Acute Upper Gastrointestinal Bleed (AUGIB) Guideline

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

Acute upper gastrointestinal bleed (AUGIB) is a common medical emergency in the UK with an estimated incidence of 134 per 100,000 population[1], translating to around 2-3 patients presenting daily to our Trust. The key to optimal AUGIB management is early recognition and resuscitation followed by timely OGD (Oesophago-Gastro-Duodenoscopy). Despite published national guidelines, the overall care for patients with AUGIB was found to be suboptimal in the majority of cases in the NCEPOD audit 'Time to Get Control' in 2015[5]. These Trust guidelines are adapted from the British Society of Gastroenterology (BSG)-led multi-society consensus care bundle for the early clinical management of acute upper gastrointestinal bleeding[6].

This guideline is for use by the following staff groups:

All Medical Staff

Lead Clinician(s)

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Approved by the Gastroenterology Directorate:	17th June 2025
Approved by Divisional Management Board:	17th June 2025
Approved by Medicines Safety Committee:	22nd March 2022
Review Date: This is the most current document and should be used until a revised version is in place	17th June 2028

Key amendments to this guideline

Date	Amendment	Approved by:
March 2022	New guideline approved	Gastroenterology Directorate, DMB, MSC
June 2025	Document approved with no changes	Dr Cheung

Contents

Abbreviations

Acronym	Abbreviations
AUGIB	Acute upper gastrointestinal bleeding
BSG	British Society of Gastroenterology
BP	Blood pressure
bpm	Beats per minute
ECG	Electrocardiogram
ED	Emergency department
FBC	Full blood count
FFP	Fresh frozen plasm
GBS	Glasgow Blatchford Score
Hb	Haemoglobin
IR	Interventional radiology
IV	Intravenous
LFTs	Liver function tests
MHP	Major haemorrhage protocol
NSAID	Non-steroidal anti-inflammatory drugs
NCEPOD	National Confidential Enquiry into Patient Outcome and Death
OGD	Oesophago-gastro-duodenoscopy
PCI	Percutaneous coronary intervention (stents)
PPI	Proton pump inhibitors
qds	*quater die sumendum* (4 times daily)
U+Es	Urea and electrolytes

Introduction

Acute upper gastrointestinal bleed (AUGIB) is a common medical emergency in the UK with an estimated incidence of 134 per 100,000 population[1], translating to around 2-3 patients presenting daily to our Trust. There is significant risk of mortality from AUGIB which has been reported as between 6.7 to 14.4% in the UK[2-5]. The risk of mortality is even greater in patients who develop AUGIB as an inpatient (table 1). The key to optimal AUGIB management is early recognition and resuscitation followed by timely OGD. Despite published national guidelines, the overall care for patients with AUGIB was found to be suboptimal in the majority of cases in the NCEPOD audit 'Time to Get Control' in 2015[5].These Trust guidelines are adapted from the British Society of Gastroenterology (BSG)-led multi-society consensus care bundle for the early clinical management of acute upper gastrointestinal bleeding[6].

As with any guidelines, this guideline aims to provide a framework for managing AUGIB but does not replace clinical judgement and each patient's care must be tailor to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Table 1: Mortality risk in patients with AUGIB

Study	Mortality rate		
	Overall	AUGIB on admission	Developed AUGIB as inpatient
Rockall *et al*, 1995[3]	14%	11%	33%
Blatchford *et al*, 1997[4]	8.1%	6.7%	42%
NCEPOD 2015[5]	23.7%	14.4%	37.7%

Details of Guideline

1. Recognition and assessment of AUGIB

1.1 Presentation

Acute upper gastrointestinal bleeding (AUGIB) should be suspected in patients presenting with:

- **Haematemesis (blood in vomit)**
  - Bright red blood – implies active haemorrhage
  - Coffee ground vomitus – altered/ partially digested blood (if associated with falling Hb/ raise serum urea)
- **Melaena (black tarry stool)** - digested blood in stool
- **Haematochezia (bright red rectal bleeding)**
  - Usually arises from the lower GI tract – refer/ assess by on call surgical team
  - If haemodynamic compromise and/or raised serum urea: creatinine ratio – consider AUGIB

1.1.1 Clinical assessment

History

- Haematemesis, melaena, (haematochezia)
- History of weight loss
- Past medical history: chronic liver disease, previous AUGIB, peptic ulcer disease
- Medications: NSAIDs, anticoagulants, antiplatelets

- Family history: coagulopathy
- Social history: excess alcohol consumption
- Time of last meal consumed

Clinical examination

- Evidence of shock (pulse, blood pressure, postural blood pressure) – see table 2
- Anaemia
- Stigmata of liver disease, jaundice, ascites
- Features of bleeding disorders (petechiae)
- Buccal or facial telangiectasia
- **Digital rectal examination - should be performed in all patients with suspected AUGIB**

Table 2: Classification of hypovolemic shock[7]

	Class I	Class II	Class III	Class IV
Blood loss, volume (ml)	<750	750-1500	1500-2000	>2000
Blood loss (% of circulating blood)	0-15	15-30	30-40	>40
Systolic BP	No change	Normal	Reduced	Very reduced
Diastolic BP	No change	Raised	Reduced	Very reduced/ unrecordable
Pulse (bpm)	Slightly tachycardia	100-120	120 (thready)	>120 (very thready)
Respiratory rate	Normal	Normal	Raised (>20/min)	Raised (20/min)
Mental state	Alert, thirsty	Anxious or aggressive	Anxious, aggressive or drowsy	Drowsy, confused or unconscious

2. Initial management

1. ABCDE approach
2. Secure venous access: minimum of 2 green (18G) venflons
3. Early fluid resuscitation (crystalloid or blood) aiming for systolic BP >100mmHg
4. Urgent bloods: FBC, U&Es, LFTs, clotting, group and save/ cross match
5. Venous gas for rapid Hb estimate

Early critical care involvement is recommended in unstable patients

- Airway compromise, hypoxia (requiring >4L/min via nasal cannulae)
- Persistent haemodynamic instability
- Reduced consciousness (e.g. patients with hepatic encephalopathy)

1.2 Acute upper gastrointestinal bleeding bundle

The UK acute upper GI bleeding bundle (appendix A) is a cross society one page *aide memoire* for the initial 24 hours management of AUGIB. It has been developed by the British Society of Gastroenterology, in conjunction with the Society of Acute Medicine (SAM) and the Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland (AUGIS). **This should be used for all patients with suspect AUGIB.**

2.1.1 Major haemorrhage protocol

In severe uncontrolled haemorrhage or patients in keeping of severe hypovolemic shock class IV (see table 2) – activate the Major haemorrhage protocol (MHP, appendix B) by calling 2222:

- Inform switchboard of major Haemorrhage, location and contact number
- The switchboard will activate bleeps in the MHP team (blood bank, porters, anaesthetist, theatre bleep, senior nurse and medical registrar)
- The Laboratory will issue major haemorrhage pack 1, consisting of:
  - 4 units of red cells
  - 4 units of Octoplas (or FFP) will be defrosted and issued
  - Clinical area to notify lab to request MHP 2 if required

Full major haemorrhage protocol can be found at:
www.treatmentpathways.worcsacute.nhs.uk/EasysiteWeb/getresource.axd?AssetID=153852&servicetype=Attachment

3. Ongoing management

- Check blood glucose
- Monitor hourly urine output
- 12 lead ECG
- For the first hour, observations repeated at 15 minute in all patients
- Keep nil by mouth

- Transfusion – **avoid over transfusion which increases re-bleeding and mortality risk[8]**
  - In haemodynamically stable patients – transfuse if Hb Hb<70g/L (target 80-100g/L)
  - If severe cardiovascular disease – transfuse if Hb <80g/L
- **Do not routinely give Tranexamic acid iv as no evidence of mortality reduction and may increase risk of venous thromboembolic events in patients with AUGIB[9].**

- **For suspected variceal bleeds**
  - **Terlipressin IV (2mg bolus, then 1-2mg IV QDS for up to 5 days) -** acts as a vasopressor to increase systemic vascular resistance, reduce cardiac output and reduces portal hypertension. Use with caution in patients with:
    - Severe peripheral vascular disease
    - Ischaemic heart disease
    - Severe hyponatraemia
    - Prolonged QTc interval on ECG
  - **Intravenous antibiotics** (Refer to MICROGUIDE for up to date guidance)
    - Piperacillin with tazobactam (Tazocin) 4.5g IV TDS
    - If NON-SEVERE penicillin allergy Cefuroxime 1.5g IV TDS plus Metronidazole 500mg IV TDS
    - If SEVERE penicillin allergy Ciprofloxacin 400mg IV BD plus Metronidazole 500mg IV TDS

- **Use the BSG cirrhosis care bundle (appendix C) for patients with established cirrhosis**
  - The care bundle form pre-filled with patient details can be generated on CLIP by searching 'cirrhosis' in the name box or 'WR5109' in the code box

1.3 Correct clotting abnormalities

Coagulopathy and active bleeding	Management
Thrombocytopenia (platelets <50x10^9/L)	Platelet transfusion[10]
Warfarin*	IV prothrombin complex (e.g. Octaplex)[10]
NOACs/DOACs (e.g. Rivaroxaban, Dabigatran, Apixaban, Edoxaban)*	Contact the on-call Haematologist for advice
Dual antiplatelet therapy for coronary stents	Discussed with on call gastroenterologist/ cardiologist

*Patients at high risk of thrombosis e.g. recent major PE, metallic mitral heart valve – require urgent discussion with the on call haematologist

3.1.1 Risk assessment

Following resuscitation and initial management, patients should be assessed for severity of AUGIB. Commonly used assessment score includes Glasgow Blatchford Score (GBS) (table 3) and the Rockall score (table 4). GBS predicts likelihood of needing intervention (blood transfusion and/or endotherapy) which in patients scoring ≥6 has a 50% risk of requiring intervention. Rockall score predicts mortality risk which can be calculated pre-OGD (maximum score of 7) and/or post-OGD (maximum score of 11). Use the index parameters prior to fluid resuscitation e.g. using first paramedic observations as aggressive resuscitation may mask severity of AUGIB.

Table 3: Glasgow-Blatchford score[4]

Admission parameter		Score value
Urea (mg/dL)	≥6.5 to <8.0	2
	≥8.0 to <10.0	3
	≥10.0 to <25.0	4
	≥25.0	6
Haemoglobin (g/dL) – Male	≥12.0 to <13.0	1
	≥10.0 to <12.0	3
	<10.0	6
Haemoglobin (g/dL) – Female	≥10.0 to <12.0	1
	<10.0	6
Systolic BP (mmHg)	100 to 109	1
	90-99	2
	<90	3
Other parameters	Pulse >100 bpm	1
	Melaena at presentation	1
	Syncope	2
	Hepatic disease	2
	Cardiac failure	2

Table 4: Rockall score – pre-endoscopy[3]

Variable	Score			
	0	1	2	3
Age	<60 years	60-79 years	≥80 years	
Shock	No shock: Systolic BP ≥100mmHg, pulse <100 bpm	Tachycardia: Systolic BP ≥100mmHg, pulse ≥100 bpm	Hypotension: Systolic BP <100mmHg	
Comorbidity	No major comorbidity		Cardiac failure, ischaemic heart disease, any major comorbidity	Renal failure, liver failure, disseminated malignancy

Pre-endoscopy Rockall score	Mortality risk (%)
0	0.2
1	2.4
2	5.6
3	11.0
4	24.6
5	39.6
6	48.9
7	50.0

4. Referring for OGD

- **All patients with AUGIB should be urgently reviewed by a senior decision maker (ST3 or above) before requesting OGD**
- All patients with AUGIB should receive OGD within 24 hours of admission or presentation (except in low risk patients)[10]
- Offer OGD to unstable patients with severe AUGIB immediately after resuscitation[10]

Practical considerations

- It is essential OGD referral is made in a timely manner following initial management
- Ensure the patient is kept nil by mouth (minimum 6 hours prior to OGD to reduce risk of aspiration and ensure adequate endoscopic views)
- **Patients must be admitted to a hospital ward and as they cannot 'back track' to ED post OGD**
- **High risk patients who are haemodynamic unstable may need to have their OGD performed in CEPOD theatre with anaesthetic support (either clinical decision by the on-call Gastroenterologist and/or the patient has not be admitted/ allocated a bed)**
    - In this scenario, the admitting doctor will need to liaise with the on call anaesthetic/ critical care team and the CEPOD theatre coordinator
    - Bearing in mind during out of hours, the endoscopy team often takes between 30-60 minutes to return to the hospital and set up equipment before OGD can take place
    - The endoscopist will recommend the appropriate destination ward following OGD, if no bed is available then patient to be monitored in theatre recovery by theatre staff while waiting for bed
- Unstable patients should be managed in critical care.

- Stable patients should eventually be managed on Gastroenterology ward (Aconbury 4)
- If a patient is suitable for ward transfer, but has not undergone OGD, patients can be transferred provided that: PTWR has taken place, there is a clear plan in place regarding the patient's OGD and NBM status

<table>
<tr><th></th><th>Worcestershire Royal Hospital</th><th>Alexandra Hospital Redditch</th></tr>
<tr><td>Low risk patients:
GBS 0-1</td><td colspan="2">Consider early discharge after observation
Ensure PPI is prescribed
Consider urgent outpatient OGD with appropriate safety netting – submit completed OGD request form to endoscopy booking office</td></tr>
<tr><td rowspan="2">Medium risk patients:
GBS 2-11
Haemodynamic stable following fluid/ blood resuscitation
No history of varices or suspected liver cirrhosis</td><td>Mon-Fri (08:00-17:00)
Submit completed OGD request form to nurse in charge in endoscopy unit</td><td>Mon-Fri (08:00-17:00)
Submit completed OGD request form to nurse in charge in endoscopy unit if OGD can be done on the same day
If no lists or OGD cannot be done on the same day – contact WRH endoscopy unit on x39490 or x30279 for further advice</td></tr>
<tr><td colspan="2">Fri 17:00 to Mon 09:00 and Bank holidays
Contact on call Gastroenterologist via switchboard (must be ST3+ between 23:00-08:00 if urgent endoscopy is needed between these hours – see below)</td></tr>
<tr><td>High risk patients:
Persistent haemodynamic instability despite fluid/blood resuscitation
Clinical deterioration following fluid/ blood resuscitation</td><td colspan="2">Contact on call Gastroenterologist via switchboard (must be ST3 or above between 23:00-08:00)
Consider early critical care involvement
Activate major haemorrhage protocol if appropriate</td></tr>
</table>

5. Post OGD management

The OGD report should be reviewed by the medical and nursing team as the endoscopist usually provides care instructions and further management plans

- **All patients with Forrest 1 or 2 lesion (see table below) should have a clear re-bleeding plan documented on the OGD report**
- **Surgical SpR should also be informed for patients with Forrest 1 or 2a lesions post OGD, as these patients are at highest risk of rebleeding**
- **All patients on antithrombotic therapy should also have an antithrombotic plan**

If these are unclear, seek clarification from the endoscopist who had performed the procedure or the on call Gastroenterologist

Forrest classification	Endoscopic appearance	Rebleeding risk
1. Active bleeding	a. Spurting haemorrhage b. Oozing haemorrhage	60-100% 50%
2. Signs of recent bleeding	a. Non-bleeding visible vessel b. Adherent clot on lesion c. Haematin covered flat spot	40-50% 20-30% 7-10%
3. No signs of recent bleeding	Clean base ulcer	3-5%

1.4 Non-variceal bleed and haemostasis following endotherapy

- Start on intravenous omeprazole infusion – give omeprazole 80mg IV stat, then infuse at 8mg/hr for 72 hours (unlicensed use).
- Should have ongoing management in an acute/specialist area (Aconbury 4, ITU, MAU, MSSU) unless other competing healthcare needs
- Monitor Hb and transfuse if needed (see section 4)
- Check stool H *pylori* antigen (if CLO test not done during endoscopy)
- **Following definitive endotherapy – restart aspirin asap in patient with cardiac history as they are at increased cardiovascular risk post AUGIB**
    - Definitive endotherapy = adrenaline injection + another modality (mechanical, thermal etc)
    - If only adrenaline applied and/or haemospray use – do not restart aspirin unless directed by the endoscopist
- Do not restart other antiplatelets/ anticoagulation immediately – usually between 48 hours to 7 days post endoscopy depending on the lesion identified
    - In patients with recent PCI (<12 months) or metallic heart valve – discussed with endoscopist and on call cardiologist for further advice

5.1.1 Variceal bleed and haemostasis following endotherapy

- Continue with intravenous terlipressin 2mg QDS for 3 days
- Continue with intravenous antibiotics for 3 days
- Should have ongoing management in a specialist area (Aconbury 4 or ITU) unless other competing healthcare needs
- Monitor Hb and transfuse if needed (see section 4)

5.1.2 ReSPECT form

AUGIB patients have a relatively high mortality risk, particular if developed during inpatient stay – consider completing a RESPECT form at the earliest opportunity to guide escalation plan and treatment limitation.

6. Re-bleeding management

Recurrent bleeding is defined as bleeding following initial successful endoscopic haemostasis:

- Recurrent hematemesis or bloody nasogastric aspirate after index OGD
- Recurrent tachycardia or hypotension after achieving hemodynamic stability
- Melaena and/or haematochezia following normalisation of stool colour
- Reduction in haemoglobin ≥ 20g/L after a stable haemoglobin value has been attained

The initial management for rebleeding is the same as initial AUGIB presentation (refer to section 3). Usually repeating OGD within 48 hours of index procedure is futile and other management options considered.

1.5 Non-variceal bleed

Consider urgent interventional radiology for embolisation as first line rebleed management and/ or involve the surgical on call team

Scenario	Action
Unable to achieve haemostasis at index OGD	Refer to IR (Mon – Fri 09:00-17:00) or surgical on call team
Suboptimal endotherapy (i.e. only adrenaline injected or haemospray used) and rebleed <48 hours	
Haemostasis post endotherapy but rebleed <48 hrs	
Haemostasis post endotherapy but rebleed >48 hrs	Refer to the index OGD report, if clearly states repeat endoscopy is futile then refer to IR or surgical on call team as above
No active bleeding but overlying clot at index OGD	Consider repeat OGD in 24 hours

Interventional radiology – liaise with IR team, can be found in IR suite, X-ray level 2. Note this currently an in-hour service only (Mon – Fri 09:00-17:00). If out of hours, to contact QEH IR on call or surgical on call team at WRH.
Surgical on call team – SpR (bleep via switch), consultant (mobile via switch)

1.5.1 Variceal bleed

- **Contact the on call endoscopist to discuss if repeat OGD would be appropriate**
- **If repeat OGD not appropriate, consider Sengstaken tube as temporary measure and contact liver unit for transjugular intrahepatic portosystemic shunts system (TIPSS)**

Monitoring

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
Adherence to this guideline will be monitored as part of the existing Endoscopy audit / JAG governance that is already in place and carried out routinely.						

References

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3. Rockall, T.A., et al., *Risk assessment after acute upper gastrointestinal haemorrhage.* Gut, 1996. **38**(3): p. 316-21.
4. Blatchford, O., W.R. Murray, and M. Blatchford, *A risk score to predict need for treatment for upper-gastrointestinal haemorrhage.* Lancet, 2000. **356**(9238): p. 1318-21.
5. NCEPOD. *Time to get control? A review of the care received by patients who had a severe gastrointestinal haemorrhage*, 2015. Available: http://www.ncepod.org.uk/2015report1/downloads/TimeToGetControlFullReport.pdf
6. Siau, K., et al., *British Society of Gastroenterology (BSG)-led multisociety consensus care bundle for the early clinical management of acute upper gastrointestinal bleeding.* Frontline Gastroenterol, 2020. **11**(4): p. 311-323.
7. Baskett, P.J., *ABC of major trauma. Management of hypovolaemic shock.* BMJ, 1990. **300**(6737): p. 1453-7.
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10. NICE. *Acute upper gastrointestinal bleeding in over 16S: management*, 2012. Available: https://www.nice.org.uk/guidance/cg141 [Accessed cited 18th July 2021].

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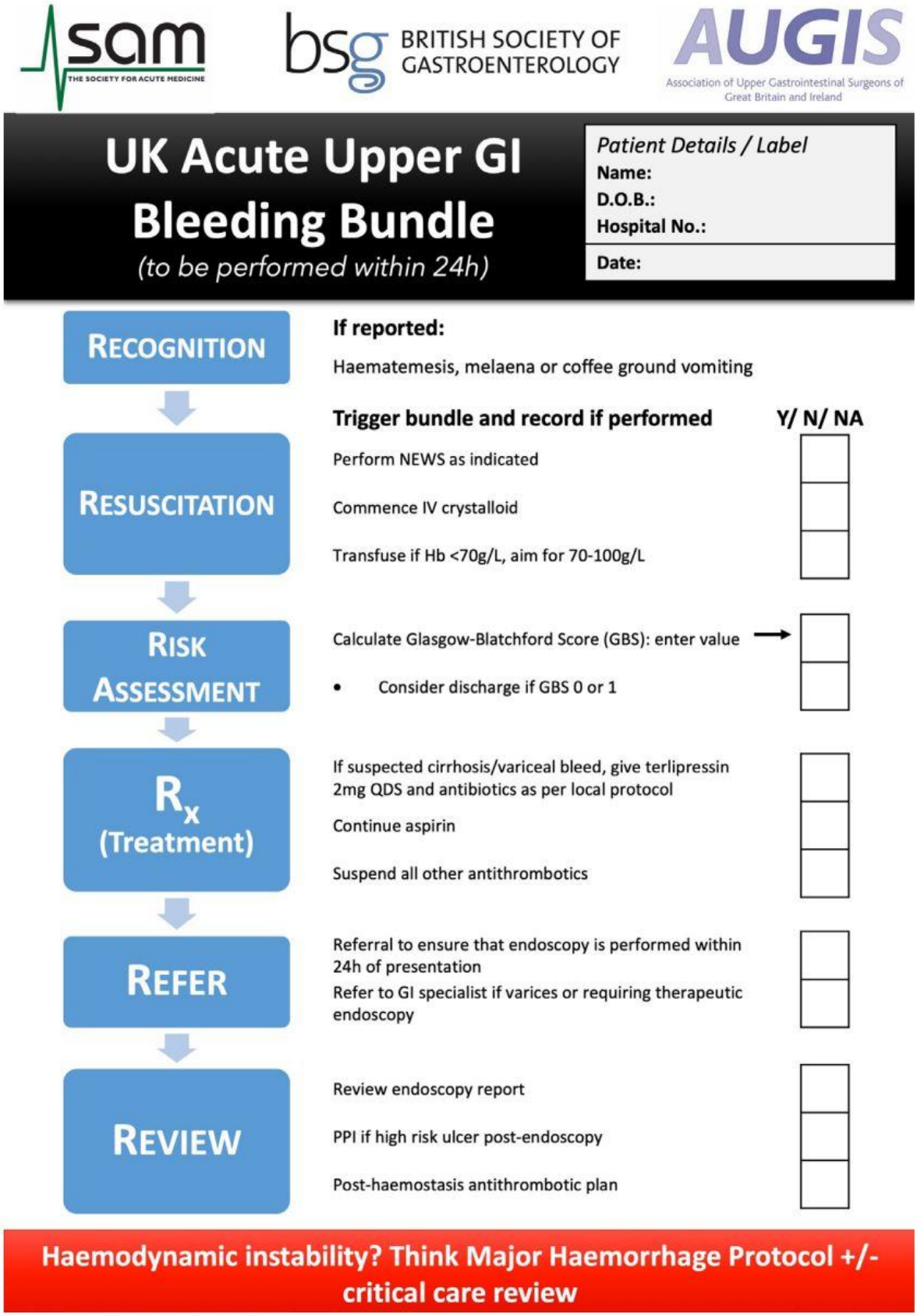
Committee
Gastroenterology Directorate
Surgical Division
SCSD Division
Specialty Medicine Divisional Management Board
Medicine Safety Committee

Appendix A: Acute upper gastrointestinal bleeding bundle



Appendix B: Major haemorrhage protocol

Blood Transfusion Pathway
WAHT-KD-001

Worcestershire Acute Hospitals NHS Trust

Adult Major Haemorrhage in Trauma Management Flowchart

MHP Activation: ☎ 2222
- Nominate roles
- Distribute action cards
- Assess patient and MOI

Call Blood Bank:
WRH 30635 OOH bleep 848
ALEX 44719 OOH bleep 0255
- Identify biomedical scientist
- Give patient details
- State urgency of XM (15 min v 45 min) if known

Check availability and location of Emergency Group O red cells:
Use O RhD neg red cells if female <50 yr/ child known RhD neg/antibodies

Rapid assessment: Pre-hospital/hospital

SUSPECT MAJOR HAEMORRHAGE: HAS TXA BEEN GIVEN PRE-HOSPITALLY? Significant MOI / severe bleeding / shock/ Poor physiological response to IV fluids/pre-hospital transfusion (RCC or plasma). Consider Blood to Scene or pre-activate hospital Major Haemorrhage Protocol

Activate Major Haemorrhage Protocol

Activate team: 222
'Major Haemorrhage, Specialty, Location'
Team collect action cards
Secure IV access & ensure ID band
Consultant involvement essential

RESUSCITATE
Airway
Breathing
Circulation

STOP THE BLEEDING

Baseline bloods
XM (x 2), FBC, PT, APTT, Fibrinogen, U+E, Ca^{2+}
ABG, lactate (and if available, TEG / ROTEM

Order Pack 1

Prevent Hypothermia
Manage shock
Minimise unnecessary use of crystalloids

Consider:
Haemorrhage control
Interventional Radiology
Early surgery

Pack 1
Red cells* **4 units**
Plasma **4 units**
(*Emergency O blood, or group specific blood). Anticipate need for platelets and cryoprecipitate

Aims for post resuscitative therapy

Hb	80-100g/dl
Platelets	> 75 x 10^9/l
PT ratio	< 1.5
APTT ratio	< 1.5
Fibrinogen	> 1.5g/l
Ca^{2+}	> 1 mmol/l
Temp	> 36°C
pH (ABG)	> 7.35

Monitor for hyperkalaemia

Cell salvage
Haemostatic component support may be required during use of intra-operative salvage of washed red cells

Reassess: Suspected continuing haemorrhage
Repeat Trauma bloods
FBC, PT, APTT, Fibrinogen, U+E, Ca^{2+}
ABG, lactate (and if available, TEG / ROTEM)

Haemostatic Drugs
Vit K and Prothrombin complex concentrate (PCC) for warfarinised patients
Other haemostatic agents and reversal of new anticoagulants: discuss with Consultant Haematologist

Anticipate low calcium
10mls 10% calcium chloride IV over 10 mins after pack 1.

Pack 2
Red Cell **4 units**
Plasma **4 units**
Platelets **1 dose (ATD)**
Give 2 pools (of 5) Cryoprecipitate
if fibrinogen <1.5g/l or 2g/l and falling
(Fibrinogen concentrate may be available – use as per trust guidelines)

STAND DOWN
- Inform lab
☎ Ext 30635/44719
- Track all blood units
- Return unused products
- Complete documentatation including audit proforma

TERMS
ABG – Arterial Blood Gas
FFP – Fresh Frozen Plasma
PT – Prothrombin Time
APTT – Activated Partial Thromboplastin Time
MHP – Massive Haemorrhage Pack
TEG/ROTEM –Thromboelastography
ATD – Adult Therapeutic Dose
NPT – Near Patient Testing
XM - Crossmatch

Goal directed therapy
Monitor patient
Adjust component support based on Pack 2

Page **10** of **12**

Appendix C: Decompensated cirrhosis care bundle

Affix Patient Label here or record

NAME: .....

NHS NO:

HOSP NO:

D.O.B: D D / M M / Y Y Y Y MALE ☐ FEMALE ☐

WARD:..... CONS:.....

Worcestershire NHS
Acute Hospitals NHS Trust

DECOMPENSATED CIRRHOSIS CARE BUNDLE - FIRST 24 HOURS

BASL British Association for the Study of the Liver

bsg BRITISH SOCIETY OF GASTROENTEROLOGY

Decompensated cirrhosis is a medical emergency with a high mortality. Effective early interventions can save lives and reduce hospital stay. This checklist should be completed for all patients admitted with decompensated cirrhosis within the first 6 hours of admission.

1.	**Investigations**		
a)	NEWS ☐ FBC ☐ U/E ☐ LFT ☐ Coag ☐ Gluc ☐ Ca/PO_4/Mg ☐		Initials: Time:
b)	Blood cultures ☐ (if pyrexia or ? sepsis) ☐ Urine Dip/ MSU ☐ CXR ☐ Request USS abdo ☐ CRP ☐		
c)	Perform ascitic tap in all patients with ascites using green needle irrespective of clotting parameters and send for ascitic PMN/WCC, culture (inoculate into blood culture bottles) and fluid albumin	Done Y N / N/A ☐	
d)	Record recent daily alcohol intake ..... Units		
2.	**Alcohol** - if the patient has a history of current excess alcohol consumption (>8 units/day Males or >6 units/day Females) N/A ☐		Initials: Time:
a)	Give IV Pabrinex (2 pairs of vials three times daily)	Y N	
b)	Consider Chlordiazepoxide (policy WHAT-A&E-031)	Y N N/A	
3.	**Infections - if sepsis or infection is suspected** N/A ☐		Initials: Time:
a)	What was the suspected source?.....		
b)	Treat with antibiotics in accordance with Trust protocol	Y N	
c)	If the ascitic neutrophils >0.25 x 10^9/L (>250/mm3)(i.e. SBP) then give:	Y N	
I)	Treat with antibiotics as per trust protocol	Y N NA	
II)	IV albumin (20% Human Albumin solution) 1.5g/kg (20g of albumin in 100ml of 20% Human Albumin Solution)	Y N NA	
4.	**Acute kidney injury and/or hyponatraemia (Na <125 mmol/L)** N/A ☐		Initials: Time:
AKI defined by RIFLE criteria	1: Increase in serum creatinine ≥ 26µmol/L within 48hrs ***or*** 2: ≥50% rise in serum creatinine over the last 7 days ***or*** 3: Urine output (UO) <0.5mls/kg/hr for more than 6 hrs based on dry weight ***or*** 4: Clinically dehydrated		
a)	Suspend all diuretics and nephrotoxic drugs	Y N NA	
b)	Fluid resuscitate with 5% Human Albumin Solution or 0.9% Sodium Chloride (250ml boluses with regular reassessment: 1-2L will correct most losses)	Y N	
c)	Initiate fluid balance chart/daily weights	Y N	
d)	Aim for MAP>80mmHg to achieve UO>0.5ml/kg/hr based on dry weight	Y N	
e)	At 6 hrs, if target not achieved or EWS worsening then consider escalation to higher level of care	Y N NA	
5.	**GI bleeding** – if the patient has evidence of GI bleeding and varices are suspected N/A ☐		Initials: Time:
a)	Fluid resuscitate according to BP, pulse and venous pressure	Y N	
b)	Prescribe IV terlipressin 2mg four times daily (caution if known ischaemic heart disease or peripheral vascular disease; perform ECG in >65yrs)	Y N NA	
c)	Prescribe prophylactic antibiotics as per Trust protocol for 7 days (Tazocin 4.5g tds, 2nd line (non type 1 allergy to penicillin): ceftriaxone 1g OD IV, 3rd line (type 1 allergy to penicillin): ciprofloxacin 400 mg BD plus metronidazole 500 mg TDS IV)	Y N	
d)	If prothrombin time (PT) prolonged give IV vitamin K 10mg stat	Y N NA	
e)	If PT> 20 seconds (or INR >2.0) – give FFP (2-4 units)	Y N NA	
f)	If platelets <50 – give IV platelets	Y N NA	

PF WR5109 Decompensated cirrhosis Care Bundle - First 24 Hours Version 1 Page 1 of 2

Affix Patient Label here or record

NAME: .....

NHS NO: | | | | | | | | | | |

HOSP NO: | | | | | | | | | | |

D.O.B: D D / M M / Y Y Y Y MALE ☐ FEMALE ☐

g) Transfuse blood if Hb <7.0g/L or massive bleeding (aim for Hb >8g/L). Consider Major Haemorrhage policy (WHAT-HAE-008) if appropriate	Y N NA	
h) Early endoscopy **after** resuscitation (ideally within 12 hours)	Y N	
6. Encephalopathy	N/A ☐	
a) Look for precipitant (GI bleed, constipation, dehydration, sepsis etc.)	Y N	Initials:
b) Encephalopathy – lactulose 20-30ml QDS or phosphate enema (aiming for 2 soft stools/day)	Y N	Time:
c) If in clinical doubt in a confused patient request CT head to exclude subdural haematoma	Y N N/A	
7. Other		
a) Venous thromboembolism prophylaxis – prescribe prophylactic LMWH (patients with liver disease are at a high risk of thromboembolism even with a prolonged prothrombin time; withhold if patient is actively bleeding or platelets <50)	Y N NA	Initials: Time:
b) GI/Liver review at earliest opportunity (ideally within 24 hrs)	☐	

Signature: ..... Printed Name: .....

Designation: ..... Date: .....

Decompensated Cirrhosis Care Bundle - First 24 Hours

The recent NCEPOD report 2013 on alcohol related liver disease highlighted that the management of some patients admitted with decompensated cirrhosis in the UK was suboptimal. Admission with decompensated cirrhosis is a common medical presentation and carries a high mortality (10-20% in hospital mortality). Early intervention with evidence-based treatments for patients with the complications of cirrhosis can save lives. This checklist aims to provide a guide to help ensure that the necessary early investigations are completed in a timely manner and appropriate treatments are given at the earliest opportunity.

- Decompensated cirrhosis is defined as a patient with cirrhosis who presents with an acute deterioration in liver function that can manifest with the following symptoms:
  - Jaundice
  - Increasing ascites
  - Hepatic encephalopathy
  - Renal impairment
  - GI bleeding
  - Signs of sepsis/hypovolaemia
- Frequently there is a precipitant that leads to the decompensation of cirrhosis. Common causes are:
  - GI bleeding (variceal and non-variceal)
  - Infection/sepsis (spontaneous bacterial peritonitis, urine, chest, cholangitis etc)
  - Alcoholic hepatitis
  - Acute portal vein thrombosis
  - Development of hepatocellular carcinoma
  - Drugs (Alcohol, opiates, NSAIDs etc)
  - Ischaemic liver injury (sepsis or hypotension)
  - Dehydration
  - Constipation

When assessing patients who present with decompensated cirrhosis please look for the precipitating causes and treat accordingly. The checklist shown overleaf gives a guide on the necessary investigations and early management of these patients admitted with decompensated cirrhosis and should be completed on all patients who present with this condition. The checklist is designed to optimize a patient's management in the first 24 hours when specialist liver/ gastro input might not be available. Please arrange for a review of the patient by the gastro/liver team at the earliest opportunity. Escalation of care to higher level should be considered in patients not responding to treatment when reviewed after 6 hours, particularly in those with first presentation and those with good underlying performance status prior to the recent illness.

Supporting Document 1 - Equality Impact Assessment Tool

NHS Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	✓	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	Dr Danny Cheung

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Specialty Medicine Governance Team		wah-tr.medicinegovernance@nhs.net
Date assessment completed	29/12/2021		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title:** Acute Upper Gastrointestinal Bleed (AUGIB) Guideline			
What is the aim, purpose and/or intended outcomes of this Activity?	To provide consensus guidance for the early clinical management of acute upper gastrointestinal bleeding.			
Who will be affected by the development & implementation of this activity?	☑	Service User	☑	Staff
	☑	Patient	❑	Communities
	☑	Carers	❑	Other _____
	❑	Visitors	❑	
Is this:	☑ Review of an existing activity (new guideline to cover existing activity) ❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			

What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	National guidance and studies. See References – page 14.
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Numerous staff from a variety of departments have been involved in creating this guideline. See Contribution List – page 15.
Summary of relevant findings	

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age	✓			Targeted risk assessment of patients based on sex for improved ongoing management of AUGIB (pages 8-9)
Disability		✓		
Gender Reassignment		✓		
Marriage & Civil Partnerships		✓		
Pregnancy & Maternity				
Race including Traveling Communities		✓		
Religion & Belief		✓		
Sex	✓			Targeted risk assessment of patients based on sex for improved ongoing management of AUGIB (pages 8-9)
Sexual Orientation		✓		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		✓		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		✓		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
		.		
How will you monitor these actions?	**N/A**			
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**N/A**			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Completed by Specialty Medicine Governance on behalf of the document author
Date signed	29/12/2021
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.