

Contents lists available at [ScienceDirect](#)

International Journal of Surgery

journal homepage: www.journal-surgery.net

Editorial

Emergency cross-cover of surgical specialties: Consensus recommendations by the Association of Surgeons in Training

Keywords:

Emergency
Cross-cover
Surgical training
Patient safety
Service provision



A B S T R A C T

In recent years, working time restrictions and a restructuring of postgraduate surgical training have resulted in increased reliance on emergency cross-cover (ECC) – the provision of emergency care by a doctor trained or training in a different specialty to that which they are requested to assess or manage. There are increasing concerns surrounding the provision of ECC, particularly regarding appropriate supervision of trainees and in turn their competence, experience and confidence in dealing with surgical problems of outside their own specialty. Surgical training has failed to keep pace with workforce changes and in this document we outline the key principles of providing safe ECC. In particular this includes the medico-legal implications of providing such cover outside a surgical trainee's normal area of practice, particularly without previous experience or means for regular skills practice and up-dating. We report the findings of an ASiT snapshot survey that demonstrates concerns surrounding existing cross-cover arrangements. Variable access to senior support, together with varied willingness to provide this, and a paucity of specific training opportunities for trainees required to provide cross-cover were highlighted. These have the potential to promote variability in patient care and resource use by those providing care outside of their usual specialty. This document provides consensus recommendations to address these issues, including clarification of curricula and improved provision of training for, and supervision of, trainees who are expected to deliver cross-cover.

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1. Foreword from the Royal College of Surgeons of England (RCSEng) Patient Liaison Group (PLG)

Patients are concerned that they receive appropriate treatment, delivered by doctors trained and experienced in dealing with the management of their condition. The Patient Liaison Group at the Royal College of Surgeons of England would like patients to receive safe and high quality care delivered in a timely manner so as to achieve the best possible clinical outcome and that these services are provided by appropriately trained and competent doctors. ASiT have highlighted in this report the concerns in service delivery and training that need to be addressed in order to maximise good patient clinical outcomes.

2. About ASiT

The Association of Surgeons in Training (ASiT) is a professional body and registered charity working to promote excellence in surgical training for the benefit of junior doctors and patients alike. With a membership of over 2200 surgical trainees from all 10 surgical specialties, the association provides support at both regional and national levels throughout the United Kingdom and Republic of Ireland. Originally founded in 1976, ASiT is independent of the National Health Service (NHS), Surgical Royal Colleges, and specialty associations.

3. Introduction

Emergency cross-cover (ECC) can be defined as the provision of emergency care by a doctor trained or training in a different specialty to that which they are required to assess or manage. ECC is a concept that has been present between specialties for many years, utilising trainees to fulfil on-call service requirements. However the progressive changes within surgical training and the wider workforce have caused increasing difficulties in its provision. Questions have been raised at both the consultant and trainee level with respect to the appropriateness and also manner in which ECC is provided between specialties. Concerns amongst general surgical trainees over cross-cover of urology have predominated discussions on ECC, triggering the recent ASiT snapshot survey, however it appears that issues relating to the provision of ECC are relevant for all surgical specialties that provide or receive ECC. This consensus statement aims to inform the trainee's position and help guide discussions with respect to the provision of cross-cover amongst the surgical specialties.

4. Background to emergency cross-cover

Since the implementation of the European Working Time Directive (EWTD), New Deal (ND), Hospital at Night (HaN) and Modernising Medical Careers (MMC), surgical specialties have been

Abbreviations

ASiT	Association of Surgeons in Training
CORESS	Confidential Reporting System in Surgery
ECC	Emergency Cross-Cover
ENT	Ear Nose and Throat
EWTD	European Working Time Directive
GMC	General Medical Council
HaN	Hospital at Night
JCST	Joint Committee on Surgical Training

MMC	Modernising Medical Careers
ND	New Deal
NHS	National Health Service
PLG	Patient Liaison Group
RCSEng	Royal College of Surgeons of England
SAC	Specialist Advisory Committee
SHO	Senior House Officer
StR	Specialty Registrar
TPD	Training Program Director

exploring new ways of working. ECC is one such mechanism, commonly referred to in respect of the out-of-hours assessment and management of acute surgical emergencies within a given specialty, be they new admissions or ward patients. Cross-cover relationships commonly exist between general surgery and urology, Ear Nose and Throat (ENT) and maxillofacial surgery, as well as orthopaedics and plastic surgery. There is often overlap between surgical specialties, both in terms of training and the procedures and conditions managed (e.g. inguinal, hernia and vasectomy surgery in the case of general surgery and urology). Such overlap forms the historical basis of cross-cover, such as the requirement for general surgery trainees to maintain competence in the management of the acute scrotum.

Recent years have seen trainees increasingly required to provide ECC for more varied disparate surgical specialties. The increased use of ECC is a result of numerous factors including changes to rota patterns in an attempt to maintain EWTD rota compliance and a reduction in training posts. With the radical overhaul and restructuring of surgical training in the UK,⁶ current junior trainees may not have undertaken 6-month Emergency Department posts, nor rotated through as many surgical specialty Senior House Officer (SHO) posts as in previous years (particularly Foundation Year doctors filling posts previously staffed by surgical SHOs). Certainly the implementation of MMC and EWTD has resulted in a reduction in the training hours and exposure of junior trainees being appointed to Specialty Registrar year 3 (StR3) and beyond.^{1–5} Subsequently, trainees' experience and ability in managing surgical emergencies across other specialties has reduced as curricula have been streamlined to meet the training requirements within their own specialty, with evidence demonstrating that the care provided by trainees cross-covering specialties differs from that of trainees within that specialty.⁷ Such variation in practice needs to be addressed.

5. Legal, ethical and professional principles of safe cross-cover

ECC must be based on the provision of safe, appropriate and timely patient care when needed. Prompt and definitive decision making is critical in the outcome of patient care with delays in the correct diagnostic or therapeutic decisions carrying associated increase in both morbidity and mortality. The suitability of a trainee to provide ECC can be assessed by applying guidance issued by the GMC and standards expected by the law courts. The GMC's guidance hinges upon their 'Good Medical Practice' publication which states that: "In providing care, you must recognise and work within the limits of your competence"⁸ Doctors are required to act to the required standard of care expected of them by law. The *Bolam* test⁹ requires a doctor to act in accordance with the accepted practice of a responsible body of medical opinion. Inexperience cannot be used as a defence in the event of a trainee acting without obtaining guidance from a senior.¹⁰ The law therefore expects a trainee to seek advice from experienced colleagues when appropriate.

Conversely a consultant would be found negligent were he to delegate responsibility to a trainee in the knowledge that the junior was incapable of performing the duty.¹¹ Given that the actions of medical professionals are being placed under increased scrutiny by the courts, following decisions such as in *Bolitho*,¹² medical professionals therefore carry greater responsibility to their level of expertise.

Both professional and legal guidance on the provision of care centres around the competence of a doctor to provide the care required of them. Competence is of paramount importance when assessing suitability to provide ECC for a specialty in which the doctor is not training and thus may have limited exposure and experience. The GMC's guidelines and the law both defend the basic principles of patient safety and care.

Recent recommendations from the RCSEng have stated that surgical care should be consultant led and, where necessary, consultant delivered.¹³ It is the consultant's duty to ensure that those trainees to whom they are delegating care and management of their patients are appropriately experienced and trained.^{13,14} This is particularly important in an era of continually changing full-shift rotas where consultants may not have worked with the particular trainees on-call with them before. Implementation of adequate training and induction programmes has the potential to inform and educate incumbent trainees not only of their responsibilities, but also to provide them with necessary skills and knowledge.¹⁵

6. Results of an ASiT snapshot survey of general surgery trainees cross-covering urology

Existing evidence demonstrates that there is variation between the management of the acute scrotum when general and urological trainees are compared,⁷ and a recent ASiT snapshot survey demonstrated varied experiences amongst general surgical trainees providing ECC for urology. All ASiT members were emailed a brief survey specifically requesting details regarding their cross-cover arrangements in this area. Thirty-eight responses were received from trainees in general surgery currently providing urology cross-cover, with the majority of trainees describing serious problems surrounding this. The survey results are presented in [Table 1](#) and representative free-text quotes are provided in [Table 2](#). There appears to be wide variation in the degree of confidence and competence in assessing and managing urology patients in the emergency setting, with only a third of trainees feeling confident in managing urological emergencies (all of whom had previously undertaken urology training posts). Such variation is likely to occur between trainees of other specialties with other comparable conditions unless they have been subject to the same training, exposure and assessment of such cross-covered conditions. The degree of senior urological supervision, support and coverage appears to be variable between institutions. General surgery registrars are often expected

Table 1
ASiT snapshot survey investigating general surgery trainees cross-covering urology.

1) Have you experienced problems with this working practice?
No: 35%
Yes: 65%
2) Do general surgery registrars feel competent and confident to cross-cover in urology?
No: 65%
Yes: 35% [NB all had previous urology experience]
3) Are general surgery registrars supported by urology consultants while on-call?
No: 47%
Yes: 53%
4) Do general surgery registrars have access to urological teaching/training/exposure?
No: 95%
Yes: 5%

to perform assessment and sometimes operative management of the acute scrotum with little or no experience or formal training.

In the past, there has been an expected ability amongst general surgical trainees to assess and manage a broad range of conditions. This is no longer the case with the continuing sub-specialisation seen in surgery. The breadth of training has reduced along with the relative experience in these fields. Of most concern is the lack of exposure to elective urological lists or access to other urological training for general surgical trainees, with 95% of respondents stating these were not available to them. Even for those who deem themselves competent and confident in the assessment and

Table 2
Representative quotes from general surgery trainees regarding their opinions on the provision of emergency cross-cover for urology.

<i>"Whether consultants are supportive or not, the skills learnt in the modern era are not as generic as they used to be, and the juniors not as skilled in their own specialty, let alone another one ... although concerns were raised, little was done to remedy the situation".</i>
<i>"The situation in our [hospital] Trust is very much that the Urology service is propped up by the General Surgical SpRs with no assessment of training or competence. I feel it is entirely wrong that we are just expected to provide this cover which is outside our speciality".</i>
<i>"Clarity from ASiT and the SAC would be very helpful in this matter as at present I feel General Surgical Trainees are left exposed to criticism and possibly worse such as legal action, and discussion of this now will assist in the future with further separation issues in other specialities".</i>
<i>"Yes, frequently [experience problems] and I feel very under-qualified and under-trained to be providing a urology service".</i>
<i>"Giving an opinion about a ?torsion will result in a scrotal exploration 100% of the time in my practice since I do not feel confident or qualified to make the decision not to explore anyone".</i>
<i>"I perform approx 2 emergency scrotal procedures per month, never have any training or senior support and have not been involved in an elective scrotal procedure for 8 years".</i>
<i>"My concern is that occasionally we are required to perform emergency procedures such as suprapubic catheter or scrotal exploration for torsion with no urology consultant cover. The only training I have had in these is on a "see one do one" basis as I have never worked in a urology job. While this is ok most of the time, I don't feel I have the experience or knowledge to deal with unexpected findings".</i>
<i>"From my personal point of view, as a senior general surgical trainee I could manage the patients adequately, but as I had never done a urology post and was post-CCT [Certificate of Completion of Training], there was always an uneasiness about doing this from a medico-legal point of view".</i>
<i>"I have often found it difficult and at times impossible to contact the on-call urology consultant for advice or assistance. When contactable they are extremely unsupportive and resentful of the disturbance. I have been pressurised to undertake scrotal exploration when it did not appear to be clinically indicated and also to undertake it with no prior experience/expertise in emergency exploration/orchidopexy. My other concern is that the majority of scrotal explorations are undertaken in the under 18 if not under 16 age group i.e paediatric and this has further implications medico-legally".</i>
<i>"I do not feel that general surgical registrars should be the 'catheter service' for the whole hospital".</i>

management urological emergencies, on-going training is required in order for them to maintain their competence within the specialty.

At present, early care of urological emergencies forms part of the curriculum for core trainees in general surgery. Therefore exposure to urological emergencies through ECC, with appropriate supervision from seniors, can provide core trainees with learning opportunities needed to fulfil their curriculum requirements.¹⁶ From ST3 onwards, the management of the acute scrotum in paediatric patients is also included in the general surgery curriculum. However there is no mention of the management of the acute scrotum, or in fact any specific mention of technical skills required to manage adult urological emergencies, such as bladder catheterisation, in the intermediate or final stages of the general surgical curriculum.¹⁶ The expected urological competencies need to be clarified in the intermediate and final stages of the general surgery curriculum.

7. Current concerns – other surgical specialties

Issues of ECC are certainly not restricted to general surgery trainees covering urology, with head and neck services often requiring ECC from trainees in maxillofacial surgery, ENT and sometimes plastic surgery. ASiT are also increasingly concerned of reports regarding non-medically qualified dentists providing emergency care out of hours for patients in specialties such as plastic surgery as a result of amalgamation of on-call rotas. An out of hours telephone survey of ENT units in the UK has also raised concerns regarding inexperienced non-ENT trainees who are expected to provide emergency resident ENT cover.¹⁷ This study demonstrated a lack of training for doctors from other specialties covering ENT. Two-thirds of respondents were cross-covering other specialties in addition to ENT, with 19% of doctors covering four or more surgical specialties whilst on-call. These concerns echo those from a previous study of junior doctors covering ENT which showed that of those cross-covering from other specialties only 35% had received any training on how to manage common ENT emergencies.¹⁸

Cross-cover of children by primarily adult sub-specialities has also raised issues regarding the assessment and management of children presenting with possible testicular torsion and acute abdominal pain. The relationship of secondary-care general and urological surgery with tertiary paediatric surgery also warrants comment. Initial assessment and management of a child with acute abdominal pain, for example acute appendicitis, can be made at a secondary-care level by either general surgery and or general paediatrics. In the majority of cases, the initial observation period can be safely undertaken locally avoiding potentially unnecessary transfers to tertiary centres, often out-of-hours. A decision to operate locally is determined by provision of adequate resources and expertise, as outlined by the Children's Surgery Forum.¹⁹

Issues relating to children presenting with possible testicular torsion echo those highlighted between general surgery and urology with regards to the acute scrotum in the adult services. The technical aspects of scrotal exploration are similar in children, particularly post-puberty, and thus within the competency of the surgical team providing the service to adults in the local unit. Delay in definitive treatment caused by transfer to tertiary care is inappropriate and safe practice may require greater surgical and anaesthetic consultant input.

Although curricula for general surgery, urology and general paediatrics include the assessment of surgical conditions of childhood, recent closure of secondary-care level inpatient paediatric units threatens to divert significant numbers of children with common emergency presentations away from local services and towards tertiary care. As a result the critical mass necessary to sustain local

Table 3

Summary of advice for trainees who are asked to provide ECC.

- You should always work within the limits of your competence as per GMC guidance.
- Prior to commencing a training post find out in advance if you will be expected to provide ECC.
- If you have not received adequate training or do not feel competent to provide ECC then bring this to the attention of your educational supervisor and/or training programme director, ideally in advance of starting the post.
- Your supervisors should help with the early identification of training opportunities in order for you to gain the required level of competence to conduct ECC duties.
- If you find yourself providing any element of ECC that you do not feel competent to do so then you have a duty to inform the consultant on-call for the speciality and document having done so.
- You should then utilise any resultant opportunities to gain experience and training under consultant supervision.
- If you have concerns about patient safety then you are obliged to raise these. GMC advice on raising concerns about patient safety can be accessed at www.gmc-uk.org/guidance/ethical_guidance/raising_concerns.asp

paediatric surgical services may be lost with few learning opportunities available for trainees working in secondary care to fulfil curricula requirements and maintain competence.

There are also particular challenges in the provision of ECC for surgical specialities where emergency cases are infrequent. In such instances there is greater likelihood that they will operate non-resident rotas, leaving other specialities to manage cases such that there is little chance to gain any experience, even for trainees within that particular speciality.

The recent separation of vascular surgery from general surgery, and with it a separate vascular training programme and curriculum, adds further complexity to the issues surrounding ECC. Vascular surgery now represents an additional speciality that will require trainees from other surgical specialities to cross-cover in order to support consultant vascular surgeons in service delivery. How the new speciality status of vascular surgery impacts on the training of non-vascular trainees and their on-call responsibilities remains to be seen.

8. The impact on the training of those providing cross-cover

It is important to ensure that a specialty's need for ECC due to rota provision does not impact unnecessarily upon the workload, training and delivery of patient care of another specialty's trainees. Specialities such as general surgery can be seen as an easy target for the provision of ECC, and there are concerns that such broad-based on-call workload will make the specialty an unattractive proposition in the longer term. The requirement for a resident on-call service is usually driven by the volume and extent of the workload within the specialty in question, and as such, resident teams are often already busy prior to the addition of cross-cover responsibilities. Interestingly, prior to adoption of MMC the Gold Guide to training concluded that trainees should not cross-cover other specialities once they had entered higher training. It is noticeable that this is no longer the case in current editions of the Gold Guide, although it does allude to the GMC guidance on acting within one's competence.²⁰

9. Recommendations

In response to the issues identified with regards to ECC, ASiT recommends the following proposals as appropriate for all surgical specialities providing ECC out of hours. Summary advice for trainees can be found in [Table 3](#).

1. Wherever possible, patient care should be provided by those doctors trained or training within the specialty in question, thus avoiding the need for cross-cover provision and maximising training for those trainees pursuing that specialty.
2. Where potential service need for ECC between specialities arises, further Joint Committee on Surgical Training (JCST) and Specialist Advisory Committee (SAC) guidance on relevant curriculum content and the extent of such provision is required to ensure robust guidance for those undertaking ECC.
3. Trainees should not be expected to perform ECC for any specialty or condition which is not included within their curriculum, and thus no formal requirement or provision for training.
4. In those areas where there is clinical knowledge and skills overlap between specialities providing cross-cover, curriculum alignment must take place between those specialities to ensure trainees demonstrate similar competencies at similar grades.
5. In departments where a surgical specialty is cross-covered by another, there is a duty upon consultants in both specialities to ensure there are adequate local training opportunities and provision for trainees to gain the required level of competence to conduct their ECC duties.
6. Trainees who have not yet received adequate training experience or competence to provide ECC must bring this to the attention of the on-call specialty consultant in question and their educational supervisor.
7. Trainees providing ECC who do not feel competent to do so must inform the consultant for whom they are cross-covering and should utilise the resultant opportunity to gain experience and competency.
8. In centres where cross-cover is provided for a specialty, consultants will provide immediate appropriate support for those trainees providing ECC when asked to do so.
9. Where ECC provision is necessary, it should be to provide timely appropriate emergency care only, and should not include the out of hours (e.g. weekend daytime) management of ward patients including routine ward rounds.
10. Once admitted, all patients should be assessed by their appropriate specialty consultant on a post-take round, and not solely by the registrar providing cross-cover.
11. There should be local induction processes for new trainees who are required to provide cross-cover, so they can be made aware of local practices and how to get hold of senior support when required.
12. The need for and provision of such support should be audited on a regular basis to ensure trainee and patient needs are met.
13. Consideration should be given at local, regional and national levels to provide specific courses addressing the training needs of those expected to provide surgical cross-cover for different specialities whilst on-call, in order to ensure trainees are emergency safe and provide consistent, up-to-date patient care.
14. Further research into the required frequency and outcomes of ECC between specialities will better identify whether or not such cross-cover provisions are in fact necessary, or whether such emergencies should be managed by the specialty themselves.
15. Trainees have a duty to report deficiencies and clinical incidents arising where the provision of cross-cover was a contributing factor. Reports highlighting this should be submitted both locally and also through national organisations such as the Confidential Reporting System in Surgery (CORESS;

<http://www.coress.org.uk/>). In addition, this should be copied to the relevant Training Programme Directors (TPD) in order that they may review the appropriateness of continued provision of training posts in these hospitals and departments.

- On a broader level, cultural changes within the health service and training programs are required in order for trainees to feel supported in highlighting unsafe working practices such as cross-cover without fear of harming future career progression or training opportunities.

10. Conclusions

Current training programs and curricular have not kept pace with the increasing sub-specialisation within surgery and more general workforce changes. This consensus statement clearly describes current safety concerns surrounding the arrangements for the provision of emergency cross-cover between surgical specialties by trainees. Cross-cover practices should be avoided. Where this is not possible due to staffing or geographical issues, formal training and Consultant support is required for junior doctors charged with managing surgical patients outside of their own specialty. The recommendations set out in this statement should ensure confident, competent surgical trainees and safe patient care.

Conflict of interest

The authors are current surgical trainees and current or former elected members of the Council of the Association of Surgeons in Training. The authors have no other relevant financial or personal conflicts of interest to declare in relation to this paper.

Funding

Nil.

Acknowledgements

The Royal College of Surgeons of England Patient Liaison Group (PLG), Mr Basil Beckdash^c and Mr Peter Radford.^c

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Available online 25 September 2013

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