Medical education’s front line
A review of training in seven emergency medicine departments
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Introduction

This report gives an overview of the current challenges in emergency medicine training and makes recommendations on how these might be addressed. The findings come from our targeted checks of the emergency medicine departments in six local education providers (LEPs) in England (NHS trusts) and one in Jersey, which we carried out between December 2012 and February 2013.

Emergency medicine training faces a number of key challenges. The high workload can put foundation doctors in training off the specialty, while supervision on night shifts can be inconsistent.

According to the College of Emergency Medicine: ‘The continued rise in attendances and the severity and complexity of patient conditions presenting, without provision of adequate resources for assessment and admission, has contributed to severe difficulty in the recruitment and retention of doctors specialising in emergency medicine.’

* Statement taken from the College of Emergency Medicine website.
**Why did we carry out the checks?**

Our checks were prompted by the increasing number of concerns reported to us about education and training in emergency medicine, particularly about very junior doctors in training working unsupervised at night. These checks are part of our role to assure the quality of medical education and training – we use them to review how training is being delivered and investigate, in detail, specific risks that have been identified.

In April 2012, we audited emergency department rotas. We found 20 sites that did not clearly demonstrate on-site supervision from a senior doctor in the emergency department overnight. Our London regional visit, carried out in late 2012, also highlighted issues with supervision and handover – this varied depending on the emergency department (see [www.gmc-uk.org/London_review](http://www.gmc-uk.org/London_review)).

There are currently 16 NHS trusts where we currently have concerns about the postgraduate training of doctors in emergency medicine departments.

These concerns include:

- a lack of clinical supervision for doctors in training during weekdays and, to an even greater extent, out of hours
- providing services across two sites with insufficient staffing
- doctors in training being asked to work beyond their competence or to carry out inappropriate tasks
- poor quality of locum doctors who are being used to fill rota gaps.

We also identified recurring themes about patient safety raised by doctors in training in our 2012 national training survey. Some of the concerns doctors identified were:

- a reliance on locum nursing staff
- long waiting times on trolleys
- high numbers of patients
- a lack of resources
- understaffing, especially at night
- poor triage of patients
- a lack of beds.
Where we checked

We identified seven LEPs to check. They were selected using evidence from the 2012 audit of rotas and the national training survey, as well as information from postgraduate deaneries, local education and training boards (LETBs), and medical royal colleges. We also used data from other organisations such as the Care Quality Commission (CQC).

Two sites were selected because they demonstrated potential good practice, and five were selected because there was evidence of potential risk. We found that each site we visited had particular strengths and were finding innovative ways to meet challenges.

The chosen sites were in England and Jersey. We did not visit emergency departments in Northern Ireland, Scotland and Wales because of other ongoing quality assurance activity in these areas.
Location of the seven sites visited

The two sites chosen for potential good practice were the University Hospital of North Tees and The James Cook University Hospital in South Tees.
Concerns about emergency medicine training

In its 2012 annual report to the GMC, the College of Emergency Medicine highlighted concerns about:

- continuing service pressures, which reduce the amount of time trainers can dedicate to delivering training
- rota gaps in Scotland, northeast England and the east Midlands, which have increased the pressure on doctors in training to work more out-of-hours shifts
- a lack of senior supervision for junior doctors in training, leading to consultants completing fewer workplace-based assessments of competence
- a lack of resources, leading to ineffective simulation training.

The wider context

It is important to see our review in the wider context. It is just one of a number of reports that have highlighted pressures on emergency care with recommendations for improvement.

Professor Sir Bruce Keogh has recently announced a review into urgent and emergency care that is aiming to develop a national framework to build a safe, more efficient system, 24 hours a day, seven days a week. Those using and working in the NHS have from 17 June to 11 August 2013 to feedback on an evidence base for change and emerging principles that will guide that review. See the NHS website for more information (www.england.nhs.uk/2013/06/17/uec).

We also believe it is important to undertake this work with others and to ensure that we exchange information and work closely together with other regulators, as was highlighted by the Mid Staffordshire NHS Foundation Trust Public Inquiry (www.midstaffspublicinquiry.com/report).

For this review, we have involved the College of Emergency Medicine, the CQC, and deaneries and LETBs in our checks. A local Health Education England (HEE) member of staff with an interest in postgraduate education and training attended every check we completed. The CQC gave us information about the quality of care delivered at the sites and observed two of the site checks.
The pathway into emergency medicine

The typical training pathway for a graduate of a UK medical school who wants to become an emergency medicine consultant is to undertake eight years of training in three stages.

The ACCS training programme provides experience in emergency medicine, acute medicine, anaesthetics and intensive care. It has been designed by the College of Emergency Medicine, the Royal College of Anaesthetists, the Federation of Royal Colleges of Physicians and the Intercollegiate Board for Training in Intensive Care Medicine. Together these organisations form the Intercollegiate Committee for ACCS Training.

To move from ACCS to higher specialty training, doctors in training must pass the College of Emergency Medicine’s membership exam (MCEM) in addition to deanery or LETB workplace-based assessments. To complete training, they must also pass the College of Emergency Medicine’s fellowship exam (FCEM).
Increases in unfilled core training posts

The number of doctors in training moving from foundation to ACCS training is low. Figures from the College of Emergency Medicine indicate that in 2012, 177 foundation doctors in England and Wales applied for ACCS with a view to training in emergency medicine. Of those, 115 were offered a place on the programme, but only 61 accepted, making this the second lowest acceptance rate of any specialty.

The consequences of such posts being unfilled can include:

- challenges in delivering services to patients
- the need to recruit locums (who can be expensive and of variable quality)
- additional pressures on other medical staff
- impact on rotas and educational opportunities for other doctors in training.

Common themes
During this review, many of the doctors in foundation training who were working in emergency departments told us that they would not apply for specialty training in emergency medicine because of the high and intense workload they had seen. Many felt that their senior colleagues had little or no work-life balance.

Many of the doctors in core training said they were planning to take a break before applying for higher specialty training to reassess their career choice, work abroad or spend time with their family.

Doctors in higher specialty training told us that there is a large increase in workload when moving from core to higher specialty training posts. They are part of the middle-grade rota, have more responsibility and must supervise doctors in foundation, core and general practice (GP) training in the emergency department.

At University Hospital of North Tees, doctors in higher specialty training work daytime shifts with more experienced staff covering initial night shifts. The core rota allows doctors to learn new skills, such as supervising others and managing the department, before having to do so without direct supervision.

Doctors must pass the MCEM to make the transition from core to higher specialty training. In 2011–12, 73.6% of candidates passed the exam, up from 61.7% in 2010–11. This means a quarter of the doctors who could move into higher specialty training end up either repeating the training year, taking time out or leaving the specialty or the UK.

FCEM pass rates are lower, with 46.7% of candidates passing in 2011–12. As with many specialty exams, the college reported that women tend to perform better than men, as do those with a primary medical qualification from the UK and those of white ethnicity.

At the time of our 2012 national training survey, there were 1,416 foundation, 493 core, 716 GP and 555 higher specialty doctors in training holding a post in emergency medicine.
46.7% of candidates passed the FCEM exam in 2011–12.

Unsatisfactory outcomes in the annual review of competence progression (ARCP) are increasing

Each year doctors in training must show that they have learnt enough to move onto the next stage of training. If they have not, they are awarded an unsatisfactory outcome at ARCP.

The figure below shows the proportion of doctors in emergency medicine who were awarded an unsatisfactory outcome in 2010, 2011 and 2012. In general, doctors in training who gained their primary medical qualification in the UK have a lower proportion of unsatisfactory outcomes in emergency medicine than those who gained their primary medical qualification in the European Economic Area (EEA) and international medical graduates (IMGs). From 2010 to 2012, the proportion of unsatisfactory outcomes has increased across all specialties overall in UK medical training.

* IMGs are doctors who gained their primary medical qualification outside the UK and EEA.
Finding ways to manage risk

In every site visit, staff reported increasing numbers of patients, reflecting the national trend. Each trust sought to manage risk both in the emergency department and elsewhere in the hospital.

We found that frequently patients remained in the emergency department despite being ready to move to a relevant specialty ward, because of pressures elsewhere in the hospital and in some cases a lack of beds. It is preferable to let high risk patients stay in the emergency department where staff are trained to deal with them.

Creative ways to limit emergency admissions

Risk management works well at the University Hospital of North Tees, where much work has been done to build relationships between the emergency department and other areas of the hospital. The hospital has brought together two emergency departments on one site, and the department is now better staffed.

At Leeds General Infirmary, several initiatives have been put in place by the emergency medicine department to reduce numbers of patients and to manage risk across the hospital. For example, a helpline has been introduced for GPs who are considering referring patients to the emergency department. GPs can also admit patients directly to the relevant specialty ward without having to go through the emergency department. The number of patients continues to rise but, without these initiatives, the increase could be at a much higher rate.

Liaising with other services and making quick decisions

All emergency departments have to manage the flow of patients, especially when transferring them to other acute or mental health services. This can be particularly challenging out of hours.

Many of the departments we checked struggle with their out-of-hours access to mental health services, so patients remain in the emergency department until they can be seen by a specialist – often until the next working day.
The Royal Bournemouth Hospital has a liaison psychiatrist who is based in the emergency department and available to deal with patients and support doctors in training with regular educational sessions. Doctors in training told us that this works very well.

A key aspect of managing risk in an emergency department is being able to make decisions, often quickly. Because of the shortage of higher specialty doctors in emergency medicine, most are in the early years of training. With less clinical experience, and often no previous experience in emergency medicine, they are often not able to make difficult decisions quickly. Some also said that they felt their need for supervision and senior review of clinical decisions could be a burden on already over-worked colleagues.

Many doctors in foundation and core training told us that this made them feel marginalised and contributed to their decision not to apply for specialty training in emergency medicine.

Tackling understaffing

There are a number of initiatives ongoing at a national level to deal with recruitment and retention in emergency medicine.

In all the departments we checked, every effort was being made to manage the workload of doctors in training. But this often resulted in consultants working beyond their contracted hours and doing the work of doctors in higher specialty training to fill rota gaps. At most of the departments we checked, we were told that current rotas at all levels were not sustainable.

The only rota adequately staffed was at the University Hospital of North Tees, which had recently brought two emergency departments on to one site.
Finding time for training
The high intensity of workload leads to doctors in training and their consultants focusing largely on service provision, with learning opportunities that are opportunistic rather than managed. Doctors in training said they were unable to complete workplace-based assessments. At The James Cook University Hospital, King’s Mill Hospital and Leeds General Infirmary, a consultant allocates time each week to complete these assessments.

Understaffing and rigid rotas can make it challenging for doctors in training to attend regular teaching sessions and to take time out for study leave.

Most doctors that we spoke to in all seven emergency departments said that the day-to-day business of their departments, as well as the intensity of the work, has a long-term effect on personal well-being. We heard from staff that making repeated high-risk decisions within tight timescales, while working long hours, can cause burnout.

Giving doctors in training the right supervision
One of the aims of the rota audit was to identify the areas where a large number of foundation doctors work without adequate supervision at night. Some of the sites we checked were selected on the basis that they might fall into this category, but we were pleased to see this generally wasn’t the case at the seven LEPs we visited.

Supervision can take many different forms, including the physical presence of a more senior doctor or having access to a more experienced colleague (either in person or by telephone) to answer questions or assist when needed. Of course, the quality of that supervision can depend on a number of factors, including personalities, competing pressures, approachability and accessibility.
We found that while most of the doctors in training were being supervised, the main issue was the quality of that supervision.

Concerns about the quality of supervision

We found that while most of the doctors in training were being supervised, the main issue was the quality of that supervision. Many of the departments we visited relied on locum cover during out-of-hours shifts, when the doctors in training that we spoke to are most likely to be working.

The experience of doctors in training suggests that there is a difference between emergency departments that use regular locum doctors who know the hospital and staffing team well, and those that rely on locum doctors who can be inexperienced in the specialty or the hospital. Inexperienced locum doctors may need more support from the doctor in training than they are able to return.

The location of the supervisor is also crucial. For example, we were told of situations where the supervisor spent the entire shift in the resuscitation room with the highest risk patients, and so were unavailable to give any support or supervision. Again we were told that supervisors are sometimes unable to come to a patient when a doctor in training needs senior review and instead has to give advice based on a verbal account of the patient’s history and physical state.

Accessibility of clinical supervision can also effect admission and discharge. At Queen’s Medical Centre, a senior review is only required when a patient is admitted, rather than on discharge. This carries serious risk – it means that doctors in training miss out on key learning opportunities and, with no senior review, they run the risk of becoming more confident without becoming more competent.
Positive examples to promote learning

Consultants at the University Hospital of North Tees and the Royal Bournemouth Hospital review case notes the morning after a night shift to see what their doctor in training has experienced. They then discuss these with the doctor in training to strengthen their learning.

The James Cook University Hospital, King’s Mill Hospital and University Hospital of North Tees assign supervisors thematically. This means supervisors with specific interests are paired with doctors in training with a similar interest, meaning that consultants can engage in detail with one training curriculum and focus more effectively on the training they deliver.

Sharing practice

The latest postgraduate deans’ reports to the GMC (October 2012 and April 2013) identified six elements of good practice relating to emergency medicine. These included using USB sticks containing clinical guidelines for all doctors training in emergency medicine, a ‘how to’ guide for foundation doctors, and good quality of regional teaching and induction (annex 1).

The College of Emergency Medicine is piloting a new assessment tool for senior doctors in training across five LETBs or deaneries across the UK. After evaluation, this pilot will inform changes to the curriculum and assessment system in 2014.
Case study: University Hospital of North Tees

The University Hospital of North Tees, part of the North Tees and Hartlepool NHS Foundation Trust, had eight areas of good practice in our report from the site check. We asked staff at the Trust how they achieve such positive results.

The emergency medicine department has undergone several significant changes since the Trust formed in 1999. Until 2006, there were two separate emergency departments: one at University Hospital of Hartlepool and the other at the University Hospital of North Tees, nearly 14 miles away. The departments had one directorate, but worked independently for most activities.

Achieving adequate medical staffing levels in the emergency department had been challenging for many years, despite funding attempts to recruit enough medical staff for two 24-hour, middle-grade emergency department rotas. It became clear that the Trust could no longer continue to rely on a single doctor in training at night in the emergency department at Hartlepool.

As a result, the emergency department in Hartlepool was closed in August 2011 and replaced with an urgent care centre. The two departments were amalgamated at University Hospital of North Tees. Protocols were put in place for direct ambulance admissions to the University Hospital of North Tees’ emergency assessment unit.

Clear progress for doctors in training and specialty doctors

To maintain adequate staffing levels, both emergency departments developed strong educational programmes for medical staff. With the rotation of medical staff and a steady increase in consultant numbers, the education programme was modified and more closely linked to the various curricula.
Separate middle-grade teaching, in addition to regional higher teaching, was started, with separate intermediate grade teaching being introduced slightly later. Teaching is now provided on a four-month cycle, with virtually all teaching coming from within the directorate. A CD of all policies and guidelines is given to each doctor in training, and guidelines can be accessed through the directorate website.

The feedback from doctors in training about these programmes was overwhelmingly positive and this, combined with a high retention rate of doctors, suggests that the support within this department is working well. There were also signs of career progression in the department with several doctors moving from junior to middle grade. Two doctors who started with clinical attachments are now associate specialists.

Improving patients’ care through better rota cover

Amalgamating the departments at one site allowed consultants to cover from 8 am to 10 pm, seven days a week, with a second consultant from 9 am to 5 pm, Monday to Friday. Doctors in training can easily access these consultants to complete workplace-based assessments. All staff know each other and communicate readily on any problems, from clinical decision making to the trivial matters that help to make teams work.

Doctors at the Trust point to the overarching principle that quality of care comes first and suggest that has been key to implementing these changes – both in the emergency medicine department and in the Trust as a whole.

This has meant that any changes must demonstrate improvements in patient care, and that achieving targets is secondary.

They also believe that having an easily accessible executive team has made it easier to create this ethos. The executive team is happy to be questioned and act on suggestions made by clinical teams.

“To maintain adequate staffing levels, both emergency departments developed strong educational programmes for medical staff.”
Seven key ways to improve quality

We have identified seven ways in which those involved in training in emergency medicine may be able to improve quality. We accept that not all of these recommendations may fit into every local context and that we only checked a small sample of sites.

1. Managing a patient’s care in the emergency department, and in subsequent departments, needs to be the collective responsibility of the trust, its board and senior management team. Risk should not be held solely within the emergency department.

2. The healthcare system at a national level needs to educate patients, the public and colleagues on the best care pathways for patients to address the overdependence on emergency medicine departments.

3. LEPs need to develop plans to address the current issues facing emergency medicine to ensure sustainable delivery of services. These plans should include an extended induction, more intensive shop floor teaching and use of simulation to develop the junior medical workforce’s confidence and competence in managing the care of acutely ill patients.

4. LEPs, deaneries and LETBs need to work together to ensure that they balance service and training appropriately in working arrangements to minimise burnout in the training workforce.
Seven key ways to improve quality

Understaffing has placed many emergency medicine doctors in a difficult position. One of the most reassuring messages from these checks is that the vast majority of emergency medicine doctors are committed and caring, and work beyond their contracted responsibilities to give patients safe care. Furthermore, senior doctors and other healthcare professionals try hard to give their doctors in training a positive educational experience.

We have set a number of requirements for each LEP and these will be monitored through our quality assurance process. In addition, the checks have underlined the overall pressures on this area of medicine and medical training, and we will continue to keep a close eye on the position of doctors training in this area, including the possibility of carrying out further checks in the future.

5. Recruiting doctors into the specialty needs to be a higher priority. Many of the current problems arise from staff shortages, which in turn place greater pressures on doctors and make it a less attractive area of medicine in which to work.

6. There appear to be significant advantages from combining services on to a single site. If this is possible, it can transform rotas and help to ensure safer care and better training.

7. There are real benefits to be gained from deaneries and LETBs working more closely with trusts to support doctors who are making transitions between stages of their training programme. This can help to make sure that there is guidance at each step and that the next level is achievable and appropriate.
Annexes

Annex 1: Good practice from the October 2012 and April 2013 deanery reports

<table>
<thead>
<tr>
<th>Trust</th>
<th>Summary</th>
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<tbody>
<tr>
<td>Imperial College Healthcare NHS Trust</td>
<td>All A&amp;E trainees given USB sticks containing clinical guidelines</td>
</tr>
<tr>
<td>North Middlesex University Hospital NHS Trust</td>
<td>Creating the Foundation Doctors’ “How to guide” website linked to the hospital intranet, which provides easy access to practical information for all junior doctors starting at the hospital. In addition, a mobile app has been created.</td>
</tr>
<tr>
<td>North Tees and Hartlepool NHS Foundation Trust</td>
<td>Emergency Medicine - Provision of a 3 tier rota and 3 tier training programme</td>
</tr>
<tr>
<td>Northern Health and Social Care Trust</td>
<td>Induction. Induction runs on three half days immediately after changeover and then in a series of 1 hour sessions over the next week. Considered by trainees to be comprehensive and of very good quality. Experienced staff cover the first night. A very good handbook is also provided.</td>
</tr>
<tr>
<td>Portsmouth Hospitals NHS Trust</td>
<td>The One Minute Wonder Network. A One Minute Wonder (OMW) board was introduced to the Queen Alexandra Hospital Emergency Department. The board was positioned in the Emergency Department resus room, next to the gas machine to take advantage of the 60-90 seconds spent stood waiting for a blood gas result. The OMWs were focused educational displays which contain information that could be read and absorbed in just one minute.</td>
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Annex 2: Good practice from the College of Emergency Medicine annual specialty report 2012

The College ran a review of the assessment system and have found that the system has characterised the concerns of trainees and trainers highlighted by the National Survey feedback. The College would pilot a new assessment system, including a novel assessment tool, for ST5s in five Deaneries in 2012-13 to inform potential curriculum changes for 2014.

The College was noted for developing College Tutors, Training Programme Directors and Educational Supervisors to provide externality to ARCP panels and deanery visits.

* This text has been taken from reports submitted to us by the deaneries, LETBs and the College of Emergency Medicine.