeholders Governance Support Unit Clinical Audit Infection Control Surgical Director Legal Department

REVIEW AND AMENDMENT LOG

Version	Type of change	Date	Description of Change
4	New Policy	April 2018	
6	Minor amendments	June 2018	Alerted section numbers, an additional paragraph at 3.2.6 about the safer surgery checklist and some minor wording changes to section 22 about the use of the safer surgery checklist in practice.

ENDOSCOPY UNIT OPERATIONAL POLICY

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Burton Hospitals NHS Foundation Trust

ENDOSCOPY OPERATIONAL POLICY

INTRODUCTION

This document describes the endoscopy service operating in Burton Hospital NHS Trust. It forms part of the requirements for Global Rating Scale (GRS) accreditation standards, Joint Advisory Group (JAG) accreditation standards and provides reference material for nursing staff, endoscopists, trainees and users of the service.

The Burton Endoscopy Unit is placed within the Division of Medicine. The Sir Robert Peel Endoscopy Unit in Tamworth Unit is operationally within the Division of Surgery.

Trust policies will be followed at all times and are not duplicated here. Local endoscopy unit clinical policies and standard operating procedures are available for reference within the units.

LOCATION OF ENDOSCOPY

There are two endoscopy units within the Trust:

1. **Queen's Hospital Endoscopy Unit, Burton on Trent:**

The Endoscopy Unit is located at the front entrance of the hospital, near the revolving doors. It comprises of 2 procedure rooms, decontamination room, patient waiting area, 3 assessment/bowel preparation rooms, patient sub wait areas, an 8 bedded recovery area and separate discharge area. Out patients enter the unit via the reception area where the booking staff are based whilst in-patients arrive from the main hospital via the internal entrance of the endoscopy unit.

Out of hours endoscopy (between 1800 hrs and 08.30 hrs) are currently performed in main theatre.

Services provided:

- Upper GI endoscopy (diagnostic & therapeutic)
- Lower GI endoscopy (flexible sigmoidoscopy & colonoscopy)
- Bronchoscopy
- Flexible cystoscopy
- C-urea breath tests
- ERCP (in the x-ray department)

2. Sir Robert Peel Community Hospital Endoscopy Suite, Tamworth.

The Endoscopy Suite operates lists from Monday to Friday, from 8 AM to 5 PM.

Services provided:

- Gastroscopy
- Colonoscopy
- Sigmoidoscopy
- Flexible Cystoscopy

The endoscopy suite is located in the main building of the community hospital within the operating theatres. The unit is closely integrated with the Day Case ward which provides the admission and recovery facilities for the suite.

Session times

Session are held Monday to Friday

The morning session is 09.00 am to 13.00pm

The afternoon session is 14.00pm to 17.00pm

There are currently 30 lists resourced per week across the two sites.

Key Staff

Clinical Director for Medicine	Dr H. Hayat	Consultant Medicine
Clinical Lead for Endoscopy (Queen's Hospital) & Audit lead	Dr David Watmough	Consultant gastroenterologist
Clinical lead for Sir Robert Peel & Training lead (surgery)	Mr Pradeep Thomas	Consultant surgeon
Training lead (medicine & nurse endoscopists)	Dr Altaf Palejwala	Consultant Gastroenterologist
Matron (Queen's Hospital)	Sam Gibbs	
Matron (SRP)	Phil Hards	
Operations Manager	Vacant	
General Manager	Laura Brown	
Assistant operations manager (SRP)	Vic Agar	
Unit manager (Burton)	Di Walker	
Unit manager (SRP)	Chantal Chatfield	
GI endoscopists	Dr Maria Guerra	Consultant Gastroenterologist
	Mr Stelios Vakis	Consultant surgeon
	Mr James Eccersley	Consultant surgeon
	Mr Pradeep Kumar	Consultant surgeon
	Mr Himaz Marzook	Consultant surgeon
	Mr Zbigniew Muras	Consultant surgeon
	Dr Faizal Ali	Consultant Gastroenterologist
	Mr Ioannis Virlos	Consultant surgeon
	Mr Naseem Waraich	Consultant Surgeon
	Kelly Robinson	Nurse Endoscopist
	Andrew Potts	Nurse Endoscopist
Trainee Endoscopists	Nicola Stevens	Trainee Nurse Endoscopist
	Anna Warburton-Spare	Trainee Nurse Endoscopist
Bronchoscopists	Dr Elizabeth Spencer	Respiratory physician
	Dr Utam Nanda	Respiratory physician

Unit Philosophy

As a dedicated Multidisciplinary Team of health care professionals, we believe that patients have the right to receive up to date research based, high quality specialised nursing care, this is accomplished by providing support and advice that is clear and comprehensive from admission through to discharge.

We aim to provide patient focused care in partnership with individual health care needs. Our delivery of care is continually re assessed and evaluated.

Our Code of Conduct reflects the individuals' right to respect, dignity, privacy, and confidentiality, religious, cultural and personal beliefs.

We endeavour to provide an atmosphere that is conducive to patients' holistic needs and an atmosphere conducive to staff learning and development acknowledging and respecting each other as a valued member of the team.

1. ENDOSCOPY UNIT GOVERNANCE STRUCTURE

1.1 Endoscopy Clinical Lead (acting on behalf of Clinical Director)

- Responsible for
 - Clinical standards
 - Clinical audits pertaining to Endoscopy
 - Quality of endoscopy procedures (as defined by the National Endoscopy Team)
 - Governance of appropriateness of endoscopic procedures
 - Standards of consent and aftercare of patients having endoscopic procedures
 - Governance of patients' feedback (shared with the unit manager)
- Responsible to
 - Clinical Director of Specialist Medicine
- Reports to
 - Directorate of Medicine via the Directorate Board
 - Endoscopist colleagues via the Endoscopy Users Group
- Specific roles
 - Chair – Endoscopy Users Group

1.2 Endoscopy Unit Managers / Senior Sisters

- Responsible for
 - Equality of access (assistant ops manager at SRP)
 - Waiting lists and procedure booking within the unit (assistant ops manager at SRP)
 - Management of IT within the endoscopy unit
 - Governance of patients feedback (shared with the Lead Clinician)
 - Governance of adverse events (clinical and non-clinical)
 - Patients privacy and dignity
 - Patients comfort
 - Decontamination standards (shared with HSSU)
 - Nursing standards
 - JAG standards
 - Health and Safety
- Responsible to
 - Matron the Directorate of Specialist Medicine
- Reports to
 - Unit Lead Clinician
 - Endoscopists via Endoscopy Users Group
 - Directorate Matron
 - Directorate General Manager

1.3 Endoscopy Users Group (EUG)

- Attendance
 - Endoscopy Clinical Lead (Chair)
 - Matron
 - Unit Sisters or a nominated deputy
 - Operations manager/Assistant operations manager (SRP)
 - Reception manager (Queen's Hospital)

- Additional invitees
 - All Endoscopists
 - All nursing staff
 - Representatives from other clinical areas utilising the unit (e.g. Urology, Respiratory and Specialist Nurses)

- Meetings
 - The EUG meets monthly, currently on the first Monday of the month. An agenda will always be distributed prior to the meeting. All meetings will have minutes documented and approved at the following meeting.

- Standing agenda items will be as follows:
 - Waiting times
 - Global Rating Scale standards
 - Adverse events
 - 30 day mortality
 - Patient feedback and surveys
 - Clinical Audits

2. CONSENT

2.1 General Policy

Consent must be obtained for all patients in accordance with the **BHFT *Consent Policy*** and also in compliance with the recommendations set out in ***Guideline for obtaining valid consent for gastrointestinal endoscopy procedures*** (BSG 2016).

2.2 Specific Protocol

- Consent must **not** be obtained inside the procedure room. Please refer to the *Endoscopy Unit Standard Operating Procedure for Patients Consent*.
 - For the consent to be valid, it must be given voluntarily by an appropriately informed person who has the capacity to consent to the intervention in question (this will be the patient or someone with parental responsibility for a patient under the age of 18, someone authorised to do so under a Lasting Power of Attorney (LPA) or someone who has the authority to make treatment decisions as a court appointed deputy). Acquiescence where the person does not know what the intervention entails is not 'consent'.

- In a clinical emergency, full compliance with written consent may not be possible and in these circumstances verbal consent may be obtained, but must be fully documented in the medical notes. In all other cases, written consent must be documented on a **BHFT Consent Form**.

2.2.1 Withdrawal of consent

- Patients may withdraw consent at any time (providing they have the capacity to make this decision)
- Where a person objects during an endoscopic procedure, the procedure should be stopped, and the person's concerns and capacity to withdraw consent established. It may be possible to restart after a suitable pause and reassurance.
- If the patient appears to have capacity (whether sedated or not) and clearly indicates that he/she wishes the procedure to be discontinued then, this must occur immediately unless doing so would expose the patient to risk of serious harm. If stopping the procedure would put the person at risk of harm the practitioner may continue until that risk no longer applies.
- Assessment of capacity in this situation may be difficult if the patient has received sedation and/or analgesia. If, in the endoscopist's opinion, capacity is lacking it may be justified to continue in the person's best interests. It is good practice in this situation for the endoscopist to involve the endoscopy nurse that is looking after the patient in the assessment of mental capacity and in the decision to continue or stop.
- If the patient is assessed to lack capacity, it may be justified to continue in the person's best interests. If stopping the procedure would put the person at risk of harm the endoscopist may continue until that risk no longer applies.
- Where there is suspicion from any member of staff that a failure to comply with the above policy has occurred, the event will be reported and investigated on Datix as an adverse incident.

2.2.2 Appropriate individuals involved in the pre-procedure consent process.

- Confirmation of consent must either be obtained by a trained endoscopist or delegated to a suitably qualified individual.
- Consent for diagnostic procedures may be delegated to endoscopy nurses who have successfully completed competency-based training and undertaken a documented assessment for that procedure.

2.2.3 Information for patients

- All patients will be provided with information in a format that they can understand about the expected benefits as well as the potential burdens and risks and alternatives of any proposed endoscopic procedure.
- Patient information sheets will be available for all procedures undertaken in that unit.
- Patient information will be produced as per Trust Patient information Policy, and will be accessible on the intranet.
- These information sheets will be reviewed annually.
- Any archived versions will be stored electronically.
- Changes to information sheets will reflect the feedback that has been received from patients that has been discussed at the EUG

2.2.4 Assessment of pre-procedure mental capacity

- The principle of presumed capacity means that the patient can be considered not to have capacity only once it is shown, that they are unable to:
 - understand the information needed to make a decision;
 - remember that information long enough to make a decision;
 - use or weigh up that information to make a decision;
 - communicate their decision by whatever means
- Where a patient lacks capacity and there is a proxy decision-maker then the decision taken for endoscopy must be taken in the patient's best interests. When assessing a person's best interests the endoscopist must take into consideration the prior wishes of the patient and the views of those caring for the patient or with an interest in his welfare, such as family members. Any intervention must be the least restrictive of the person's future options and freedom.
- The **BHFT Consent Policy** provides further information on issues of capacity and consent and must be followed in all circumstances.

3. PATIENT SAFETY

3.1 General Policy

All adverse events must be reported and acted upon in line with Trust Incident Reporting Policy.

3.2 Specific Protocol

Please refer to Endoscopy Standard Operating Procedure for Incident Reporting

3.2.1 Recording of adverse events

- All adverse events must be recorded on the appropriate Trust form and sent to the Governance Support Unit.
- A record of all such forms will be kept by the Unit Manager.

3.2.2 Reviewing of adverse events

- All adverse events will be summarised by the Unit Manager and discussed at staff meetings. Serious incidents or those from which wider lessons can be learned will be escalated for discussion at the monthly EUG meetings. Learning outcomes from incidents that have implications for other areas in the trust will be shared by the matron or clinical lead as appropriate.
- A quarterly summary of adverse incidents will be obtained from the Governance Support Unit and reviewed on a three monthly basis by the EUG
- The EUG will be responsible for taking additional action by the Trust Clinical Governance process.

3.2.3 British Society of Gastroenterology (BSG) Guidelines

- A full set of the above guidelines relevant to the endoscopy unit must be available within the unit in written and electronic format.

3.2.4 Decontamination process

- Decontamination endoscopes and equipment will be in line with Trust processes and in accordance with BSG and National Endoscopy Programme guidelines.
- There will be a combined audit of these processes at least once a year by the Trust Infection Control and Decontamination teams.
- The results of this audit will be presented to the Infection Prevention Board annually.

3.2.5 Procedure Morbidity and Mortality

- All deaths within 30 days and emergency operations within 8 days of any endoscopic procedure will be identified by the trust information analysts on a regular basis.
- Data for 30 days mortality and 8 days emergency procedures must be reviewed by the unit clinical lead and audited appropriately **every 3 months**.
- The results of these audits must be reviewed at the EUG meetings on a quarterly basis.

3.2.6 Safer Surgery Checklist

- All members of staff will take part in a 'stop moment' before every procedure to complete the safety checks on the 'WHO' checklist. Non-compliance with these checks will be recorded as an incident on Datix and reported to the nurse in charge.
- The service will regularly review and update the checklist taking into account incidents, and guidance from trust audits, the BSG and the NHS.
- Compliance with the checklist will be audited monthly.

3.3 Infection Control

3.3.1 General principles

The endoscopy units are committed to controlling the spread of infection within the units. To this end the following must be strictly adhered to

- Endoscopists will change into theatre blues for their lists
- All staff in the department will adhere to the **BHFT Hand Hygiene Policy** and will change disposable plastic aprons and gloves for each patient.
- Patients with known communicable infections, such as MRSA or Clostridium difficile, will be placed last on the list and thorough room cleaning with chlorine-based disinfectants will be used after the procedure. These patients will be recovered in a side room in recovery, which will be appropriately cleaned and disinfected after discharge or transfer of the patient.
- All surfaces used will be cleaned between each patient with disposable cleaning wipes.
- Pulse oximetry probes and blood pressure cuffs will be cleaned between each patient.
- Monthly hand hygiene audits will be carried out by senior nursing staff in the unit and regular environmental audits will take place. The results of these will be available to the unit manager for review and action planning as necessary.

3.3.2 Patients at increased risk of vCJD

- If a patient is identified as being at increased risk of developing vCJD and requires endoscopy, it is the responsibility of the referring consultant to discuss their management with senior members of the endoscopy nursing team. The endoscopy team will liaise with HSSU about additional requirements for scope decontamination in these cases.
- These patients and endoscopes will be managed in accordance with BSG guidance on endoscopy in patients at risk of vCJD. (Allison, M. 2013 *Changed guidance on the need to quarantine endoscopes following invasive gastrointestinal endoscopy in patients at risk of vCJD*. Available on BSG website)
- Following endoscopy in most patients at risk of vCJD (including people with haemophilia and other plasma product recipients), an endoscope can return to use provided that it goes through a conventional thorough decontamination process consisting of manual pre-cleaning and a subsequent validated automated machine disinfectant and rinse cycle. Such endoscopes should be reprocessed in an endoscope washer disinfectant without any other endoscopes in the chamber, using a single-use non-aldehyde based disinfectant. At Queen's hospital, the HSSU department will be contacted in advance by nursing staff to arrange appropriate segregation of these scopes.

- The following groups of patients would require a scope to be quarantined after use:
 - vCJD diagnosis confirmed
 - Symptoms of CJD but awaiting diagnosis
 - Asymptomatic patients at increased risk through receipt of labile blood components (whole blood, red cells, white cells or platelets) from a donor who later developed vCJD.
- It is anticipated that endoscopy in these groups patients will rarely be required.
- If the referrer is unsure about the reason why a patient is thought to be at increased risk of vCJD, the patient's GP should be able to clarify this. If they cannot do so, the CJD Section at Public Health England (PHE) can advise on how to investigate further.

4. PATIENT COMFORT

4.1 Specific protocol

4.1.1 Recording Patient comfort

- An intra-procedure comfort score for each patient will be recorded on V6. The comfort score will be recorded after asking the patient at the end of each procedure.

4.1.2 Reviewing patient comfort

- Individual Endoscopist comfort scores will be audited regularly and feedback to Endoscopists via reports and in anonymised format at EUG meetings.
- Comfort scores will be reviewed monthly by the EUG.
- Where comfort scores are outside the normal range, sedation and analgesia usage by that Endoscopist will be reviewed by the clinical lead.
- If the clinical lead feels there is cause for concern regarding an individual Endoscopist performance, either because of excessive use of sedation or excessive discomfort then the clinical lead will discuss this concern with the individual concerned.
- Comfort and sedation usage will then be reviewed for that individual over the next 6 months.
- If the individual Endoscopist fails to improve sufficiently, the clinical lead will report this to the appropriate clinical director.

5. QUALITY OF ENDOSCOPY PRACTICE

5.1 Quality Indicators

- 5.1.1 Quality indicators for different endoscopy procedures will be based on those outlined by the RCP and JAG (*JAG Summary guide to quality and safety indicators 2016*).

5.1.2 Quality indicators will be recorded for audit as follows (some indicators may be recorded by more than one process to allow internal validation)

- All procedures
 - Number of procedures performed by each operator
 - Use of flumazenil and/or naloxone
 - Need for ventilation
 - Immediate perforation
 - Immediate bleeding (needing transfusion)
 - Sustained drop in oxygen saturation less than 90%
 - 30 days mortality
 - Further endoscopic procedure within 8 days
 - Further procedure of any type within 8 days
 - Unplanned admission within 8 days

- Gastroscopy
 - Completion rate
 - Success of intubation
 - Perforation following therapeutic procedures.
 - Success of haemostasis following endoscopic therapy

- Percutaneous endoscopic gastrostomy (PEG)
 - Satisfactory placement of PEG at end of the procedure
 - Infection requiring antibiotics
 - Peritonitis

- Flexible sigmoidoscopy
 - Diagnostic flexible sigmoidoscopy perforation rate
 - Rectal retroversion rate

- Colonoscopy
 - Completion rates (unadjusted)
 - Adenoma detection rate
 - Polyp retrieval rate
 - Sedation and analgesia doses (<70 and ≥70)
 - Tattoo of lesions >2cm and suspected malignant polyps
 - Quality of bowel preparation
 - Diagnostic colo-rectal biopsies for diarrhoea
 - Comfort/Pain (nursing audit)
 - Post colonoscopy cancer
 - Rectal retroversion rate
 - Perforation rate
 - Post-colonoscopy colorectal cancer audit (PCCRC)

- Endoscopic retrograde cholangio-pancreatography (ERCP)
 - Completion rate
 - Decompression of obstructed system
 - Cannulation of intended duct at first ERCP
 - Common bile duct stone clearance at first ERCP

- Patients with extra hepatic stricture have stent sited and histo/cytopathology at first ERCP.
- Complication rate

5.2 Audit of Quality Indicators

5.2.1 Frequency of audit of quality indicators

Quality indicators will be audited according to the frequency stated by BSG and results of audits reviewed at EUG according to these frequencies.

5.2.2 Review of audit of quality indicators

- Individual Endoscopist performance will be fed back to Endoscopist via their personal reports and in anonymised format at EUG meetings
- Where performance levels are outside the normal range and the EUG feels there is cause for concern regarding an individual's Endoscopist' performance the clinical lead will communicate this concern to the individual concerned.
- Performance will then be reviewed for that individual over the following 6 months unless it is felt that patient safety is compromised when immediate action will be taken.

6. APPROPRIATENESS OF ENDOSCOPY REFERRALS

6.1 Unit referral guidelines

National referral guidelines, such as BSG and NICE guidelines will usually be adopted within the endoscopy unit for all diagnostic and therapeutic procedures. These guidelines also can be used as the targets for audit, i.e. any procedure not referred in line with the guidelines will be deemed 'inappropriate'.

6.2 Validation and audit referrals

6.2.1 Please refer to Endoscopy Standard Operating Procedure for Vetting Surveillance Referrals.

6.2.2 Surveillance procedures

- Notes for all surveillance procedures will be reviewed at least two months prior to that patient being endoscoped.
- This review will be performed by a nominated endoscopist
- Any procedure deemed inappropriate will be logged and the case discussed with the consultant in charge of the patient.
- If the person vetting the procedure deems the procedure appropriate it can go ahead

6.2.3 Non-surveillance procedures

Validation

- All referrals for endoscopy procedures will be allocated to a consultant on the V6 system for vetting.
- Referrals deemed to be inappropriate will be discussed with the referrer.

- Should any patient attend for endoscopy and the procedure found to be inappropriate, the procedure will be cancelled and the reason for this cancellation recorded on Meditech V6 or by letter.

6.2.4 Audit of the appropriateness

- The EUG will review an audit of appropriateness of referrals on an annual basis.

7 RESULTS REPORTING

7.1 Record Keeping

The units will abide by the BHFT *Policy for Health Records Keeping*

7.2 Requesting hospital notes for procedures

Patients' notes will be requested from health records for all procedures. If, in exceptional circumstances, notes are not available, a temporary set will be create and the contents merged with the permanent set as soon a practicably possible.

7.3 Filing of endoscopy reports

All endoscopy reports will be filed in the patients notes on the day of the procedure if the notes are available. If notes have not arrived in the unit, the report will be filed as soon as the notes reach the endoscopy unit.

7.4 Reporting results to the referrer

All endoscopy reports will be sent as soon as possible to the referrer. Usually within one working day following the procedure.

A copy of the endoscopy reports will be sent to the patients GP

Endoscopy reports must also be sent to the referring hospital clinician, where appropriate.

8. EQUALITY OF ACCESS

8.1 General Policy

All patients will be treated in accordance with *the BHFT Patient Access Policy*

8.2 Specific protocol

8.2.1 Information sheets

- Information sheets for diagnostic procedures are available in English, Polish and Urdu, the most commonly spoken languages within the local population. Written information in other languages can be requested by the interpreting service via the contact details on the intranet interpreting page.

- The need for these information sheets will be identified by the referrer and by the booking staff on the Trust computer system or on the referral.

8.2.2 Interpreting services

- The use of relatives or friends for interpreting is actively discouraged and the hospital interpreting services will be used in all but exceptional circumstances.
- Whenever patients needing interpreting services are identified, interpreters will be booked by booking staff prior to the day of the procedure.
- The up-to-date procedure for booking interpreters is described on the intranet interpreting page

9. WAITING LIST MANAGEMENT

9.1 Specific protocol

9.1.1 Pooling of lists:

- Patients on active waiting lists will be pooled. Refer to **Endoscopy Standard Operating Procedure for Pooling and Vetting Referrals**.

9.1.2 Targets for waiting times for endoscopies will be as follows

- Two-week cancer referrals <2 weeks
- Urgent referrals <2 weeks
- Routine referrals <6 weeks

9.1.3 List Utilisation

- Vacant lists will be identified 6 weeks prior to the date of those lists and utilised by other Endoscopists wherever possible
- Lists which are likely to breach the above waiting times will be identified and action taken to prevent waiting time breaches.
- A weekly demand and capacity meeting will identify the above
- Identified problems will be escalated to senior management level and if required to directorate level

10. BOOKING

10.1 Patient booking

- The unit will aim for >75 % of patients to be fully booked.
- A monthly report will be produced for the endoscopy reception manager detailing the progress towards this target.
- If the proportion of patients that are fully booked falls below 75%, this will be discussed at the EUG meeting and an action plan agreed.

10.2 DNA/Cancellation

- DNA and cancellation rates will be reviewed monthly by the endoscopy reception manager.
- DNA and cancellations will be managed according to the **BHFT Patient Access Policy**

- The reason for cancellation (e.g. patient unwell) will be recorded on Meditech V6

10.3 Pre-check of patients due to attend

- At Queen's hospital, all patients with a booked appointment will receive a 'reminder' phone call from endoscopy booking staff approximately 7 days prior to the procedure. All patients will also receive three SMS text messages reminding them of their appointment, unless they have opted out of this service.
- A similar system to the above method will be set up at the SRP site.

10.4 Pre-assessment

The endoscopy nurses provide ad hoc advice to patients who have telephone queries prior to their scheduled appointment. At SRP, all patients who are due to have a colonoscopy are phoned by a nurse prior to the procedure to answer questions and check that patient understands the procedure. The service aspires to have a thorough, uniform, properly funded pre-assessment service for all relevant patients and is making plans for this which will be discussed with relevant stakeholders.

11. PRIVACY AND DIGNITY

11.1 The units and staff will work in accordance with the **BHFT Confidentiality Policy**

11.2 Specific protocols

11.3 Patient feedback

- Patients' experience of privacy and dignity within the unit will be surveyed as part of the patient feedback questionnaire.
- Patients are able to give feedback on an ad hoc basis either formally or informally following their procedure

11.4 Patient confidentiality

11.4.1 A private room will always be available, or made available, for confidential conversations

11.4.2 Staff must consider the most appropriate place to have confidential conversations with patients and others without the risk of being overheard.

11.4.3 Outpatients will always have confidential conversations, including for consent purposes, in a private room

11.4.4 Inpatients will only have confidential discussions in the main recovery bay when there is no practicable private area that can be used. Staff should take appropriate steps to reduce the risk of being overheard.

12. GENDER SEGREGATION

12.1 The units and staff will comply with the ***BHFT Eliminating Mixed Sex Accommodation Policy***.

12.2 See section 22 specific guidance on gender segregation in the individual units..

13. SAFEGUARDING

13.1 The units and staff will work in accordance with the BHFT ***Safeguarding Adult Policy***

13.2 Clinical staff will attend Safeguarding training as part of their mandatory training

13.3 Clinical staff who suspect abuse or neglect of any patient will inform the nurse in charge, who will escalate the concern according to the Safeguarding Adult Policy.

14. AFTERCARE

14.1 Specific protocol

14.1.1 Information sheets

- Written information for post procedure care and advice will be available to all procedures

14.1.2 Helpline

- All patients who have concerns or queries are asked to contact the Endoscopy Unit at which they had their procedure between the hours of 09.00 hrs and 17.00 hrs. Patients at SRP are given the phone number for the day case surgical ward as the point of first contact. In cases of out of hours emergencies, patients are advised to contact the Queen's Hospital Emergency Department on 01283 511511 ext 5003. Contact numbers are provided on the discharge patient information sheets for all procedures.

14.1.3 Patients with malignancy found at endoscopy

- All patients with suspected malignancy will be told of their procedure findings on the day of the procedure unless the timing is deemed inappropriate for that patient (please refer to Endoscopy *Standard Operating Procedure for Communicating Results*).
- If, in exceptional circumstances, this discussion is deemed inappropriate, the reasons for this will be documented in the patients notes and a plan made for informing the patient at the earliest appropriate opportunity.
- An email containing the endoscopy report will be sent using an encrypted *nhs.net* email to the patients GP surgery within 24 hours of endoscopy. Where this is not possible, for example if the GP or practice does not have an *nhs.net* email account, a copy of the report will be sent on the same day by first class post.

- A follow-up appointment will be booked, where possible, prior to the patient leaving the unit and a contact between the patient and an appropriate specialist nurse will be arranged.
- The delivering of difficult news will be done in a quiet room designed for the purpose, unless individual patient circumstances make another private space more appropriate.
- The endoscopist is responsible for ensuring that the appropriate MDT coordinator and the responsible referring consultant are informed (for open access patients a surgical consultant will be allocated).
- Where possible and appropriate, the endoscopist will ensure that follow-up tests, such as staging CT, are requested on the day of diagnosis.

14.1.4 Endoscopy reports

- All patients will be offered a copy of their endoscopy report, unless this is deemed inappropriate for an individual patient by the endoscopist.
- Patients may be offered a patient version report sheet of their procedure specifying:
 - Findings
 - Plans for any further investigations
 - Out-patient appointment details

14.1.5 Patient feedback

- Patients' feedback regarding aftercare will be sought in the patient questionnaire/focus group

14.1.6 Pathology results

- A letter from the responsible consultant will be sent to the patient if no follow-up appointment has been arranged, this will include the results of any biopsies taken.
- If cancer is unexpectedly detected through biopsies, the referring clinician will organise a further out-patient review of the patient within 2 weeks and the MDT coordinator will be informed.
- For all patients referred for endoscopy internally within BHFT, the referring consultant remains responsible for acting on the results of pathology. For open access patients, the responsible consultant for the relevant endoscopy list will act on the results of pathology unless the individual patient has been booked an appointment in the outpatients clinic as a result of the endoscopy.
- Nurse endoscopists will ensure that a responsible consultant for all open access patients on their lists has been identified.

15. PATIENT FEEDBACK

15.1 Patient complaints

- Patient complaints will be handled using the BHFT *Complaints Policy and Procedure*

15.2 Specific Protocol

15.2.1 Patient feedback

- Patient feedback will be sought by the following methods
 - The units will take part in the 'Friends and Family' tests, and patients will be encouraged to anonymously complete these forms.
 - Patients questionnaires given to all patients attending the unit twice a year
 - Feedback, cards and letters sent by post, email or via online groups such as Patient Opinion will be discussed at the nursing huddle and, where appropriate, the EUG.
- Feedback will be summarised by the Endoscopy Unit Manager for presentation to the EUG review on feedback
- Action deemed to be necessary from patients feedback will be actioned within 3 months of the EUG feedback
- Patient's feedback will be kept anonymous. However, if a patient requests information regarding changes made as a result of their feedback, their details will be kept by the Endoscopy Unit Manager who will contact the patient once action has been taken.

15.2.2 Stakeholder involvement

- Patient advocacy groups or a selection of individual patients will be appropriately involved or consulted before major changes are made to the service.

16. DECONTAMINATION

16.1 The specific processes for the decontamination and traceability of scopes is detailed in the Endoscopy Standard Operating Procedure for the Scope Decontamination Pathway and Standard Operating Procedure for the Traceability of Endoscopes.

16.2 The unit follows BSG and National Endoscopy Programme Guidance (updated 2009) in particular:

- Advice on decontamination is taken from the Trusts authorised person and decontamination lead. All staff using the Decontamination equipment are trained and assessed as competent in the procedure.
- Manufacturer's instructions will be followed for endoscopy equipment
- There is clear traceability of endoscopes throughout the decontamination process
- There is regular testing of the decontamination equipment

17. BRONCHOSCOPY

The unit performs bronchoscopies and follows the British Thoracic Society Guidelines.

18. CYSTOSCOPY

The unit performs cystoscopies for patients who present with haematuria and follows relevant guidelines.

19. ERCP

The unit performs ERCP in the x-ray department. Please see separate ERCP Operational Policy

20. TRAINING

20.1 Nursing staff

- The endoscopy unit manager is responsible for ensuring that nursing and support staff within the unit are competent to perform their roles within the unit and for reviewing training needs as part of the appraisal process
- All new nursing staff will be orientated to the endoscopy environment. A mentor will be provided and a comprehensive induction programme provided. They will initially be supernumerary to allow for training in all areas until assessed as competent to work with minimal supervision or unsupervised.
- All clinical staff that perform procedures and tasks within the endoscopy unit must be competent and experienced in those skills. Staff once competent will rotate throughout all areas of the Unit
- Nursing staff training will be competency based and all staff will be monitored to ensure that they remain up-to-date with mandatory training and will also have an annual appraisal.

20.2 Staff who are identified to have unsatisfactory work performance by the endoscopy unit sisters will be supported and managed according to the **BHFT *Managing Performance and Supporting Staff Policy***

20.3 Training (Medical, surgical and Nurse endoscopist trainees)

- There will be an active training lead
- The Endoscopy unit will comply with JAG requirements to enable training medical and surgical SpRs.
- All trainees arriving in the unit will be assessed by one of the trainers and a needs assessment made. Other information from previous trainers and taken into account. Induction will be given by the unit nursing staff in the use of the units equipment, decontamination process and information systems

- Assessments will include a formal direct observation of procedural skills (DOPS) and one to one training.
- Lists will be adjusted to allow adequate time for training.
- All trainees will be expected to have had or booked onto the relevant basic endoscopy courses
- No unsupervised endoscopy will be permitted until the trainee has been assessed for competency in that specific technique.
- The endoscopy training lead will ensure trainees are committed to a future career using endoscopy frequently.

21. REFERRAL PATHWAY

21.1 Specific protocol

- Referral pathways and processes will be as described in the following protocols:
 - Endoscopy Referral Pathway (routine)
 - Endoscopy Referral Pathway (urgent)
 - Endoscopy Unit Direct Outpatients Booking Request Form
 - Procedure for Requesting In Patient Endoscopies
- Referral pathways and guidance are available on the Trust intranet

22. PATIENT PATHWAYS

22.1 Outpatient pathway

- There will be a huddle for the nursing staff at the beginning of each working day at which duties will be allocated, incidents or feedback will be discussed, and the endoscopy activity will be highlighted.
- Each endoscopy list will begin with an informal briefing, led by nursing staff or endoscopist that will identify any concerns regarding equipment or staffing skills and will discuss the planned procedures on that list. The responsibilities of each staff member in the room will be defined at this briefing.
- Patients for endoscopy will report to the main reception desk upon arrival at the Burton unit, or to the Surgical Day Case ward at Sir Robert Peel Community Hospital (SRP).
- The patient's demographic details are confirmed and then they are requested to take a seat in the reception area (Burton unit) or allocated a room, bed space or a seat in the day room dependent on the procedure (SRP).
- A nurse brings patient through to the individual patient preparation rooms (Burton site) or admits the patient in a side room or pre-assessment room. (SRP). Relatives and carers may be invited through for the admissions

process at the nurse's discretion, dependent on the patients' needs and wishes. All relatives will be given an approximate time that the patient is predicted to be ready for collection.

- The nurse or healthcare assistant that has been allocated the role of scope assistant will be responsible for checking that endoscopes are 'in date' and will attach the scope and check that the air/water, suction and 'jet-wash' are working they will also ensure that the scope traceability scan has been completed on the PC.
- Details are checked from the referral details, patient list and case notes.
- Admission:
 - The patients' admission details and their individual nursing assessment will be documented onto the Meditech V6 system, including regular medications and relevant medical history. The first part of the adapted 'WHO' checklist form will be completed.
 - If sedation is likely to be administered the admitting nurse will establish that a carer is available for 24 hours post-procedure and document the details of this person.
 - Base line observations will be recorded and documented.
 - The patient will then be prepared for their endoscopy procedure including enemas, blood tests and cannulation as required. Patient changing facilities will be private and individual. Dignity pants will be offered to patients, if appropriate.
 - Potential additional risks or problems identified on the admission will be escalated to the endoscopist.
- The admitting nurse accompanies patient to the single sex sub waiting areas (Burton site), or taken to wait by their allocated bed-space or in the surgical day room (gastroscopy only) until being escorted to the consent room (SRP).
- At SRP patients will either be consented on the day case ward prior to entering the endoscopy suite or in a dedicated private consent room, after a discussion with the endoscopist or an appropriately trained and competency-assessed qualified nurse and after an opportunity to have their questions answered.
- At Burton, patients have a discussion in the consent room with the endoscopist or an appropriately trained and competency-assessed qualified nurse, have their procedure explained, questions answered and formal consent obtained.
- The patient's details are checked by the staff prior to transfer to the procedure room.
- On entering the procedure room the whole team will take part in the 'Stop moment' to go through the identity and safety checks on the WHO checklist. The checklist will be signed by three team members.
- The patient will be made comfortable on a trolley.
- Monitoring of pulse oximetry takes place on all. Oxygen may be given via nasal cannula at the instruction of the endoscopist.
- The procedure is carried out with one staff member responsible for patient care and a second staff member assisting the endoscopist. Both of these members of staff will have been competency assessed for that role and planned procedure.

- The post-procedure part of the WHO checklist will be completed by the team prior to the patient leaving the procedure room.
- Controlled drugs will be dispensed in accordance with the **BHFT Controlled Drugs Policy**. Signatures for administered controlled drugs will be obtained promptly after each procedure.
- The nurse or healthcare assistant that has been allocated the role of scope assistant will be responsible for ensuring that through 'bedside cleaning' of the endoscope is completed according to the manufacturer's instructions and local guidance.
- The endoscopist will document the procedure on the Unisoft reporting system and include instructions for follow-up or discharge. The endoscopist will also dictate a letter to the referring consultant or GP summarising the procedure, findings and follow-up (except for Bowel Scope).
- Any specimens and the histology request form will be checked against the patient's notes, patient's wrist band, and verbally with the patient (if able), by two members of staff, at least one of whom will be a qualified nurse. The biopsies will be bagged and signed in the book after each patient.
- On completion of procedure patient is transferred to recovery area (Burton site) or to the Surgical Day Case ward (SRP) for recovery. The recovery areas will have a resuscitation trolley that is easily accessible. This will be checked daily and signed by a qualified member of nursing staff. Records will be available for audit purposes.
- Single sex accommodation rules will be adhered to by appropriate use of the side rooms in recovery (Burton unit) or by single sex bays and individual side rooms (SRP).
- The procedure room 'patient care' nurse provides written and verbal handover to recovery staff.
- Appropriate post procedure observation will be carried out and documented.
 - Sedated patients will have observations recorded at fifteen-minute intervals for a minimum of thirty minutes. The patient may leave their trolley during this time if clinically appropriate, but must continue to be supervised by recovery staff.
 - Patients who have not had sedation will be monitored in recovery according to their individual needs and the procedure that they have had.
- Patients will be offered refreshments before discharge, where appropriate to individual needs.
- The endoscopist or nominated staff give the patient verbal and written results of procedure in a private area, with a copy of their report where appropriate.
- There is a designated room available in a quiet area where 'difficult news' can be delivered to patients with their relatives or carer present (Burton unit) or in their individual side room on the Surgical Day Case ward (SRP).
- If sedation has been administered the patient will be accompanied home by a responsible adult.

- Nurses giving discharge advice will emphasise that a responsible adult must be present at all times with the patient for 24 hours after the administration of sedation.
- Written and verbal discharge advice will be given that is appropriate to the procedure and individual patient.
- Patients are discharged on the hospital system after leaving the Unit
- At the end of each list the team will discuss any issues that have arisen during the session that need escalating to endoscopy sisters or require lessons to be learned by the team.
- The endoscopy room will be restocked and clutter free in preparation for the start of the next session.

22.2 Patient Pathway (Inpatients)

- Inpatient referrals are made by completion of a Request for Opinion Form. This form will be brought to the endoscopy unit by the requesting physician and discussed with the Endoscopist performing the session.
- At the Burton unit the endoscopy nurse will liaise with the ward staff to ensure that patients are adequately informed and prepared prior to the procedure, and that documentation has been completed.
- At SRP, a qualified nurse from the endoscopy unit will visit all inpatients before their proposed procedure to check admission paperwork and provide further information to the patient. The patient will be transferred to the Surgical Day case ward following transfer policy before being brought to the endoscopy suite.
- The referrals will be assessed for urgency by the Endoscopist and where appropriate added to the endoscopy list.
- Nursing staff will contact the relevant ward and request appropriate preparation of the patient for the requested procedure.
- Unless the patient's condition dictates their procedure will be performed at the end of the endoscopy session.
- If inpatients are stable they can be nursed in the single sex sub waiting areas. If monitoring is required then the patient will be nursed in the recovery area in a single sex room.
- All inpatients will have their observations taken and recorded. Ideally the patient's consent will be taken by the referring physician on the ward otherwise consent will be taken by the Endoscopist in a private area of the endoscopy unit prior to their endoscopy.
- Patients will be transferred to the procedure room for their endoscopy. They will be fully monitored by relevant nursing staff
- Any specimens taken will be checked as per above guidelines.
- Following their procedure patients will be transferred to the recovery area for further monitoring.
- When patients' condition allows qualified members of staff will transfer them back to the ward and hand over the details of the procedure, endoscopy report and any follow up care to the ward staff.

22.3 Follow-up

- At the end of each out-patient procedure the endoscopist will document the appropriate follow-up on the Unisoft report and the dictated discharge letter. The endoscopy admin staff will book an appropriate follow-up outpatient appointment or discharge the patient to the GP according to the instructions on the Unisoft report. As a 'failsafe' check, medical secretaries will always check that appropriate follow-up is booked on the Meditech V6 system when typing the endoscopist dictated discharge letters.
- If further tests are required as a result of the endoscopy procedure (eg completion colonoscopy or CT scan) it is the responsibility of the endoscopist to ensure that this is done.
- For inpatients, it is the responsibility of the referring team to book appropriate follow-up on discharge.

23. EMERGENCY CARE & POST-PROCEDURE COMPLICATIONS FROM SIR ROBERT PEEL HOSPITAL

23.1 Nursing staff at SRP will escalate concerns regarding potential post-procedure complications and deteriorating patients to the endoscopist, if they are still on-site, or if unavailable, with any available doctor within the operating theatres, or failing this by contacting the on-call medical or surgical consultant at Queen's Hospital.

23.2 Staff will follow the ***Action Plan for Emergency Transfer from Sir Robert Peel*** (Appendix B) and the **BHFT Transfer of Patients Policy** for all patients requiring transfer for urgent medical reasons.

23.3 Patients will be transferred from Sir Robert Peel to Burton or Heart of England Foundation Trust (HEFT) as appropriate. In an event that a transfer is required, the appropriate location is determined and a 999 ambulance called. The doctor responsible or lead nurse on duty will liaise with the receiving hospital prior to transfer.

24. OUT OF HOURS ENDOSCOPY (OOH)

24.1 Any potential urgent in-patient endoscopies at the Burton site will be assessed by the on call Medical Consultant

24.2 Lower GI bleeds will be managed in accordance with Colorectal Emergency Policy.

24.3 Any Upper GI bleeds will be managed as by the Upper Gastrointestinal Haemorrhage Protocol (see appendix A)

24.4 Any urgent in-patient GI bleeds that can wait until the following day will be allocated as per Consultants instructions to the Urgent Endoscopy Session.

- 24.5** Any non-emergency endoscopy OOH will be performed in theatre by staff that have attained endoscopy competences.
- 24.6** OOH decontamination will be carried out in line with the Trust Decontamination policy.

Appendix A

UPPER GASTROINTESTINAL HAEMORRHAGE PROTOCOL

RECOGNITION AND ASSESSMENT

Symptoms and signs

- Coffee-ground vomit (dark brown, denatured blood in vomit)
- Haematemesis (bright red or clotted blood in vomit)
- Melaena (black, tarry, smelly stool containing digested blood). Rarely, severe upper GI haemorrhage can present as dark altered or very rarely fresh blood per rectum with no other features to suggest upper GI pathology
- Postural dizziness or fainting
- Evidence of severe bleeding – defined as presence of shock with tachycardia (heart rate >100 beats/min), hypotension (systolic BP <100 mmHg) and clammy skin, or of postural hypotension in patient who is not clinically shocked
- Evidence of anaemia
- Features of precipitating disease, jaundice, stigmata of liver disease
- Features of bleeding disorder (petechiae)
- Buccal or facial telangiectasia

Bright red rectal bleeding in the absence of hypotension is likely to arise from lower gastrointestinal tract

Previous history

Enquire about:

- peptic ulceration
- previous bleeds
- liver disease
- family history of bleeding
- ulcerogenic medication/anticoagulants
- alcohol
- weight loss
- Anticoagulation
- use of NSAIDs

ASSESSMENT OF RISK

It is essential to categorise patients according to their risk of death/rebleeding – Use Glasgow Blatchford (GBS) score (see Figure 1): ≥ 1 high-risk; 0 low-risk

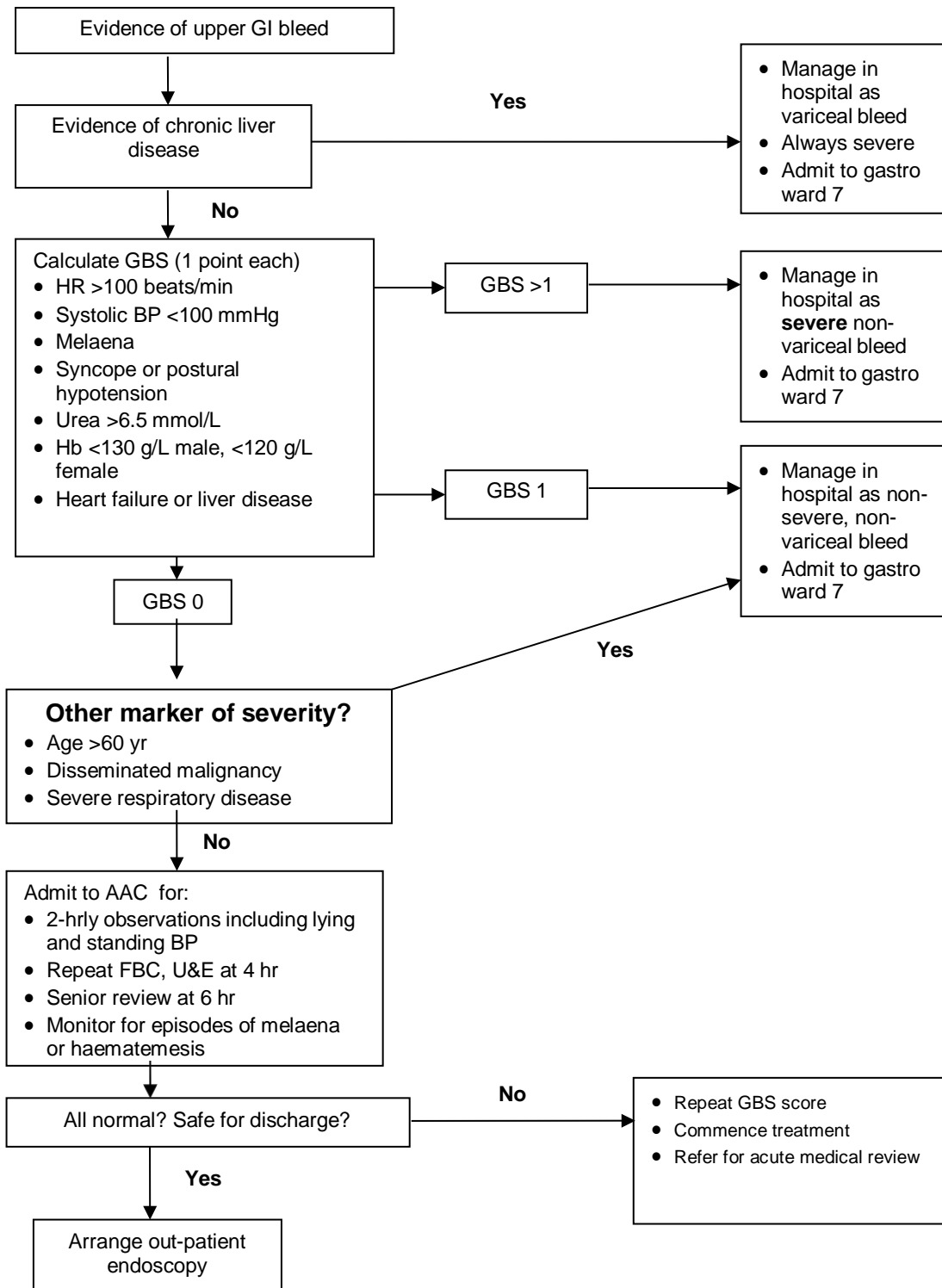
If more than one of the following are present, patient is at high risk:

- Heart rate >100 beats/min and systolic BP <100 mmHg, or postural hypotension (fall ≥ 20 mmHg 3 min after standing)
- Recent syncope
- Melaena
- Heart failure or liver disease
- Haemoglobin (Hb) <130 g/L (male), or <120 g/L (female)
- Urea >6.5 mmol/L

Additional markers of severity

- Rebleeding after admission
- GI bleeding arising after admission with another condition
- Actively bleeding ulcer or visible non-bleeding vessel at endoscopy
- Disseminated malignancy
- Severe respiratory disease

Figure 1 is an aid to cll judgement :



Investigations

All

- FBC
- U&E

Non-severe bleeding

- group and save (non-urgent)

Severe bleeding:

- INR
- LFTs
- crossmatch (4 units) – notify blood transfusion laboratory of clinical problem and degree of urgency

Management – AAC

Observations – 2-hrly

- Heart rate
- BP: lying and standing at 3 min

Investigations

- See above
- Repeat FBC and U&E 4 hr after admission to AAC

Treatment

- None, unless specific cause or increase in severity identified

Review

- After 6 hr

Admission criteria

- Glasgow Blatchford score ≥ 1
- Further episode of GI bleed
- Haemodynamic instability
- Abnormal blood results

PATIENTS FOR POSSIBLE DISCHARGE

Criteria for AAC discharge and out-patient endoscopy

- Glasgow-Blatchford score 0
- No co-morbidities requiring acute admission
- Patient information pack provided to patient
- Request OGD on as urgent out-patient
- Give patient copy of discharge letter

PATIENTS REQUIRING ADMISSION

Non-severe non-variceal bleeding

- Baseline observations with a view to upper GI endoscopy within 24 hr/next available endoscopy list
- Wide bore IV access
- Allow food and drink until 4 hr before endoscopy
- No treatment necessary before endoscopy
- Send patient GI Ward 7

Severe non-variceal bleeding

The first priority is to replace fluid loss and restore BP

Insert two large bore (14–16 G) venous cannulae

Infuse compound sodium lactate (Hartmann's) solution (or, alternatively, sodium chloride 0.9%) 1–2 L over 30–120 min to achieve systolic BP >100 mmHg

In patients with significant cardiac disease, consider inserting central venous pressure (CVP) line to guide IV fluid replacement

Stop antihypertensives, diuretics, NSAIDs, anticoagulants

Measure urine output. Adequately resuscitated patients have urine output of >30 mL/hr

Keep patient nil-by-mouth

If not already an in-patient **admit**, preferably to GI Ward 7

Transfuse as soon as blood available – see **Blood and blood products** guidelines

- prefer packed cells
- if 50% of total blood volume loss in 3 hr, follow **Massive haemorrhage protocol** with blood bank to obtain blood products rapidly – see **Massive haemorrhage protocol** on Trust intranet>Clinicians>Clinical guidance>Blood and blood products> or use flowchart within **Maximum surgical blood ordering schedule** guideline in **Surgical** guidelines
- Once resuscitation has begun, give IV omeprazole – 80 mg by IV infusion over 40–60 min, then by continuous IV infusion of 40 mg in 100 mL sodium chloride 0.9% at 20 mL/hr (8 mg/hr) for 72 hr. Arrange upper GI endoscopy .Discuss with any endoscopist doing a list in person
- Out of hours. If the patient has had a severe UGIB with GBS score 1 or above Contact DW/AP/MG if they are the physician on call. If not, contact on call surgical team.
- **If it is not possible to arrange emergency out of hours endoscopy then discuss case with on call Consultant and contact the On call Endoscopist for Royal Derby Hospital via RDH**

switchboard for further advice. If patient is to be transferred, refer to Hospital Transfer Policy.

- After preliminary resuscitation, discuss all patients with severe non-variceal bleeding with on-call surgical team.
- if doubt about realistic possibility of surgery, duty surgeon and duty physician to review patient in consultation
- if any difficulties are encountered with this policy, inform on-call consultant physician.
- Indications for surgical intervention (or interventional radiology under surgical care) are:
- exsanguinating haemorrhage (too fast to replace or requiring >4 units of blood to restore blood pressure)
- failed medical therapy
- special situation (e.g. patients with rare blood group or refusing blood transfusions)

Oesophageal variceal bleeding

Haemorrhage from oesophageal varices is always life-threatening

Identify patients from clinical history, previous hospital notes or by clinical signs (e.g. jaundice, ascites, spider naevi)

Insert two large bore (14–16 G) venous cannulae, one in each antecubital fossa. In patients with significant cardiovascular disease, a CVP line is advisable

- Initially infuse sodium chloride 0.9% 1 L over 2–4 hr:
- if Hb <100 g/L, transfuse one unit of blood for every g/L <100 g/dL – see **Blood and blood products** guidelines
- Correct raised INR with fresh frozen plasma but prothrombin complex recommended for major bleeding associated with warfarin (see **Warfarin** guidelines)
- Continue fluid replacement, aiming to restore heart rate <100 beats/min, systolic BP >80 mmHg and Hb ≥100 g/L, but avoid rapid fluid replacement as it increases risk of rebleeding
- Whilst awaiting endoscopy, give terlipressin 2 mg IV bolus then 1 mg 6-hrly, duration directed by endoscopist
- If haemorrhage still not controlled, discuss with gastroenterology team
- Give co-amoxiclav 625 mg oral or 1.2 g IV 8-hrly for three days
- in penicillin allergic patients give aztreonam 1 g IV 8-hrly and metronidazole oral 400 mg 8-hrly or 500 mg IV by infusion 8-hrly for three days. If previously MRSA colonised, add vancomycin IV by infusion – see **Vancomycin** guideline
- always obtain blood culture before giving an IV antimicrobial – see **Collection of blood culture specimens** guideline
- If septic – see **Sepsis, severe sepsis and septic shock** guideline
- In patients with grade 4 encephalopathy – see **Acute liver failure with encephalopathy** guideline, discuss endotracheal intubation with gastroenterology team and, if decided appropriate to intubate, contact critical care team
- If not already in-patient, admit to ward 7
- Contact gastroenterology team for advice on further management

Do not refer to surgical team

SUBSEQUENT MANAGEMENT

Non-variceal bleeding

- Continue observations until outcome of upper GI endoscopy known
- Follow advice appearing on endoscopy report

Preferred eradication regimen for *Helicobacter pylori* is:

omeprazole 20 mg oral 12-hrly

amoxicillin 500 mg oral 8-hrly

metronidazole 400 mg oral 8-hrly

for one week, then continue omeprazole 20 mg oral daily for 6 weeks

In patients allergic to penicillin:

omeprazole 20 mg oral 12-hrly

clarithromycin 250 mg oral 12-hrly

metronidazole 400 mg oral 12-hrly

for one week, then continue omeprazole 20 mg oral daily for 6 weeks

Absolute compliance with this regimen is essential in order to achieve an eradication rate of 90%

Simvastatin contraindicated in combination with clarithromycin and restricted to ≤ 20 mg in patients taking amlodipine (see current BNF for other interactions)

- After successful eradication of *Helicobacter pylori* and course of PPI for ulcer healing, if NSAID therapy must be reintroduced, continue omeprazole 20 mg oral daily for as long as NSAID required
- If neoplasm identified, refer to upper GI cancer nurse specialist .

Patients who rebleed:

- if an otherwise stable patient who is potentially referable for surgery rebleeds, request **urgent** endoscopy and discuss with on-call surgical team

Indications for surgical intervention:

- exsanguinating haemorrhage (too fast to replace)
- failed endoscopic therapy
- major rebleed after successful endoscopic therapy

- special situation (e.g. patients with rare blood group or patients refusing blood transfusion)
 - a major bleed may warrant early surgery

Once agreed with surgical team, transfer high-risk patients to SAU

Variceal bleeding

Contact gastroenterology team for advice on management:

- if not admitted directly, transfer patient to GI ward 7.

MONITORING TREATMENT

All patients

- 4-hrly heart rate and BP
- Observe vomit for blood content and stool chart for melaena
- Daily Hb until it is stable (not falling)
- In patients with severe bleeding, urine output – aim for >30 mL/hr

DISCHARGE AND FOLLOW-UP

Discharge when stable

Non-variceal bleeding

- If *H.pylori* positive **duodenal** ulcer, ask GP to arrange faecal antigen testing for *H pylori* >4 weeks after completion of eradication therapy
- If *H.pylori* positive **gastric** ulcer, ask GP to arrange faecal antigen testing for *H pylori* >4 weeks after completion of eradication therapy and repeat upper GI endoscopy to check healing 6–8 weeks following discharge
- If Hb still <100 g/L, start ferrous sulphate 200 mg oral 8-hrly

Non-severe bleeding with transient pathology (e.g. Mallory–Weiss tear, acute erosion):

- discharge promptly after endoscopy with no follow-up

Non-severe bleeding and ulcer-related disease:

- discharge young stable patients (aged <45-yrs) promptly after endoscopy
- discharge older patients (aged >45-yrs) when their condition is stable

Severe bleeding and ulcer-related disease:

- discharge when condition and Hb stable

Variceal bleeding

- Start propranolol 40 mg oral 12-hrly, unless contraindicated, as prophylaxis for further variceal bleeding
- Refer to Dr Watmough or Dr Palejwala

Neoplasia

Discuss further investigation and treatment with upper GI cancer team – contact cancer nurse specialist

Appendix B

Action Plan for Emergency Transfer from Sir Robert Peel

(Source: Theatre operational policy v.4)

Ventilated:
Transfer with Anaesthetist
and Paramedic Crew

Unventilated:
Transfer with Paramedic
Ambulance Crew

Determine Urgency of
Transfer
ie: Immediate or 4hr

Determine Hospital to
Receive Patient
ie: Burton, HEFT, Other

Determine Receiving
Department
ie: ED, Ward, Theatre

Arrange Appropriate
Equipment, Staff and
Ambulance for the
Transfer