The Royal College of Emergency Medicine

CONSULTANT SIGN OFF

CLINICAL AUDIT 2016/17

National Report

Published: 26th May 2017

Contents

Foreword

Caring for patients in the Emergency Department (ED) is of course all about managing risk. In an ideal world, all our patients would be either seen or 'signed off' by a trained or an ST4+ trainee (or equivalent) emergency physician. The present workforce challenges in the UK & Ireland suggest we have a long way to travel to achieve that standard. The College has therefore identified a number of high risk conditions that merit senior review / sign off. The audit suggests that even in these sub groups we are not doing well.

Equally frustrating are the poor quality of our ED information systems (EDIS) that do not easily track this activity and link to adverse events or outcome. We are left therefore to perform laborious reviews to try and quantify how well we are able to care for such high-risk patients.

This audit by the College has taken much effort, application and expertise to try and quantify how far we have travelled on this important topic – we seem to have a long way to go indeed! There may be a number of reasons for this and some systems that are well staffed may believe they are doing better than the audit suggests. Most will agree that our services at a senior level are stretched to their very limits and safety is compromised as a result both for our patients and our juniors who care for them.

The broad message coming out is that if as we believe, 'senior sign off' is a powerful surrogate marker of safety, then we will need to address our workforce challenges. We also need our EDIS systems to be improved so we can track progress in a much better way.

The results from this College audit should be of interest to quality regulators, commissioners, risk managers and Executive Boards as well as the clinicians in ED. We should all be aiming to create solutions to manage and mitigate risk so that we can improve the delivery of care for our patients.

Dr Taj Hassan, RCEM President

Co-signed:

Dr Adrian Boyle, Chair of Quality in Emergency Care Committee

Dr Jeff Keep, Chair of Standards & Audit Subcommittee

Executive Summary

A total of 24341 patients presenting to 180 Emergency Departments were included in this audit. This was the third time this audit has been conducted. The chart on the following page is a summary of the performance against standards.

The purpose of the audit is to monitor documented care against the standards published in June 2016. The audit is designed to drive clinical practice forward by helping clinicians examine the work they do day-to-day and benchmark against their peers but also recognise excellence. There is much good practice occurring and we believe that this audit is an important component in sharing this and ensuring patient safety.

The audit shows an average rate of consultant review of 14% across the 4 standards.

81% of departments reported that they felt the standards have an effect on clinical management and 79% an effect on admission or discharge decisions.

The standards are valued but the ability to deliver and demonstrate them remains a challenge.

When including the ST4 grade and above, the average senior review rate was 43%.

The practice of subsequent case note review appears to occur in few departments or is incomplete.

There is much else to learn from this audit. It gives a picture of the current state of staffing, the reliance on locums and the areas on which departments need to focus.

Key recommendations

1. High risk cases present to EDs throughout the week and at all times of day and night. Departments should consider how staffing and seniority are balanced not only to demand, but also to the requirement for senior staff to care for high risk conditions.

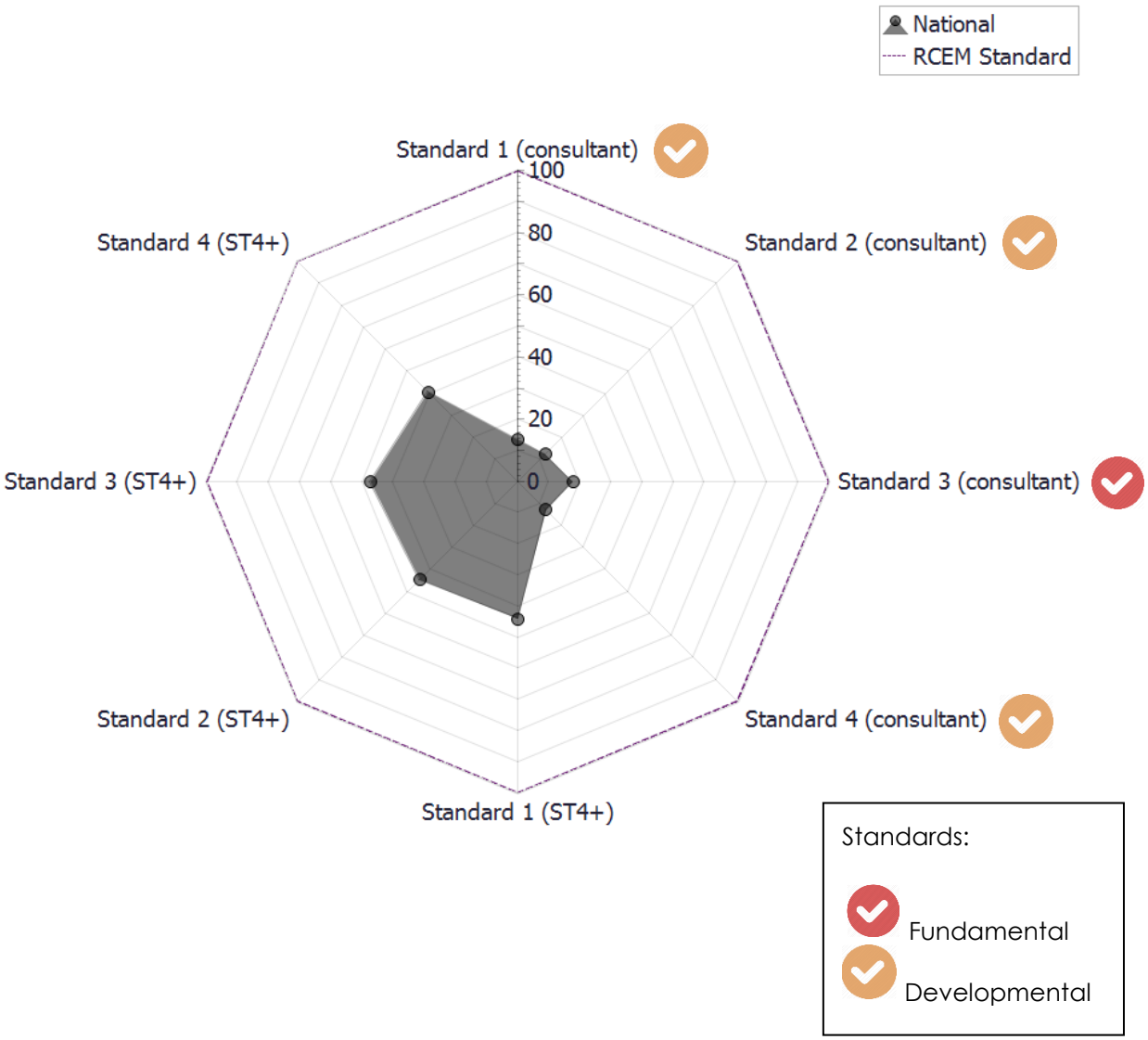
2. Departments appear to have more reliable methods for identifying patients making unscheduled returns. RCEM encourages EDs to examine whether processes for this group can translate to a higher review rate for other high risk groups.

3. The adoption and reliability of a subsequent case note review appears incomplete. Departments are encouraged to examine this process and consider dedicated consultant time for this. The RCEM service delivery group have useful resources for job planning and ensuring that the consultant workforce identifies key direct clinical care administrative tasks.

4. RCEM notes the difficulty gathering data and the small proportion of departments with automated clinical systems. Evidencing senior reviews is important for a number of reasons including the need for clear documentation and communication and for medicolegal reasons. Departments are encouraged to review how a senior review is documented, whether in a clinical system or in paper case notes.

Performance Summary

This graph shows the median national performance against standards for this audit.



↑ **Higher scores (e.g. 100%)** indicate higher compliance with the standards and better performance.
↓ **Lower scores (e.g. 0%)** indicate that your ED is not meeting the standards and may wish to investigate the reasons.

Summary of national findings

	RCEM Standard	National Results 2016/17 (24341 cases)		
		Lower quartile	Median	Upper quartile
The following high-risk patient groups should be reviewed by a consultant* in EM prior to discharge from the ED.				
STANDARD 1: Consultant* reviewed - Atraumatic chest pain in patients aged 30 years and over	100%	5%	11%	19%
- Reviewed by ST4 or above		34%	43%	54%
STANDARD 2: Consultant* reviewed – Fever in children under 1 year of age	100%	0%	8%	20%
- Reviewed by ST4 or above		33%	48%	65%
STANDARD 3: Consultant* reviewed – Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge	100%	6%	12%	24%
- Reviewed by ST4 or above		35%	46%	60%
STANDARD 4: Consultant* reviewed – Abdominal pain in patients aged 70 years and over	100%	4%	10%	19%
- Reviewed by ST4 or above		28%	40%	55%

*The term consultant includes both consultants and associate specialists.

Notes about the results

The **median** value of each indicator is that where equal numbers of participating EDs had results above and below that value. The median figures in the summary table may differ from other results quoted in the body of this report which are mean (average) values calculated over all audited cases.

The **lower quartile** is the median of the lower half of the data values.

The **upper quartile** is the median of the upper half of the data values.

Introduction

This report shows the results from an audit of patients who presented at Emergency Departments (EDs) with either atraumatic chest pain (30 years and over), fever (children under 1 year), or abdominal pain (70 years and over), or patients making an unscheduled return to the ED with the same condition within 72 hours of discharge.

Emergency Medicine (EM) is a rapidly developing specialty. Over the past 40 years the Emergency Department (ED) has become the "front door" of the acute hospital, responsible for the management of 15 million patients every year in England alone. Some of the sickest patients in the hospital will be found in the ED. The level of clinical risk is high with ED clinicians required to make critical decisions under conditions of considerable uncertainty with limited information, resources and time.

Published research indicates that consultant-delivered care reduces waiting times and length of stay, improves clinical outcomes and ensures that patients are only admitted to hospital if there is no reasonable alternative (Wyatt et al, 1999; Thornton & Hazell, 2008; Geelhoed et al, 2008; White et al, 2010).

The ED is an excellent training area for junior doctors, because they are required to see a large number of acutely ill and injured patients and make important clinical decisions. This provides effective training, but it also has the effect of matching inexperienced staff with very sick patients, creating high levels of clinical risk. In addition, nurse practitioners increasingly work within EDs, as do professional groups not fully trained in EM (e.g. General Practitioners). In response, EM consultants have put in place systems to support their teams and manage risk. Not all EDs have enough EM consultants to provide a consistent 24/7 presence. Despite this there is an increasing expectation that care will be delivered and supervised by fully-trained consultant medical staff.

RCEM advocates progressive EM consultant expansion in order to improve the quality and timeliness of care, and enhance the support provided to junior doctors and other practitioners working within the ED. RCEM believes that it is appropriate to specify particular high-risk patient groups who should be reviewed by a consultant in EM before they are discharged from the ED.

This topic was previously audited in 2011/12 and 2012/13. Following a subsequent data-based review in 2016, the relevant patient groups for the 2016/17 audit have been revised.

These patient groups have been selected on the basis that they are important ED presentations with a risk of life-threatening disease that may not be immediately appreciated by less experienced staff.

It is accepted that some EDs, particularly those with lower numbers of EM consultants, will find it challenging to adopt these standards. However, its purpose is to promote improved risk management by reducing the possibility of catastrophic clinical error, whilst at the same time supporting the case for an expansion in EM consultant numbers. Where it is not feasible to immediately implement this standard RCEM recommends that EDs have in place a plan to address the clinical risk and work towards achievement of the standards, through an increase in EM consultant numbers.

Aims

This audit was conducted for the third time to continue the work of the 2011/12 and 2012/13 data collections. It identifies current performance against RCEM clinical standards, showing the results in comparison with other departments. The results of 2011/12 and 2012/13 are presented for comparison.

The objectives of this audit were:

1. To benchmark current performance in EDs against the four standards
2. To allow comparison nationally and between peers
3. To identify areas in need of improvement
4. To compare against previous performance in 2011/12 and 2012/13

Review by a senior trainee or similarly experienced doctor is considered an interim measure pending a move towards extended EM consultant shop floor presence. EDs are encouraged to work towards this standard in association with their employing Trust.

Methodology

Participation summary

Nationally, **24341** cases from **180** EDs were included in the audit.

Country	Number of relevant EDs	Number of cases
National total	180/233 (77%)	24341
England	158/179 (88%)	21554
Scotland	7/26 (27%)	964
Wales	10/13 (77%)	1063
Northern Ireland	4/9 (44%)	614
Isle of Man /Channel Islands	1/3 (33%)	146

Pilot methodology

A pilot of the audit was carried out prospectively from 13th July 2016 to 29th July 2016 with the help of 12 sites. The pilot period was used to test the audit questions and the quality of data collected.

Pilot sites

We are grateful to contacts from the following Trusts for helping with the development of the audit:

- Airedale General Hospital, Airedale NHS Foundation Trust
- Barnsley Hospital, Barnsley Hospital NHS Foundation Trust
- Blackpool Victoria Hospital, Blackpool Teaching Hospitals NHS Foundation Trust
- Doncaster Royal Infirmary, Doncaster and Bassetlaw Hospitals
- Peterborough City Hospital, Peterborough and Stamford Hospitals NHS Foundation Trust
- Queens Medical Centre, Nottingham University Hospitals NHS Trust
- Royal Blackburn Hospital, East Lancashire Hospitals NHS Trust
- Royal Gwent Hospital, Aneurin Bevan University Health Board
- Royal Lancaster Infirmary, University Hospitals of Morecambe Bay NHS Foundation Trust
- Royal Victoria Hospital, Belfast Health and Social Care Trust
- Southampton General Hospital, University Hospital Southampton NHS Foundation Trust
- Wexham Park Hospital, Frimley Health NHS Foundation Trust

Audit history

All EDs in the UK were invited to participate in July 2016. Data were collected using an online data collection tool.

Participants were asked to collect data from ED patient records on consecutive cases who presented to the ED and were subsequently discharged home between 1st January 2016 and 31st December 2016.

Sample size

RCEM recommends auditing a different number of cases depending on the number of the patients seen within the data collection period. If this was an area of concern, EDs were able to submit data for more cases for an in depth look at their performance.

Basing the audit sample size on the number of cases in this way increases the reliability of your ED's audit results.

Expected number of cases	Recommended audit sample
< 50	All eligible cases
50-250	50 consecutive cases
>250	100 consecutive cases

Standards

The audit asked questions against standards published by RCEM in June 2016:

Standard	Standard type
The following four high-risk patient groups should be reviewed by a consultant* in EM prior to discharge from the ED (includes patients who die in the ED).	
Atraumatic chest pain in patients aged 30 years and over	**Developmental**
Fever in children under 1 year of age	**Developmental**
Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge	**Fundamental**
Abdominal pain in patients aged 70 years and over	**Developmental**

Understanding the different types of standards

Fundamental: need to be applied by all those who work and serve in the healthcare system. Behaviour at all levels and service provision need to be in accordance with at least these fundamental standards. No provider should provide any service that does not comply with these fundamental standards, in relation to which there should be zero tolerance of breaches.

Developmental: set requirements over and above the fundamental standards.

For definitions on the standards, refer to the appendix.

QIP **Quality Improvement Project**

This symbol identifies an area that would be a good topic nationally for a QIP. Local QIP priorities may vary depending on performance.

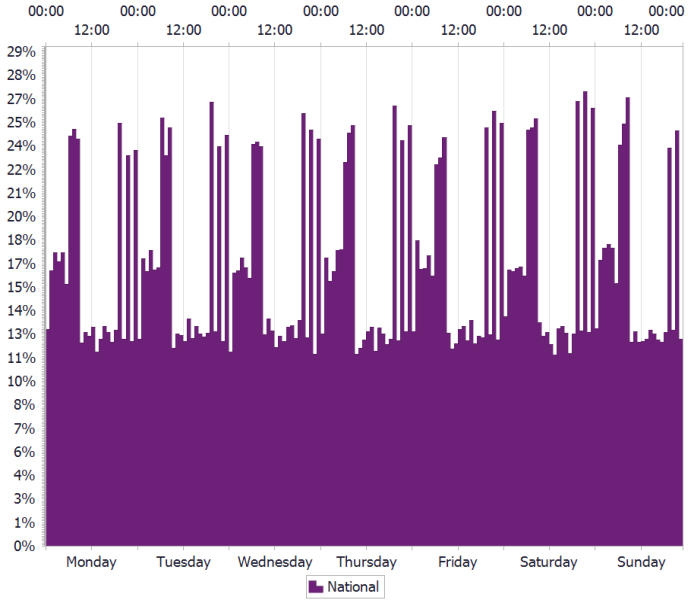
*The term consultant includes both consultants and associate specialists.

About this report

Understanding the charts

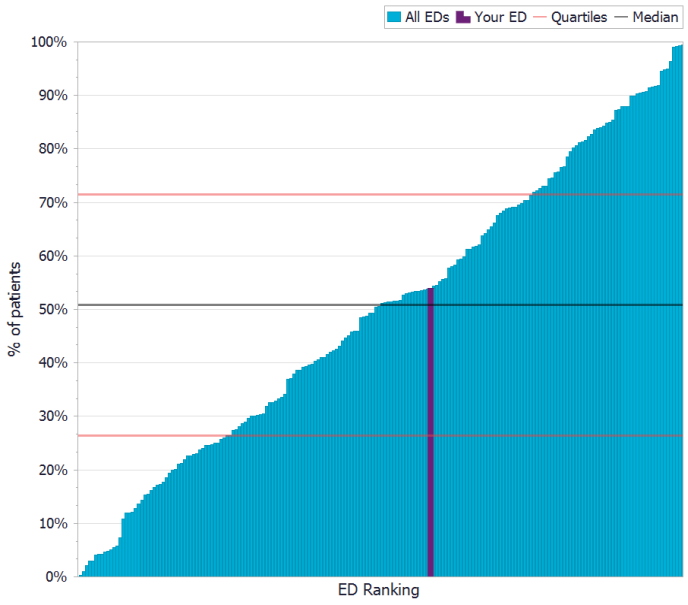
There are different types of charts within this report to present the data. The example graphs below show the type of charts you will encounter.

Time and date



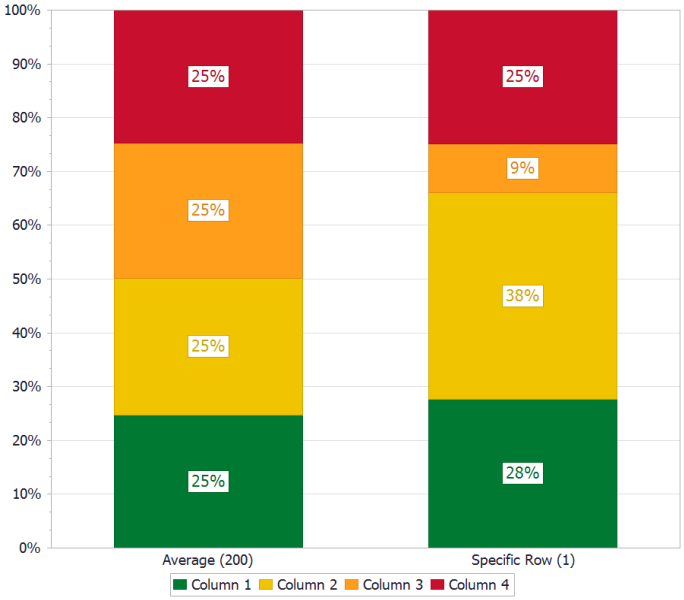
This chart shows the day and time of patient arrivals. Higher bars show when a lot of patients are arriving in the ED, whereas lower bars show quieter arrival times.

Sorted Bar Chart



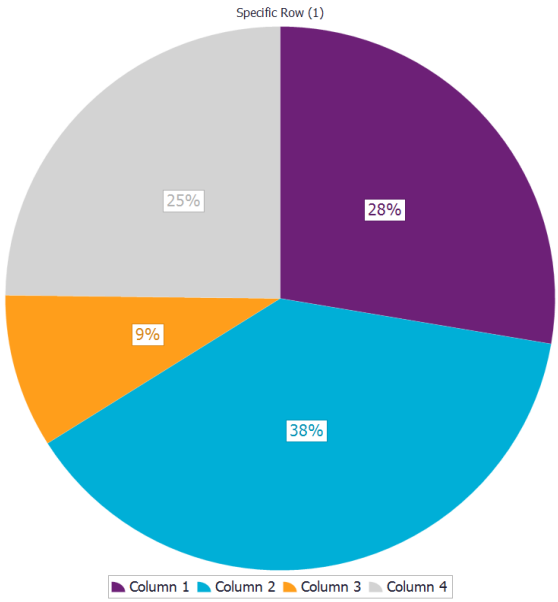
Sorted bar charts show the national performance, where each bar represents the performance of an individual ED. The horizontal lines represent the median and upper/lower quartiles.

Stacked Bar Chart



Stacked bar charts show the breakdown of a group nationally. These are used when it will be helpful to compare two groups side by side, for example comparing local data with the national data.

Pie Chart

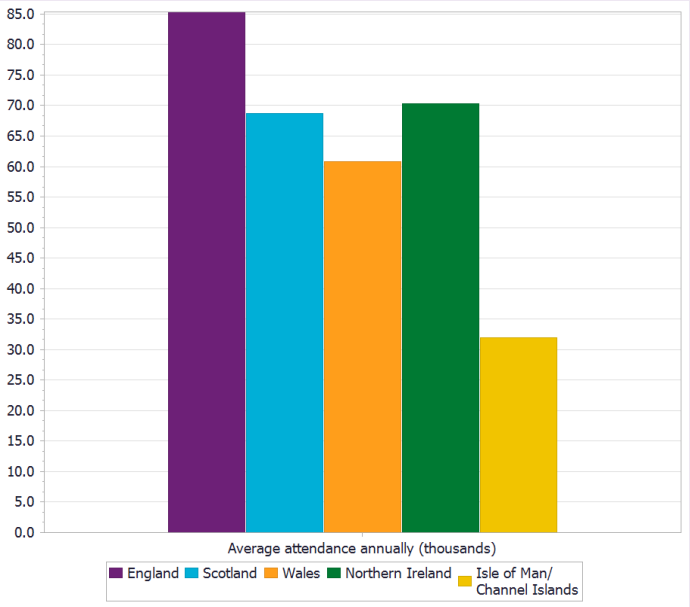


Pie charts show the breakdown of a group nationally. They help you understand the composition of a sample and which subgroups are largest.

Section 1: Organisational audit

Results of the organisational audit conducted in 180 EDs.

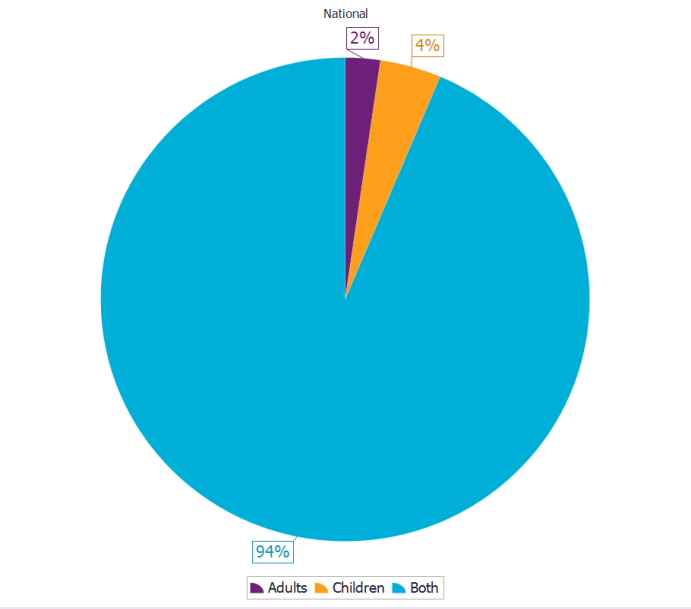
Q1a. How many new attendances are there annually in your ED? (To the nearest thousand per annum).



Sample: all EDs

England and Wales had a high response rate from EDs. The data from other areas of the UK is based on responses from less than half of their departments.

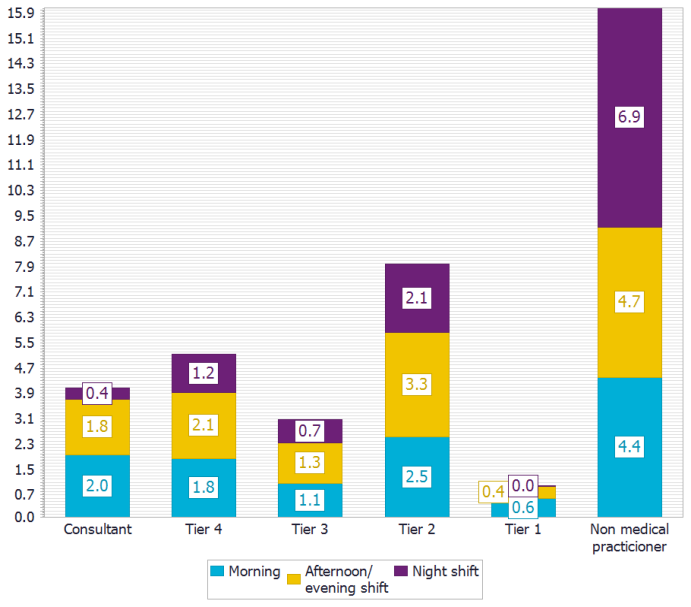
Q1b. What is the casemix of your ED? (Adults only, children only, both adults and children).



Sample: all EDs

The vast majority of EDs provide care to both adults and children. Staffing models however are likely to vary widely with some EDs working with separate Paediatric ED Consultants and different levels of middle grade cover and experience.

Q1c. On a weekday, assuming all shifts are filled, how many staff would usually be on each clinical shift?



Sample: all EDs

Chart shows the average number of consultants on shift was less than 2 at all times of the day and demonstrates the challenge of achieving the 4 standards.

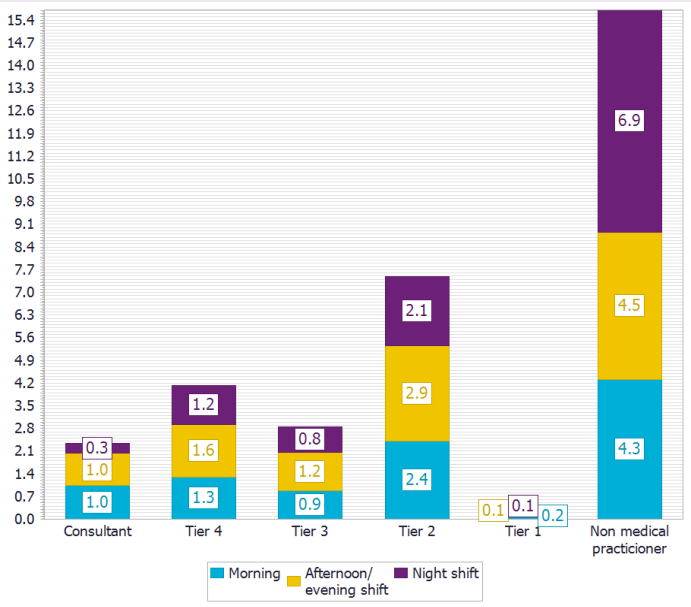
Tier 4= ST4+, Senior Clinical Fellows, SAS

Tier 3= CT3, Clinical Fellows, Some GPs, Junior SAS

Tier 2= FY2, CT1-2, some GPs

Tier 1 = FY1

Q1d. On a weekend, assuming all shifts are filled, how many staff would usually be on each clinical shift?

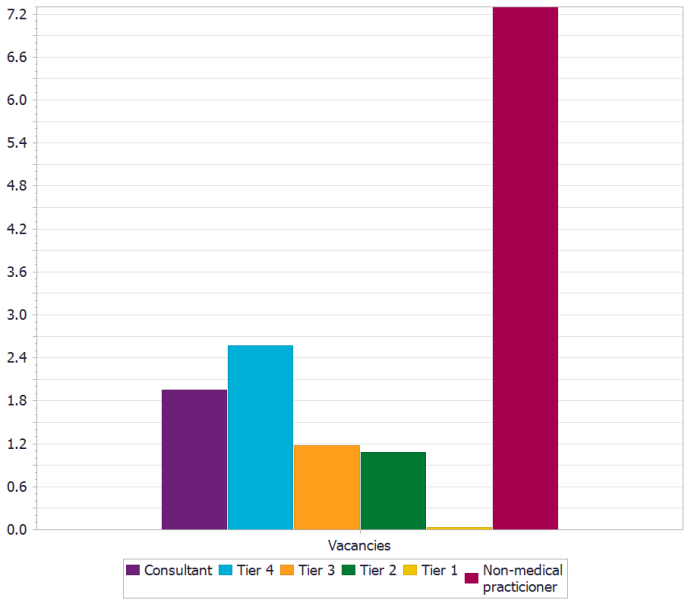


Sample: all EDs

Chart shows the average number of staff per shift.

Weekend staffing of EDs changes little for non-medical practitioners and Tier 1-3 doctors. There is however a noticeable reduction in the staffing rate for Tier 4 doctors and consultants. These more senior doctors may however work longer shifts at weekends to provide similar departmental cover with the aim of reducing the number of weekends worked.

Q1e. How many vacant posts do you currently have?



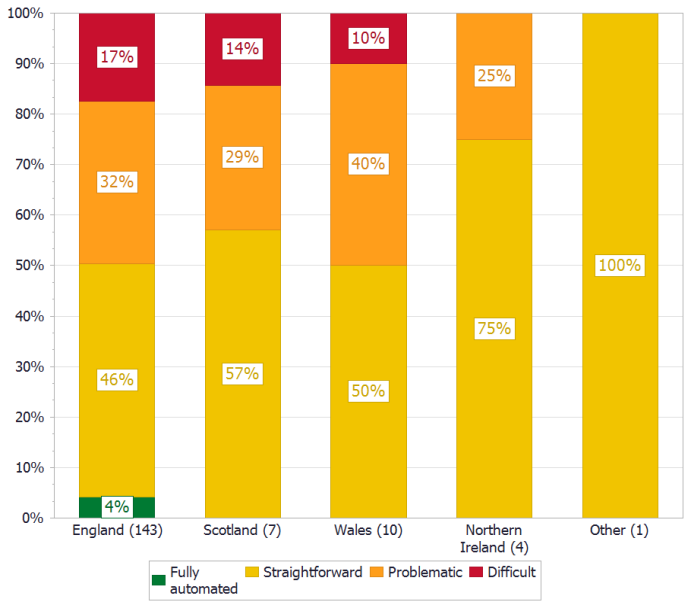
Sample: all EDs

Chart shows the average number of vacancies per level.

This graph demonstrates the significant deficit in staffing for all groups except Tier 1 doctors. Section 4a of this report demonstrates the extent to which departments rely on locums.

Section 2: Organisational audit – about Consultant Sign Off

Q1f. How easy is it to collect data about consultant sign-off in your ED? (Fully automated, straightforward, problematic and difficult).

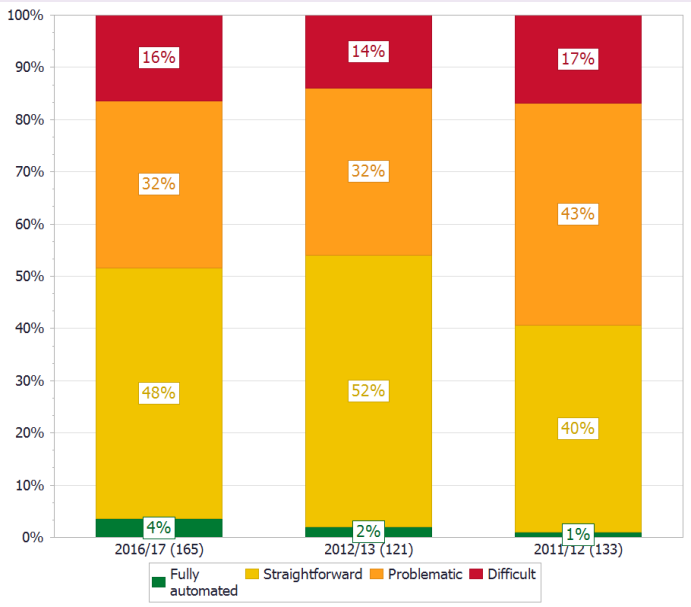


Sample: all EDs

The relative difficulties experienced by different areas of the UK may represent differences in IT strategies or the size and structure of departments.

Chart shows the average percentage on how easy it is to collect data across England, Wales, Scotland, Ireland and Other.

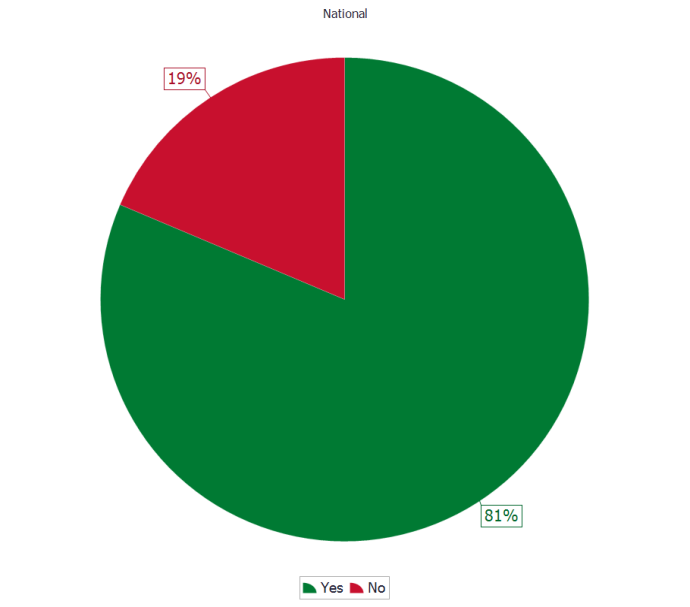
Historical chart showing how easy it is to collect data about consultant sign-off in your ED. (Fully automated, straightforward, problematic and difficult).



Sample: all EDs

The chart demonstrates most departments had problems gathering data and that there has been little change since the last audit. The number of departments with a fully automated system has risen from 1% to 4% but remains small.

Q1g. In your opinion, does the existence of the consultant sign-off standard have an effect on the clinical management of patients? If so, what are the effects?

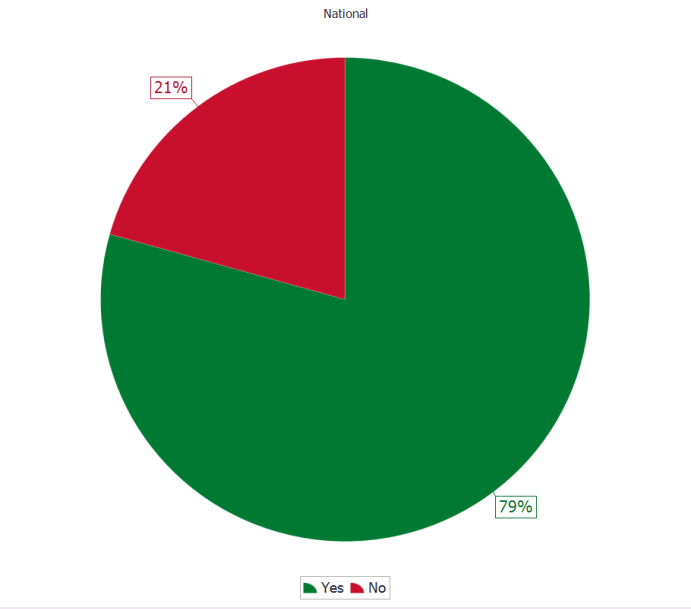


Sample: all EDs

The majority of respondents value the existence of the sign-off standard with 81% of respondents stating an effect on clinical management.

There were many effects described. The most commonly cited effect was improved safety but other responses included greater efficiency, more timely decisions, more discriminate use of investigations and some cited increased educational opportunity.

Q1h. In your opinion, does the existence of the consultant sign-off standard have an effect on the decision to admit or discharge patients? If so, what are the effects?



Sample: all EDs

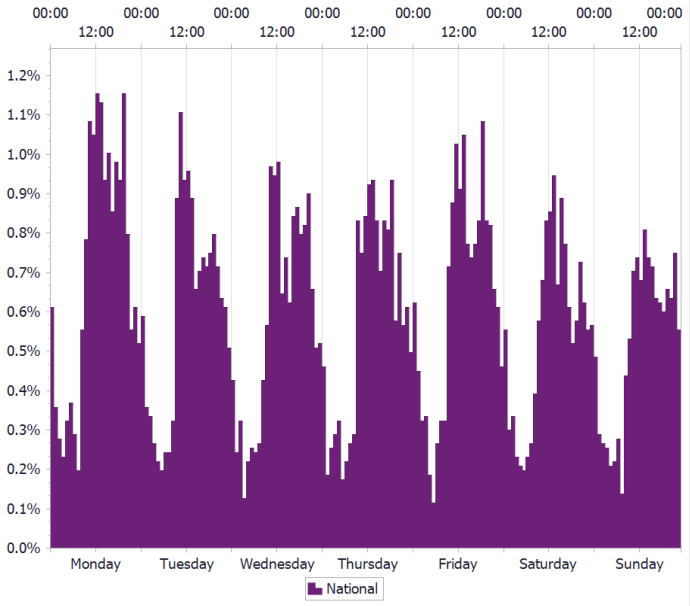
79% of respondents recognised an effect on admission or discharges decisions. Not only is management influenced but also the fundamentals of "admit" or "discharge".

The majority of respondents reported that the admission rate was reduced and that there was a time saving. Some reported that inappropriate discharges were avoided.

Section 3: Casemix

National casemix and demographics of the patients

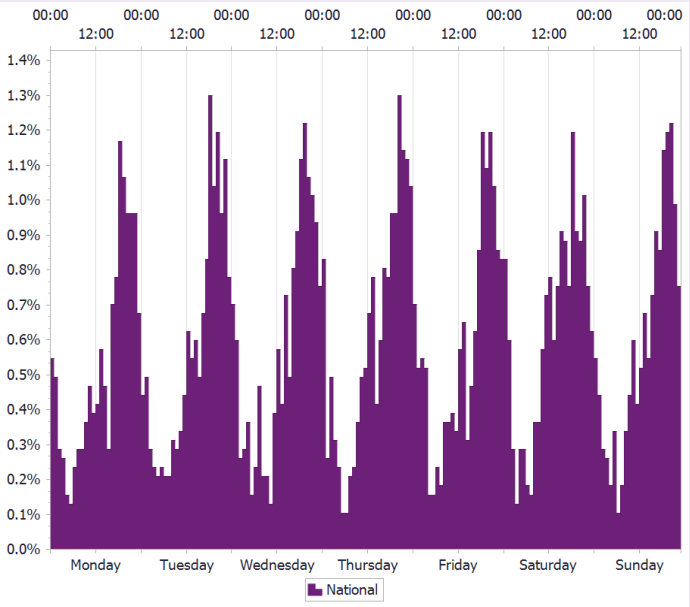
Q3&4: Day and time of arrival – **Chest pain in patients over 30 years of age**



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

The day and arrival time followed a similar pattern throughout the days of the week with only a modest reduction in activity at weekends. Attendances were distributed throughout the day with significant numbers of patients arriving overnight.

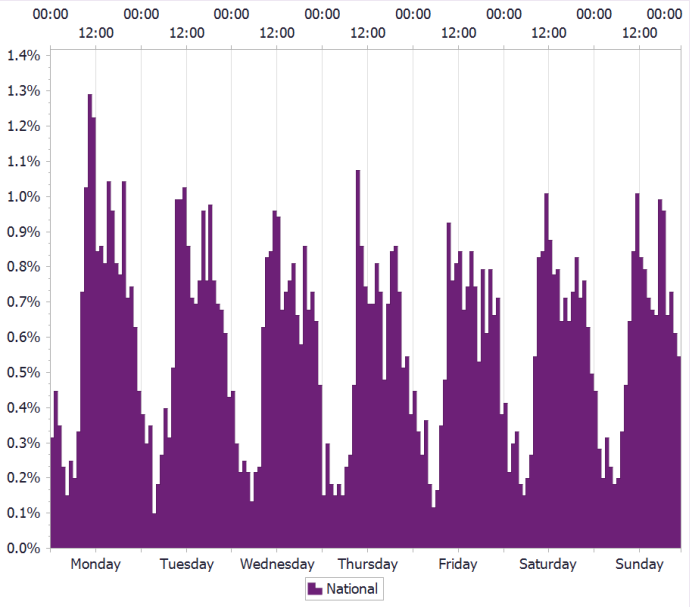
Q3&4. Day and time of arrival – **Fever in children under 1 years of age**



Sample: Q5 = fever in children under 1 year of age

The attendances for febrile children showed an even distribution throughout the week. There were significant peaks in attendances in the evening from 6pm. Emergency department staff will be familiar with this observation but these results will continue to be useful for the planning of paediatric care and timing of senior cover.

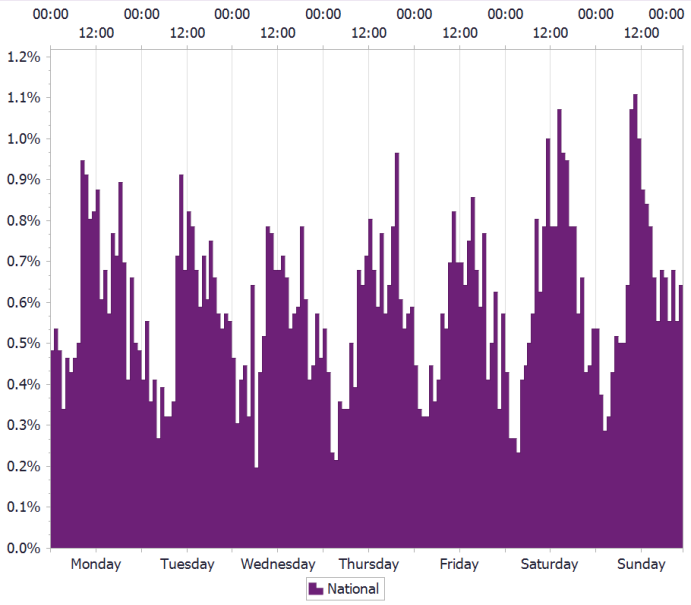
Q3&4. Day and time of arrival – **Unscheduled return within 72 hours**



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

It is perhaps not surprising to see a peak in unscheduled returns during the late morning on a Monday. The re-attendance rate was however distributed throughout the week and continued at all hours of the day.

Q3&4. Day and time of arrival – **Abdominal pain in patients aged over 70**



Sample: Q5 = Abdominal pain in patients aged 70 years and over

Elderly patients with abdominal pain presented at all times of day and throughout the week. The peak during late morning on Sundays is interesting to note. Perhaps more than for the other standards, this graph demonstrates the need for service and resource provision during all hours of the day, on all days of the week.

Q5. Patient Group

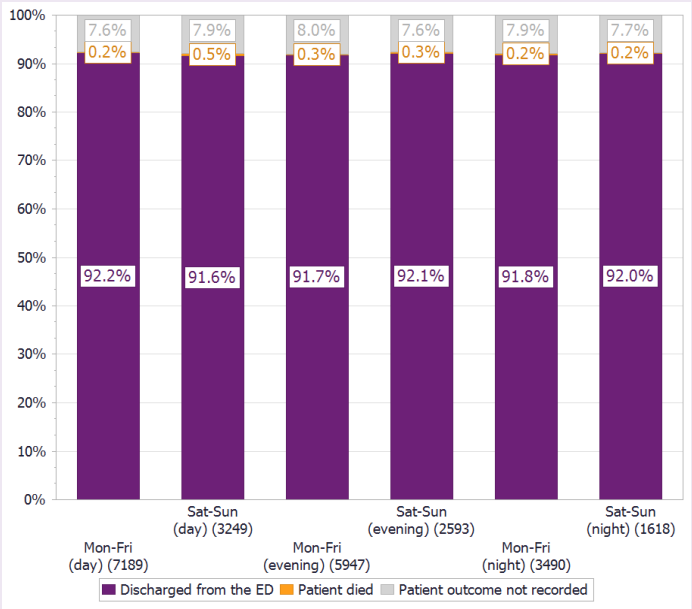
Sample: all patients

Chest pain was previously in patients aged 17+, this year it is 30+.

Respondents to the audit were not required to submit an equal number of cases for each standard. This graph demonstrates that whilst cases of chest pain make up the majority, all 4 groups are significantly represented.

It is encouraging that cases of abdominal pain in the elderly were well represented having been introduced as a new standard in 2016.

Q6. Patient outcome



Sample: all patients

Definitions:
Day: 09:00-17:00
Evening: 17:01-00:00
Night: 00:01-08:59
Bank holidays: counted as Sat-Sun

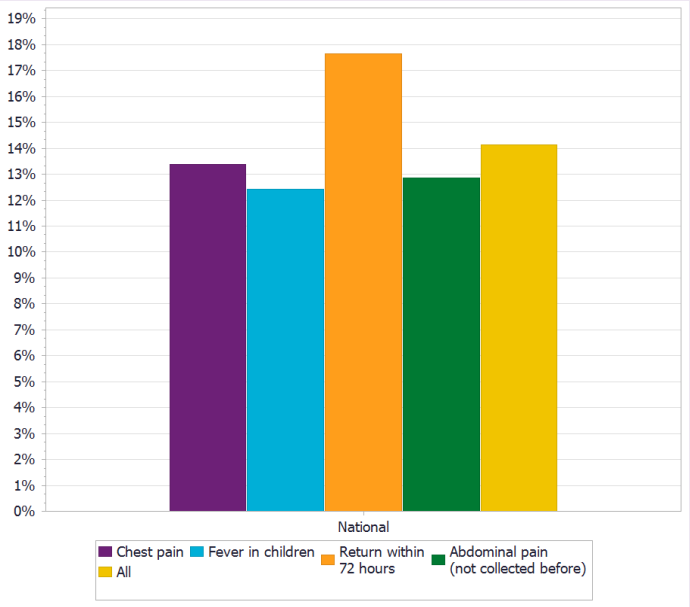
The audit excluded admitted patients. It was expected that most patients would be discharged from ED. It is surprising that the disposition of 7-8% of patients is not known and this is likely another indicator of the difficulty in obtaining data for the audit.

Section 4: National Findings

High-risk patients should be seen and assessed in person by a consultant.

This section shows the collated results for all contributing departments in the UK.

Q7a. Proportion of patients in each high risk group that were seen and assessed by a consultant*.



The UK wide review rate for consultant assessment of patients making unscheduled returns to ED is significantly higher than the other standards. This is consistent with its fundamental designation.

Departments may want to examine whether the mechanisms for identifying this group of patients and the priority given to achieving this standard can inform and effect an improvement in performance against the others.

The following four high-risk patient groups should be reviewed by a consultant in EM prior to discharge from the ED (includes patients who die in the ED).

- Standard 1: Atraumatic chest pain in patients aged 30 years and over
- Standard 2: Fever in children under 1 year of age
- Standard 3: Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge
- Standard 4: Abdominal pain in patients aged 70 years and over

QIP

*The term consultant includes both consultants and associate specialists

The UK wide consultant review rate is low though there has been a small increase since the previous audits. Crowding and system wide pressures have increased over the same period but the results serve to demonstrate the ongoing challenge. The graph demonstrates National audit findings for over 24,000 presentations to Emergency Departments and provides further evidence for progress in senior staff levels to meet this challenge.

Q7a. Proportion of patients in each high risk group that were seen and assessed by senior staff

% of those seen and assessed by:	UK Totals		
	2016/2017	2012/2013	2011/2012
Consultant	12%	10%	10%
Associate Specialist	2%	2%	2%
Staff grade/specialty doctor	14%	12%	14%
Senior clinical fellow (register or equivalent)	6%	8%	4%
ST4 to 7	9%	9%	12%
Total	**43%**	**41%**	**42%**

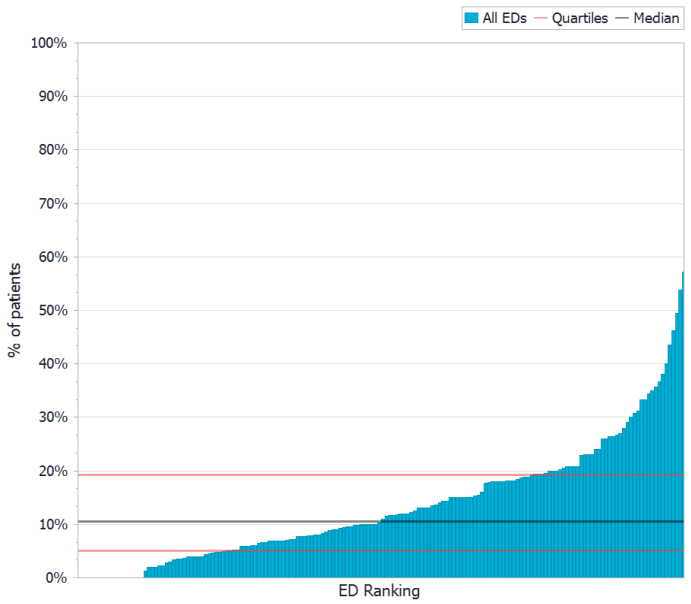
There has been little change in the rate of senior assessment over the last 5 years. It should be appreciated that an additional standard was added in 2016 and that over this period ED attendances have continued to rise. The total number of patients assessed by senior staff has increased but the proportion of patients assessed by junior staff remains high. Measures to ensure senior discussion or subsequent case note review are therefore vital and the further findings of this report will aid departments in assessing current performance and improving practice.

Section 4A: Grade of most senior doctor to actually see and assess the patient in person for each patient group.

The following four graphs compare individual departments and allow benchmarking across all contributing to the audit. Achieving even 50% "in person" review has been impossible for all but a few departments. Results do, however, rely on the ability of a department to record a consultant review. Electronic care records may or may not make this easier.

*The term consultant includes both consultants and associate specialists.

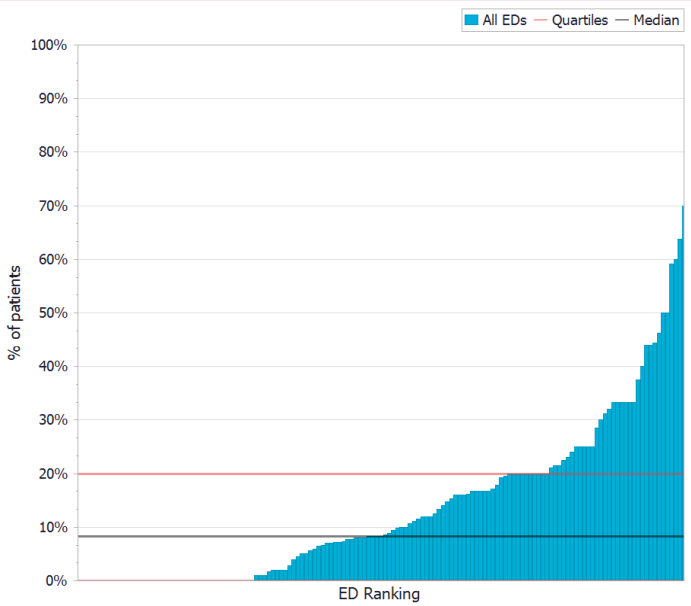
Q7a. Seen and assessed by a consultant* – atraumatic chest pain in patients over 30



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

Standard 1: Atraumatic chest pain in patients aged 30 years and over should be reviewed by a consultant in EM prior to discharge from the ED (includes patients who die in the ED).

7a. Seen and assessed by a consultant* – Fever in children under 1 year

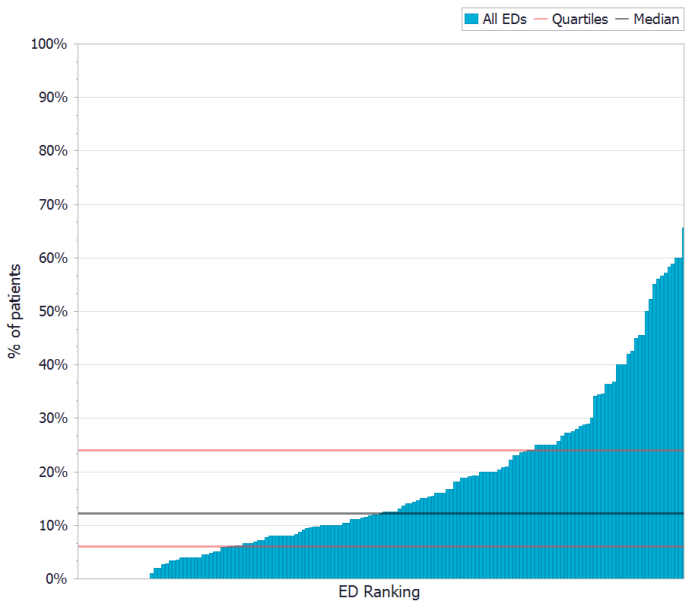


Sample: Q5 = fever in children under 1 year of age

Standard 2: Fever in children under 1 year of age should be reviewed by a consultant in EM prior to discharge from the ED (includes patients who die in the ED).

Q7a. Seen and assessed by a consultant* – Unscheduled return within 72 hours

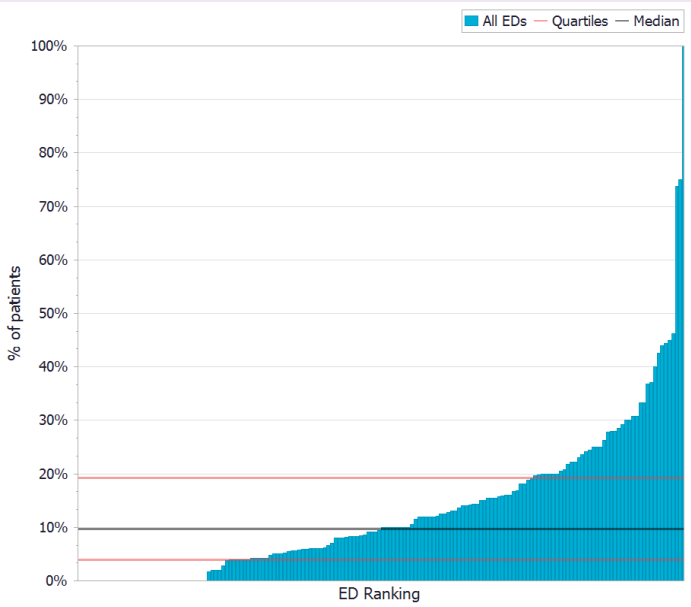
QIP



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

Standard 3: Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge should be reviewed by a consultant in EM prior to discharge from the ED (includes patients who die in the ED).

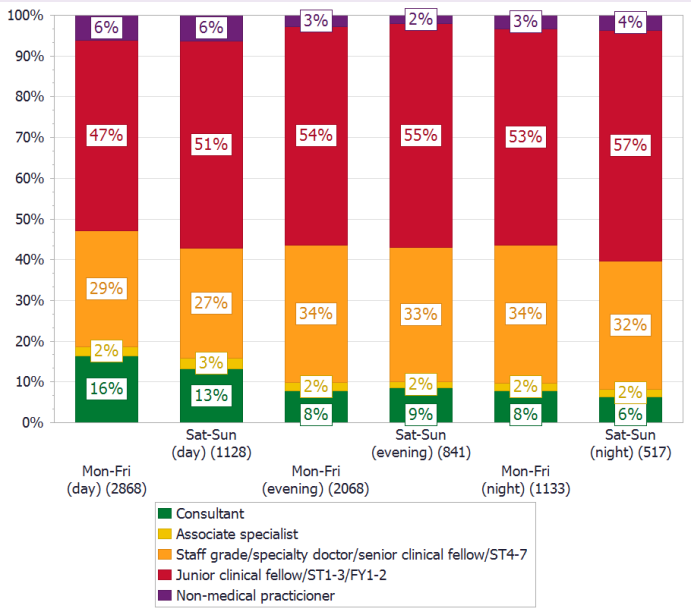
Q7a. Seen and assessed by a consultant* – Abdominal pain in patients aged over 70



Sample: Q5 = Abdominal pain in patients aged 70 years and over

Standard 4: Abdominal pain in patients aged 70 years and over should be reviewed by a consultant in EM prior to discharge from the ED (includes patients who die in the ED).

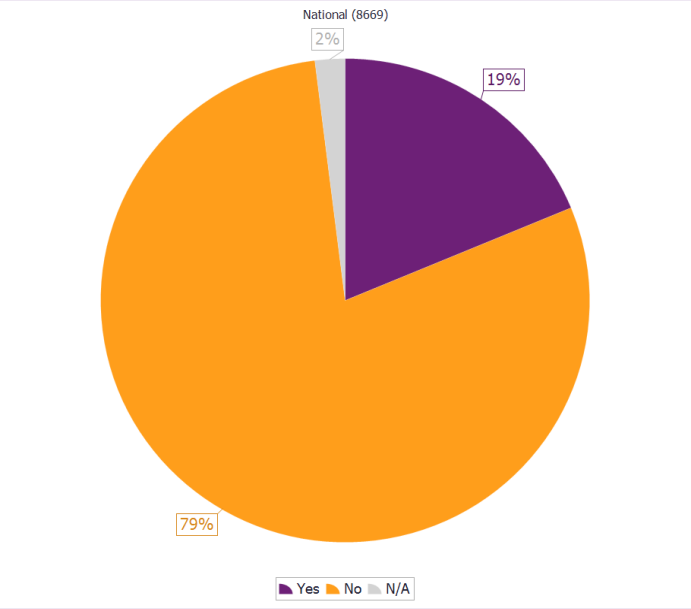
Question 7a. Grade of most senior doctor to actually see and assess the patient in person – Chest pain in patients over 30



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

There was a higher consultant review rate during Monday to Friday and daytime hours. Evening and night time reviews remain challenging. A significant proportion of patients were only seen by a junior grade – FY1 to ST3.

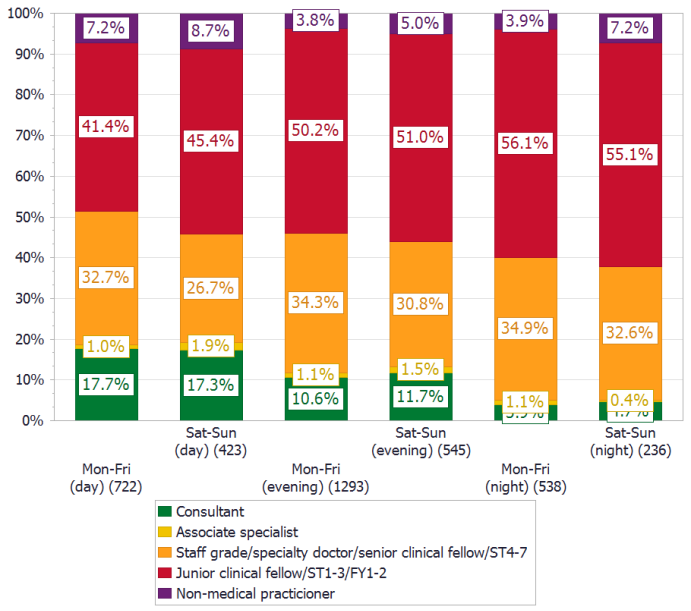
Question 7b. Was this doctor a locum?



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

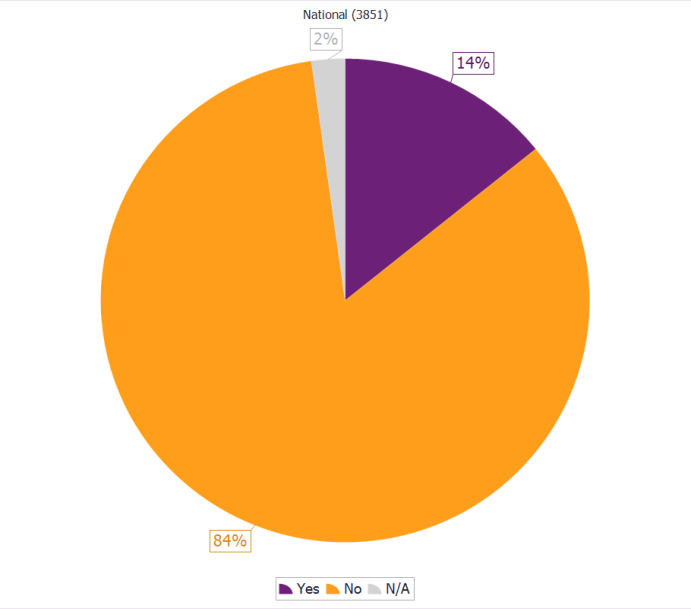
Question 7a. Grade of most senior doctor to actually see and assess the patient in person – Fever in children under 1 year



Sample: Q5 = fever in children under 1 year of age

Findings for review rates in children are similar to those for chest pain. Weekend working of consultants is evident with reviews matching weekdays. A high proportion of patients were again only reviewed by junior staff – approximately 55% during the night.

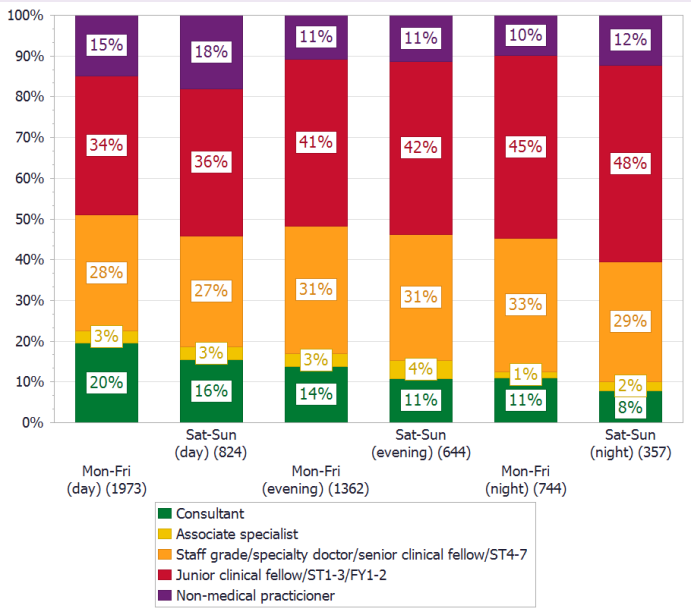
Question 7b. Was this doctor a locum?



Sample: Q5 = fever in children under 1 year of age

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

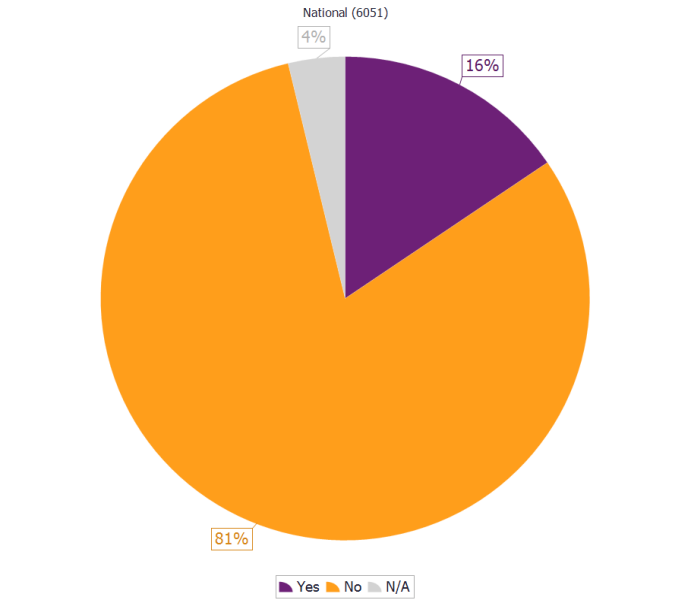
Question 7a. Grade of most senior doctor to actually see and assess the patient in person – Unscheduled return within 72 hours



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

A greater proportion of unscheduled returns were seen by non-medical practitioners than for other groups. This may represent the work of ENPs in assessing patients with minor injuries.

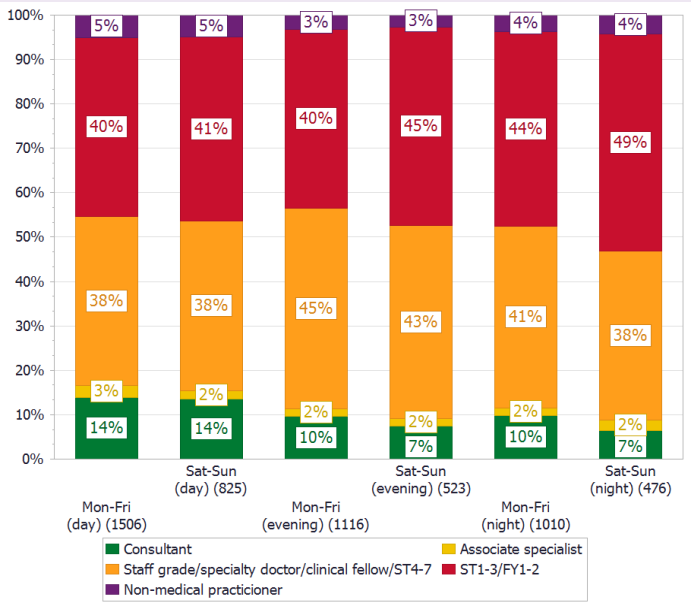
Question 7b. Was this doctor a locum?



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

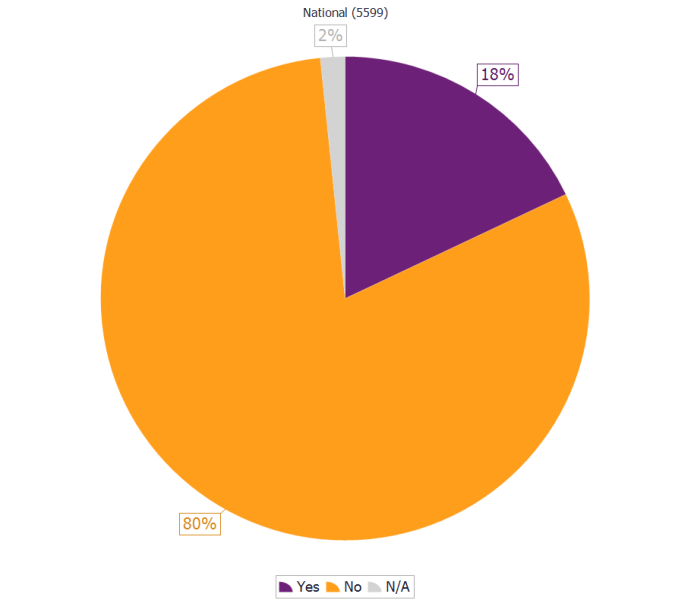
Question 7a. Grade of most senior doctor to actually see and assess the patient in person – Abdominal pain in patients aged over 70



Sample: Q5 = Abdominal pain in patients age 70 years and over

It is encouraging that the seniority of review for this group replicated the other three. The standard was introduced in 2016. Many EDs will have been aware of this higher risk group for some time and will have already introduced safety measures.

Question 7b. Was this doctor a locum?

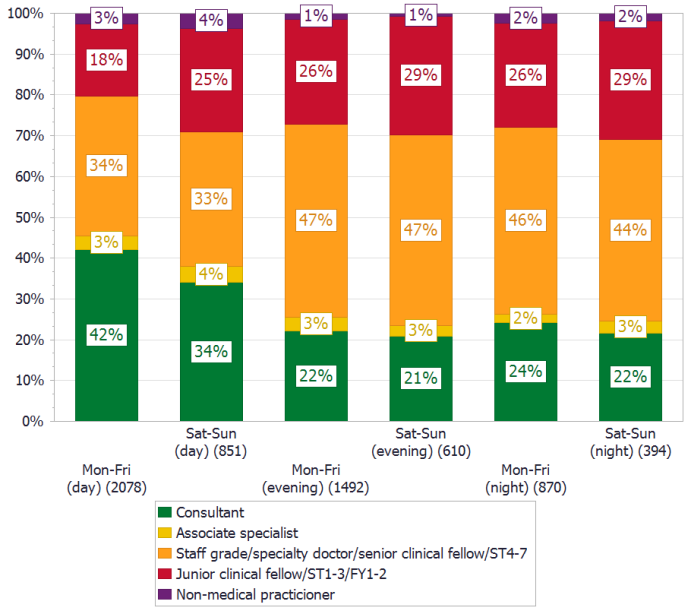


Sample: Q5 = Abdominal pain in patients aged 70 years and over

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

Section 4B: Grade of most senior doctor with whom the patient was discussed during their visit to the ED for all patient groups.

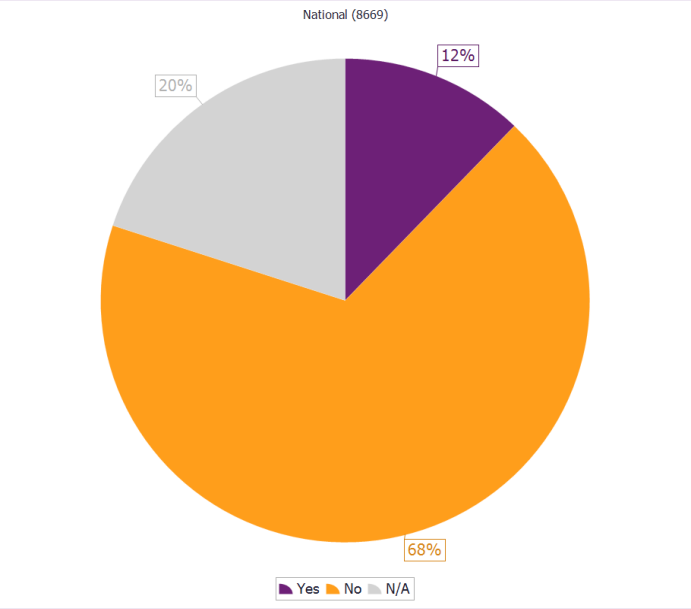
Question 8a. Grade of most senior doctor with whom the patient was discussed during their visit to the ED – atraumatic chest pain in patients over 30



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

18- 29% of patients presenting with chest pain were assessed and discharged without being discussed with a senior. A significant number occurred during weekdays when consultants should be available.

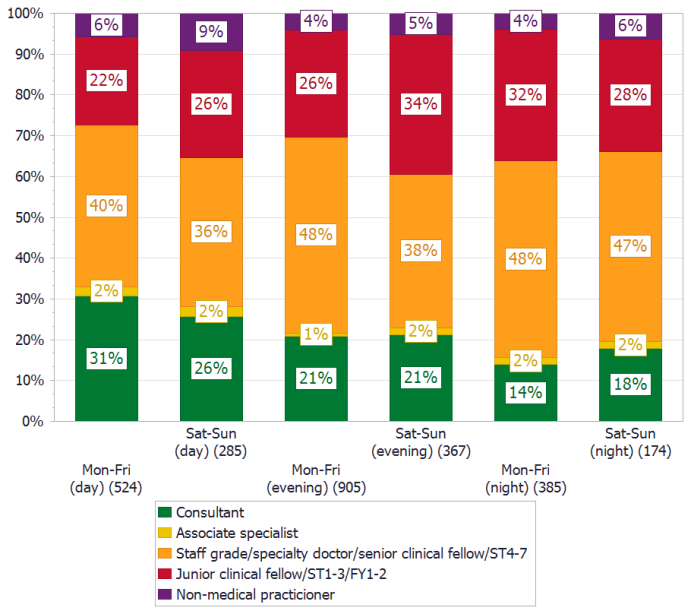
Question 8b. Was this doctor a locum?



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

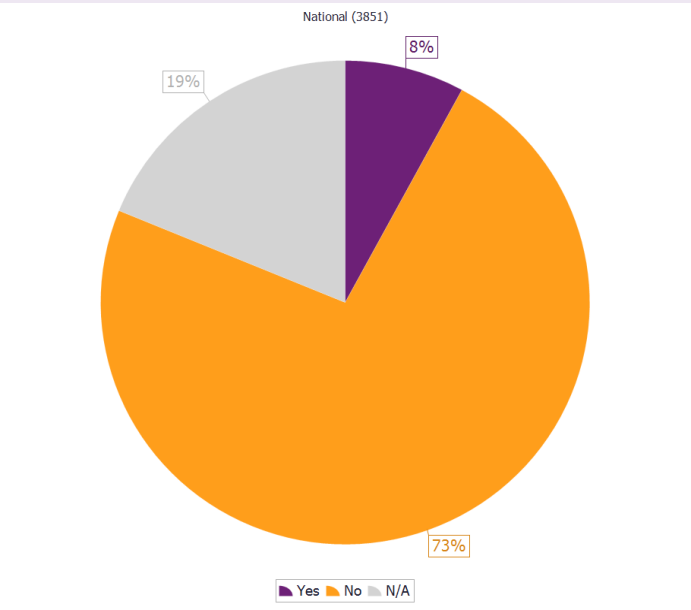
Question 8a. Grade of most senior doctor with whom the patient was discussed during their visit to the ED - Fever in children under 1 year



Sample: Q5 = fever in children under 1 year of age

As per other standards, a significant proportion of febrile children were discharged without discussion with a senior.

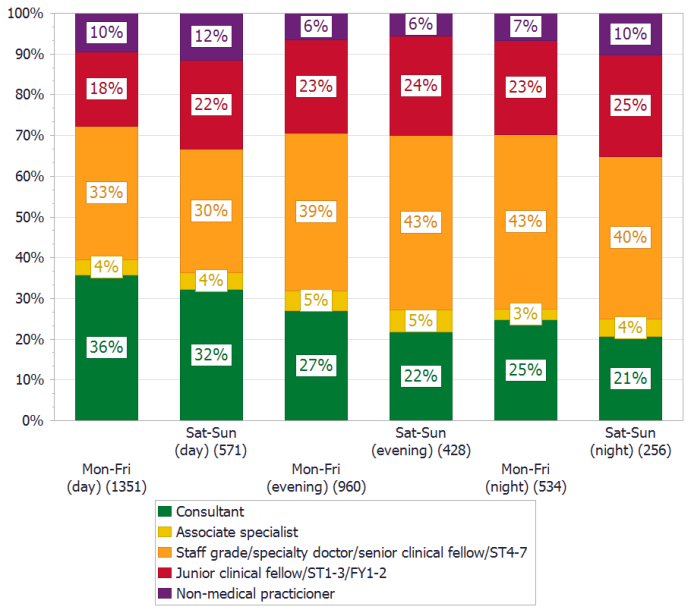
Question 8b. Was this doctor a locum?



Sample: Q5 = fever in children under 1 year of age

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

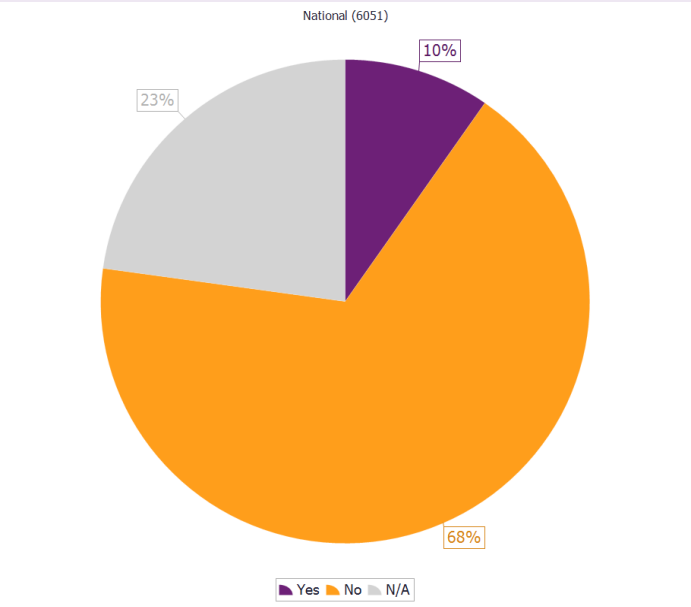
Question 8a. Grade of most senior doctor with whom the patient was discussed during their visit to the ED – Unscheduled return within 72 hours



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

Consultant review rates were higher in this group at all times of day. Departments may want to examine why and how this is achieved relative to the other standards.

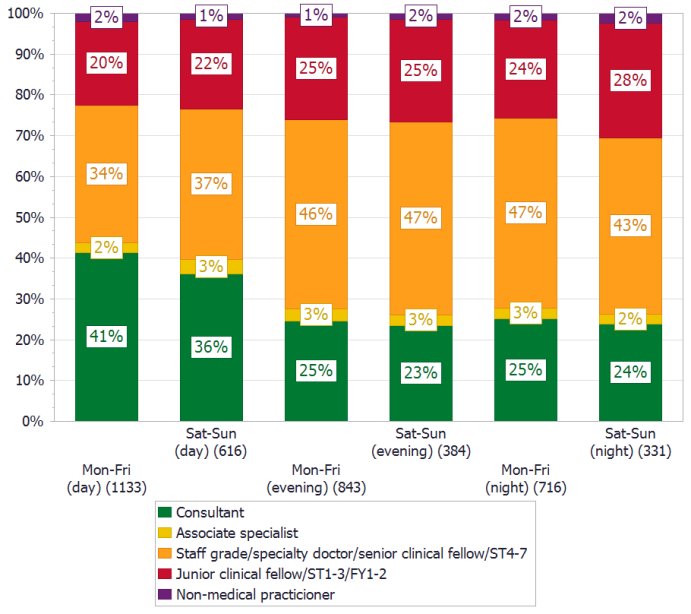
Question 8b. Was this doctor a locum?



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

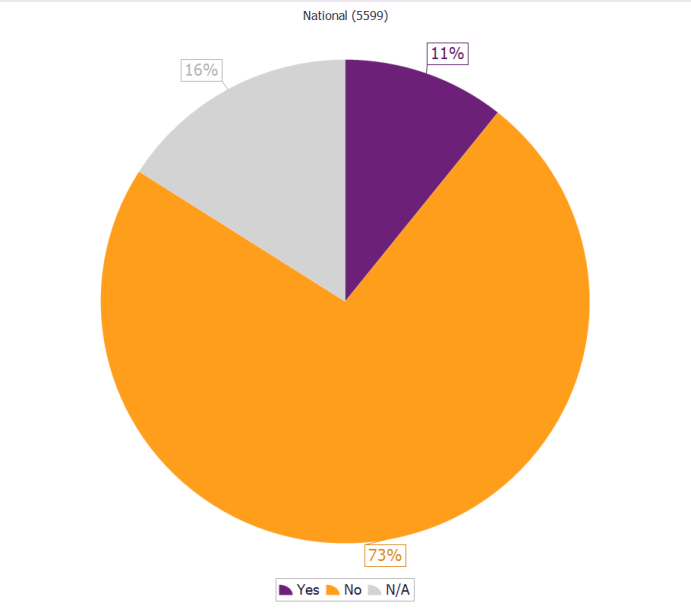
Question 8a. Grade of most senior doctor with whom the patient was discussed during their visit to the ED – Abdominal pain in patients aged over 70



Sample: Q5 = Abdominal pain in patients aged 70 years and over

The discussion rate for this high risk and often complex group was high and is encouraging having only introduced the standard in 2016.

Question 8b. Was this doctor a locum?

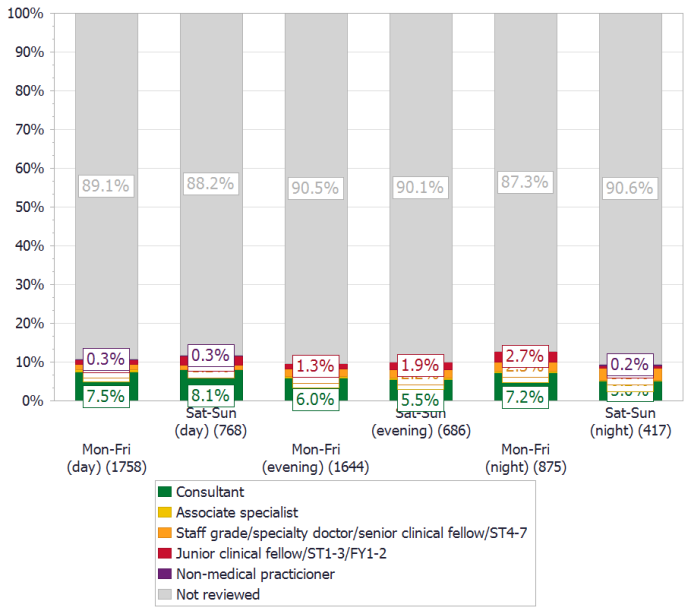


Sample: Q5 = Abdominal pain in patients aged 70 years and over

There can be increased risks when staff work in an unfamiliar workplace with unfamiliar systems and processes. Where induction, governance and supervision processes are well established, a review by a locum need not mean sub-optimal care.

Section 4C: Grade of most senior doctor to retrospectively review the patient's case notes for all patient groups. (Excludes all patients who had already been seen (Q7) by or discussed with (Q8) a consultant/associate specialist).

Question 9a. Grade of most senior doctor to retrospectively review the patient's case notes – Chest pain in patients over 30

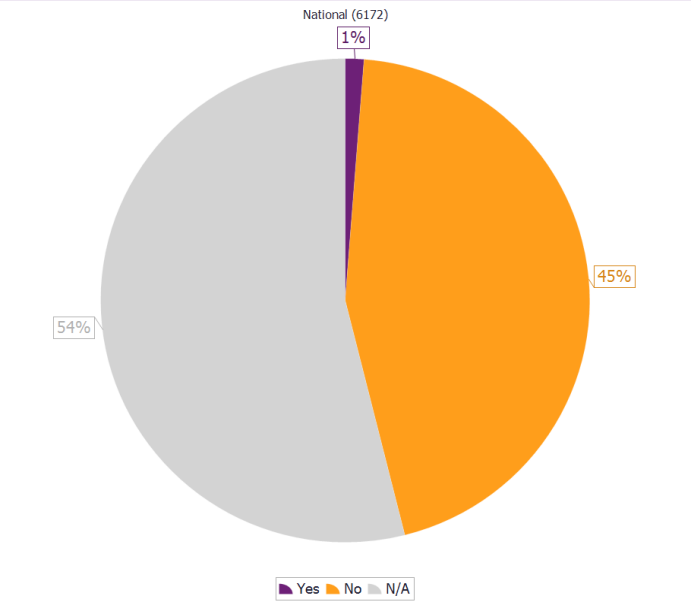


Sample: Q5 = atraumatic chest pain in patients aged 30 years and over. Excludes all patients who had already been seen (Q7) by or discussed with (Q8) a consultant/associate specialist.

The results suggest that the practice of subsequent case note review has not been adopted and/or is far from complete.

It is surprising that though small, a proportion are reviewed by the ST1-3/FY1-2 grade.

Question 9b. Was this doctor a locum?



Sample: Q5 = atraumatic chest pain in patients aged 30 years and over

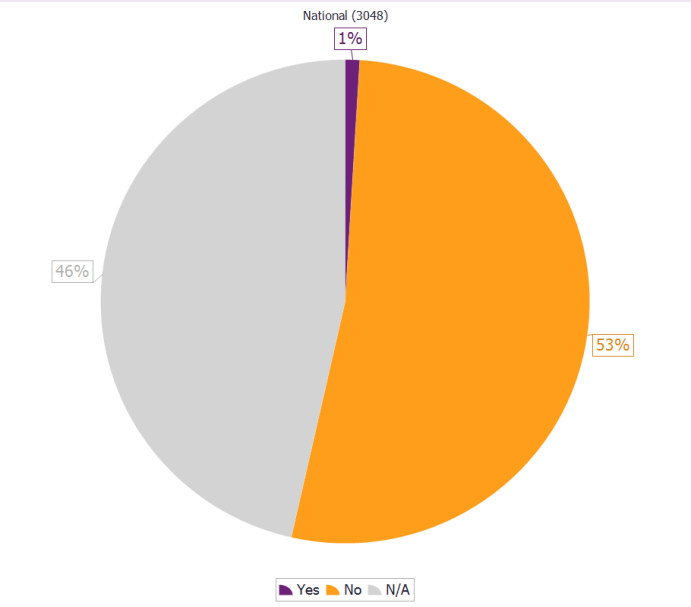
It appears to have been difficult for contributors to obtain this information with over half unknown.

Question 9a. Grade of most senior doctor to retrospectively review the patient's case notes - Fever in children under 1 year

Sample: Q5 = fever in children under 1 year of age. Excludes all patients who had already been seen (Q7) by or discussed with (Q8) a consultant/associate specialist.

The subsequent case note review rate is similar to the chest pain standard. The extent to which this is a failure to document vs carry out the review is not known but is for departments to consider.

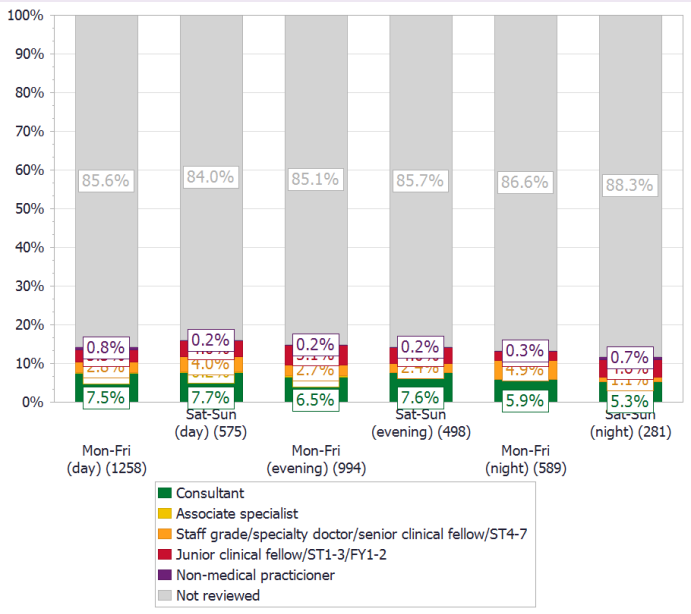
Question 9b. Was this doctor a locum?



Sample: Q5 = fever in children under 1 year of age

Little can be interpreted with such a large proportion "unknown".

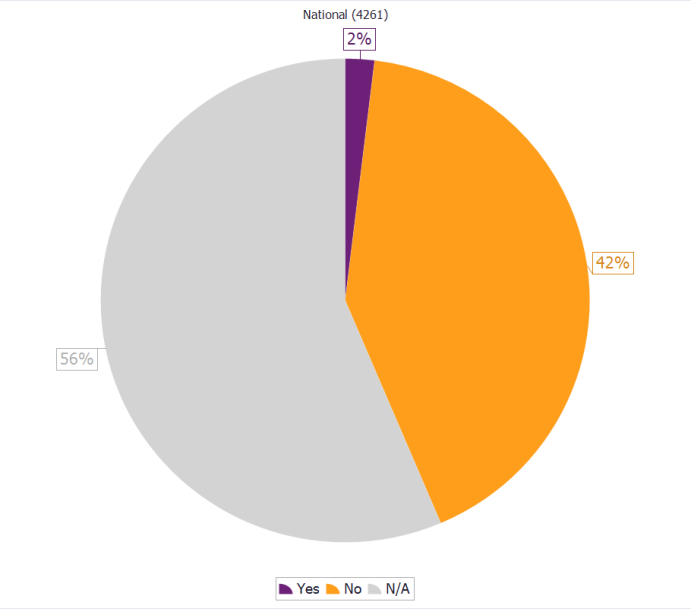
Question 9a. Grade of most senior doctor to retrospectively review the patient's case notes – Unscheduled return within 72 hours



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge. Excludes all patients who had already been seen (Q7) by or discussed with (Q8) a consultant/associate specialist.

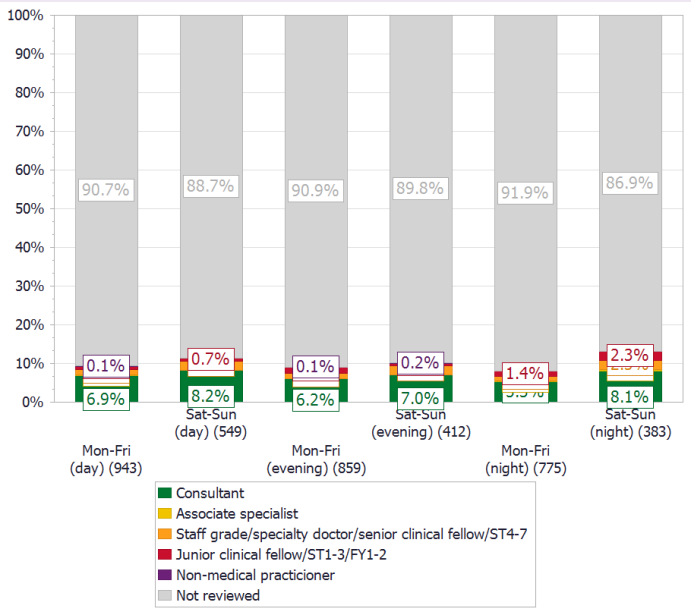
The review rate is consistent across all 4 standards.

Question 9b. Was this doctor a locum?



Sample: Q5 = Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge

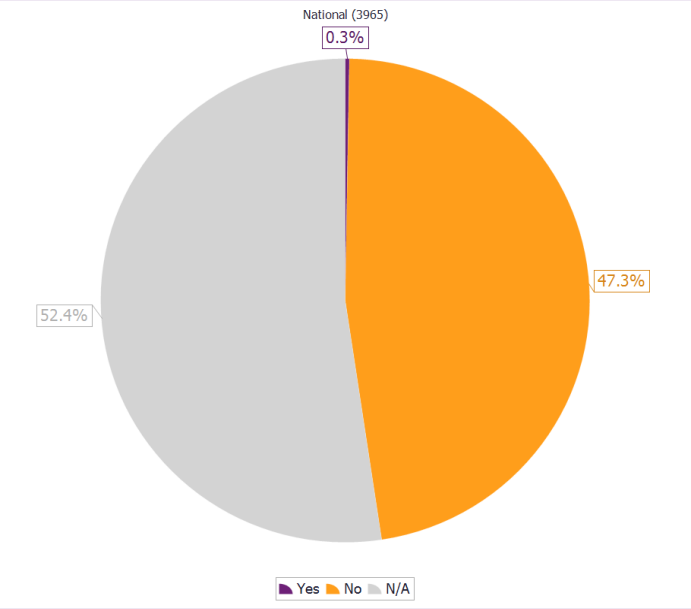
Question 9a. Grade of most senior doctor to retrospectively review the patient's case notes – Abdominal pain in patients aged over 70



Sample: Q5 = Abdominal pain in patients aged 70 years and over. Excludes all patients who had already been seen (Q7) by or discussed with (Q8) a consultant/associate specialist.

The same lessons and action needs to apply for all four standards.

Question 9b. Was this doctor a locum?



Sample: Q5 = Abdominal pain in patients aged 70 years and over

Analysis

The audit shows an average rate of consultant review of 14% across the 4 standards.

This remains well short of the 3 developmental and 1 fundamental aim of 100%.

81% of the 180 departments contributing did, however, report that they felt the standards have an effect on clinical management and 79% an effect on admission or discharge decisions.

The standards are valued but the ability to deliver and demonstrate them remains a challenge.

The current problems encountered by EDs and the state of consultant staffing and recruitment are likely significant impediments to higher performance.

There may also be a significant challenge for departments to evidence senior reviews. Significant numbers of departments reported some difficulty collecting data for the audit.

Clinical IT systems may not capture all care providers for a patient and consultants may be unable to document their reviews during pressured, crowded shifts. Despite some increase, only 4% of departments described their data collection as "fully automated".

The further findings of the report have demonstrated the extent to which departments are able to ameliorate the risk either by review by senior trainees or subsequent case note review.

Despite the challenges in achieving consultant review, the results for ST4 and above show the majority of patients benefit from at least middle grade expertise. When including these staff, the average review rate was 43%.

There was therefore an average of 57% of cases which were assessed by only junior staff. These were found throughout the hours of the day and the days of the week but were more frequent during the night. Given this and the problems of consultant staffing, departments may wish to pursue the value of retrospective case note review. The findings within section 9a suggest that few departments have adopted this practice or where present it may be incomplete.

Limitations

For the purposes of this audit, the following patient populations were excluded:

- Patients admitted to an inpatient ward outside of the ED
- Patients leaving the ED before being seen
- Patients directly referred to other specialities from primary care

Summary of recommendations

High risk cases present to EDs throughout the week and at all times of day and night. Departments should consider how staffing and seniority are balanced not only to demand, but also to the requirement for senior staff to care for high risk conditions.

Departments appear to have more reliable methods for identifying patients making unscheduled returns. RCEM encourages EDs to examine whether processes for this group can translate to a higher review rate for other high risk groups.

The adoption and reliability of a subsequent case note review appears incomplete. Departments are encouraged to examine this process and consider dedicated consultant time for this. The RCEM service delivery group have useful resources for job planning and ensuring that the consultant workforce identifies key direct clinical care administrative tasks.

RCEM notes the difficulty gathering data and the small proportion of departments with automated clinical systems. Evidencing senior reviews is important for a number of reasons including the need for clear documentation and communication and for medicolegal reasons. Departments are encouraged to review how a senior review is documented, whether in a clinical system or in paper case notes.

Using the results of this audit to improve patient care

The results of this audit should be shared with all staff, including doctors and nurses, who have responsibility for looking after patients in these four high risk groups.

Discussing the results of this audit with colleagues is a good way of demonstrating the ED's commitment to improving care. Engaging staff in the action planning process will lead to more effective implementation of the plan.

EDs may wish to consider using a rapid cycle audit methodology, which can be used to track performance against standards, as a tool to implement the action plan. For further resources, please visit the RCEM Quality Improvement webpage.

Further Information

Thank you for taking part in this audit. We hope that you find the results helpful.

If you have any queries about the report please e-mail audit@rcem.ac.uk or phone 020 7400 6108.

Details of the RCEM Clinical Audit Programme can be found under the Current Audits section of the RCEM website.

Feedback

We would like to know your views about this report and participating in this audit. Please let us know what you think by completing our feedback survey: www.surveymonkey.co.uk/r/RCEMaudit16

We will use your comments to help us improve our future audits and reports.

Useful Resources

- Site-specific report – available to download from the clinical audit website
- Site-specific PowerPoint presentation – developed to help you disseminate your site-specific audit results easily and efficiently – available to download from the clinical audit website for registered users
- Local data file – a spreadsheet that allows you to conduct additional local analysis using site-specific data for this audit. Available to download from the clinical audit website for registered users

Report authors and contributors

This report is produced by the Standards and Audit Committee subgroup of the Quality in Emergency Care Committee, for the Royal College of Emergency Medicine.

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Appendices

Appendix 1: Audit questions

Organisational audit – about your ED					
Q1a-e: Only one response per ED is required Q1a-e: Only non-English EDs should complete this section. English EDs should instead complete the Census run by HEE					
Q1a	How many patients attend main Emergency Department per year? *(To nearest thousand per annum)*	Leave blank if unknown			
Q1b	What is the casemix of your ED?	Adults only			
		Children only			
		Both adults and children			
Q1c	On a **weekday**, assuming all shifts are filled, how many staff would **usually** be on each **clinical** shift? *(RCEM recommends using July 2016 as the census month)*		Morning shift	Afternoon/ evening shift	Night shift
		Consultant	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 4 (ST4+, senior clincial fellows, SaS)			
		Tier 3 (CT3, clinical fellows, some GPs, junior SaS)			
		Tier 2 (F2, CT1,2 some GPs)			
		Tier 1 (FY1)			
		Non-medical practitioner (e.g. nurse)			

Q1d	On a **weekend**, assuming all shifts are filled, how many staff would **usually** be on each **clinical** shift? *(RCEM recommends using July 2016 as the census month)*		Morning shift	Afternoon/ evening shift	Night shift
		Consultant	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 4 (ST4+, senior clincial fellows, SaS)			
		Tier 3 (CT3, clinical fellows, some GPs, junior SaS)			
		Tier 2 (F2, CT1,2 some GPs)			
		Tier 1 (FY1)			
		Non-medical practitioner (e.g. nurse)			
Q1e	How many **vacant posts** do you currently have? *(RCEM recommends using July 2016 as the census month)*	Consultant	Leave blank if unknown		
		Tier 4 (ST4+, senior clincial fellows, SaS)			
		Tier 3 (CT3, clinical fellows, some GPs, junior SaS)			
		Tier 2 (F2, CT1,2 some GPs)			
		Tier 1 (FY1)			
		Non-medical practitioner (e.g. nurse)			

Organisational audit – about consultant sign-off			
Q1f-h: Only one response per ED is required Q1f-h: All EDs should complete this section			
Q1f	How easy is it to collect data about Consultant sign-off in your ED?	Fully automated	
		Straightforward	
		Problematic	
		Difficult	
Q1g	In your opinion, does the existence of the consultant sign-off standard have an effect on the clinical management of patients? If so, what are the effects?	Yes	
		No	
Q1h	In your opinion, does the existence of the consultant sign-off standard have an effect on the decision to admit or discharge patients? If so, what are the effects?	Yes	
		No	

Patient audit			
All EDs should complete this section			
Q2	Patient reference		
Q3	Date of arrival (dd/mm/yyyy)	dd/mm/yyyy	
Q4	Time of arrival (Use 24 hour clock e.g. 11.23pm = 23:23)	HH:MM	
Q5	Patient group	Atraumatic chest pain in patients aged 30 years and over	
		Fever in children under 1 year of age	
		Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge	
		Abdominal pain in patients aged 70 years and over	
Q6	Patient outcome	Discharged from the ED	
		Patient died	
		Not recorded	
Q7a	Grade of most senior ED doctor to actually see and assess the patient in person	Consultant	
		Associate specialist	
		Staff grade/specialty doctor	
		Senior clinical fellow (registrar or equivalent)	
		Junior clinical fellow (SHO or equivalent)	
		ST4-7	
		ST3	
		ST1-2	
		FY1-2	
		Non-medical practitioner (e.g. nurse)	
Q7b	Was this doctor a locum?	Yes	
		No	
		N/A	
Q8a	Grade of most senior ED doctor with whom the patient was discussed during their visit to the ED	Consultant	
		Associate specialist	
		Staff grade/specialty doctor	
		Senior clinical fellow (registrar or equivalent)	
		Junior clinical fellow (SHO or equivalent)	
		ST4-7	
		ST3	
		ST1-2	
		FY1-2	
		Non-medical practitioner (e.g. nurse)	
Q8b	Was this doctor a locum?	Yes	
		No	

		N/A	
Q9a	Grade of most senior ED doctor to retrospectively review the patient's case following their visit to the ED	Consultant	
		Associate specialist	
		Staff grade/specialty doctor	
		Senior clinical fellow (registrar or equivalent)	
		Junior clinical fellow (SHO or equivalent)	
		ST4-7	
		ST3	
		ST1-2	
		FY1-2	
		Non-medical practitioner (e.g. nurse)	
		Not reviewed	
Q9b	Was this doctor a locum?	Yes	
		No	
		N/A	

Notes

Question and answer definitions

Question	Definition
Q1c-d	Do not include shifts by staff working pre-hospital unless this is part of this trust. Do not include non-clinical activity in the clinical shifts e.g. management, teaching (even if on the floor).

Appendix 2: Participating Emergency Departments

Aberdeen Royal Infirmary
Addenbrooke's Hospital
Airedale General Hospital
Alexandra Hospital
Altnagelvin Area Hospital
Antrim Area Hospital
Arrowe Park Hospital
Barnet Hospital
Barnsley Hospital
Basildon University Hospital
Basingstoke and North Hampshire Hospital
Bedford Hospital
Blackpool Victoria Hospital
Bradford Royal Infirmary
Bristol Royal Hospital for Children
Bristol Royal Infirmary (Adults)
Bronglais General Hospital
Broomfield Hospital
Calderdale Royal Hospital
Causeway Hospital
Charing Cross Hospital
Chelsea & Westminster Hospital
Cheltenham General Hospital
Chesterfield Royal Hospital
City Hospital (Birmingham)
Colchester General Hospital
Countess of Chester Hospital
County Hospital Stafford
Croydon University Hospital
Darlington Memorial Hospital
Derriford Hospital
Diana, Princess Of Wales Hospital
Doncaster Royal Infirmary
Dorset County Hospital
Dr Gray's Hospital
Dumfries and Galloway Royal Infirmary
Ealing Hospital
East Surrey Hospital
Epsom General Hospital
Fairfield General Hospital
Forth Valley Royal Hospital
Frimley Park Hospital
Furness General Hospital
George Eliot Hospital
Glan Clwyd Hospital
Glangwili General Hospital
Gloucestershire Royal Hospital
Good Hope Hospital
Grantham & District Hospital
Hairmyres Hospital
Harrogate District Hospital
Heartlands Hospital
Hereford County Hospital
Hillingdon Hospital
Hinchingbrooke Hospital
Homerton University Hospital
Horton Hospital
Huddersfield Royal Infirmary
Hull Royal Infirmary
James Paget Hospital
John Radcliffe Hospital
Kettering General Hospital
King George Hospital
Kings College Hospital
King's Mill Hospital
Kingston Hospital
Leeds General Infirmary
Leicester Royal Infirmary
Leighton Hospital
Lincoln County Hospital
Lister Hospital
Luton and Dunstable University Hospital
Maidstone District General Hospital
Manchester Royal Infirmary (Adults)
Manor Hospital
Medway Maritime Hospital
Milton Keynes Hospital
Morriston Hospital
Musgrove Park Hospital
New Cross Hospital
Newham General Hospital
Noble's Hospital
Norfolk & Norwich University Hospital
North Manchester General Hospital
North Middlesex University Hospital
Northampton General Hospital
Northern General Hospital
Northumbria Specialist Emergency Care Hospital
Northwick Park Hospital
Ormskirk & District District General Hospital
Peterborough City Hospital

Pilgrim Hospital
Pinderfields Hospital
Princess Alexandra Hospital
Princess of Wales Hospital
Princess Royal University Hospital
Queen Alexandra Hospital, PO
Queen Elizabeth Hospital (Birmingham)
Queen Elizabeth Hospital (Gateshead)
Queen Elizabeth Hospital (Woolwich)
Queen Elizabeth The Queen Mother Hospital
Queen's Hospital (Burton)
Queen's Hospital, Romford
Queen's Medical Centre, Nottingham
Royal Albert Edward Infirmary
Royal Alexandra Children's Hospital
Royal Berkshire Hospital
Royal Blackburn Hospital
Royal Bolton Hospital
Royal Bournemouth General Hospital
Royal Cornwall Hospital
Royal Derby Hospital
Royal Devon and Exeter Hospital (Wonford)
Royal Free Hospital
Royal Gwent Hospital
Royal Hampshire County Hospital
Royal Infirmary of Edinburgh
Royal London Hospital (The)
Royal Manchester Children's Hospital
Royal Oldham Hospital
Royal Preston Hospital
Royal Shrewsbury Hospital
Royal Stoke University Hospital
Royal Surrey County Hospital
Royal Sussex County Hospital
Royal Victoria Infirmary
Russells Hall Hospital
Sandwell General Hospital
Scunthorpe General Hospital
Sheffield Children's Hospital
South Tyneside District General Hospital
Southampton General Hospital
Southend Hospital
Southmead Hospital
Southport & Formby District General Hospital
St George's
St Helier Hospital (Adult)
St James's University Hospital
St Mary's Hospital
St Peter's Hospital
St Richard's Hospital (Chichester)
St Thomas' Hospital
Stepping Hill Hospital
Stoke Mandeville Hospital
Sunderland Royal Hospital
Tameside General Hospital
The Cumberland Infirmary
The Great Western Hospital
The James Cook University Hospital
The Princess Royal Hospital
The Royal Liverpool University Hospital
Tunbridge Wells Hospital
Ulster Hospital
University College Hospital
University Hospital Lewisham
University Hospital Of North Durham
University Hospital Of North Tees
University Hospital of Wales
University Hospital, Coventry
Victoria Hospital
Warrington Hospital
Warwick Hospital
Watford General Hospital
West Cumberland Hospital
West Middlesex University Hospital
West Suffolk Hospital
Weston General Hospital
Wexham Park Hospital
Whipps Cross University Hospital
Whiston Hospital
Whittington Hospital
William Harvey Hospital
Withybush General Hospital
Worcestershire Royal Hospital
Worthing Hospital
Wrexham Maelor Hospital
Wythenshawe Hospital
Yeovil District Hospital
York Hospital
Ysbyty Gwynedd

Appendix 3: Definitions

Standard	Term	Definition
All	Discharge	Discharge home (or to the patient's usual place of residence) from the ED. Do not include patients discharged from another specialty. Include patients who die in the ED.
2	Fever	Temperature of ≥38˚C at triage/ED arrival, not prior to arrival or subsequently.
3	Unscheduled return	Do not include patients who leave before being seen and then re-attend within 72 hours
3	Unscheduled return	Do not include patients who leave before being seen and then re-attend within 72 hours

Question and answer definitions:

Question	Definition
Q1c-d	Do not include shifts by staff working pre-hospital unless this is part of this trust Do not include non-clinical activity in the clinical shifts e.g. management, teaching (even if on the floor)

Appendix 4: Calculations

STANDARD	GRADE	Analysis sample	Analysis plan – conditions for the standard to be met
1. Atraumatic chest pain in patients aged 30 years and over	D	'Atraumatic chest pain in patients aged 30 years and over'	Standard fully met: Q7a = Consultant [OR] Associate specialist Partially met: Q7a = Consultant [OR] Associate specialist [OR] Staff grade/specialty doctor [OR] Senior clinical fellow (registrar or equivalent) [OR] ST4-7 Standard failed: Q7a = ST3 ST1-2 [OR] FY1-2 [OR] Non-medical practitioner (e.g. nurse) [OR] Junior clinical fellow (SHO or equivalent)
2. Fever in children under 1 year of age	D	'Fever in children under 1 year of age'	Standard fully met: Q7a = Consultant [OR] Associate specialist Partially met: Q7a = Consultant [OR] Associate specialist [OR] Staff grade/specialty doctor [OR] Senior clinical fellow (registrar or equivalent) [OR] ST4-7 Standard failed: Q7a = ST3 ST1-2 [OR] FY1-2 [OR] Non-medical practitioner (e.g. nurse) [OR] Junior clinical fellow (SHO or equivalent)
3. Patients making an unscheduled return to the ED with the same	F	'Patients making an unscheduled return to the	Standard fully met: Q7a = Consultant [OR] Associate specialist

condition within 72 hours of discharge		ED with the same condition within 72 hours of discharge'	Partially met: Q7a = Consultant [OR] Associate specialist [OR] Staff grade/specialty doctor [OR] Senior clinical fellow (registrar or equivalent) [OR] ST4-7 Standard failed: Q7a = ST3 ST1-2 [OR] FY1-2 [OR] Non-medical practitioner (e.g. nurse) [OR] Junior clinical fellow (SHO or equivalent)
4. Abdominal pain in patients aged 70 years and over	D	'Abdominal pain in patients aged 70 years and over'	Standard fully met: Q7a = Consultant [OR] Associate specialist Partially met: Q7a = Consultant [OR] Associate specialist [OR] Staff grade/specialty doctor [OR] Senior clinical fellow (registrar or equivalent) [OR] ST4-7 Standard failed: Q7a = ST3 ST1-2 [OR] FY1-2 [OR] Non-medical practitioner (e.g. nurse) [OR] Junior clinical fellow (SHO or equivalent)

Appendix 5: Inclusion and exclusion criteria

Inclusion criteria

General:

- Patients in the four high-risk patient groups presenting to the ED should be included in the audit if discharged home
- Include patients who die in the ED.

Exclusion criteria

- Patients admitted to an inpatient ward outside of the ED
- Patients leaving the ED before being seen
- Patients directly referred to other specialities from primary care

Patient groups

This audit includes the following four high-risk patient groups:

1. Atraumatic chest pain in patients aged 30 years and over
2. Fever in children under 1 year of age
3. Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge
4. Abdominal pain in patients aged 70 years and over

Appendix 6: References

1. Geelhoed GC, Geelhoed EA. Positive impact of increased number of emergency consultants. Arch Dis Child 2008;93:62-64.

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3. White AL, Armstrong PAR, Thakore S. Impact of senior clinical review on patient disposition from the emergency department. Emerg Med J 2010;27:262-265.

4. Wyatt JP, Henry J, Beard D. The association between seniority of Accident and Emergency doctor and outcome following trauma. Injury 1999;30(3):165-168.