Out of Hours Upper GI Haemorrhage

This short paper describes the current pathways within the Health Board for the management of out of hours’ emergency upper gastrointestinal bleeding (UGIB), across the 3 acute BCU sites

What’s the Issue
Currently there isn’t a pan BCU out of hours’ emergency endoscopy service. Instead, if a patient arrives requiring such a service out of hours, a local arrangement takes effect on each site. These arrangements are different and based on historical local arrangements.

Ysbyty Bangor: nursing rota in place compliant with A4C, endoscopist rota not formalised within contracts
Ysbyty Maelor Wrecsam: arrangement with the surgical team and main theatres
Ysbyty Glan Clwyd: no formal rota

What’s the Analysis
There are a relatively low number of cases per annum (each hospital will receive approximately 250 cases per year of UGIB). One of the main barriers to providing a North Wales services has been the relative lack of endoscopists available for such work (should funding be available). The Health Board has around half the number of gastroenterologists per population recommended by the British Society of Gastroenterology in 2004.

What’s the Risk
Upper gastrointestinal bleeding (UGIB) is a common cause of hospital admission and carries a 10% mortality rate (NICE Guideline 141, Acute upper gastrointestinal bleeding: management; June 2012). The BSG in 2003 found that one in ten patients who present with an upper gastrointestinal bleed die as a result of the bleed, and early endoscopy for this type of patient can be crucial. Most English hospitals have now entered into clinical networks with other local hospitals or developed their own service, but to date, only two hospitals in Wales provide an out of hours’ service – University Hospital Wales and University Hospital Llandough.

A large percentage of the patients who present with upper GI bleeding are elderly and have other significant medical co-morbidities, and the high mortality rate reflects this. Moreover, an increasing number of patients are taking aspirin and or other irritant medication and anticoagulants; there is a rising incidence of gastro-oesophageal reflux disease and increasing prevalence of obesity and liver disease, all of which are proven to intensify the risk of upper GI bleeds.

The majority of patients admitted to hospital following a bleed should have an endoscopy safely on an early elective list (ideally the morning after admission); only a minority of cases need emergency out of hours endoscopy which should be available 24 hours day, 7 days a week (NICE 2012). The number of BCUHB patients we would expect to be admitted or assessed with
an upper GI bleed will be 700 per year, of these 59% will be admitted out-of-hours (ie not Mon-Fri 8am-5pm), and 20% present between midnight and 8am. Many of these can be stabilised and endoscoped on the next available endoscopy list – this should be done within 24hrs of presentation. The small number of extremely high risk, unstable patients who present with an upper GI bleed should have access to a formal out of hours rota.

What should be done to mitigate those risks
The Endoscopy Service and the Primary Care, Community and Specialist Medicine Clinical Programme Group has reviewed the options and is proposing a model that works on the basis of local services each providing care for local patients during normal working hours with ‘networked services’ for care out of hours.

What are the options
The gold standard for an upper GI bleed on call service would be a consultant endoscopist (usually a gastroenterologist) available out of hours per site, with two endoscopy-trained nursing assistants to open the endoscopy unit and provide safe staffing. This would, however, be the most expensive option, in both manpower and impact on acute medical rotas, if all three District General hospital sites were to have their own OoHs Bleeding Service. Such an arrangement would be hugely disruptive to existing on-call rotas, and this may not be a viable proposal given current shortfalls in staffing. Consultant gastroenterologists would also be able to provide a full diagnostic and therapeutic range of skills including care of variceal bleeding.

Other options, none of which are completely risk-free, include:

**Option 1**: Single Centre: endoscopist travels. The endoscopist would be mobile and would travel to the patient. This option would ideally require 10 endoscopists to run the service, but would require either to be released from general medical on-call rota, or perhaps undertake a reduction in general medical commitment in return for this provision.

**Option 2**: Single Centre: patients transfer. This option involves moving the patient to a single centre that is the designated unit for GI bleeding for that day/week/month. This approach has been held up by the British Society of Gastroenterologists (BSG) as the best solution, with the caveat that it works best when distances/times to transfer are short. This option may be more attractive in that only the patient will transfer (as opposed to endoscopist and nurse).

**Option 3**: Three OoHs UGIB services. This option would require the following at each site:
- **Ysbyty Bangor**: consultant endoscopist rota to be formalised within contracts. Nursing rota all ready in place and funded
- **Ysbyty Glan Clwyd**: consultant endoscopist rota to be formalised within contracts and on call endoscopy nursing team to be established and funded.
- **Ysbyty Maelor Wrecsam**: either maintain the existing arrangement with the surgical team and main theatres or develop full endoscopy nursing on call rota and formal endoscopist rota as YG and YGC

**Option 4**: Seven Day Working. Permanently open the units on Saturday and Sunday mornings and bank holidays for a general symptomatic list. Patients admitted the previous evening with GI bleeds could have their procedure undertaken on this list. This option would still require an
agreed procedure to support the significant out of hours bleed and would be likely to be option 2. The additional advantage with this option would be an increase in routine endoscopy sessions at weekends to support the rising demand in both symptomatic and asymptomatic pathways.

**Option 5:** Two Bleeding Centres only (possible impact of any decision re acute surgical services at two sites only). No bleeding service for significant cases OoHs would be provided at Ysbyty Glan Clwyd and those cases requiring emergency endoscopy within 4 hours would be transferred to either Wrexham Maelor or Ysbyty Gwynedd. This option would only require the formalisation of the Ysbyty Gwynedd endoscopists rota to support this model (as above). The Emergency Quarter at YGC would provide initial assessment, stabilisation and inter-hospital transfer to either Wrexham Maelor or Ysbyty Gwynedd for consultant delivered surgical intervention. Robust transfer pathways with WAST will therefore need to be in place.

**What are the recommendations to the Board**
Support the national drivers such as the NICE Guidelines for Upper GI bleeding and the RCP Toolkit that is endorsed by a number of professional bodies, giving us the rationale for local development of a robust and sustainable service, supporting recent SIRs across BCUHB that demonstrate an urgent need for a pan North Wales UGI bleed rota with clear governance arrangements and consistent evaluation and monitoring.

The clinical pathway for the management of all upper GI bleeds needs to be agreed for any site providing the out of hours service as variceal bleeding expertise will be a requirement in the portfolio of all staff undertaking the UGIB OoHs service whether medical or surgical endoscopists.

Currently at Ysbyty Glan Clwyd Hospital the pathway in appendix one is followed. At Ysbyty Gwnnedd the local agreement remains extant but needs formalised to ensure consistency.

**Option 5 is recommended to the Health Board for further consideration and agreement as an interim solution pending any reconfiguration of services that might impact on this service.**

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Current Service provision

Ysbyty Gwynedd
The Endoscopy Unit nursing staff provide a formal Agenda for change compliant out of hours on call rota for emergency patients who present with upper GI bleeds. If an emergency procedure is deemed to be required by the on call medical / surgical team, the nurse on call is contacted by the hospital switchboard.

Subsequently the nurse contacts one of the gastroenterologists, who agrees the response necessary, there is no formal on call arrangement with the Consultant Gastroenterologists at Ysbyty Gwynedd, however, there is a local agreement from the gastroenterologists to provide support if they are available to respond. If it is established that an endoscopy is required the nurse discusses preparation of the patient with the nurse in charge of the patient. A procedure room is then set up in the Endoscopy Unit. Once the procedure is completed the patient is returned to the relevant ward for recovery. To note, this is a nurse rota only as there is no formal consultant out of hours rota.

The nurse rota is fully established with appropriate Agenda for Change bandings and on call payments already being received by staff to support an out of hours upper gastrointestinal bleed service for Ysbyty Gwynedd.

Ysbyty Glan Clwyd
There is no official out of hours’ service in Glan Clwyd. There is a bleeding service which runs between 8am and 5pm, Monday to Friday. During these periods one of the Endoscopy Nurses attends the Acute Medical Unit (AMU) at 8am and will list all emergency patients who require an endoscopy. They advise preparation of the patient and then alert the Endoscopy Unit. The patient then undergoes the endoscopy if the appropriate criterion for endoscopy is met. However, no such service exists out of hours and on those occasions any emergencies are dealt with by the general surgeon on call and the procedure is carried out in theatres. Occasionally a gastroenterologist will attend main theatres if available, and especially if the surgeon on call is an inexperienced endoscopist, but this not rostered. In the 2007 audit only half the patients having endoscopy in YGC for UGIB had this done within 24 hrs of presentation.

Ysbyty Maelor
Upper GI bleeds in YWM come to the General Surgeons. There is a close working relationship with the gastroenterologists, and many endoscopies are undertaken in the endoscopy unit (in normal working hours), particularly for known or suspected variceal bleeding patients. Where there is no capacity in the endoscopy unit for an emergency endoscopy during working hours, they are performed by the on call surgical team in theatre.

All out of hours emergency endoscopy are done by the on call General Surgeons – with liaison as appropriate to other specialties as necessary / available (such as interventional radiology). This has been the case for many years and is believed to have produced satisfactory and safe outcomes. Some of the surgeons undertaking this work are not working in endoscopy as part of their regular day-to-day work however, and the number of procedures are small so that sufficient procedures are not being done to maintain individual competence (Currently numbers of
procedures are not mandated but JAG – the Joint Advisory Group for endoscopy is looking at theses and is likely to make recommendations about this in the near future).

The surgical team in YWM has agreed to consider transfers of patients with major GI bleeding if this cannot be dealt with in YGC or YG, but the numbers transferred thus far are believed to be small. This arrangement is, of course, not without considerable risk.

**Primary Community and Specialist Medicine CPG (Central)**

**Management of Upper GI Bleeding Out of Hours**

1. Within 4 hours – usually shock/ongoing severe bleeding that does not respond to resuscitation with iv fluids and transfusion (and iv terlipressin if appropriate)
2. Most surgeons on-call at Glan Clwyd are not able to undertake Upper GI Endoscopy and variceal management
3. There is no formal out of hours GI Bleeding Rota
4. Support to the out of hours upper GI Bleed service is provided by the Surgical on-call team at Wrexham