

South West Clinical Senate

Emergency General Surgery – A review of Acute Trusts in the South West

Final Report – All Trusts

February 2017



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1. Foreword

The health and care system is complex, but we know good care depends at least as much on how that care is organised as on individual clinical interactions. By definition, half of all care has to be above the average, and half has to be below. But achievement is more nuanced than one polarised choice – particular innovations might have driven certain beneficial behaviours in some sites but not others, and the take up of improvements and learning can be variable. The size, complexity of Trust, the change management resource of organisations, leadership and many other factors impact on performance in any one particular speciality. The Senate rejects a pass / fail mentality (and results in this document should not be interpreted in this way) but is motivated by a desire to raise the average healthcare performance across the South West of England and therefore aims to support the sharing and adoption of good practice universally.

If the NHS is to be a learning, continually-improving system then we must examine elements of its care via quantitative and qualitative means. Recommendations can be problematic and risk over-simplicity if they are not fully cognisant of related interdependencies. Whilst this is as true in Emergency General Surgery as other areas, there is sufficient distinctiveness of this service that, with judgment, lessons can reasonably be learned and recommendations disseminated more widely. Systems should be determined for best clinical care not to maximise financial flows. The work done here can act as an exemplar and template for examining other clinical areas.

I have been impressed by the cooperation, honesty and openness of participating hospital teams, which I think makes the outputs genuinely valuable. Thank you for that. Even as the review has progressed, it became apparent where the greatest gains can be made and the interrogation and discussion of best practice inherent in site visits has already resulted in system developments and advances in several of the participating hospitals and plans to do so in others.

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This work, commissioned by the Senate in 2015, is not targeted towards, nor should it be used, as evidence towards external reconfiguration of EGS services. It should primarily be used toward configuring EGS more efficiently within individual Trusts and learning from each other to drive up EGS performance standards.

The high quality review outcomes communicated in this document have been the result of a great deal of hard work by Trusts and the Review Team. I am indebted to Mr Paul Eyers, Lead Surgeon and the project steering group for their thoughtful professional leadership of this review.



Dr Phil Yates Chairman, South West Clinical Senate February 2017

2. Acknowledgements

We would like to extend our thanks to all of the Trusts in the South West which allowed us to visit and understand their Emergency General Surgery Services. Special thanks go to the Trust leads and supporting teams for the hard work in preparation for these visits.

We would also like to thank all of the individuals (appendix 4-5) who volunteered their time to work as part of a review team, and all members of the Steering group for overseeing the work and providing guidance throughout the review.

Finally, thanks to the London Health Audit programme team for advice and guidance on the set-up of the review.

3. Glossary

A&E	Accident and Emergency		
Acute Care	Short term treatment, usually in a hospital.		
	A patient focused service where some conditions may be		
Ambulatory Care	treated without the need for an overnight stay in hospital.		
ВСН	Bristol Children's Hospital		
CEPOD Theatre	Emergency Theatre		
CQUIN	Commissioning for Quality and Innovation: A commissioning framework developed to reward improvement work.		
СТ	Computerised Tomography (Scan)		
DH	Department of Health		
ED	Emergency Department		
EGS	Emergency General Surgery		
Emergency Surgery	Surgery that is not planned and which is needed for urgent conditions. This includes surgery for appendicitis, perforated or obstructed bowel and gallbladder infections. It is also known as non-elective surgery.		
EWS	Early Warning System: A process of recording vital signs in order to quickly determine the degree of illness of a patient.		
F&F	Friends and Family. Sometimes used to refer to the Friends and Family test which collects patient experience feedback.		
Gastro-Intestinal. made up of the GI tract - a long tube extending from your oral cavity where food your body, via the oesophagus, stomach, small in large intestine, rectum, and finally to the anus w undigested food is expelled.			
GP	General Practitioner		
Critical Care	To include Intensive Care Unit (ICU) and High Dependency Unit (HDU). A unit containing beds providing intensive monitoring & treatment to very sick patients.		
Interventional radiology	A method of using minimally invasive, image-guided procedures, to diagnose and treat specific conditions		
Laparotomy	A surgical procedure involving a large incision through the abdominal wall to gain access into the abdominal cavity.		
LOS	Length of Stay: the duration of a single episode of hospitalization.		

NELA	National Emergency Laparotomy Audit NELA: An audit which looks at structure, process and outcome measures for the quality of care received by patients undergoing Emergency laparotomy.		
NEWS	A National Early Warning System. See EWS		
Non-elective surgery	See Emergency Surgery		
Obstetric	The care associated with giving birth.		
Perioperative Care	Perioperative care refers to the period before operation, during operation, and after operation.		
P-Possum An algorithm used to predict outcomes in surg patients, taking into account variables in the c			
RCS	Royal College of Surgeons		
RTT	Referral to Treatment. Often used in conjunction with National waiting time targets.		
SAU	Surgical Assessment Unit. A seated or bedded unit, allowing rapid diagnosis and, where appropriate, early access to operating theatres.		
SLA	Service Line Agreement.		
ST3/SpR	Speciality trainee, previously Speciality Registrar.		
SWCS	South West Clinical Senate		
Т&О	Trauma and Orthopaedics		
US	Ultrasound Scan		

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4. Executive Summary

As a service, Emergency General Surgery (EGS) represents the largest number of surgical admissions in UK hospitals¹ and accounts for a high number of complications, resulting in long periods of care and a high number of fatalities. It is nationally recognised that there is considerable variability in outcomes between Trusts.

The Clinical Senate held a deliberative session at the end of 2014 considering how EGS services should be configured in the South West, based on available evidence and guidance, so as to provide comprehensive, high quality emergency care that is sustainable for the future. One of the emergent recommendations² proposed that a review should be conducted of all current providers of emergency surgery in the South West to assess compliance with existing standards.

The Emergency General Surgery review, was subsequently set up to assess compliance with 22 specific standards (appendix 1) derived from three existing sources³. Trusts then undertook a self-assessment of compliance with these standards and provided documented evidence to support this. This was followed by a one day visit from a review team who assessed the Trust against the standards gathering further evidence from a variety of sources.

At the highest level, the review found that over half of the standards were being met by Trusts and over a quarter were partially met. There appeared to be a positive association between the number of standards met and the size of an organisation. However, if the number of partially met standards is included, this relationship disappears with almost all Trusts achieving similar numbers of met standards. The implication being that if we can improve from 'partially met' to 'met' across the South West, we can deliver a universally high quality EGS service.

Due to variations in infrastructure, description, practice and data availability, this review process was a combination of 'stocktake audit' and an information gathering activity, undertaken to develop an understanding of EGS care in the South West and guide improvements in clinical standards. To aid delivery of this we have developed

http://www.asgbi.org.uk/en/publications/consensus_statements.cfm

¹Association of Surgeons of Great Britain and Ireland. (2007) Emergency General Surgery: The future. A consensus statement.

² http://www.swsenate.org.uk/emergency-surgery-how-should-services-be-configured-in-thesouth-west/657/

³ (1) RCS (2011) Standards for Unscheduled Surgical Care, (2) London Health Audit (2012) Quality and Safety Programme (EGS) (3) NHS England (2016) 7 day standards.

six main recommendations using the existing standards, coupled with the feedback and commentary of the local clinical teams. We looked for recommendations that would support improved clinical care, safety and outcomes for EGS patients and guide future service provision/development. Furthermore, we felt these recommendations needed to be financially and logistically achievable.

The recommendations can be summarised as:

- 1. The provision of a protected Surgical Assessment Unit (SAU).
- 2. The provision of 24/7 CEPOD or Emergency Theatre.
- 3. A 'South West' standardised, rolling audit of EGS.
- 4. The appointment of an EGS lead and an Emergency Nurse lead in each Trust.
- 5. Delivery of 2 consultant led ward rounds per day of EGS patients.
- 6. Development of a fully integrated ambulatory EGS service.

It is intended that Trusts and commissioners work together to deliver these recommendations, which we believe will produce improved and equitable EGS care across the South West. Implementation of these recommendations will also provide more robust support for future commissioning decisions.

5. Background and Introduction

The spotlight on waiting times has meant an increasing focus on elective care whilst improvements to non-elective care have tended to focus on meeting the four hour A&E target. This has taken resources and made it difficult for Emergency General Surgery (EGS) to maintain the continual improvement necessary in today's environment. The majority of Trusts staff their EGS service with surgeons who already have a sub-specialisation and are involved in the EGS service via a rotational rota. This often means EGS can lack the ownership necessary to find commitment and resources in order to develop. It is nationally recognised that there is a considerable variability in outcomes between Trusts. Whilst services between Trusts will differ, there is clearly an opportunity for outcomes to be improved through sharing ways of working throughout the region. By learning from neighbouring Trusts, processes can be improved leading to an increase in quality and associated improvement in patient safety.

In 2011 a joint working group between the Royal College of Surgeons (RCS) and the Department of Health (DH) was set-up and produced a number of guidelines on perioperative care in emergency surgery⁴. This provided guidance on standards of care and key issues, which in the opinion of the specialist group, could be implemented within two years and produce an appreciable difference in outcomes. These standards of care were incorporated within the RCS guideline document, Emergency Surgery: Standards for unscheduled care⁵, which is primarily aimed at commissioners and planners & providers of emergency care. In the same year London reviewed its acute medicine and emergency services and in 2012 produced a set of commissioned quality standards in which they audited all of the acute hospitals against. The majority of these standards were already national recommendations that many hospitals were not meeting.

In September 2014 the South West Clinical Senate (SWCS) held a deliberative session on the provision of Emergency General Surgery (EGS)⁶. Following this the Commissioners developed 10 recommendations around the review and delivery of EGS in the South West. The third recommendation was a Royal College (Royal College of Surgeons of England (RCSEng) led peer review of EGS services in the 14

⁴ RCS (2011) The Higher Risk General Surgical Patient: Towards Improved Care for a Forgotten Group. DOI: https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/the-higher-risk-general-surgical-patient/

⁵ RCS (2011) Emergency Surgery: Standards for unscheduled care. DOI: https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/emergencysurgery-standards-for-unscheduled-care/

⁶ http://www.swsenate.org.uk/emergency-surgery-how-should-services-be-configured-in-the-south-west/657/

Trusts within the South West. Due to conflicting demands the RCS was unable to engage with the proposal at the time, and the South West Clinical Senate (SWCS) wanted to maintain momentum from their previous deliberative session on EGS. Consequently, the decision was made by the Senate to continue with this work as a 'peer based review' using, in part, the RCS 2011 Standards for Unscheduled Surgical Care

A Clinical Lead and Project Manager were appointed, and a draft review process was developed. An expert clinical panel was formed, and a set of standards produced for EGS in the South West. The steering group recognised that the South West was made up of a wide range of acute Trusts of different sizes, resources, populations and geography. As a consequence of this, and natural variation, organisations have developed individual ways to manage their EGS service, which meant comparisons of such individualistic structures and processes would be almost impossible without some consistent data collection, and reporting, and some standardisation of the measure of workload. Hence, the review process set out with several objectives:

- 1. To find out how Trusts were delivering their EGS service and to use a series of nationally developed standards to <u>guide</u> this assessment.
- 2. To identify common themes, both positive and negative, relating to the delivery of EGS. This was to include current issues and potential future concerns.
- 3. To identify areas of good/excellent practice for wider use. This was later agreed to comprise a series of recommendations from the report to help improve EGS clinical care in the South West, hence objective 4 was added.
- 4. To develop an abbreviated set of standards/recommendations that would form the basis of a simple, widely applied Quality Improvement Framework within the South West. We were cognisant of the need for such recommendations to be few, simple, financially pragmatic and achievable.

This report details the findings, key recommendations and conclusions from the review.

6. The review process

The review primarily focused on using a combination of standards from three main sources shown below:

- 1. RCS (2011) Emergency Surgery: Standards for Unscheduled Surgical Care
- 2. London Health Audit (2012) Quality and safety programme
- 3. NHS Services, Seven Days a Week Forum (2013).

Many of these standards already overlap (see appendix 1 for sources), Indeed the London Health Audit and 7 day standards had previously built on the RCS standards. In further developing the standards, and with an aim to keep the review to a manageable size, whilst also considering a number of key factors, we combined related elements together to create 22 multifactorial standards. For instance, standard 1 recommended 2 consultants ward rounds but was also combined with a requirement for patients to be seen within 14hrs and consultants to be free of private practice when on-call. The standards were reviewed and adapted by an expert panel to be used as the commissioning standards to assess all South West acute Trusts that deliver an emergency general surgery service. The review process comprised a self-assessment to the 22 standards, followed by a review visit by a team of local health professionals.

6.1 Hospital self-assessment

The Trust team was requested to self-assess the current status of each of the twenty two standards as either 'met' or 'not met' during the week, weekend or both. To support the self-assessment, the review required documentary evidence to be supplied by the hospital. Where a standard was assessed as not met, the hospital had the opportunity to detail any current plans that would enable compliance with the standard. It also provided an opportunity to detail any current challenges faced by the hospital in meeting particular standards.

Each hospital was supplied with standard proformas and given six weeks (see appendix 2) to complete the self-assessment. The evidence submitted by the hospital was distributed to the review team to access prior to the review visit. It was also reviewed by the clinical lead and project manager who summarised the evidence prior to the visit. Any initial points of clarification relating to the emergency standards were sent back to the hospital team. The review of evidence ensured that the review team was able to identify key lines of enquiry for the review visit day.

6.2 Review visit

The purpose of the review visit was to understand how the hospital was running its EGS services and confirm whether or not the processes outlined in policy at the self-assessment stage reflected the day to day running of the service. The day had four components which contributed to the overall assessment of whether a standard was being met:

- 1. Presentation by the Trust team on how the EGS service was running and whether it was meeting the standards set out for the review.
- Hospital walk around that included discussions with all levels of seniority and staff professions, including medical, nursing & therapies. The walk around lasted approximately 80 minutes and visited A&E, Theatres, SAU/Surgical wards, Radiology and Critical Care.
- 3. A one hour focus group with both doctors in training and (separately) members of nursing and therapy staff.
- 4. A short review of patient notes consisting of common EGS procedures that had taken place 4 weeks prior to the review on both a weekday and weekend.

The review team then convened to discuss and agree the standards and their outcomes before presenting back to the trust teams.

6.3 Review Write-Up and Moderation

To ensure there was a consistent process followed, the review Clinical Lead (CL) and Project Manager (PM) were present on every review⁷. Following each Trust visit they produced an initial report which was sent to the hospital review team, allowing 1 week for changes. The review was then sent to the Trust for further discussion and a details check.

As the project progressed there was a change in expectations and thinking around the standards, as well as wording changes that were agreed through the steering group. As such, the clinical lead and project manager moderated the review

⁷ Clinical lead not present for own trust review (Taunton).

outcomes for all Trusts together, in an attempt to ensure Trusts had their outcomes determined from equivalent criteria to their peers.

Due to the multifactorial nature of the standards, it was necessary to consider individual aspects within a standard before assigning a 3 point-binary outcome judgement. The commentary sections in the individual trust reports allowed for a summary description which detailed the reasons behind the outcome. Information from reviews days was digitally recorded ensuring details from the interviews and discussions were available at moderation.

7. Key findings

In 2016 all 14 Trusts within the South West Peninsula were assessed on their performance against Emergency General Surgery Standards. An individual report was produced and is available for each Trust (appendix 20). Summary pages for each trust can be found in appendix 6-19. The overall findings collated from each review are summarised below.

Overall, the review found a good level of engagement from each Trust and there was clearly a level of commitment from teams to showcase their service. There was also good knowledge of general service limitations. No one Trust met all of the standards and the majority of Trusts still had significant work to do to meet all of the standards.

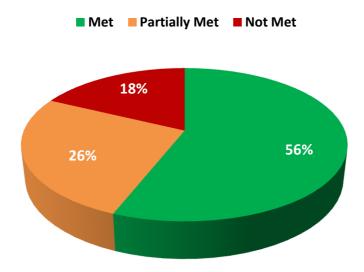


Figure 1 shows that, in total, over half of the standards were being met by Trusts and over a quarter were partially met.

Figure 1. Percentage of standards met, partially met and not met across South West Trusts.

Figure 2 shows the number of standards met/partially-met across week and weekend by each acute Trust in the South West. In general, the number of standards met across the week was similar to the weekend with an average of 8 standards met over the week and 7 over the weekend. The hospital that met the most standards was Plymouth Hospital with 19 met (from a possible 23⁸), 2 partially met & 2 not met for both the week & weekend. Next were North Bristol Trust who

⁸ Note: standard 21 is split into two parts and produces two separate outcomes.

met 19 standards for the Week and 17 for the weekend, 1 standard partially met for Week and Weekend and 2 not met for the Week, 4 not met at Weekend.

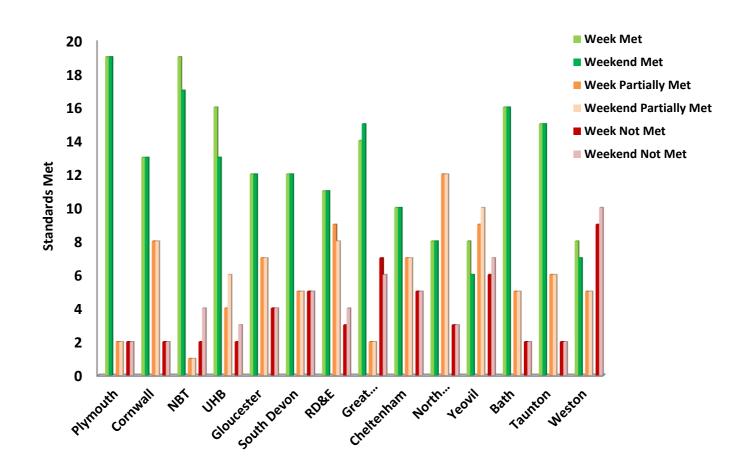


Figure 2. Number of emergency general surgery standards met/partially met by acute Trusts in the South West

The hospitals with the least number of standards met were Yeovil (8 met Week, 6 met Weekend) and Weston (8 met Week, 7 met Weekend). Of note, when measured by bed size, Plymouth has the highest number of beds (969) with NBT next highest (858), whilst the fewest beds belong to Weston (235) and Yeovil (341). The relationship between no. of beds (a surrogate for hospital size) and no. of standards met is shown below in figure 3.

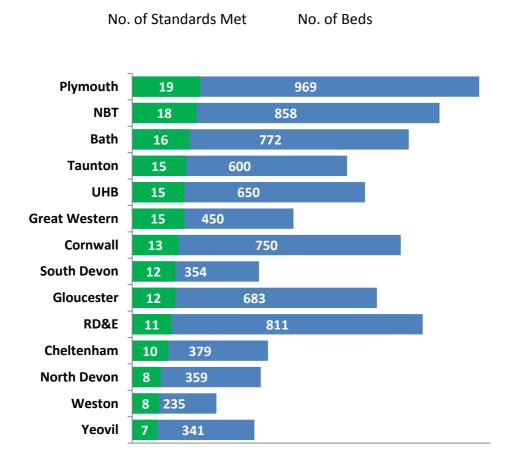


Figure 3. No. of standards met vs. hospital size (no. of beds).

In general, the larger hospitals (as measured in bed provision) are meeting more standards than the smaller hospitals. To some degree this might be expected since larger hospitals require more provision. The standards do not differentiate according to provision per patient; rather they are looking at provision of cover over 7 days. It is key to note that understanding the provision of services per patient across different hospitals is particularly complicated due to variance in services, staff and the way data is recorded.

In contrast to the difference in performance between Trusts for no. of standards met, the variation between Trusts reduces significantly when the number of standards met is combined with the number of standards partially met (figure 4) suggesting that the quality (as measured by performance towards meeting the standards) does not differ as much as Figure 3 might suggest. We do have to caveat that this is somewhat generalised, since standards are not comparable to each other. For instance, some standards like Ambulatory care (std. 7) and CEPOD availability (std. 8) will arguably impact on quality to a greater degree than Unitary documents (std. 6) or Transfer arrangements (std. 18). We suggest Trusts focus on the recommendations for the standards that we consider to be achievable key impact drivers. It should also be noted that whilst a 'partially met' measure is closer

to meeting a standard than a 'not met', some standards will be more difficult to achieve for some Trusts than others. For example, it may be more difficult for a smaller Trust to meet 24hr CEPOD availability than to implement a process to raise their Sepsis screening levels. As such, these figures should be used as a general guide to the current position of Trusts in the South West.

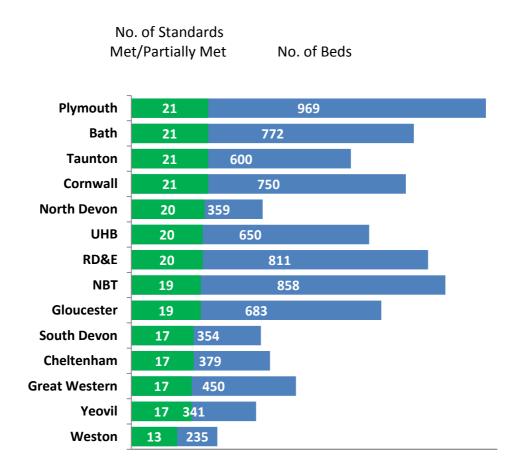
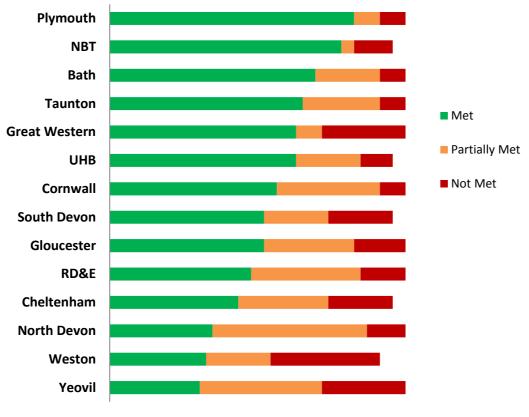


Figure 4. No. of standards Met/Partially met vs. hospital size (no. of beds).

The difference in relative proportions of Met, Partially Met and Not Met for each trust is seen in Figure 5 below. The Trusts with the highest number of Partially Met standards are North Devon, Yeovil and Cornwall which generally suggests it will be easier for those Trusts to improve their relative positions on figure 3.



No. of Standards

Figure 5. Number of Met, Partially Met and Not Met standards (average week/weekend) for each trust.

Figure 6 below shows the total performance of all of the Trusts against specific standards. As expected, there is a great deal of variation according to the difficulty in meeting a particular standard. All acute hospitals in the South West met standard 3, which represented diagnostics provision (*x-ray, ultrasound, computerised tomography (CT) and pathology).* It was not within the scope of this review to conduct an in depth review of diagnostics provision but the general picture in the South West was good in relation to Emergency General Surgery provision. Thirteen out of fourteen Trusts met standard 2 (Clearly agreed escalation policy around an early warning system) with Yeovil scoring a 'partially met' against this standard. Thirteen out of 14 Trusts met standard 20 (escalation to ST3 within 30 minutes) with Weston scoring not met.

The standard that was most consistently not met across the region was the requirement for a senior medical specialty review of EGS admissions (22). Only North Devon and Taunton were deemed to have made any progress towards meeting this standard. The second standard that was most commonly not met was senior specialty review of all general surgical in-patients by a consultant (21a) but of note, the majority of hospitals did provide a senior specialty review at registrar level (21b).

Met Partially Met Not Met

Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the...
 Clearly agreed escalation policies based around an Early Warning System (EWS), are in...
 All hospitals admitting surgical emergencies to have scheduled access to diagnostic services...
 All hospitals admitting surgical emergencies to have access to interventional radiology 24...
 Rotas to be constructed to maximise continuity of care for all patients in an acute surgical...
 A unitary document to be in place, issued at the point of entry, which is used by all...
 All acute surgical units have provision for formalised ambulatory emergency care delivered...
 Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30...
 All patients considered 'high risk' (predicted mortality greater than or equal to 10% based...
 All emergency general surgical operations are discussed with the consultant surgeon and...
 The majority of emergency general surgery to be done on planned emergency lists on the...
 Handovers must be led by a competent senior decision maker and take place at a...
 Patient experience data to be captured, recorded and routinely analysed and acted on....
 Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24...

16. Sepsis bundle, pathway in emergency care

17. There is a policy for review of all Emergency general surgery patients by a consultant,...
 18. Emergency surgical services delivered via a network (e.g. vascular surgery, IR, etc.) have...
 19. For emergency surgical conditions not requiring immediate intervention, children do not...
 20. As a minimum, a speciality trainee (ST3 or above) or a trust doctor with equivalent ability...
 21a. Do you have clear protocols for consultant review of all general surgical in-patients to...
 21b. Do you have clear protocols for registrar review of all general surgical in-patients to...
 22. Do you have clear protocols, including a standard for timing, for senior medical (physician)...

% of Trusts

*Figure 6. Percentage of Trusts that meet, partially meet or don't meet each individual standard*¹

¹ Note: Standards abbreviated due to size. See appendix 1 for complete wording Standard 16, Sepsis Data not supplied for South Devon Standard 19, Four trusts n/a due to bypass transfer arrangement for children. To summarise, Figure 1 demonstrated that 82% of standards were met or partially met across the Southwest. Figures 2-5 illustrate the variation in Trusts meeting the standards, which in general, correlates with the variation in hospital size. On a positive note, when looking at partially met/met outcomes combined, it suggests that this variation in outcomes across the South West can be reduced. Figure 6 shows there is a clear difference in performance on each standard and this is discussed further in Table 1 (below) which provides an individual commentary on each of the standards. For a more detailed picture of specific individual Trusts, please see the separate reports available (Appendix 20).

8. Overall assessment

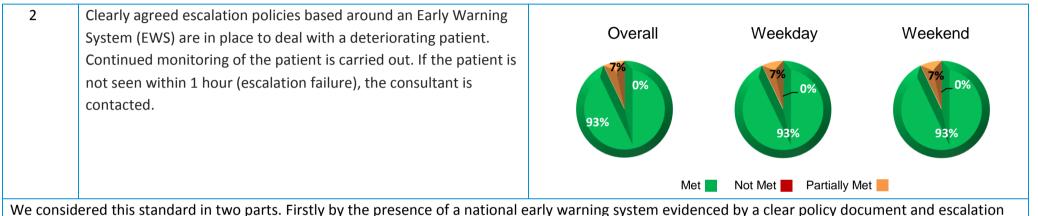
Table 1 outlines each standard, presented alongside the overall results from all South West Acute Trusts, together with a commentary highlighting selected key findings relating to the standard.

Standard Standard Met No. Two consultant led ward rounds of all acute admitted patients, 7 1 Weekday Weekend Overall days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care either through multiple day 18% 25% working or specific patterns of working that allow continuity of care. When on-take, a consultant and the on call team are to be 57% 57% completely freed from other clinical duties or elective commitments. Surgeon with private practice commitments makes Partially Met Met Not Met arrangements for their private patients to be cared for by another surgeon/team, when they are on call for emergency admissions.

 Table 1: Summary and commentary of compliance with the Emergency General Surgery standards

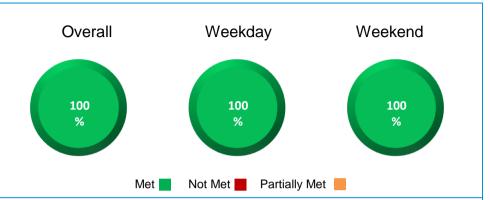
This standard combined a number of factors to look at working patterns in delivering EGS. In all Trusts the whole EGS team was free from all elective commitments whilst on call, in line with national guidance from the DOH. The majority of rotas (See standard 5) were constructed to ensure continuity of care of EGS patients. The majority of differences between Trusts arose in the provision of 2 consultant led ward rounds and in whether patients were seen within 14 hours of arrival. Here, only 4 Trusts achieved the standard. This was surprising to the reviewing teams as almost universally the on-call consultant

was job planned to be in the hospital from 0800-1800, and could deliver 2 ward rounds and see the vast majority if not all patients within 14 hours of arrival with a 5.00pm ward round. Of note, in all hospitals not achieving the standard, some of the consultants were delivering the standard on an individual basis. In others, the lack of an SAU and the resulting drawn out 'safari' ward rounds across multiple wards often interfered with the delivery of 2 ward rounds within the job planned timeframe.

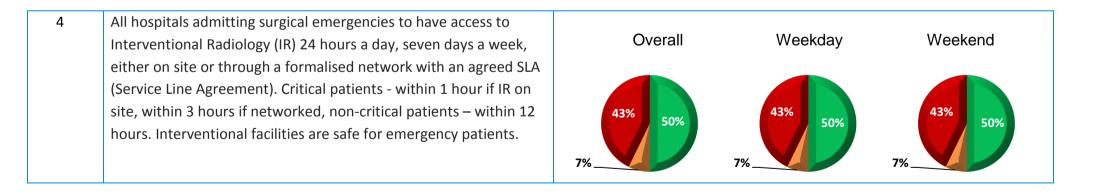


We considered this standard in two parts. Firstly by the presence of a national early warning system evidenced by a clear policy document and escalation form, and secondly by the use of this policy from discussions with the nursing and junior doctor focus groups. The majority of organisations in the South West showed clear escalation policies in accordance with national recommendations and had a clear culture whereby the junior staff and nursing teams were happy to escalate patient concerns in line with the policy up to consultant level if necessary. One Trust scored partially met, in part due to some confusion between which actual escalation policy was being used and in part due to a perceived reluctance on the part of some juniors to escalate up to consultant level.

3 All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.

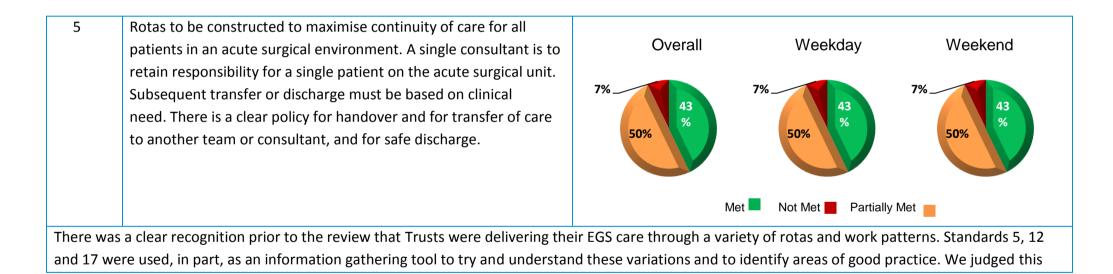


This was one of only two standards the review teams felt were consistently met in each Trust. The majority of Trusts were using private companies to cover their out of hours reporting and these were felt, in general, to be performing well, with urgent scans reported within the 12 hour window and emergency scans reported in real time. Whilst the 24/7 requirements were met for the provision of X-Ray and CT, there was variation in the availability of Ultrasound scanning out of hours which could have a significant impact on the management of the Emergency General Surgery workload. In some Trusts the EGS service had augmented the departmental availability of Ultrasound scanning by the provision of Ultrasound slots within the ambulatory care/SAU environment. Initially the standard considered the availability of MRI scanning 24/7 but this was removed when it became clear there was a consensus between the steering group, review teams and local clinical teams that the need for out of hours MRI scanning in EGS was negligible.



Met Not Met Partially Met

This standard produced an interesting split. Half of the Trusts had availability of Interventional Radiology due to the presence of an on-site service. In those that failed to meet the standard this was, more often than not, due to a lack of clearly formalised arrangements with local units to provide the service. Interventional Radiology in these units is still being delivered but in an ad-hoc way, necessitating a considerable amount of clinical time spent agreeing and arranging for the transfer of patients. It was also clear throughout the South West that the national lack of interventional radiology candidates was beginning to have an effect on the ability to recruit at some hospitals.



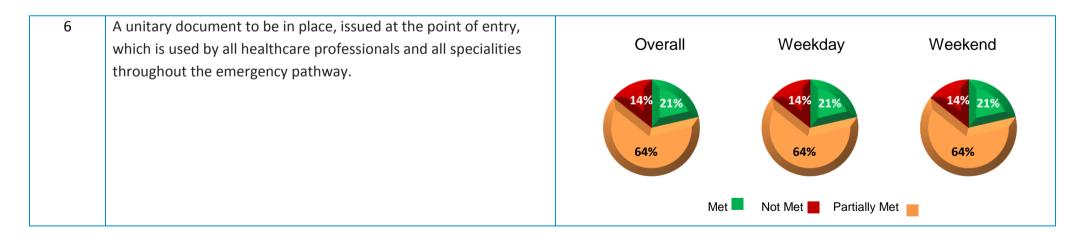
standard on 2 main elements: continuity of care through both rota design & ongoing responsibility, and the provision of an 'acute surgical unit'. The latter had not been clearly defined in the initial development of the standards (although a variety of work has recognised the importance of an SAU⁹). It became quickly apparent during the review visits that the provision of a dedicated area or Surgical Assessment Unit (SAU) was vital to the delivery of EGS and high on the list of importance for all of the local teams.

We found 3 main types of rota being used in the South West, although with some variation between Trusts. The majority of Trusts delivered their EGS through a 4/3 split on-call rota, whereby the consultant and team deliver care Monday morning to Friday morning, with a different team taking over to deliver the 3 day weekend. This rota serves several purposes, reducing the total number of cases accumulated by one team, and reducing the potential for overworking/lack of sleep as a risk for patient safety. It also provides a degree of continuity of care, with the majority of the admitted patients being manged by the same team, and better training and continuity of management for the junior staff. Some Trusts address the potential issue of tiredness (due to consecutive late night operating) by having some of the week day nights covered or 'babysat' by a different consultant; hence allowing the on-call consultant to get at least 2 nights full sleep. However, this provision was not in place for any Trusts at the weekend. In Torbay we found teams working a 7 day on call week. The reviewing group were concerned by the pressures this placed on the consultant as the single point of continuity. The Trust had mitigated this through cover of some of the weekday nights, but they acknowledged that with increasing numbers of admissions this system was likely to change shortly. The Torbay team did have a variation in handover, which reduced the impact of 7 days on call somewhat. In most Trusts the on call consultant retains responsibility for the cases admitted under their care throughout the course of the patients admission, i.e., into the subsequent elective working week of that consultant. In Torbay, all cases that had had surgery and had a clear diagnosis, or were specific to the speciality of the on-call consultant, were retained by the outgoing consultant. All cases with an unclear diagnosis, awaiting investigation results or with an unclear management plan were handed over to the incoming consultant in a very structured fa

⁹ Chana, P., Burns, E. M., Arora, S., Darzi, A. W., & Faiz, O. D. (2016). A systematic review of the impact of dedicated emergency surgical services on patient outcomes. *Annals of surgery*, 263(1), 20-27.

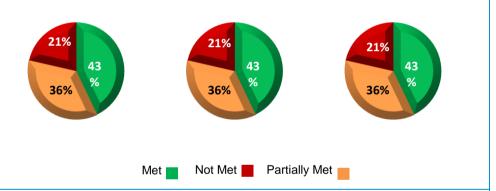
Two Trusts in the South West are working single day on call rotas for their EGS service. The reviewing teams were surprised by this and raised concerns about continuity of care and ongoing management from consultants subsequently job planned to elective work on or off-site. Furthermore, it was unclear as to how subsequent operations were planned and then delivered, who then retained responsibility for the case, and any follow up. In both cases the teams worked hard to deliver continuity of care, but there was variation between individuals as to how this was delivered and hence scope for patients 'falling between the cracks'. The reviewing groups felt a safer service with better continuity of care could be delivered in both Trusts by using a 4/3 split rota.

Every one of the EGS services recognised the importance of having the majority of the EGS patients in one location. Not only did teams think it was safer for patient care, but also that such co-location allowed the EGS service to function more efficiently and effectively. The scattering of patients to multiple different wards often resulted in 'safari' ward rounds taking over 90 minutes leading to delays in the CEPOD theatre operating, ambulatory care and hot clinics (where present) and to a risk of 'missing' cases. Those services with an SAU were absolutely clear about the benefits, whilst those without one found it a major limitation to their service. This view was mirrored in the junior focus groups, which often included trainees who had worked in both systems. However, even in those units with an SAU, there were clear risks to the ability to facilitate an effective EGS service. The presence of medical outliers on the SAU had both an immediate and accumulative effect on the running of the unit, and all the EGS teams expressed a wish for 'ring fencing' of the SAU.



The principle behind a unitary document was to have a standardised format which enabled all clinical staff (medical, nursing and allied health professionals) to consistently record EGS patient admissions. Evidence has previously shown that this provides a more consistent quality of documentation¹⁰ and can be used to record (and remind staff to record) key clinical markers for that admission. We found that in those Trusts with a unitary document, there was a wide variation in the format of these documents with some being used for all emergency admissions and others for just emergency surgery admissions. What was also clear was the considerable variation in the use of this document both between hospitals and within hospitals. This probably reflects the view expressed by both the clinical teams and the focus groups, that some people find these documents of value whereas others do not. As far as standardising the record of an admission and any key parameters to be measured, it was felt this was unlikely to become a reality until the documentation becomes electronic, whereby certain fields can be mandated.

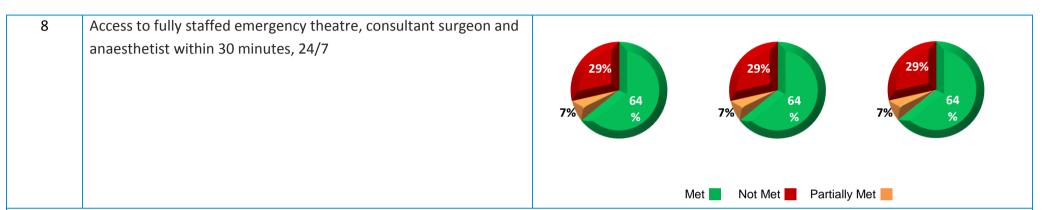
 All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR).
 Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.



We considered this standard to comprise four elements: The presence of a 'hot clinic' with bookable appointment slots, a daycase pathway and capacity for EGS operations, a dedicated area, and the presence of a senior decision maker (SpR/ST3 and above). A failure to achieve any or only one of these was marked as not met. Achievement of 2 was partially met and 3-4 was scored as met. Across the South West three Trusts failed to provide any realistic

¹⁰Ehsanullah, J. et al. (2015) The surgical admissions proforma: Does it make a difference? *Annals of Medicine and Surgery, Volume 4, Issue 1, p53 – 57.*

provision of ambulatory care for EGS. Five Trusts had two elements of the standard, with six Trusts meeting the standard. However within five of these six Trusts there was considerable scope to improve the delivery of ambulatory care, with potential reductions in length of stay and bed occupancy, in line with those achieved in the 'gold standard' ambulatory service in Bath.



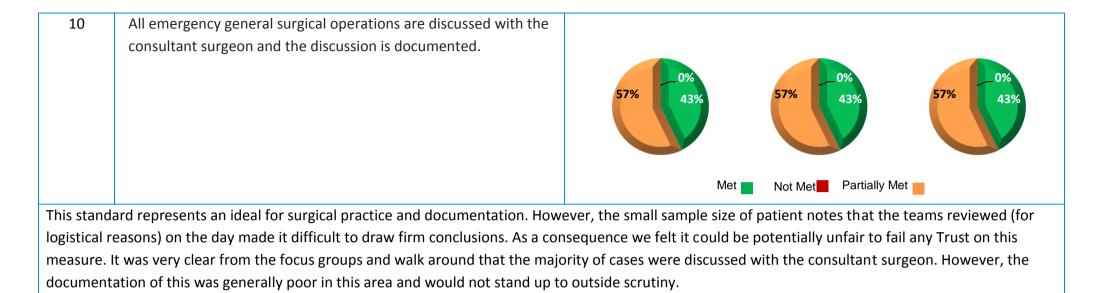
In line with the NCEPOD recommendations, this standard recognises that all Trusts providing EGS should have provision of a 24/7 Emergency (CEPOD) operating theatre. Interestingly across the South West this was only completely met in nine out of 14 Trusts. In four of the five remaining Trusts the standard was not met because the provision of CEPOD theatre they had was clearly inadequate for the volume of EGS work being delivered. In North Devon, despite the lack of 24/7 CEPOD operating, this standards was scored as partially met due to the lower volume of EGS work being compatible with theatre availability and the scope to 'break into' elective lists.

Despite the provision of a 24/7 CEPOD theatre in nine of the Trusts (now 10 since completion of the review) there were additional issues that impacted on the availability of operating time. In Taunton a lack of anaesthetic cover was felt by the local team to impair access to the CEPOD theatre on occasion. In Great Western and Torbay hospitals out of hours, Orthopaedic and Obstetric emergencies respectively, could impact on the access to the CEPOD theatre for EGS procedures, whereas, access to the CEPOD theatre in Plymouth could be limited due to the sheer volume of EGS cases presenting to the hospital.

9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care. All patients with a predicted mortality of >5% (SORT or P-Possum), should be discussed with an intensive care consultant preoperatively. A consultant surgeon and consultant anaesthetist must be present for the operation except in specific circumstances where adequate experience and the appropriate workforce are otherwise assured. Risk of death at end of surgery reassessed to determine location for post-op care.	7% 6% 57% 7% 6% 57% 0 0 0 0 0 0 Met Not Met Partially Met		
We judged	d this standard in two parts using the NELA data on high risk laparotor	nies (greater than 10% mortality). The first was a presence of consultant		
anaesthetist and surgeon in theatre, and the second was whether the patients were admitted to Critical Care following their surgery. We used a cut off				
level (in line with NELA) of 80%. If Trusts were 80% or above for both of these measures the standard was met. If one measure was 80% or above, the				
standard was partially met and if both were below 80% the standard was not met. Due to the duration of the review and the timing of the most recent				
NELA reports, Trusts were given the opportunity to provide updated data for this standard. In eight of the fourteen Trusts this standard was fully met and				
only one Trust had both measures below 80% (but above 70%). The reasons for partially meeting the standard were a mixture of critical care bed				

availability, confusing processes to access critical care beds, or lack of consultant anaesthetist at operation. However, across the South West there was

clear active engagement in the NELA work with dedicated clinical leads and regular reporting.

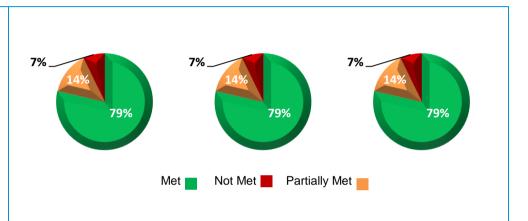




This standard looked at the delivery of EGS operating. Universally the WHO safety briefing was undertaken for all general surgical cases with regular audits to review this. However, this document was not always recorded in the patient notes, which may be an issue for subsequent case review. All Trusts struggled to deliver all emergency surgical cases on the day of decision to operate for an obvious mixture of reasons including case load and access to

theatre. However, it was clear those Trusts not providing 24/7 operating struggled with this issue more. Furthermore, any issues impacting the access to the CEPOD list, such as anaesthetic cover or sharing with orthopaedics/obstetrics also played a role. It should be noted that most Trusts operate a policy of only 'life or limb' emergency surgery after midnight and therefore some cases could be rolled onto the following morning to avoid operating in the early hours of the morning, where the surgical teams are proven to be less safe and efficient.

12 Handovers must be led by a competent senior decision maker (ST3/SpR) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff as soon as possible if they are not involved in the handover discussions. Handover processes, including communication and documentation, must be reflected in hospital policy and standardised across seven days of the week.



There are 2 components to handover. The first is the day to day handover between the day and night teams within the same on call block. In general, this standard is met across the South West with most EGS services delivering 2 handovers per day, the first usually around 0800, where the outgoing night team handover to the incoming day team. The second is between the daytime junior team and the incoming night team usually around 20.00-21.00. In almost all cases, the morning handover included the consultant, but this was not consistent in some of the Trusts despite job planning, and hence they scored partially met or not met. The evening handover was uniformly middle grade led.

The second part of the handover process is between the different consultant on-call blocks (this does not apply to those Trusts running a single day on call, where handover happens as mentioned above). This happens first thing in the morning and should include both the outgoing and the incoming consultant. Specific cases are then transferred or highlighted for ongoing review. The majority of Trusts achieve this standard with clearly allocated time for the

consultant to consultant handover. A particularly good example of this was seen in Exeter where the outgoing consultant was rostered to run the CEPOD theatre. This allowed the outgoing consultant to operate on their own cases and gave time for the incoming consultant to familiarise themselves with any outstanding cases.

Usually the nursing staff were involved in the handover sessions, but due to pressures on the ward they sometimes struggled to make the meetings, resulting in a need for a further transfer of information, with an associated risk of error. Ensuring a nurse is available for these handover sessions would seem a sensible recommendation.

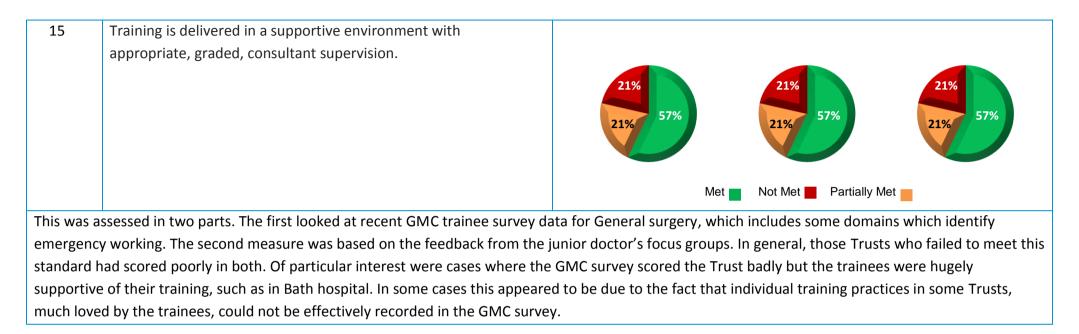
All Trusts had some form of handover documentation. More often than not, this was a Word table or Excel spreadsheet, but some Trusts were able to use their own particular software, e.g., EPRO. However, in most Trusts these documents were contemporaneous with continual updating. Hence there was no historical record of the workload. This was emphasised by the difficulty we found in Trusts being able to identify the workload of the EGS. In Bath, a system called Amadeus, allowed the team to record all referrals, admissions, in-patient reviews, phone calls/advice or ED referrals. As such this was the only complete record of the EGS workload we were able to find.

13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on- board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA,	0%	0%	0%
	EPOCH - list those known)	71%	71%	71%
	Do you audit:			
	a. Outcomes - death, LOS, return to theatre, readmissions	Met	Not Met Partially M	/let
	b. Risk assessment prior to surgery	_	-	_
	c. Risk assessment post-surgery			

d. Time to CT/US from request
e. Time from decision to theatre
f. Proportion of patients having gall bladder out on
admission
g. Proportion of patients having gall bladder out on
admission for pancreatitis

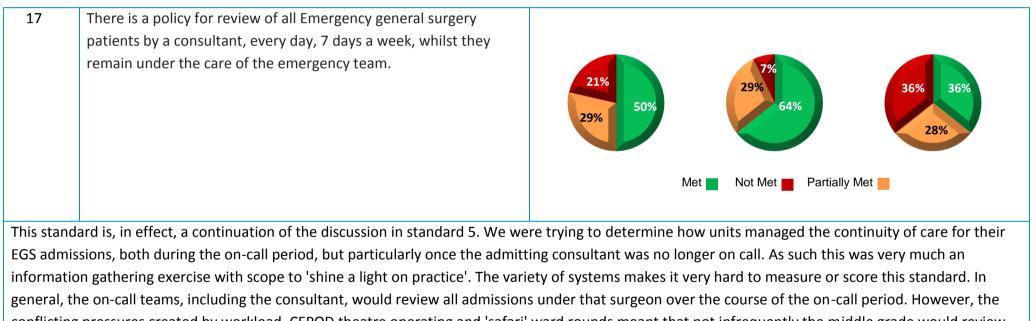
This standard was designed to assess the audit and quality improvement work being undertaken in EGS. As a result of the active engagement in the national audits such as NELA, no Trust failed to meet this standard completely. There was a range of quality improvement/audit work being undertaken by Trusts to look at their processes and very little outcome reviews. Furthermore there was no standardisation of these measures between Trusts. For example, it was very difficult to determine the precise workload of the majority of EGS services i.e. admissions, reviews, in-house referrals, ED referrals, due to variations in recording and coding. All Trusts recorded Friends and Family data, and whilst some separated out the emergency admissions, nowhere was there a specific review of the EGS patients. The reviewing teams felt that this was a specific group of patients and as such the Friends & Family questionnaire may not be as applicable. Some Trusts expressed an interest in reviewing their patient experience questionnaires with respect to EGS admissions.

Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	100 %	100 %	100 %
	М	let 🗾 Not Met 📕 Partially	Met



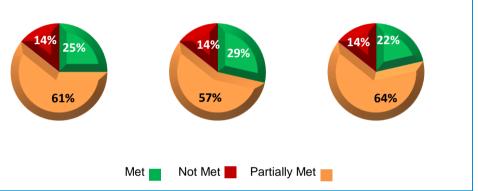
16	Sepsis bundle/pathway in emergency care.			
		8%	8%	15% 77%
		Met 🗾	Not Met Partially Met	

Expectations of the review team for this standard were high since Sepsis screening and antibiotics within 1 hour are a national CEQUIN. In general we found that screening levels were very good but problems arose in the actual delivery of antibiotics within one hour. In Trusts where all emergency admissions are admitted through their ED department, a delay could occur due to transfer of patients from the ED to the acute surgical environment. In one Trust there was a disagreement with the evidence base supporting this CEQUIN and as such they had argued at a national level for derogation and for the development of their own protocol. This was acknowledged but as there was no evidence presented for an active protocol or for any national derogation, this standard was scored as partially met.



conflicting pressures created by workload, CEPOD theatre operating and 'safari' ward rounds meant that not infrequently the middle grade would review some of the cases. Again, this may not be an issue with more senior middle grades, but could be an issue for patient safety with more junior doctors. The EGS patients at risk at handover are those admitted under the out-going team, who don't have a clear diagnosis or management plan. In some cases these patients were identified to the incoming team for ongoing review, although usually the patient remained under the name of the original admitting consultant. However, this handover/arrangement was individual and informal, and clear policies were lacking. In some Trusts, this group of patients would be 'managed' by the elective team of that consultant or service. This was an acceptable system in the presence of regular, consultant ward rounds, but had potential patient risk in the absence of a senior decision maker. Furthermore, the elective team doesn't have the same access to operating through the CEPOD list, with a potential for delays in surgery. The 'best' system we encountered was the formalised handover of 'unsorted' cases seen in Torbay at the end of the on-call period. There may be some merit in this being more widely adopted or formalised in handover policies.

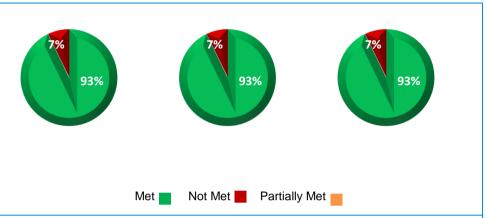
18 Emergency surgical services delivered via a network (e.g. vascular surgery, IR, etc.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.



This standard was used to assess the networking of EGS care across the South West. No single Trust in the South West had all the surgical specialities that link to, or may link to, EGS. Even the bigger centres needed links to other Trusts to support all aspects of their EGS work, with Plymouth and North Bristol linking to Bristol Children's Hospital, North Bristol requiring Cardiothoracic support from UBHT and UBHT itself needing Interventional Radiology support from North Bristol. In addition, the bigger 'hub' centres provided support for smaller units. The key finding of this standard was the remarkable lack of formalised clinical pathways and Service Line Agreements (SLAs) between organisations in the South West. All units seemed to have informal arrangements, often based on historical precedents, but few were able to evidence their pathways and SLAs and several identified significant delays in clinical care arising from uncertainty about the arrangements. Furthermore, even when the clinical aspect of the transfer of care had been delivered, issues remained around funding, both between Trusts and from the commissioners.

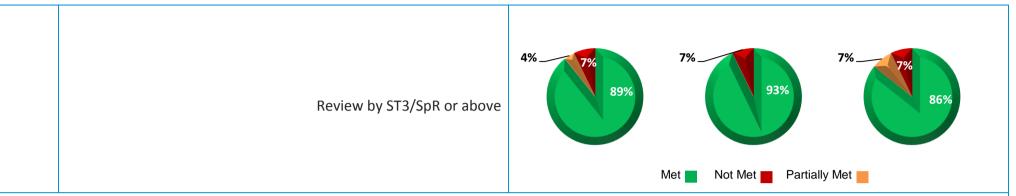
19	For emergency surgical conditions not requiring immediate			
	intervention, children do not normally wait longer than 12 hours	0%	0%	0%
	from decision to operate to undergoing surgery. Children receive	21% NA	21% NA	21% NA
	adequate hydration and symptom control during this time.	29%	29%	29%
	Surgeons and anaesthetists taking part in an emergency rota that	50%	50%	50%
	includes cover for emergencies in children have appropriate			
	training and competence to handle the emergency surgical care			
	of children, including those with life-threatening conditions who			
	cannot be transferred or who cannot wait until a designated	Met 🗖	Not Met Partially I	Met 💼
	surgeon or anaesthetist is available.			-

The delivery of EGS for children remains a key issue for all hospitals. The South West has an active Paediatric surgery network with excellent links into Bristol Children's Hospital, particularly for the very young (less than 5 years of age). All Trusts have some provision for EGS care in children, with the 'cut-off age' for management/transfer depending on both local policies and the skill set of the on-call consultants - some of whom undertake paediatric surgery electively. Universally, children under 1 year were referred to BCH, with many units transferring all children under 5 years. Two Trusts (North Bristol and UBHT) do not admit paediatric EGS cases with these patients being admitted directly to BCH. Other units scored 'partially met' due to a lack of clear policies around the management of paediatric EGS cases. The majority of Trusts (all but one) had a clear policy whereby children were admitted and managed by the Paediatricians with support/involvement from the surgical team when requested. In view of the relatively small numbers of children admitted by the surgical teams, this was felt to be the safest way of ensuring adequate management of paediatric EGS cases. 20 As a minimum, a speciality trainee (ST3/SpR or above) or a Trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.



In all but one Trust this standard was met with the availability of a specialty trainee (Registrar or Trust grade doctor) available throughout the on-call period. The Trust failing this standard had only F2 doctors available during the night. In part this represents a reduction in both core and specialty training numbers in general surgery. Some Trusts have been able to mitigate this through the appointment of Trust doctors. However, there appeared to be an increasing number of gaps in rotas needing to be covered internally or by locums.

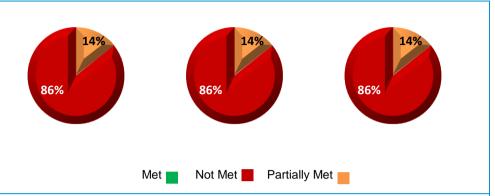
21	Do you have clear protocols for senior speciality review of all general surgical in-patients to include: GI surgery (Colorectal, Upper GI, Hepatobiliary), Vascular, Breast & Urology every day, seven days a week.			
	Review by consultant	79%	79%	79%



This standard was incorporated into the review for 2 reasons. Firstly, a proportion of EGS cases arise from the deterioration of existing emergency admissions or from complications to elective cases. It is well understood that outcomes in surgery depend on both the delivery of the surgical procedure <u>and</u> on the provision of 'rescue' systems, whereby patients developing complications following surgery are quickly identified and managed. Secondly, with the current push towards delivering 7 day consultant care, we wanted to understand the current level of review and the implications of an enhanced level of review. For this reason we considered the standard, as written, for consultant review and also for middle grade (Registrar or Trust Grade) review. Although we have looked at this for 7 days, week days and weekends, the key focus is on the provision of cover at the weekends.

The results were quite contrasting. In only Plymouth and Cheltenham were all 'general surgical' in-patients reviewed by a consultant during both the week and weekends. Two other Trusts were working towards 7 day consultant review, with UBHT delivering a consultant review Mon-Fri and Great Western Sat-Sun. In the majority of Trusts, the review of all in-patients at the weekend was delivered by the middle grade tier. In some cases this was clearly sufficient when the middle grade was more senior or experienced. However, the variability of the grade of doctor filling these positions in the rota was felt to be a risk in the absence of more formalised consultant involvement. What was clear from the majority of Trusts was that provision of a consultant delivered review of all in-patients would have an impact on elective work during the week, and over the weekend; In many cases, it would require a second consultant rostered to review the in-patients. This would clearly have a significant impact on working patterns and elective provision, with a 1 in 8 on call rota becoming a 1 in 4 for weekend working. Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?

22



All Trusts across The South West report an increasing number of EGS admissions with increasing numbers of elderly patients with multiple co-morbidities. This was a new standard, developed by the EGS steering group to investigate the availability of senior medical support for the EGS admissions. Whilst it was acknowledged that all hospitals had the availability of the on-call medical registrar, their availability to review general surgical patients was limited due to their workload and in general any follow up review appeared to be undertaken by the following day's on-call medical registrar as opposed to the consultant. It was reported that in most units an in-house medical referral will be seen that day by the on-call surgical registrar and possibly by the consultant but almost certainly seen by the consultant the following day. This appeared to be at considerable odds with the provision of medical cover. In two Trusts this standard was partially met. In Taunton this was due to the introduction of a 'research post' whereby elderly care physicians review all patients admitted over the age of 75 years. In North Devon it was reported that the volume of work and working relationship were such that it was possible to get a consultant physician review either that day or the following day depending on the time of referral.

9. Recommendations

This series of recommendations was developed using the existing standards, coupled with the feedback and commentary of the local clinical teams. Opinions between Trusts were remarkably consistent despite the variety of settings. We looked for recommendations that would support improved clinical care, safety and outcomes for EGS patients and would guide future service provision/development. Furthermore we felt these recommendations needed to be financially and logistically achievable. We have developed a series of 6 inter-linked recommendations that we argue will enhance the quality of EGS care. Recommendations 1-2 are infrastructure based, with 3-6, essentially process based. They can be summarised as:

1. The provision of a protected Surgical Assessment Unit.

2. The provision of 24/7 CEPOD or Emergency Theatre.

3. A 'South West' standardised, rolling audit covering EGS processes, outcomes and patient experience to be delivered and reported quarterly to each Trust board. In addition we believe the results should be reported twice yearly to the 11 South West CCGs and should be in the public domain through the Clinical Senate website.

4. Each Trust to appoint an EGS lead and an Emergency Nurse lead to monitor and develop the service.

5. Job planning and delivery of 2 consultant led ward rounds of the acute General Surgical admissions, timed to ensure all patients are seen by a consultant within 14 hours of admission.

6. All EGS services to develop a fully integrated and audited ambulatory care service, including a 'hot clinic', senior decision maker and a day case surgical pathway aligned with appropriate resources.

Each recommendation is now discussed in further detail alongside findings from the review process.

1. Surgical Assessment Unit (SAU)

'All Trusts providing EGS services should have a dedicated Surgical Assessment Unit ring fenced from medical outliers or admissions. This should provide a mixture of assessment bays/chairs and beds, with workspace for the medical and nursing teams to manage the unit. Ideally, there should be a waiting area and reception, and where possible the SAU should be co-located with the ambulatory EGS service (see recommendation 5)' This is the first of two infrastructure recommendations, and was covered, somewhat indirectly, through Standard 5. We have chosen it as a recommendation based on the comments and feedback from every EGS team in the South West. There is also support in the literature for the wide benefits of an SAU¹¹.

"Surgical assessment units can provide a dedicated, centralised area where acutely ill surgical patients can be assessed and monitored prior to being admitted to the hospital or receiving appropriate treatment. They can provide speedy access to assessment, diagnosis and treatment, and avoid unnecessary admissions" (RCS, 2007)¹².

There was no doubt that the provision of a Surgical **Assessment** Unit where the majority of the EGS take patients are located and which provided a hub for the oncall surgical team was considered invaluable to both senior and junior medical staff. In some Trusts, this was sometimes called, and indeed used, as a Surgical **Admission** Unit. Patients on an assessment unit are triaged prior to admission to ensure they are moved onto the appropriate pathway. (Note: this has implications for patient expectation, Length of Stay and how clinical data is coded to be used later in audit). A functioning SAU was recognised as a key requirement to maintaining an efficient and effective EGS service. When integrated with EGS ambulatory care and co-located close to the Emergency Theatre, the SAU provides a 'hub' to focus delivery of EGS care in a more efficient way. This recommendation links with the 5th recommendation of 2 consultant ward rounds, as focusing the patients in one area allows for efficient rounding by the consultant. This potentially enables the consultant(s) to work flexibly between the Emergency Theatre and Ambulatory Care.

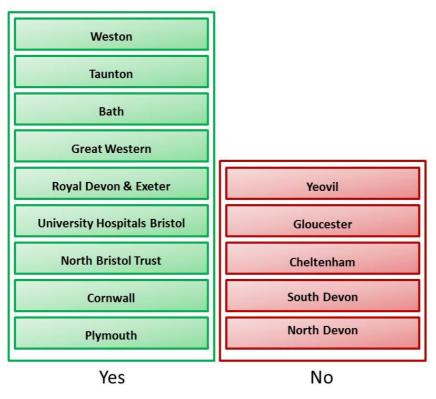
In the South West, 9/14 units had a designated, clearly identifiable SAU (see figure 7). However, on occasion there was significant impact on the functioning of the EGS service from the presence of medical outliers on the SAU. This varied depending on the bed management and SAU gatekeeping. In Taunton medical outliers were infrequent primarily due to the geography of the unit whereby it was situated a long way from the other medical wards. In other units there was a progressive failure in the service as medical outliers were placed on SAU and more than ~40% occupancy by medical outliers could lead to a complete breakdown in EGS take processes. This was demonstrated in delayed/prolonged ward rounds and patient reviews (including hot clinic reviews), delayed Emergency Theatre starts, increased length of stay (LOS) and delayed transfers from the Emergency Department (ED).

¹¹ Chana, P., Burns, E. M., Arora, S., Darzi, A. W., & Faiz, O. D. (2016). A systematic review of the impact of dedicated emergency surgical services on patient outcomes. *Annals of surgery*, *263*(1), 20-27.

¹² RCS/ASGBI (2007) Emergency General Surgery: The future. A consensus statement. <u>http://www.asgbi.org.uk/en/publications/consensus_statements.cfm</u>

In Trusts with no designated SAU, or acute surgical area, or an extremely poorly functioning one, the review of patients is delayed as the on-call ward rounds become what is colloquially known as 'safari ward rounds'. This means the ward round covers multiple different wards, often including the ED. As an example, in Torbay, one ward round was measured as 3.3km long by pedometer!

Ideally, the SAU should incorporate, geographically, the Ambulatory care aspect of the service. This allows flexible working of the on-call team, maintains the basis of senior decision making and allows co-ordination of the EGS referrals.



Have an SAU

Figure 7. South West Trusts which have or don't have a Surgical Assessment Unit (SAU).

2. CEPOD or Emergency Theatre

'All Trusts delivering EGS should have a 24/7 CEPOD or Emergency Theatre, fully staffed with teams available within 30mins. Ideally, this theatre should not be used for emergency trauma/orthopaedics or obstetrics, and staffing should allow provision of these services separate from the CEPOD theatre.' This recommendation was covered in Standard 8 derived from the RCS 2011¹³ and the CEPOD reports¹⁴. However, there was clear agreement from all the clinical teams we visited and from the Steering Group that this was a vitally important service provision in the delivery of EGS care.

Within the South West over half of the Trusts (9/14) had a 24/7 (24 hours a day, 7 days per week) clearly designated Emergency or CEPOD theatre (see figure 8). In other Trusts, the lack of this facility was repeatedly identified by senior and junior staff, and by nursing staff, as a cause for delay in managing EGS patients. This frequently led to delayed surgery and an extended LOS, as cases were rolled over to the next day, or operated on late into the night, which is proven to have poorer outcomes.

As expected there was a heterogeneous picture both in terms of provision and how the theatre was used. In most units with a CEPOD list the theatre was utilised not only by EGS cases, but also by urology, vascular surgery, gynaecology, and in some case Maxillofacial and ENT surgery. In five Trusts, Trauma & Orthopaedics shared use of the CEPOD theatre out of hours. This potentially creates a conflict in access to theatre due to high orthopaedic numbers and sicker EGS patients. Interestingly Bath mitigated the risk by the provision of a 10 hours trauma list each day and a daily afternoon 'hip fracture ' list. This reduced the orthopaedic use of the CEPOD theatre out of hours to virtually zero.

In other Trusts, although there was a fully staffed CEPOD theatre available 24/7, problems developed due to the use of the theatre or the theatre team by emergency obstetric out of hours. Similar conflicts were seen in Taunton for the cover of Interventional Radiology cases. Further review of this suggests this problem arose due to a failure to include EGS interventional cases on the CEPOD list, hence creating logistical and cover issues. Interestingly, despite having a fully functioning 24/7 CEPOD theatre, with additional paediatric CEPOD theatre sessions, Plymouth experiences delays in processing EGS cases due to the sheer volume of EGS cases. In North Devon, where they don't have a 24/7 CEPOD theatre, they felt it was not necessary due to low volumes, arguing they were able to 'break into' an elective list if needed. The review team acknowledged this, but expressed concerns that such an option may not be possible in the presence of bigger elective cases. Some Trusts had expressed a concern that giving up an entire theatre to EGS work would

¹³ RCS (2011) Emergency Surgery: Standards for unscheduled care. DOI: https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/emergencysurgery-standards-for-unscheduled-care/

¹⁴ NCEPOD (2003) Non-Elective Surgery In The NHS:

http://www.ncepod.org.uk/2003report/Downloads/03_s07.pdf

potentially impact on their RTT (Referral to Treatment) preventing them from meeting national 'waiting target' times.

Following this review, we concur with the NCEPOD report, and recommend all Trusts providing EGS care should have a 24/7 CEPOD theatre available and fully staffed. Consideration should be given to whether one theatre is enough depending on EGS volume, and whether this conflicts with other services, creating significant or frequently occurring delays in surgery for EGS patients. There should be adequate anaesthetic cover to support the CEPOD list and emergency obstetrics separately, and that all EGS cases should be run through the CEPOD process, even if the procedure is to be performed elsewhere - such as in radiology or endoscopy.

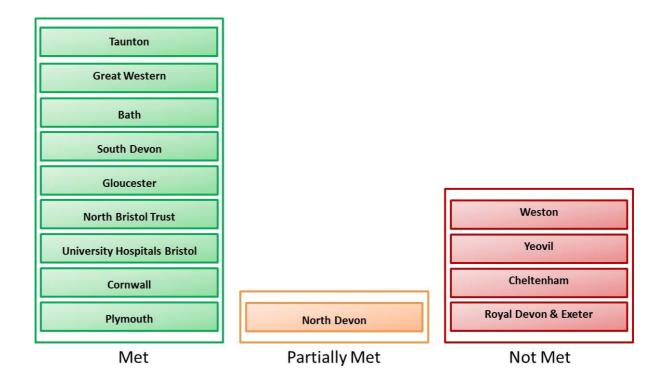


Figure 8. Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7

3. Standardised Audit of EGS services

A 'South West' standardised, rolling audit covering EGS process, outcomes and patient experience to be delivered and reported quarterly to the Trust board. In addition we believe the results should be reported twice yearly to the commissioners and should be in the public domain through the Clinical Senate website.

This recommendation was developed from Standard 13 (see figure 9) which attempted to review the quality control or audit of each organisation's EGS service,

on the basis that a routinely audited service was in a better position and hence more likely to be constantly developing and improving its service.

We found quite variable practice, and with the exception of the nationally required NELA reporting, little **routine** review of the EGS service. One could argue that if the processes and outcomes were being considered in the NELA data then it could be 'assumed' indirectly that a similar level of care was being applied to all other aspects of the service. However, our impression was that this was not always the case, and on some occasions delivery of other aspects of the service could become secondary to delivery of the major laparotomy cases. In particular, there was no record or assessment seen or presented to assess if delivery of the NELA work had an adverse effect on delivery of other aspects of the EGS service.

Throughout the review it has been clear that any valid comparisons were limited by the variability and accuracy of recorded data. It was impossible to say one service provided a safer, quicker, better outcome service as data accuracy is so variable. In these circumstances, service developments, and commissioning decisions, are almost impossible.

The standard we assessed units against attempted to cover 3 key aspects of service delivery: outcomes, process and patient experience. Many services had done excellent pieces of work looking at these different aspects, but as mentioned there was no consistent review or rolling audit process. As a consequence, we felt that any recommendation that defined more clearly a set of measures of the EGS service would form a strong basis for any future service development work as well as allow robust comparisons between organisations. This future measure would then provide an excellent benchmark for Trusts to assess and develop their services, as well as provide robust information to commissioners.

The 3 parts to this recommendation cover the 3 aspects mentioned above:

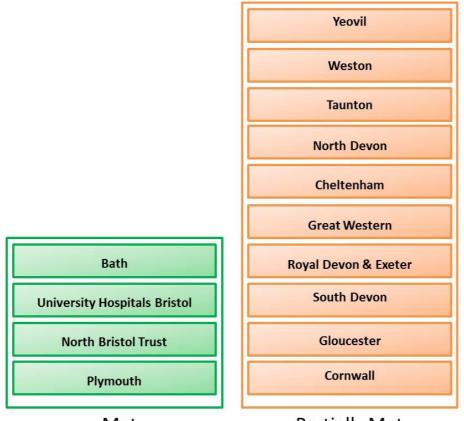
- a. Outcomes
- b. Process
- c. Patient experience

a. Outcomes - we recommend that Trusts routinely record and report on their outcomes for 4 key or index 'operation groups' - Abscesses, Appendectomy, Cholecystectomy and major Laparotomy (covered by the NELA project). For each of these groups the following measures should be recorded: Length of Stay (LOS), readmission rates¹⁵, re-operation rates, delay to theatre, complication rates and mortality. Such a series of measures, once set up, would not be too onerous to maintain, and can be assessed externally using HES data. It would provide an assessment of the full range of EGS operating, as well as an indirect assessment of process, for example, LOS for abscess drainage should be less than 1 day, i.e., ambulatory.

b. Process - these are measures to look at how the service works; its efficiency. The proposed measures include: time of medical/consultant review from arrival, time from request to investigation and time from decision to operate to actual operation. It could also audit time and number of consultant ward rounds, and documentation of results and decisions. Measurement of time from presentation to surgery for cases of symptomatic gallstones, percentage done within 2 weeks of index admission, and percentage of patients with gallstones pancreatitis who have had their gall bladder removed during the index admission would put all South West Trusts on a par with those involved in the RCS CholeQuick audit/QIF.

c. Patient Experience - almost universally we found that there was no specific review of EGS patient experience. All Trusts recorded Friends and Family Data, but none separated the emergency cases from the elective ones. We felt this was a fundamental deficit as the emergency pathway is considerably different from the elective one, and any improvement to the emergency pathway would require a specific understanding of patient's experience. Hence, we recommend that Trusts review their Friends & Family (F&F) data with respect to EGS (and probably emergency medical admissions). Torbay Hospital does separate out their acute F&F data, but doesn't break it down any further to look at the EGS patients. Discussions during that review highlighted there may be the need for some work to assess the suitability of the F&F dataset for measuring emergency admissions. Any developments in this area could then be disseminated across the region.

¹⁵ Note: Arrangements would need to be made to ensure planned ambulatory cases brought back for next day treatment were not coded as readmissions.



Met

Partially Met

Figure 9. Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known) Do you audit:

a. Outcomes - death, LOS, return to theatre, readmissions

b. Risk assessment prior to surgery

c. Risk assessment post-surgery

d. Time to CT/US from request

e. Time from decision to theatre

f. Proportion of patients having gall bladder out on admission

g. Proportion of patients having gall bladder out on admission for pancreatitis

4. Clinical and Nursing EGS Lead

'All Trusts with an EGS service should have a dedicated EGS clinical and nursing lead'.

This recommendation is made based on the recognition that EGS is a service in its own right and has very specific issues that do not easily translate to other specialities, where the focus may be on elective or cancer based targets. Furthermore, the development and delivery of quality improvement work requires a dedicated team with the appropriate time. In each of the 14 Trust visited we found dedicated individuals with a keen interest in getting the EGS service right. In some cases these were existing Clinical Leads, although usually for other aspects of surgery, but in many they were simply interested clinicians. However, none of these individuals received any time or funding to support their work. We believe that improvement of the EGS service will have benefits to the whole Trust with respect to outcomes, safety and reputation. In addition, there is evidence to suggest a focused, efficient and effective EGS service can reduce bed pressures, and make for more efficient theatre planning. This makes savings for the Trust whilst providing an excellent model of acute care.

To summarise, we believe that each Trust needs a dedicated EGS lead both for the medical and the nursing teams. The general view from the different Trusts was that 1 PA would be sufficient recognition of this role (for the medical staff), although in the early 'set up phase', more time may be required and this would be 'paid back' once the systems were in place.

Whilst the review group felt it would be inappropriate to dictate how any service improvement was delivered, it would be possible to use this review to develop a standardised 'job description, with objective and timeframes, etc.

5. Two consultant led ward rounds of the EGS admissions .

'All EGS services should have two, job planned consultant ward rounds of the SAU. EGS patients timed to ensure the majority of admissions are seen by a consultant within 14 hours of admission.'

This recommendation is based on standard 1 (see figure 10). It was positive to find that across all 14 Trusts in the South West the on call team, consultants included, were free of elective (or other commitments) allowing them to focus fully on the EGS admissions. In addition, most consultants were rostered to be in the hospital for at least 10 hours and in some cases 12 hours. Despite this, only a few Trusts had clearly job planned 2 consultant ward rounds of the EGS admissions, and in those that were job planned the focus groups often reported that this standard was not routinely achieved. North Devon Trust was the closest to achieving 'all patients reviewed within 14 hours', with consultants job planned to be in the hospital from 0800-2000 each day they were on call. However, as noted above, even they did not deliver this consistently according to the focus group reports.

There was a large amount of discussion with respect to this standard from the local clinical teams. In general those individuals leading the Trust EGS service were clearly

focused on delivering their service, and as such were often reported as being the ones delivering the 2 consultant ward rounds per day. However, both the junior staff and nursing focus groups reported varying levels of delivery of this standard amongst other members of the consultant team. The review group felt this standard was essential to the delivery of a high quality EGS service and ensuring patients' received timely senior decision making. It was acknowledged that in some Trusts the on call EGS consultant was often supported by a senior level middle grade staff (senior SpRs) and as such they felt there was less need for 2 consultant rounds. However, on further questioning, it was clear that the provision of senior SpRs was not guaranteed for every rotation of juniors and as such on some occasions the supporting juniors would be very junior SpRs. In view of this, the review group felt that a job-planned standard of 2 ward rounds per day of the EGS take, with a target of all cases seen within 14 hours of admission by a consultant, would set a 'default' level of service (that could be audited) which could be 'flexed' depending on the numbers of admissions and seniority of junior staff.

Furthermore, it was noted that as most consultants are job planned to be in the Trust for 10 hours when on call, extending this to 11 hours and including a second ward round at 18.00 would deliver these 2 parts of the standard without creating a massive cost pressure or impact on consultants working life (many are already delivering this, although not always recognised within their job plans).

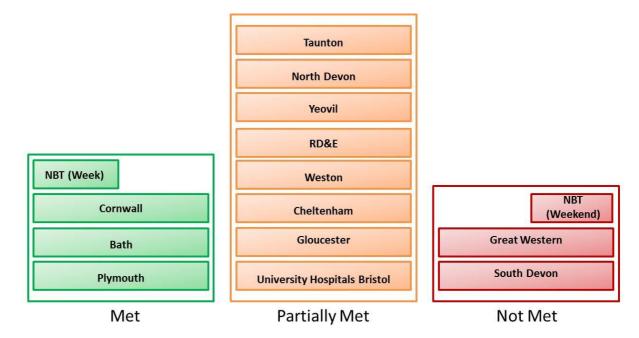


Figure 10. Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care either through multiple day working or specific patterns of working that allow continuity of care. When on-take, a consultant and the on call team are

to be completely freed from other clinical duties or elective commitments. Surgeons with private practice commitments make arrangements for their private patients to be cared for by another surgeon/team when they are on call for emergency admissions.

6. Ambulatory EGS service.

All EGS services to have a senior led, ambulatory care service, which includes a 'hot clinic', dedicated area and day case surgical pathway aligned with appropriate resources. Ideally this would be co-located with SAU.

It was clear throughout the whole of the review that all Trusts had recognised the value of ambulatory EGS care where appropriate, but most had struggled to deliver this effectively. However, in Bath Hospital this service had been significantly developed to focus on ambulatory care with a resultant impact on admissions, bed occupancy and an ongoing improvement in the delivery of acute gall bladder surgery. As such it serves as an example and model for EGS ambulatory care.

The Bath service used an Emergency Surgeon model, with 3 Emergency consultants delivering day time on call in parallel with a GI on call surgeon. The Emergency surgeon provides a morning 'hot clinic', where cases from the previous day with unclear or declared pathology can return for further investigation or review without having to be admitted overnight. In addition, Emergency Department cases can be sent home with an appointment to return for surgical review, and patients that GPs call about for advice can be reviewed. Following this, the surgeons provide a dedicated EGS day list for 4 out of 5 days, where cases such as laparoscopy, appendectomy, abscess drainage, etc. can be managed without admission to an inpatient bed. Bath is currently developing a model to deliver timelier gall bladder surgery using these lists and a nurse co-ordinator. By their own internal audit they have reduced EGS admissions by 40%, and although the service has required some investment from the Trust, there has been an overall saving (through bed occupancy) for the Trust.

The review group acknowledged this service as far ahead of any other Trust in the South West and felt there were huge opportunities within the South West for similar developments, with an associated improvement in EGS care and potential savings to secondary care Trusts.

There were certain issues related to the delivery of a high quality ambulatory EGS care service, which came out during the discussions in Bath and other Trusts. Firstly, there was a need for senior decision makers within the ambulatory care part of the service. Junior or nurse led decision making did not appear to deliver the same benefits. There was a need to link this service with day surgery list access (and with

staff to run these lists) separate to the CEPOD list. Failure to do this resulted in delays to the 'day cases' with a potential risk of admission.

This recommendation links in closely with the first recommendation for an SAU. Colocation of the ambulatory care aspect of the service with the SAU appeared to have considerable benefits in terms of cross cover by staff and flexible working. If located too far away there was a tendency for fragmentation of the on call working with a loss of efficiency and performance. Furthermore, the impact of medical outliers was evident even for the ambulatory service, where failure to ring fence bed spaces/cubicles from medical outliers results in a breakdown of the ambulatory service.

Several Trusts noted some perverse incentives created by the current tariff system, as well as issue relating to the coding of ambulatory care. Currently, there is a risk that if a patient is admitted to the EGS service, but on review by a senior clinician sent home for review the next day in the hot clinic, and then admitted for day case surgery, then the episode will be recorded as a readmission with the corresponding financial penalty. The team in Bath have negotiated their ambulatory pathways and tariffs specifically with the CCGs in order to make the service work effectively. These agreements should be shared and considered across the whole of the South West.

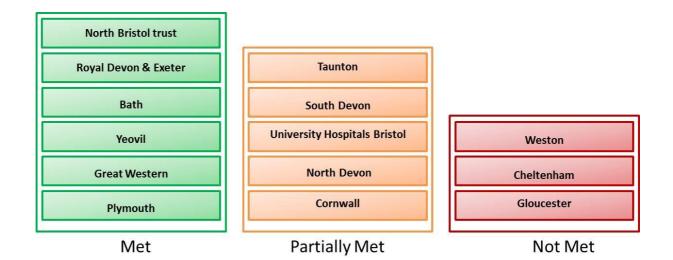


Figure 11. All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.

10. Additional Key Findings

a. Educational Network

It became quite clear from the Steering Group and during the course of the review that there was no network for EGS care amongst the nursing staff. Those staff involved in national audits or work such as NELA, EPOCH and ELC have access to ongoing education through the exposure to this work, but this was not available on a broader scale.

We would propose the formation of a South West EGS Group open to all nursing staff to provide a forum, and possibly an annual meeting, to discuss and present on topics relating to the delivery of EGS care. The review has generated considerable interest amongst EGS staff in all of the Trusts we have visited and has been highly educational for the review teams, allowing them to take back ideas and concepts to their own organisations. Following discussion with staff there appears to be an appetite for a networked group to continue this process of learning and dissemination of ideas across the South West. The Steering Group feel it would be an excellent idea to support this network and would look to the Clinical Senate and other stakeholders to support its formation. In particular, there would be a need for initial funding to get a website/forum on line and possibly some administration support. Individuals have expressed an interest in starting this up and running the network.

b. SLAs/Clinical Pathways

Standard 18 enquired about arrangements, clinical pathways and Service Line Agreements for networked services, such as Interventional radiology, and tertiary referral services such as plastics, cardiothoracics, etc. The overriding finding of the review was either the absence of any agreed arrangements or the rather ad hoc nature of the protocols. Admittedly some units were the hub of such referral practice, but they in turn didn't seem to have arrangements for the transfer in of tertiary work. There seemed to be no standardisation of funding or tariffs relating to this work. As such the review group felt the regional networking of EGS was not clearly defined and that this was something that could be addressed at NHS England South West level to save the need for individual negotiations between every Trust.

c. Tariffs

This has been covered in part during the discussion about ambulatory care. It was clear from the review that current tariffs present perverse incentives to Trusts and are at odds with ideal clinical practice. Management of elective cases attracts a larger tariff than emergency cases, despite the fact that emergency care usually costs more than elective care and although the Trust has no influence on admission routes. Furthermore, current penalties on readmissions mean cases managed through an SAU as an ambulatory case, avoiding admission and hence bed occupancy, can potentially be viewed as readmissions. The Trust would then fail to receive the tariff for this operation.

d. Library of Documents

As part of the review, teams have pulled together a large amount of evidence including operational policies and process documentation. The steering group noted, particularly those who had to write or update policies, that the review documentation provides a huge resource that would benefit sharing across the South West. The review team proposes that all South West Trusts contribute to a library of documentation which could initially be available on the Senate website. This would obviously require the agreement of all the involved Trusts, but would appear to be mutually beneficial to all.

e. Rotas and Continuity of care - 4/3, vs. single day, versus 7 days

During the course of the review we came across many different rota patterns, with only one or two being identical. However, they tended to fall into 3 groups:

i. A 4/3 split week - whereby one consultant and team cover Monday morning to Friday morning, and a separate team covers Friday morning to Monday morning. There were several variations of this for the weekdays including ones where the on call consultant would cover 2 out of the four nights, the remainder being covered or 'babysat' overnight by a colleague. The transition day between the 2 on call surgeons requires a clearly defined and job planned handover period. We particularly liked the Exeter model whereby the outgoing consultant is job planned for the first morning 'off call' to cover the CEPOD list, meaning he/she would likely be operating on their own cases. In all cases the weekend was covered by one consultant only. This arrangement has the benefit of reducing the number of weekends worked by consultants (see comment on 7 day working), but carries the risk of prolonged out of hours working with less option 'to phone a friend' than during week days. However, based on our experience and discussions with the teams this risk is low. A bigger risk was the increasing numbers of EGS patients presenting to secondary care combined with a need to review all inpatients 7 days a week. This combination of factors is moving working practices towards two consultant ward rounds each day of the weekend. It was first pointed out in Exeter, but confirmed in other hospitals, that any reconfiguration of EGS services would need to take this factor into account, as the 'receiving' hospital would face a significant increase in pressures on their consultant working.

ii. A 7 day on call period - this was present in only one hospital, and the on call consultant delivered daytime care and 2 out of the 5 weekday nights and both

weekend nights. The team recognised this solution worked for Torbay, but they acknowledged it was becoming harder with increasing referral workload. They facilitated this system by retaining responsibility for all cases they had operated on or had a specialist interest in, but handing the rest of the EGS patients over to the incoming on call surgeon. The review team felt this was an excellent way of delivering continuity of care, whilst ensuring the 'unsorted' part of the EGS admissions were handed over to the incoming team for further management, rather than being managed by a consultant with ongoing elective commitments the next week.

iii. Individual days on call - we found this type of rota in 2 Trusts. Here the on call was delivered as individual days Monday to Friday with a separate consultant on for the weekend days. In Bath this pattern of working was supported by the presence of the Emergency Surgeon role. In Swindon there was some emergency surgeon support, but much less comprehensive, and consequently the review team felt they failed the standard on continuity of care. The review group felt there was a significant potential for poor continuity of care with problems managing admitted EGS patients when the surgeon had returned to elective work, and with fragmentation of junior training.

The review did provide a series of rota options and the review group felt this could form a 'library' of work rotas/rosters, which other Trusts could review and consider if they were considering changing their working patterns. The current issue is how to display these various rota options in a way that is easy to interpret.

f. 7 day working

The review group were cognisant of national policy around 7 day working. Whilst the actual proposed plans for the delivery of this remain somewhat opaque, we tried to consider the implications for EGS services and surgical care from applying a full 7 day working programme. The impact was obviously variable for each Trust, but certain aspects were clear. For example, very few Trusts conduct daily consultant review of all General Surgical (in this we have included elective GI surgery and EGS) patients.

In general there is a transition between on call teams where patients change from being part of the EGS workload to become part of the outgoing consultant's inpatient workload. In most instances, sick or undiagnosed cases are handed over to the incoming surgeon, but the bulk of the on call patients remain with the outgoing consultant. Daily review of these cases and of the elective workload of the unit requires a daily consultant ward round of all other GI surgical cases over the weekend. At present most units provide a review of existing inpatients through a combination of SpR delivered ward rounds, partial SpR/Consultant ward rounds, or ward rounds of only highlighted cases. To deliver a daily consultant led ward round of each 'general surgical patient group (elective upper and lower GI plus 'old' EGS cases) would require a significant investment of time and money. Three consultant ward rounds per day Monday to Friday would be required to cover Upper and Lower GI plus EGS. At the weekend there could be one consultant ward round, whereby the on call consultant would review all the inpatients and the EGS patients. This is possible in smaller units but it was quite clear from the review that this would mean 2 consultant ward rounds for GI surgery each day of the weekend. This would change a 1 in 8 weekend 'on call'/work pattern to a 1 in 4, with a concomitant knock on effect in delivering weekday working and hence increased costs.

g. Junior staffing, training and alternatives

At present the majority of Trusts are able to run a 4 tier EGS on call team, comprising Consultant, SpR, Core Trainee and F1. Potential further cuts in surgical trainee numbers and recognition that fewer medical students are choosing surgery as a career, means that some Trusts in the South West may struggle to fill their oncall team rotas. Moreover, there are increasing demands and expectations for delivering training, which may impact on rostering. As an example, reduced junior staff numbers are likely to increase the frequency of their on-call commitment, with a concomitant reduction in their access to training opportunities. This risks the Trust receiving poor educational reports and losing still more trainees. Attempts to 'bolster' training would require more focused efforts by consultants with reduced delivery of other activities including elective work.

Various Trusts are looking at alternatives to junior staff including 'Emergency' Surgical Care Practitioners and Assistant Practitioners. The former are usually registered nurses, but future training programmes may open this role up to a much wider range of undergraduate applications. Within elective care, these individuals run clinics, manage ward patients and deliver a limited array of surgical procedures. Within the South West only Bath are using Emergency Care practitioners in an EGS model and it is clearly contributing to the success of their ambulatory care. The Assistant practitioners are often HCAs who have been trained up to deliver supporting roles for the EGS service. We saw this model in Plymouth, where Assistant Practitioners delivered documentation, phlebotomy and medical administration roles for the on-call team, freeing the junior team for clinical care.

Whilst the above developments can support the more junior members of the team, a reduction in SpR numbers may have a much more significant impact. Trusts lacking sufficient numbers of SpRs for the 'middle grade' part of the on-call team are at risk of their on-call structure failing. An alternative is to fill the post with Trust Doctors - the old Staff Grade and Associate Specialist roles. However, there is a lack of suitable individuals for these roles at present. This is in part viewed as a result of the introduction of European restrictions on our employment of overseas staff, which may be relieved by Brexit. In the absence of SpR/Middle grade doctors the Consultants may end up working shift patterns, which will have an enormous negative effect on the delivery of elective care and routine running of the hospital, (and require the appointment of more consultants) to deliver the same amount of elective work. Incorporate a 7 day review of all in-patients and it is easy to see the system unravelling.

h. Ultrasound on SAU

The clinical teams from many of the reviewed Trusts highlighted the benefits of either a dedicated Ultrasound service on SAU or dedicated slots for Ultrasound linked to the EGS admissions. These slots can be linked to the ambulatory part of the service, but also streamline the admitted patient pathways.

11. Developments since the Review

We were aware that the review process would take a finite period of time and that there was the potential for things to change in Trusts already visited, and for Trusts due to be reviewed to take actions to achieve the standards. Furthermore, there was the potential for members of the Steering Group, or reviewers on early Trust visits, to put in place changes prior to their own review to 'achieve a better score'.

As far as pre-emptive changes being made, the review group has accepted this possibility and takes the view that any changes introduced to achieve more of the standards are a positive outcome of the review and should enhance the existing service. However, the possibility for continuous improvement was also one of the reasons we felt the review <u>should not</u> be used to guide potential reconfiguration as 'scores' may depend on the timing of the review.

We recognise that improvement work has also occurred following review visits, and where related, this is also a positive outcome of the review. We have listed the changes in Appendix 3. However, we have not allowed the 'new' measures to impact on the original review report, as to do this would result in the review never reaching the report stage.

12. Conclusion

The EGS review has provided a fascinating, and we believe useful, insight into the current delivery of EGS services in the Southwest. We have been hugely impressed by the levels of engagement from all 14 of the Trusts in the South West and by the dedication of the EGS leads in each trust. We would like to thank each of the teams for their hard work in pulling together the evidence requested and supporting the review visits.

The review did not set out to assess or rank services with a view to reconfiguration, rather it was approached as a combination of 'stocktake audit' and an information gathering activity, with a view to developing an understanding of EGS care in the South West and to guide ways to improve clinical standards. Throughout the review it has been clear that the delivery of EGS is heterogeneous across the South West, as we suspect elsewhere in the country, and consequently difficult to quantify with a simple questionnaire. The review visits have been extremely helpful in providing greater context and a clearer narrative around the delivery of services in each Trust. From this combination of standards and feedback from the local teams we have been able to develop six achievable recommendations as well as some ancillary themes around the delivery of EGS services.

We believe that delivery of these 6 recommendations across the South West, by Trusts with the support of local commissioners, will result in improvement in the delivery, efficiency and safety of EGS, greater equity for patients across the South West, and provide a robust framework for ongoing service development in both individual Trusts and across the region as a whole.

12. Appendix 1: Emergency General Surgery Standards

	Standard	Adapted from source
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care either through multiple day working or specific patterns of working that allow continuity of care. When on-take, a consultant and the on call team are to be completely freed from other clinical duties or elective commitments. Surgeon with private practice commitments makes arrangements for their private patients to be cared for by another surgeon/team, when they are on call for emergency admissions.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care NHS 7 day services – Clinical standards
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care NICE (2007) Acutely ill patients in hospital
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care NHS 7 day services – Clinical standards

4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery

8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7.	 London Health Programme (2015) Quality & Safety Programme: Acute medicine and emergency general surgery NCEPOD (1997) Who operates when? ASGBI (2010) RCS (2011) Emergency Surgery Standards for unscheduled care
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care. All patients with a predicted mortality of >5% (SORT or P-Possum), should be discussed with an intensive care consultant preoperatively. A consultant surgeon and consultant anaesthetist must be present for the operation except in specific circumstances where adequate experience and the appropriate workforce are otherwise assured.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care RCS (2011) The Higher Risk General Surgical Patient: towards improved care for a forgotten group
10	Risk of death at end of surgery reassessed to determine location for post-op care All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented.	 RCS (2011) Emergency Surgery Standards for unscheduled care
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery. RCS (2011) Emergency Surgery Standards for unscheduled care

	delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre.	NCEPOD (2004) The NCEPOD classification of Intervention
12	Handovers must be led by a competent senior decision maker (ST3/SpR) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff as soon as possible if they are not involved in the handover discussions. Handover processes, including communication and documentation, must be reflected in hospital policy and standardised across seven days of the week.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery. NHS 7 day services – Clinical standards
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known) Do you audit: a. Outcomes - death, LOS, return to theatre, readmissions b. Risk assessment prior to surgery c. Risk assessment post-surgery d. Time to CT/US from request e. Time from decision to theatre f. Proportion of patients having gall bladder out on admission g. Proportion of patients having gall bladder out on admission for pancreatitis	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery RCS (2011) Emergency Surgery Standards for unscheduled care
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery British Society of Gastroenterology

15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	 London Health Programme (2015) Quality and Safety Programme: Acute medicine and emergency general surgery. RCS (2011) Emergency Surgery Standards for unscheduled care. Temple (2010) Time for training? A Review of the impact of the European Working Time Directive on the quality of training
16	Sepsis bundle/pathway in emergency care.	 Dellinger, R. Phillip, et al. (2012) Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	 NHS 7 day services – Clinical standards
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, etc.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	• RCS (2011) Emergency Surgery Standards for unscheduled care
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and competence to handle the emergency surgical care of children, including those with life-threatening conditions who cannot be transferred or who cannot wait until a designated surgeon or anaesthetist is available.	• RCS (2013) Standards for Children's Surgery
20	As a minimum, a speciality trainee (ST3/SpR or above) or a Trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant.	RCS (2011) Emergency Surgery Standards for unscheduled care.

	Juniors qualifications - i.e., experience level of team.	
21	Do you have clear protocols for senior speciality review of all general surgical in-patients to include: GI surgery (Colorectal, Upper GI, Hepatobiliary), Vascular, Breast & Urology every day, seven days a week. (Note: Standard split into two parts. (a) Senior review by consultant and (b) Senior review by ST3/SpR).	 RCS (2011) Emergency Surgery Standards for unscheduled care. NHS 7 day services – Clinical standards
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	New Standard (No Source)

Appendix 2: Key dates for the review visits

Name of Trust	Date of initial letter to inform of review/outline next steps	Deadline for Self Assessment information to be received	Date of Review Visit	Draft review doc. sent to review team for comments	Draft review completed and sent to Trust lead for comments ¹⁶	Trust Clinical Lead
Taunton (Pilot)	na	na	11/05/2016			Mr Hamish Noble
Royal Devon & Exeter:	12/04/2016	24/05/2016	07/06/2016	16/06/2016	04/07/2016	Mr Rob Bethune
Yeovil	05/05/2016	16/06/2016	30/06/2016	21/07/2016	30/06/2016	Mr Tim Porter
Gloucestershire	31/05/2016	12/07/2016	26/07/2016	29/07/2016	11/08/2016	Mr Mark Vipond
North Devon	07/06/2016	19/07/2016	02/08/2016	08/08/2016	18/08/2016	Mr Mark Cartmell
Cheltenham	12/07/2016	16/08/2016	30/08/2016	12/09/2016	19/09/2016	Mr Mark Peacock
Plymouth	12/07/2016	23/08/2016	06/09/2016	20/09/2016	28/09/2016	Mr Grant Sanders
Weston	20/07/2016	31/08/2016	14/09/2016	29/09/2016	10/10/2016	Mr Kandaswamy Krishna

¹⁶ All agreed changes to draft review finalised by January 2017.

University Hospitals Bristol	02/08/2016	13/09/2016	27/09/2016	17/10/2016	01/11/2016	Mr Jamshed Shabbir
North Bristol Trust	09/08/2016	20/09/2016	04/10/2016	19/10/2016	01/11/2016	Miss Anne Pullybank
Great Western	17/08/2016	28/09/2016	12/10/2016	26/10/2016	02/11/2016	Mr John Allen
Cornwall	30/08/2016	11/10/2016	25/10/2016	10/11/2016	17/11/2016	Mr William Faux
South Devon	06/04/2016	21/10/2016	04/11/2016	14/11/2016	21/11/2016	Mr Nick Kenefick
Bath	28/06/2016	08/11/2016	22/11/2016	02/12/2016	12/12/2016	Miss Sarah Richards
Taunton	14/09/2016	15/11/2016	29/11/2016	06/12/2016	14/12/2016	Mr Hamish Noble

Appendix 3: Trust changes since the review.

Subsequent to the review, some Trusts have made changes to their delivery of EGS to meet more of the standards. It should be noted that Trusts that were visited early in the review schedule have had a greater opportunity to implement changes compared to those seen at the end of 2016. Whilst we are aware that some Trusts have proposed changes that are not included below, we have tried to include only changes that have been implemented or are at the final stage of being implemented.

Royal Devon and Exeter

The RD&E had only recently undergone improvement work around its EGS service when we arrived, but we were impressed in how much had been achieved in a relatively short space of time, driven in part by the new service lead. However, there was a clear issue with their theatre availability which resulted in delayed operations, late night operating and use of elective lists. Since the visit in in June 2016, the Trust has made provision for a 24hr CEPOD theatre, hence they should now be meeting standard 8.

Yeovil

In June 2016 when the review team visited Yeovil, there was a CEPOD list that ran Monday, Wednesday, Thursday and Friday in the afternoons between 1pm and 5:30pm, with access to alternate Tuesday afternoon theatre lists. We understand that there has been some added provision with afternoon access now 5 days a week. Hot gallbladder slots (at least one per week) have been introduced onto elective lists for emergency cases, either whilst an inpatient or as an urgent outpatient (within a few days/week). It is unlikely that this provision would currently change the outcome from not met on standard 8.

At the time of the review, the focus groups identified that the F2s were lacking some supervision and support, particularly at night. (See Standard 15 in Yeovil report). In response to this, the Out of hours F1 cover has been increased which has provided more support to the F2 on the wards until midnight, and an Urgent connect GP advice line has been started.

The Trust is currently considering a separately staffed trauma list over some of the weekend, although there are no plans for this with gynaecology & obstetrics, so some emergency staff will still be shared over the weekend.

North Devon

The review visit identified the lack of SAU which meant standard 5 was only partially met. Since the review, an SAU opened mid-December 2016 consisting of a Surgical Emergency Clinic room, Ambulatory bay of trolleys and chairs and bedded bays + side rooms. In addition, there has been the development of a formalised emergency daycase pathway, which in conjunction with the above would improve the outcome on standard 7 from partially met to met. The trust has also undertaken a job planning exercise to formalise a second consultant ward round at the weekend which would improve the outcome of standard 1 to met.

Following the review, the EGS service has undertaken extensive audit work looking at processes, as well as negotiated (but not formalised) a new paediatric EGS pathway. This potentially would improve the outcome in both standards 13 and 19 from both partially met to met. It is also worthy of note that the Trust has introduced a new Hot gallbladder service which is delivering 62.5% of acute gallbladder surgery during the index admission.

Cheltenham

When we visited Cheltenham in August 2016, there was a consultant led ward round once a day in the morning but a second handover/ward round was informal, often without a consultant. Since the review there has been an agreement to move to formalised wards rounds between 16.30 and 18.30 each day to provide twice daily consultant review as required, which is due to be formalised in Operational Policy. This is likely to mean they raise their outcome of standard 1 from partially met to met.

The Trust was lacking in its ambulatory care provision and we are told that there has since been a proposal to convert an acute surgical ward into an SAU. At the current time, this is under review along with other models of EGS provision. In addition, the Trust has plans to formalise a single pathway document, to be used as a unitary document in standard 6.

NBT

Since the review team visited in October 2016, the SAU has moved to a larger ward which is better located nearer the emergency zone.

Appendix 4: Steering Group Members.

Nic Mathieu	Matron
Bruce McCormick	Anaesthetist
Rob Bethune	Surgeon
Mark Vipond	Surgeon
Andrew Allison	Surgeon
Andrew Baker	Anaesthetist
Deborah Harman	Sister (General Theatres)
Kenefick Nicholas	Surgeon
Anne Pullyblank	Surgeon
Mark Cartmell	Surgeon
Amanda Stevens	Sister (General Theatres)
Julie Smith	Sister (SAU)
Sarah Richards	Surgeon

Appendix 5: Review	Team Members*		
Alison Norbury	Surgeon	Melanie Feldman	Surgeon
Amanda Stevens	Amanda StevensSister (General Theatres)Michelle		RCS Representative
Andrew Allison	Surgeon	Nic Mathieu	Matron
Andrew Baker	Anaesthetist	Paul Mackey	Surgeon
Anne Pullybank	Surgeon	Phil Yates	SWCS Chair
Bex Snell	Manager	Rob Bethune	Surgeon
Catherine Allen	Sister	Sally Matravers	Director of Nursing
	Matron (Emergency		
Claire Bradford	Theatre)	Sharon Bonson	Matron
		Simon	
Deborah Harman	Sister (General Theatres)	Dwerryhouse	Surgeon
Ellie Devine	Manager	Simon Higgs	Surgeon
Grant Sanders	Surgeon	Siobhan Heeley	Manager
Hanousek Jan	Anaesthetist	Tracy Day	Junior Sister (SAU)
Jamshed Shabbir	Surgeon	Will Faux	Surgeon
Jeremy Reid	Anaesthetist	Mark Vipond	Surgeon
John Spearman	Surgeon	Meg Finch-Jones	Surgeon
Julie Smith	Sister (SAU)	Melanie Feldman	Surgeon
Kandaswamy			
Krishna	Surgeon	Michelle Smith	RCS Representative
	Sister (Emergency		
Karen Rayson	Theatre)	Nic Mathieu	Matron
Kenefick Nicholas	Surgeon	Paul Mackey	Surgeon
			Surgeon/Review
Liz Varian	Manager	Paul Eyers	Clinical Lead
			Review Project
Mark Cartmell	Surgeon	Scott Watkins	Manager
Mark Vipond	Surgeon		
Meg Finch-Jones	Surgeon		

* Each trust was visited by a review team of on average seven people. Commissioners (not listed) present on 11/14 reviews.

Appendix 6: RD&E Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are	Partially	Not Met
	generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Met	
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Not Met	Not Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Partially Met	Partially Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of	Partially Met	Partially Met

	on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Partially Met	Not Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Partially Met	Partially Met
20	As a minimum, a speciality trainee (ST3 or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review (consultant) of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week. As above where senior specialty review is ST3/SpR & above.	Not Met	Not Met Met
22	Do you have clear protocols, including a standard for timing, for consultant medical (physician) speciality review of emergency general surgical admissions?	Met	Met

*Standard 21 split into

(a) consultant review (b) ST3/SpR review

Appendix 7: Yeovil Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Partially Met	Partially Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Not Met	Not Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Partially Met	Partially Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Not Met	Not Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of	Not Met	Not Met

22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Not Met	Not Met
	As above where senior specialty review is ST3/SpR & above.	Met	Partially Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Partially Met	Partially Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Not Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Not Met	Not Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
	on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Not Met	Not Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff	Partially Met	Partially Met

	(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI,	Not Met	Not Met
	Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Not Met	Not Met

*Standard 21 split into

(a) consultant review (b) ST3/SpR review

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Not Met	Not Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Partially Met	Partially Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a	Met	Met

	day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Not Met	Not Met
16	Sepsis bundle/pathway in emergency care.	Not Met	Not Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Partially Met	Partially Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Partially Met	Partially Met
20	As a minimum, a speciality trainee (ST3 or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met Met	Not Met Met
22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Partially Met	Partially Met

Appendix 10: Bath Summary of compliance with the EGS standards

No.	Standard	Week	Weeken
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Met	Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Partially Met	Partially Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Met	Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff	Met	Met

13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Met	Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Partially Met	Partially Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Partially Met	Partially Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
		Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Met

*Standard 21 split into (a) consultant review (b) ST3/SpR review

Appendix 11: Cheltenham Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Not Met	Not Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Not Met	Not Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Not Met	Not Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block	Met	Met

	of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Partially Met	Partially Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Na	Na
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI,	Met	Met
	Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Not Met	Not Met

Appendix 12: Plymouth Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Met	Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Not Met	Not Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Partially Met	Partially Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Partially Met	Partially Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff	Met	Met

	(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Met	Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Met	Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI,	Met	Met
	Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Not Met	Not Me

Appendix 13: Weston Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Not Met	Not Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Not Met	Not Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Not Met	Not Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of	Met	Met

	on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Partially Met	Partially Met
16	Sepsis bundle/pathway in emergency care.	Not Met	Not Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Not Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Not Met	Not Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Na	Na
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Not Met	Not Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI,	Not Met	Not Met
	Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical (physician) speciality review of emergency general surgical admissions?	Not Met	Not Met

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Partially Met	Partially Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or	Met	Met

Appendix 14: University Hospitals Bristol Summary of compliance with the EGS standards

	block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy		
	staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Met	Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Partiall Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partiall Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and	Na	Na
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI,	Met	Not Me
	Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Me

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Met	Not Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Met	Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Partially Met	Partially Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)	Met	Met

Appendix 15: North Bristol Trust Summary of compliance with the EGS standards

13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board	Met	Met
	agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The		
	service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)		
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal	Met	Met
	consultant rota 24 hours a day, seven days a week covering GI bleeding.		
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team	Met	Not Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Met	Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and	Na	Na
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
		Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Met

*Standard 21 split into (a) consultant review (b) ST3/SpR review

No.	Standard Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Not Met	Not Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Not Met	Not Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Not Met	Not Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Met	Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)	Met	Met

Appendix 17: Great Western Trust Summary of compliance with the EGS standards

13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board	Partially	Partially
	agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Met	Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Not Met	Not Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Not Met	Not Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Met
		Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Met

*Standard 21 split into (a) consultant review (b) ST3/SpR review

Appendix 18: Cornwall Trust Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Met	Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Partially Met	Partially Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Partially Met	Partially Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Partially Met	Partially Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of	Met	Met

	on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Partially Met	Partially Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Partially Met	Partially Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Partially Met	Partially Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
		Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Met

Appendix 19: South Devon Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Not Met	Not Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Partially Met	Partially Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Not Met	Not Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (ST3/SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Partially Met	Partially Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Partially Met	Partially Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Partially Met	Partially Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Met	Met
12	Handovers must be led by a competent senior decision maker (ST3/SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on-call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff	Met	Met

	(cont)		
13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Partially Met	Partially Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Awaiting data	Awaiting data
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Met	Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Met	Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3/SpR or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
		Not Met	Not Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician of emergency general surgical admissions?	Not Met	Not Met

Appendix 19: Taunton Summary of compliance with the EGS standards

No.	Standard	Week	Weekend
1	Two consultant led ward rounds of all acute admitted patients, 7 days a week, with the timing of the ward rounds such that patients are generally seen within 14hrs from arrival. There is evidence of continuity of care(cont)	Partially Met	Partially Met
2	Clearly agreed escalation policies based around an Early Warning System (EWS), are in place to deal with a deteriorating patient. Continued monitoring of the patient is carried out. If patient is not seen within 1 hour (escalation failure), the consultant is contacted.	Met	Met
3	All hospitals admitting surgical emergencies to have scheduled access to diagnostic services such as plain x-ray, ultrasound, computerised tomography (CT) and pathology 24 hours a day, seven days a week to support clinical decision making: Emergency imaging reported real time. Urgent imaging reported within 12 hours.	Met	Met
4	All hospitals admitting surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week, either on site or through a formalised network with an agreed SLA (Service Line Agreement). Critical patients - within 1 hour if IR on site, within 3 hours if networked, Non-critical patients - 12 hours. Interventional facilities are safe for emergency patients.	Met	Met
5	Rotas to be constructed to maximise continuity of care for all patients in an acute surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical need. There is a clear policy for handover and for transfer of care to another team or consultant, and for safe discharge.	Met	Met
6	A unitary document to be in place, issued at the point of entry, which is used by all healthcare professionals and all specialities throughout the emergency pathway.	Met	Met
7	All acute surgical units have provision for formalised ambulatory emergency care delivered by senior decision maker (SpR & above). Ambulatory emergency care to include a dedicated hot clinic, dedicated day case pathway and dedicated area.	Partially Met	Partially Met
8	Access to fully staffed emergency theatre, consultant surgeon and anaesthetist within 30 minutes, 24/7	Met	Met
9	All patients considered 'high risk' (predicted mortality greater than or equal to 10% based on P-Possum/SORT) should be admitted to a level 2/3 area and have their operations carried out under the direct supervision (in theatre) of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care(cont)	Met	Met
10	All emergency general surgical operations are discussed with the consultant surgeon and the discussion is documented	Met	Met
11	The majority of emergency general surgery to be done on planned emergency lists on the day that surgery was originally planned. The date, time and decision makers should be documented clearly in the patient's notes and any delays to emergency surgery and reasons why recorded. The WHO Safety Checklist (or local variant thereof) is used for all surgical procedures in emergency theatre	Partially Met	Partially Met
12	Handovers must be led by a competent senior decision maker (SpR & above) and take place at a designated time and place, twice a day. These arrangements to be in place for handover of patients at each change of responsible consultant/surgical team/shift or block of on- call days where it should be consultant led. Changes in treatment plans to be communicated to nursing staff and therapy staff (cont)	Met	Met

13	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item, on-board	Partially	Partially
	agenda and findings are disseminated. There has been an in-house audit within the last 5 years related to emergency surgery. The service has participated in national audits (e.g., NELA, EPOCH - list those known)(cont)	Met	Met
14	Hospitals admitting emergency patients have access to comprehensive (Upper/Lower) 24 hour endoscopy service, that has a formal consultant rota 24 hours a day, seven days a week covering GI bleeding.	Met	Met
15	Training is delivered in a supportive environment with appropriate, graded, consultant supervision.	Met	Met
16	Sepsis bundle/pathway in emergency care.	Met	Met
17	There is a policy for review of all Emergency general surgery patients by a consultant, every day, 7 days a week, whilst they remain under the care of the emergency team.	Not Met	Not Met
18	Emergency surgical services delivered via a network (e.g. vascular surgery, IR, Plastics,/Burns and Paediatrics.) have arrangements in	Partially	Partially
	place for image transfer, telemedicine, and agreed protocols for ambulance bypass/transfer and a formal SLA. Standards for the transfer of critically ill patients are adhered to and regularly audited.	Met	Met
19	For emergency surgical conditions not requiring immediate intervention, children do not normally wait longer than 12 hours from decision to operate to undergoing surgery. Children receive adequate hydration and symptom control during this time. Surgeons and anaesthetists taking part in an emergency rota that includes cover for emergencies in children have appropriate training and(cont)	Met	Met
20	As a minimum, a speciality trainee (ST3 or above) or a trust doctor with equivalent ability (i.e., MRCS, with ATLS provider status), is available at all times within 30 minutes and is able to escalate concerns to a consultant. Juniors qualifications - i.e., experience level of team.	Met	Met
21*	Do you have clear protocols for senior speciality review of all general surgical in-patients to include GI surgery (Colorectal, Upper GI, Hepato-billary), Vascular, Breast & Urology) every day, seven days a week.	Not Met	Not Met
		Met	Met
22	Do you have clear protocols, including a standard for timing, for senior medical speciality review by a physician (SpR & above) of	Partially	Partially
	emergency general surgical admissions?	Met	Met

Appendix 20 – Individual Trust Reports

Due to the number and size of the individual trust reports, these will be shared, along with a combined report for all Trusts on the SWCS website from March 2017 <u>www.swsenate.nhs.uk</u>. Please email the senate administrator <u>sarah.redka@nhs.net</u> to access them if required before.