Royal College of Emergency Medicine
National Quality Improvement Project 2021/22
Consultant Sign Off
PILOT Information Pack

Welcome!

This information pack tells you everything you need to know about participating in the 2022 Royal College of Emergency Medicine (RCEM) national quality improvement program (QIP) on Consultant Sign-Off.

Quick guide to running an awesome QIP

Data collection period

Data should be collected on patients attending a type 1 ED from **1 April 2022 – 3 Oct 2022**

Data entry portal

Log into the data entry site at https://audit.rcem.ac.uk/pages/home

Standards

Click here to find the standards

Questions

Click here to find the questions

Inclusion criteria

Patients in the high-risk groups (see below) presenting to the ED should be included in the QIP if discharged home.
Include patients who die in the ED.

The following two high-risk patient groups will be evaluated separately, your department should choose to collect data on one or both:

1. Adults Consultant Sign Off* review (5 cases per week)
   Patients (18 years and over) making an unscheduled return to the ED with the same condition within 72 hours of discharge, abdominal pain 70 years and over, or chest pain 30 years and over.

2. Children's Consultant Sign Off* review (5 cases per week)
   Fever in children under 1 year of age, or patients (aged under 18 years) making an unscheduled return to the ED with the same condition within 72 hours of discharge.

Exclusion criteria

Patients under the age of 18 are excluded from the Adult Consultant Sign Off.
Patients 18 years and older are excluded from the Children's Consultant Sign Off.
Patients admitted are excluded.

Sample size

Please collect 5 adult cases and 5 child cases each week. The cases sampled should meet the eligibility criteria and be randomised.

If your ED does not see adult patients, just collect the 5 child cases per week
If your ED does not see child patients, just collect 5 adult cases per week

Data frequency

Recommended: enter cases each week
Alternative: If it is challenging in your ED to enter data weekly, you may wish to enter them fortnightly or monthly instead. What is vital however is initiating PDSA cycles regularly to improve.

Contents

Welcome

This document tells you everything you need to know if your Emergency Department (ED) wishes to participate in the 2021/22 RCEM national Quality Improvement Program (QIP) on Consultant Sign Off (CSO).

Introduction

Emergency Medicine (EM) is a rapidly developing specialty. Over the past 40 years the 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.

During the most recent CSO national audit (2017), the five high-risk patient groups performed similarly. As such we have opted to focus on all groups specified in the previous version of CSO based on the systems of care they are looked after within – Adults or Children’s. Mixed EDs may opt to evaluate one or both the patient groups, however this must still be done as 5 cases for each group, totalling 10.

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. The group may evolve with time as more evidence emerges.

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. We have changed the standard to accept overnight Tier 4/’Entrustment level’ 3 staff (e.g. ST4+) review as an appropriate balance between these challenges.

Previous attempts at collecting this data highlighted a need to train those inputting the QIP data to find the information within their electronic patient record (EPR) systems. We ask loccal QI leads to ensure those working on this QIP know where to find the relevant data, including ethnicity where possible.

The RCEM online data collection tool should be used to collect and review ED performance against the standards.

National results of the QIP will be published as part of the RCEM's work on clinical quality. Participating EDs will also receive a personalised report with their data. This QIP is listed in the Quality Accounts for 2021/22, which require providers in England to report on their participation in identified national QIPs.

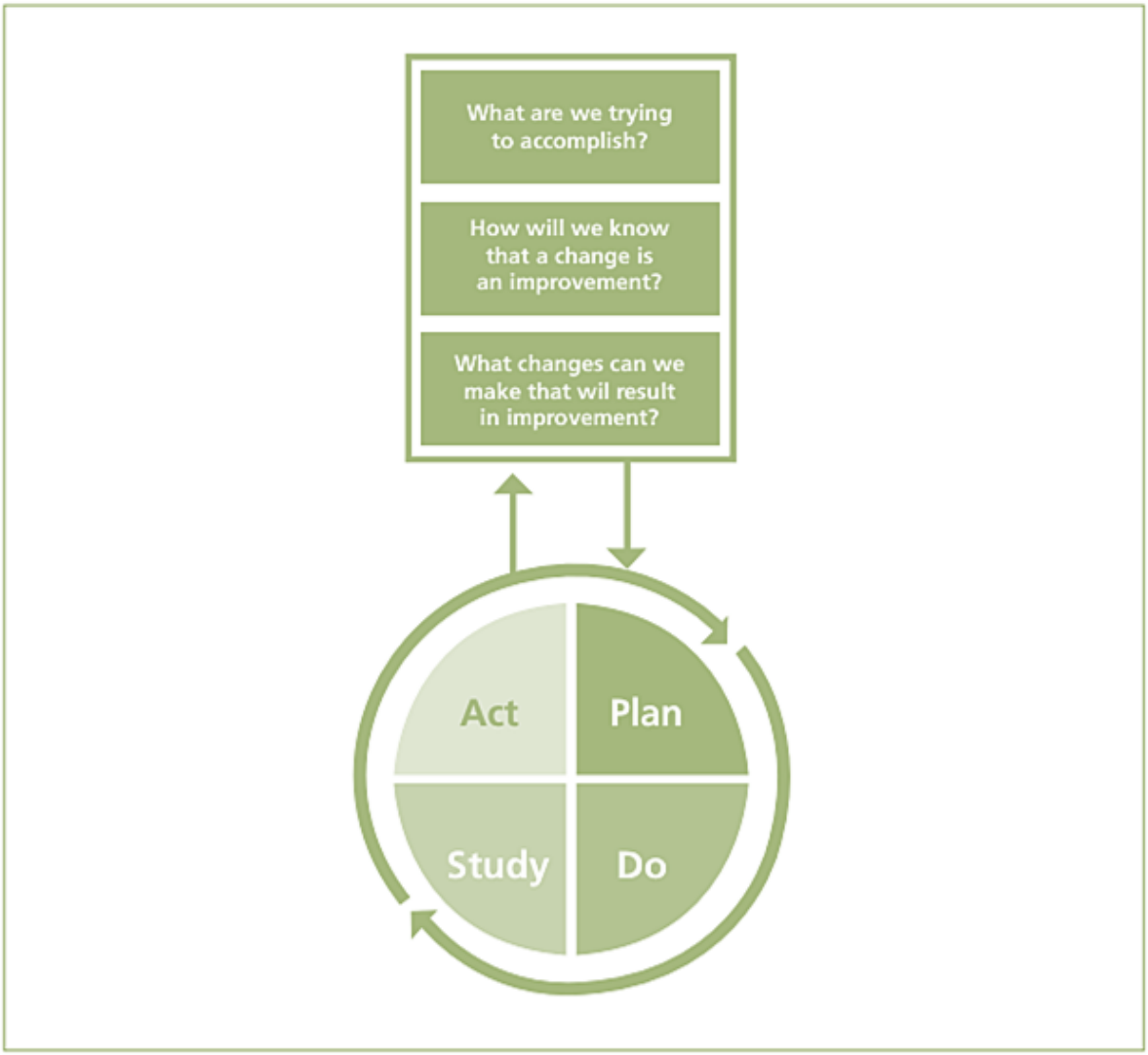
The College is committed to assessing health inequalities relating to patient ethnicity in supporting departments to provide high quality care to all. We will be collecting ethnicity data, monitoring them for systemic inequalities and reporting at the national level.

Quality Improvement Information

The purpose of this QIP is to continually quality assure, and quality improve your service where it is not meeting standards. The RCEM system allows your team to record details of quality improvement projects (QIP) and see on your dashboard how each initiative affects your data on key measures.

We encourage you to use this feature in your department. If you are new to QIPs, we recommend you follow the Plan Do Study Act (PDSA) methodology. The Institute for Healthcare Improvement (IHI) provides a useful worksheet that will help you to think about the changes you want to make and how to implement them.

Further information on ED quality improvement can be found on the RCEM website.



The model for improvement, IHI

Objectives

The objectives of the national QIPs are:

General objectives	How RCEM is supporting you
1. To identify current performance in EDs against clinical standards and previous performance	• Expert teams of clinicians and QIP specialists have reviewed current national standards and evidence to set the top priority standards for this national QIP • RCEM have built a bespoke platform to collect and analyse performance data against the standards for each ED
2. Show EDs their performance in comparison with other participating departments both nationally and in their respective country in order to stimulate quality improvement	• EDs have the flexibility to select the most appropriate comparator to their data, whether this is national or only EDs in their country
3. To empower and encourage EDs to run quality improvement (QI) initiatives based on the data collected, and track the impact of the QI initiative on their weekly performance data	• The RCEM platform includes a dashboard with graphs showing your ED's performance as soon as data are entered • The dashboard graphs are SPC charts (where applicable) with built in automatic trend recognition, so you are able to easily spot statistically significant patterns in your data • The portal has built in tools to support local QI initiatives, such as an online PDSA template • Once you have completed a PDSA template with your team, this is overlaid onto your dashboard charts so you can easily see the impact of your PDSA • RCEM have also published a QI guide to introduce you to a range of excellent QI methodologies and enhance your QI knowledge and skills
Specific objectives	**How RCEM is supporting you**
• To ensure high-risk patients are seen by senior clinicians	
• To ensure staffing and seniority are appropriately balanced at all times, 24/7	

Standards

Clinical standards	GRADE	Evidence base
1. Adults Consultant Sign Off* review – Patients (aged 18 years and older) making an unscheduled return to the ED with the same condition within 72 hours of discharge, abdominal pain 70 years and over, or chest pain 30 years and over.	F	Wyatt et al, 1999; Thornton & Hazell, 2008; Geelhoed et al, 2008; White et al, 2010.
2. Children's Consultant Sign Off* reviewed – Fever in children under 1 year of age, or patients (aged under 18 years) making an unscheduled return to the ED with the same condition within 72 hours of discharge.	F	Wyatt et al, 1999; Thornton & Hazell, 2008; Geelhoed et al, 2008; White et al, 2010

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). These standards have been checked for alignment with RCEM Quality in Emergency Care Committee Standard Consultant Sign off (June 2016)
The RCEM understands that achieving the standards of this QIP are particularly difficult in small and remote Emergency Departments.

Grading explained

F - Fundamental This is the top priority for your ED to get right. It needs to be met by all those who work and serve in the healthcare system. Behaviour at all levels of service provision need to be in accordance with at least these fundamental standards. No provider should offer a service that does not comply with these fundamental standards, in relation to which there should be zero tolerance of breaches.

D - Developmental This is the second priority for your ED. It is a requirement over and above the fundamental standard.

A - Aspirational This is the third priority for your ED, and is about setting longer term goals.

In this short life QIP we are choosing to focus on fundamental standards, across the RCEM national platform we also include the below for reference.

Definitions

Standard	Term	Definition
All	Consultant sign off (CSO)	This includes both consultants, associate specialists and ST4+ over nights*
All	Discharge	Discharge from the ED. Do not include patients discharged by another specialty from the ED
All	*Nights	Nights is defined as 2200-0800 on every day of the week. During this period, ST4+ reviews would be considered to meet the CSO standard as agreed by the Quality in Emergency Care committee of RCEM.
All	SAS	The term 'SAS doctor' includes specialty doctors and specialist grade doctors with at least four years of postgraduate training, two of which are in a relevant specialty. The NHS website provides a useful definition of this.
2	Fever	Temperature of ≥38˚C at triage/ED arrival, not prior to arrival or subsequently
1	Unscheduled return	Do not include patients who leave before being seen and then re-attend within 72 hours

Methodology

Forming your QIP team

RCEM recommends forming a multidisciplinary QI team; including consultants, trainees, paediatric specialists, elderly care specialists, ACP, nursing, pharmacy, SAS, triage, patient reps and others as needed for the topic and to suit your local set up.

Data entry portal

You can find the link to log into the data entry site at https://audit.rcem.ac.uk/pages/home (registered users only).

Inclusion criteria

Patients in the high-risk groups (see below) presenting to the ED should be included in the QIP if discharged home.
Include patients who die in the ED.

The following two high-risk patient groups will be evaluated separately, your department should choose to collect data on one or both:

3. Adults Consultant Sign Off* review (5 cases per week)
   Patients (18 years and over) making an unscheduled return to the ED with the same condition within 72 hours of discharge, abdominal pain 70 years and over, or chest pain 30 years and over.

4. Children's Consultant Sign Off* review (5 cases per week)
   Fever in children under 1 year of age, or patients (aged under 18 years) making an unscheduled return to the ED with the same condition within 72 hours of discharge.

Exclusion criteria

Patients under the age of 18 are excluded from the Adult Consultant Sign Off.
Patients 18 years and older are excluded from the Children's Consultant Sign Off.
Patients admitted are excluded. Patients that self-discharged from A&E.

Sample size

Please collect 5 adult cases and 5 child cases each week. The cases sampled should meet the eligibility criteria and be randomised.

If your ED does not see adult patients, just collect the 5 child cases per week
If your ED does not see child patients, just collect 5 adult cases per week

Data entry frequency

Recommended: To maximise the benefit of the run charts and features RCEM recommends entering **cases each week**. This will allow you to see your ED's performance on key measures changing week by week. PDSA cycles should be regularly conducted to assess the impact of changes on the week-to-week performance.

Alternative: If your ED finds weekly data entry too difficult to manage, you may enter data monthly or fortnightly instead. The system will ask you for each patient's

arrival date and automatically split your data into weekly arrivals, so you can get the benefit of seeing weekly variation if you spread the cases across the month. If you decide to enter data monthly, we recommend that you enter the 5 cases per week in batches of 20 to benefit from the SPC visualisations. You can then consider monthly cycles of PDSA with specific interventions and evaluate their impact by reviewing the trend over the following month.

Data collection period

Data should be collected on patients attending from **1 April 2022 – 3 October 2022**.

Data submission period

Data can be submitted online from **25 April 2022 – 3 October 2022**. It is recommended to enter data as close to the date of patient attendance as possible, and to review progress regularly. This will help you QI team spot the impact of intervention more promptly for refinement or disposal depending on the changes observed.

Data Sources

ED patient records including nursing notes (paper, electronic or both).

Flow of data searches to identify cases

Using codes in the appendix first identify all patients attending your ED each week during the data collection period, then by age at time of attendance, then through the other relevant criteria. ECDS codes will be available to support the full QIP.

Data to be collected

Organisational data **(Please only complete this final section once per ED)**

Q1a	What is the casemix of your ED?	Adults only			
		Children only			
		Both adults and children			
Q1b	How many adults attend the main Emergency Department per year? *(To nearest thousand per annum)*	Leave blank if unknown			
Q1c	How many children attend the main Emergency Department per year? *(To nearest thousand per annum)*	Leave blank if unknown			
Q2 On a **weekday**, assuming all shifts are filled, how many staff would **usually** be on each **clinical*** shift? *Do not include managerial teaching research SPA or EDT activity. **Please ensure no shift is double counted. If a shift traverses two shift categories select the one with the majority of hours. If this is equal, select the one that is the later shift category.		Approximate shift time**	0800 – 16:00 (Day shift)	16:00-00:00 (Late/evening)	00:00 – 08:00 (Nights)
		Tier 5/ Entrustment level 4 (Consultant)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 5/ Entrustment level 4 (Associate Specialist)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 3/ Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Tier 1/ Entrustment level 1 (FY1, trainee practitioners)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
		Qualified GPs	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown

Mirrored with RCEM curriculum entrustment levels

Q3 On a **weekend**, assuming all shifts are filled, how many staff would **usually** be on each **clinical*** shift? *Do not include managerial teaching research SPA or EDT activity	Approximate shift time**	0800 – 16:00 (Day shift)	16:00-00:00 (Late/evening)	00:00 – 08:00 (Nights)
	Tier 5/ Entrustment level 4 (Consultant)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Tier 5/ Entrustment level 4 (Associate Specialist)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Tier 3/ Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Tier 1/ Entrustment level 1 (FY1, trainee practitioners)	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
	Qualified GPs	Leave blank if unknown	Leave blank if unknown	Leave blank if unknown
Q4 How many **vacant posts** do you currently have?	Tier 5/ Entrustment level 4 (Consultant)			
	Tier 5/ Entrustment level 4 (Associate Specialist)			
	Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)			
	Tier 3/ Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)			
	Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)			
	Tier 1/ Entrustment level 1 (FY1, trainee practitioners)			
	Qualified GPs			

*Taken from Medical Practitioner staffing in Emergency Departments
** Take from the RCEM Scotland's Emergency Medicine Workforce Census

Organisational audit – about consultant sign-off			
Q5.	How easy is it to collect data about Consultant sign-off in your ED?	Fully automated	
		Straightforward	
		Problematic	
		Difficult	
Q6.	Does your department have a system in place to flag the defined high-risk cases which have not had the appropriate senior review	Chest pain 30 years and over	
		Abdominal pain 70 years and over	
		Febrile infant	
		Unscheduled return (child)	
		Unscheduled return (adult)	
		None of the above	
Q7.	At the point of discharge is it required to document if a consultant sign off has occurred.	Yes	
		No	
Q8	Which primary EPR/System does your hospital use?	Please state provider: (free text) N/A	

Equality, Diversity and Inclusion statement: We have integrated ethnicity data monitoring into our platform to form the start of a data set containing thousands of cases which can then be analysed to detect differences in care quality along sex, race and age lines. We have representation from the EDI committee at our programme development meetings and attend theirs to update this body of work.

The last QI cycles reported a lot of the data as missing. We want to determine why. Without accurate data establishing care disparities is more challenging, hampering efforts to target resources and find solutions in priority areas. We have nested these questions to establish the interhospital variability of ethnicity data recording and better understand the barriers to this data set. This exercise with take 15-20 minutes but provide a significant insight into this issue. Please encourage your team locally to input this data and show them how to find it to improve the collection process.

This data is only going to be used nationally however we do encourage local systems to better capture this data so insights and research can be undertaken in this important space.

Organisational audit – EDI monitoring					
Q1.	How easy is it to source data about a patient's characteristics within your EPR?	Characteristics	Age	Sex	Ethnicity
		Straightforward (intuitive)			
		Problematic (not intuitive)			
		Difficult (you required additional assistance to locate the data)			
		Not recorded			
Q2a – (if response to Q1a in the organisational data section is "adults only" or "both adults and children")	Please select the 10 patients currently in department* with the longest waits in **Majors** and enter age, gender and ethnicity *if there is less then 10 – use the most recently discharged in time order till 10 are entered	Characteristics	Age	Sex	Ethnicity
		Majors' patient one			
		Majors' patient two			
		Majors' patient three			
		Majors' patient four			
		Majors' patients five			
		Majors' patient six			
		Majors' patient seven			
		Majors' patient eight			
		Majors' patient nine			
		Majors' patients ten			
Q2b (if response to Q1a in the organisational data section is "adults only" or "both adults and children")	Please select the 10 patients currently in department* with the longest waits in **Minors** and enter age, gender and ethnicity *if there is less then 10 – use the most recently discharged in time order till 10 are entered	Characteristics	Age	Sex	Ethnicity
		Minors' patient one			
		Minors' patient two			
		Minors' patient three			
		Minors' patient four			
		Minors' patient five			
		Minors' patient six			
		Minors' patient seven			
		Minors' patient eight			
		Minors' patient nine			
		Minors' patients ten			

Q2c (if response to Q1a in the organisational data section is “children only” or “both adults and children”)	Please select the 10 patients currently in department* with the longest waits in **Childrens/PED** (Or under 16 if not segregated) and enter age, gender and ethnicity *if there is less then 10 – use the most recently discharged in time order till 10 are entered	Characteristics	Age	Sex	Ethnicity
		Childrens’ patient one			
		Childrens’ patient two			
		Childrens’ patient three			
		Childrens’ patient four			
		Childrens’ patients five			
		Childrens’ patient six			
		Childrens’ patient severn			
		Childrens’ patient eight			
		Childrens’ patient nine			
		Childrens’ patient ten			

Q3	Once you are on your EPR and have a patient record loaded – How many steps (clicks) thereafter are required to reach information about a patient's ethnicity	Number of steps	

Patient details (Clinical data)

Q1	Patient reference (anonymised)		
Q2	Ethnic category	• White British • White Irish • Any other White background • White and Black Caribbean • White and Black African • White and Asian • Any other mixed background • Indian • Pakistani • Bangladeshi • Any other Asian background • Caribbean • African • Any other Black background • Chinese • Any other ethnic group • Not recorded • I do not know where to find this info	
Q3a	Date of arrival (dd/mm/yyyy)	dd/mm/yyyy	
Q3b	Time of arrival (Use 24 hour clock e.g. 11.23pm = 23:23)	HH:MM	
Q4a	Date of discharge (dd/mm/yyyy)	dd/mm/yyyy	
Q4b	Time of discharge (Use 24 hour clock e.g. 11.23pm = 23:23)	HH:MM	
Q5	Patient group Only select one – If the person is an unscheduled return, with chest or abdominal pain in adults, or a fever in children under 1 – Select unscheduled return.	Adult Unscheduled return to the ED with the same condition within 72 hours of discharge (age 18 years and over)	
		Adult Abdominal pain in patients 70 years and over	
		Adult Atraumatic chest pain in patients 30 years and over	
		Children Fever in children under 1 year of age	
		Children Unscheduled return to the ED with the same condition within 72 hours of discharge (age under 18 years old)	

Q5b	Patient outcome	Discharged from the ED – by ED Clinician	
		Patient died	
		Not recorded	
Q6	Tier of the ED clinician who first seen the patient and completed an initial comprehensive review (the named clinician – "seen by")	Tier 5/ Entrustment level 4 (Consultant)	
		Tier 5/ Entrustment level 4 (Associate Specialist)	
		Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)	
		Tier 3/Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)	
		Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)	
		Tier 1/ Entrustment level 1 (FY1, trainee practitioners)	
		Qualified GPs	
Q7a	Tier of most senior ED clinician to actually see and assess the patient in person	Tier 5/ Entrustment level 4 (Consultant)	
		Tier 5/ Entrustment level 4 (Associate Specialist)	
		Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)	
		Tier 3/Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)	
		Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)	
		Tier 1/ Entrustment level 1 (FY1, trainee practitioners)	
		Qualified GPs	
Q7b **If 7a = Tier 5 or Tier 4**	Did the most senior ED clinician who actually seen the patient ALSO document their own review and outcomes?	Yes – They have made their own documentation No – It was documented within a more junior doctors notes	
Q8a	Tier of most senior ED clinician with whom the patient was discussed during their visit to the ED	Tier 5/ Entrustment level 4 (Consultant)	
		Tier 5/ Entrustment level 4 (Associate Specialist)	
		Tier 4/ Entrustment level 3 (ST4+, senior clinical fellows, SAS)	
		Tier 3/Entrustment level 2b (CT3, clinical fellows, junior SAS, ACPs)	
		Tier 2/ Entrustment level 2a (F2, CT1-2, GP trainees)	
		Tier 1/ Entrustment level 1 (FY1, trainee practitioners)	
		Qualified GPs	
Q8b	Was this review a retrospective case note review?	Yes	
		No	
Q8c **If Q8b = Yes**	Did it change the outcome?	Yes	
		No	
Q8c **If 8a = Tier 5 or Tier 4**	Did the most senior ED clinician this patient was discussed with ALSO document their own discussion and outcomes?	Yes – They have made their own documentation	
		No – It was documented within the juniors notes	
Q8d	Was this review done overnight between 22:00 and 08:00hrs	Yes	
		No	

Notes
This section is for local use, e.g. to record information that might help you during your PDSA cycles. It will not be analysed by RCEM - ensure you do not enter any identifiable data here.

References

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

2. Thornton V, Hazell W. Junior doctor strike model of care: Reduced access block and predominant Fellow of the Australasian College for Emergency Medicine staffing improve emergency department performance. Emergency Medicine Australasia 2008;20:425-30.

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.

5.Constlant Sign Off National Report 2017 The Royal College of Emergency Medicine

Appendix 1: ECDS codes to support case identification

Search Terms

The codes below can be used to help initially identify potential cases. This is not an exhaustive list; other search terms can be used but all potential patients should then be reviewed to check they meet the definitions & selection criteria before inclusion in the QIP.

The ECDS codes below relate to CDS V6-2-2 Type 011 - Emergency Care Data Set (ECDS) Enhanced Technical Output Specification v3.0.

QIP question	ECDS data item name	ECDS national code	National code definition	Notes
Ethnic group	ETHNIC CATEGORY	A	White British	Ethnic group
		B	White Irish	
		C	Any other White background	
		D	White and Black Caribbean	
		E	White and Black African	
		F	White and Asian	
		G	Any other mixed background	
		H	Indian	
		J	Pakistani	
		K	Bangladeshi	
		L	Any other Asian background	
		M	Caribbean	
		N	African	
		P	Any other Black background	
		R	Chinese	
		S	Any other ethnic group	
		Z	Not stated e.g. unwilling to state	
		99	Not known e.g. unconscious	

Fever in children under 1 year of age	PERSON BIRTH DATE	PERSON BIRTH DATE is <365 days from the EMERGENCY CARE ARRIVAL DATE	
Fever in children under 1 year of age	EMERGENCY CARE ARRIVAL DATE	PERSON BIRTH DATE is <365 days from the EMERGENCY CARE ARRIVAL DATE	
Fever in children under 1 year of age	SNOMED CT code 276885007	Core body temperature (observable entity) is >37.7	

Unscheduled return in 72 hours	EMERGENCY CARE ARRIVAL DATE & EMERGENCY CARE ARRIVAL TIME	EMERGENCY CARE ARRIVAL DATE & EMERGENCY CARE ARRIVAL TIME of the second attendance is <72 hours from the EMERGENCY CARE ARRIVAL DATE & EMERGENCY CARE ARRIVAL TIME of the first attendance	
Unscheduled return in 72 hours	EMERGENCY CARE ATTENDANCE CATEGORY	EMERGENCY CARE ATTENDANCE CATEGORY = 2 (Unplanned Follow-up Emergency Care Attendance for the same or a related clinical condition and within 7 days of the First Emergency Care Attendance at THIS Emergency Care Department), or 3 (Unplanned Follow-up Emergency Care Attendance for the same or a related clinical condition and within 7 days of the First Emergency Care Attendance at ANOTHER Emergency Care Department)	
Inclusion criteria	SNOMED-CT 812491000000102	Died in accident and emergency department (finding)	
Exclusion criteria	SNOMED-CT 306706006	Discharge to ward (procedure)	*Patients admitted to an inpatient ward outside of the ED*
Exclusion criteria	SNOMED-CT 1066311000000101	Discharge status: Left after assessment with intent to attend other healthcare provider	*Patients leaving the ED before being seen*
Exclusion criteria	SNOMED-CT 1066321000000107	Left after assessment but before treatment complete (destination unknown)	*Patients leaving the ED before being seen*
Exclusion criteria	No code for who does the discharge, but if a patient has been referred to a service, find the codes in REFERRED TO SERVICE (SNOMED CT) section		Patients discharged from the ED by a specialty other than EM

APPENDIX 2: Analysis plan

This section explains how the RCEM team will analyse and display your data. You may wish to use to conduct analysis locally. 'Analysis sample' shows which records will be included or excluded. 'Analysis plan' defines how the RCEM team will present the data graphically, and which records will meet or fail the standards.

STANDARD	Relevant questions	GRADE	Analysis Sample	Analysis plan – Conditions for the standard to be met
STANDARD 1: Adults Consultant Sign Off* reviewed – Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge, abdominal pain 70 years and over or chest pain over 30 years and over.	Q5, Q3b, Q7a, Q8a,	F	Inclusion criteria Q5 = ADULT OPTION ONLY Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge [or] abdominal pain 70 years and over [or] chest pain 30 years and over.	**Chart One:** SPC – Weekly (Q3a) **Title: Standard 1:** Percentage of high-risk adults who have had a Consultant sign off Analysis: Met = Rule 1 [OR] Rule 2 are met Rule 1: Q3b = Any time/All times of day [AND] Q8a [OR] Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) [IF] Rule 1 not met, apply rule 2 Rule 2: Q8c = Yes – Overnight review 22:00 – 08:00 [AND] Q8a [OR] Q7a = Tier 4 (ST4+, senior clinical fellows, SAS**)** **Chart Two:** Stacked line chart - Weekly Title: Stand 1 – Percentage of high-risk adults who have had a Consultant sign off (discussed or seen) prior to discharge – Tier 4 and 5 breakdowns Blue line values = Rule 1 Orange line values = Rule 1 [plus] 2 Met =

				Rule 1: Q3b = Any time/All times of day [AND] Q8a [OR] Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) [IF] Rule 1 not met, apply rule 2 Rule 2: Q8c = yes - 22:00 – 08:00 [AND] Q8a [OR] Q7a = Tier 4 (ST4+, senior clinical fellows, SAS) **Chart Three:** SPC – Weekly Title: Proportion of Tier 5 documenting their own senior reviews when they actually see the patient Inclusion: Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate specialist) Met = If Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate specialist) [AND] Q7b = Yes **Chart Four:** SPC – Weekly Title: Proportion of Tier 4 documenting their own senior reviews when they actually see the patient Inclusion: Q7a = Tier 4 ST4+, senior clinical fellows, SAS Met = If Q7a = ST4+, senior clinical fellows, SAS [AND] Q7b = Yes **Chart Five:** Stacked Bar Chart - Weekly Title: Tier of the primary clinician high-risk adults were seen by before discharge Met: Blue bar = Q6a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) Orange Bar = Q6a = Tier 4 Grey Bar = Q6a = Tier 3 Yellow Bar = Q6a = Tier 2 Purple Bar = Q6a = Tier 1 Green Bar = Q6a = Qualified GPs

				Chart Six: Stacked Bar Chart - Weekly Title: Tier of the most senior clinician to actually see high-risk patients before discharge Met: Blue bar = Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) Orange Bar = Q7a = Tier 4 Grey Bar = Q7a = Tier 3 Yellow Bar = Q7a = Tier 2 Purple Bar = Q7a = Tier 1 Green Bar = Q7a = Qualified GPs
STANDARD 2: Children's Consultant Sign Off* reviewed – Fever in children under 1 year of age and unscheduled return to the ED with the same condition within 72 hours of discharge.	Q5 Q3b, Q7a, Q8a	F	Inclusion criteria Q5 = CHILDREN ONLY Fever in children under 1 year of age and unscheduled return to the ED (aged under 18) with the same condition within 72 hours of discharge.	**Chart One:** SPC – Weekly (Q3a) **Title:** Standard 2: Percentage of high-risk children who have had a Consultant sign off (discussed or seen) Analysis: Met = Rule 1 [OR] Rule 2 are met Rule 1: Q3b = Any time/All times of day [AND] Q8a [OR] Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) [IF] Rule 1 not met, apply rule 2 Rule 2: Q8c = Yes – Overnight review 22:00 – 08:00 [AND] Q8a [OR] Q7a = Tier 4 (ST4+, senior clinical fellows, SAS**)** **Chart Two:** Stacked line chart - Weekly **Title**: Standard 2 – Percentage of high-risk children who have had a Consultant sign off (discussed or seen) prior to discharge – Tier 4 and 5 breakdowns Blue line values = Rule 1 Orange line values = Rule 1 [plus] 2

				Met = Rule 1: Q3b = Any time/All times of day [AND] Q8a [OR] Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) [IF] Rule 1 not met, apply rule 2 Rule 2: Q8c = yes - 22:00 – 08:00 [AND] Q8a [OR] Q7a = Tier 4 (ST4+, senior clinical fellows, SAS) **Chart Three:** SPC – Weekly **Title**: Proportion of Tier 5 documenting their own senior reviews when they actually see the child Inclusion: Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate specialist) Met = If Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate specialist) [AND] Q7b = Yes **Chart Four:** SPC – Weekly **Title**: Proportion of Tier 4 documenting their own senior reviews when they actually see the child Inclusion: Q7a = Tier 4 ST4+, senior clinical fellows, SAS Met = If Q7a = ST4+, senior clinical fellows, SAS [AND] Q7b = Yes **Chart Five:** Stacked Bar Chart - Weekly **Title**: Tier of the primary clinician high-risk children were seen by before discharge Met: Blue bar = Q6a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) Orange Bar = Q6a = Tier 4 Grey Bar = Q6a = Tier 3 Yellow Bar = Q6a = Tier 2 Purple Bar = Q6a = Tier 1 Green Bar = Q6a = Qualified GPs

				Chart Six: Stacked Bar Chart - Weekly **Title**: Tier of the most senior clinician to actually see high-risk children before discharge Met: Blue bar = Q7a = Tier 5 (Consultant) [OR] Tier 5 (Associate Specialist) Orange Bar = Q7a = Tier 4 Grey Bar = Q7a = Tier 3 Yellow Bar = Q7a = Tier 2 Purple Bar = Q7a = Tier 1 Green Bar = Q7a = Qualified GPs