Royal College of Emergency Medicine National Quality Improvement Project 2021/2022
Infection Prevention and Control
Information Pack

Welcome!

This information pack tells you everything you need to know about participating in the 2021/22 Royal College of Emergency Medicine (RCEM) national quality improvement program (QIP) on Infection Prevention and Control.

Quick guide to running an awesome QIP

Data collection period

Data should be collected on patients attending **from 4 October 2021 – 3 October 2022**.

Data entry portal

Log into the data entry site at www.rcem.ac.uk/audits

Standards

Click here to find the standards.

Questions

Click here to find the questions.

Inclusion criteria

Adult and paediatric patients are eligible.

Sample size

Recommended sample size: Please collect data on 5 eligible cases per week.

Data frequency

Recommended: enter cases each week.

Alternative: If your ED will find weekly data entry difficult enter data monthly instead.

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 infection prevention and control (IPC).

INTRODUCTION

Infection prevention and control is a key element of high quality and safe care. During the 2020/21 QIP cycle, RCEM identified key areas that require improvement. For this reason, the IPC QIP will continue for a second year. Key areas requiring improvement are patient screening and the isolation of patients with identified vulnerabilities.

Results of the 2020/21 cycle also demonstrated that most sites have IPC policies in place that are in line with the RCEM standards. RCEM will be monitoring if those policies have remained in place, and that standards have not deteriorated since last year's cycle.

The purpose of this QIP is to **improve patient safety and quality of care as well as workspace safety** by collecting sufficient data to track change but with a **rigorous focus on actions to improve.**

The RCEM online data collection tool should be used to collect and review the management of IPC measures.

National results of the QIP will be published as part of the Royal College of Emergency Medicine's work on clinical quality. Participating EDs will also receive an individualised report based on their submitted 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.

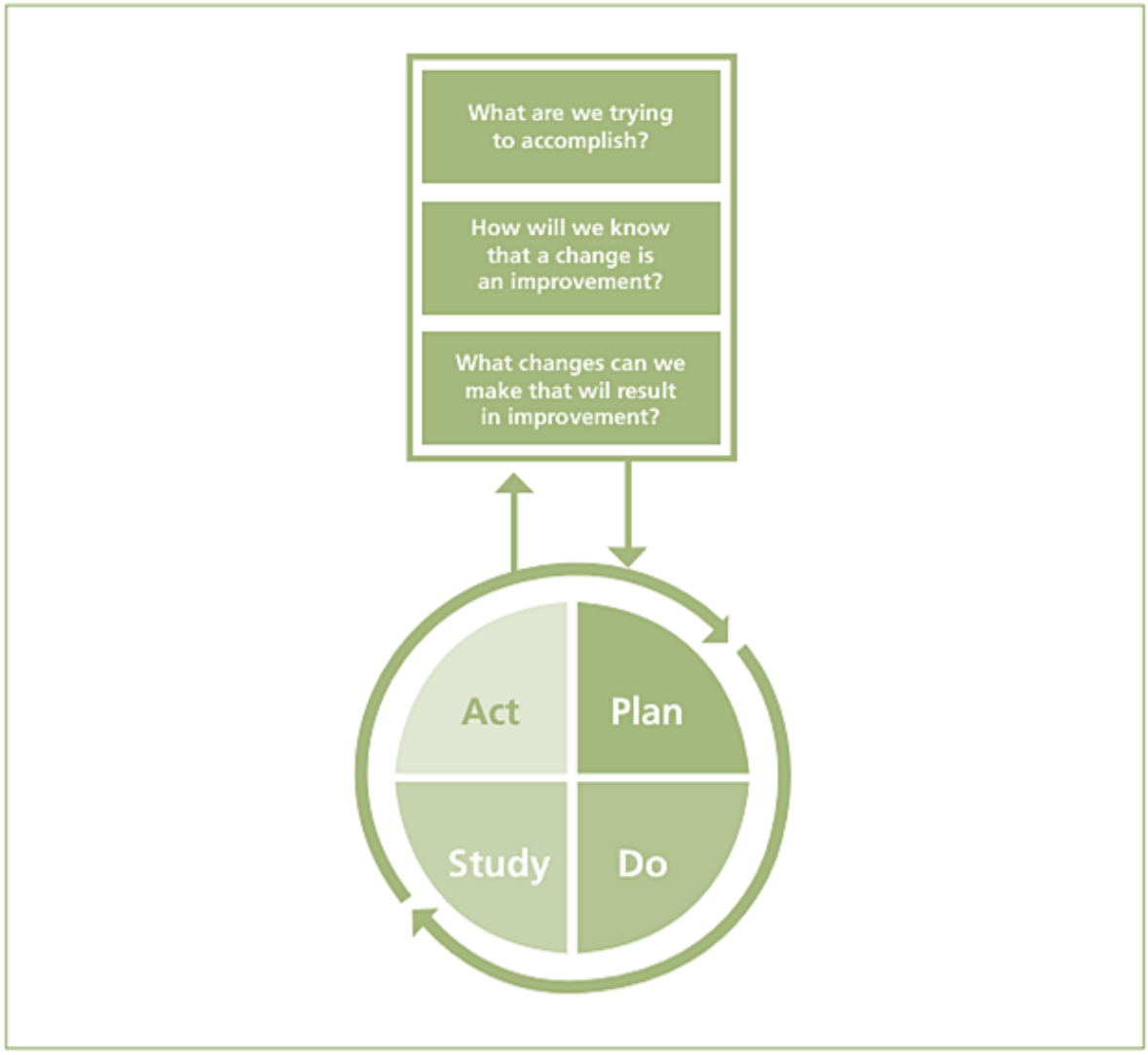
The College is committed to assessing health inequalities relating to patient ethnicity in supporting departments to provide high quality care to all. We will be collecting ethnicity data, monitoring them for systemic inequalities and reporting at the national level.

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 which 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
• To improve screening for symptoms of COVID-19 and other infectious diseases, and for conditions making patients extremely vulnerable
• To improve isolation of patients with vulnerabilities in a side-room
• To improve separation of potentially infectious patients following triage
• To ensure organisational systems in place to support good IPC

STANDARDS

Clinical standards	GRADE	Evidence base
1. Evidence that the ED has a named and active lead for infection prevention and control	D	NICE Quality standard [QS61] Infection prevention and control: Quality statement 2: Organisational responsibility
2. Healthcare workers decontaminate their hands immediately before and after every episode of direct contact or care	F	NICE Quality standard [QS61] Infection prevention and control: Quality statement 3: Hand decontamination
a. Evidence of local arrangements to ensure that all healthcare workers receive training in hand decontamination	F	NICE Quality standard [QS61] Infection prevention and control: Quality statement 3: Hand decontamination
b. Evidence of local arrangements to ensure that regular local hand hygiene observation audits are undertaken	D	NICE Quality standard [QS61] Infection prevention and control: Quality statement 3: Hand decontamination
3. The organisation has self-assessed against the RCEM Infection Control checklist	A	Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic

Clinical standards	GRADE	Evidence base
1. Patients should have documented evidence of infection screening on arrival		RCEM Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic: process recommendations
a. For symptoms of COVID-19	F	
b. For conditions considered to make them extremely vulnerable (and who will have been shielding themselves at home).	F	
c. For other infectious diseases requiring isolation	D	
2. Patients with documented vulnerability should be isolated in a side-room following triage without evidence of additional movements.	D	RCEM Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic: process recommendations
3. Patients who are documented as potentially infectious should be isolated in a side-room following triage without evidence of additional movements.	D	RCEM Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic: process recommendations

These standards have been checked for alignment with NICE Quality standard [QS61] Infection prevention and control (published 17 April 2014), and RCEM Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic (published June 2020).

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.

DEFINITIONS

Standard	Term	Definition
1, 2	Vulnerability [2]	Clinically extremely vulnerable people may include the following people. Disease severity, history or treatment levels will also affect who is in the group. 1. Solid organ transplant recipients 2. People with specific cancers: o people with cancer who are undergoing active chemotherapy o people with lung cancer who are undergoing radical radiotherapy o people with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment o people having immunotherapy or other continuing antibody treatments for cancer o people having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors o people who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppression drugs 3. People with severe respiratory conditions including all cystic fibrosis, severe asthma and severe chronic obstructive pulmonary disease (COPD) 4. People with rare diseases that significantly increase the risk of infections (such as SCID, homozygous sickle cell) 5. People on immunosuppression therapies sufficient to significantly increase risk of infection 6. Women who are pregnant with significant heart disease, congenital or acquired.
1a	COVID-19 symptoms [3]	Symptoms according to the NHS Guidance: • a high temperature • a new, continuous cough • a loss or change to your sense of smell or taste (Symptoms correct as of 2 September 2021 update, but subject to change)
1b	Other infectious diseases	Health protection: Infectious diseases - detailed information - GOV.UK (www.gov.uk)
2	Side-room	A room / single room with a door or a cubicle with a door

METHODOLOGY

Forming your QIP team

RCEM recommends forming a multidisciplinary QI team; to include consultants, trainees, advanced care practitioners (ACPs), specialty and associate specialist (SAS) doctors, nursing and, patient representatives and others to suit your local set up.

Data entry portal

You can find the link to log into the data entry site at www.rcem.ac.uk/audits (registered users only).

Inclusion criteria

Adult and paediatric patients are eligible.

Sample size

Please collect 5 randomised cases per week that meet the eligibility criteria.

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 will find 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 at least 20 cases per month. You can then consider monthly cycles of PDSA with specific interventions and evaluate their impact by reviewing the trend over that month.

Data collection period

Data should be collected on patients attending **from 4 October 2021 – 3 October 2022**.

Please note that these dates are different to the usual dates for RCEM QIPs to allow for staff adjustments to new departments during the August changeover period and to relieve pressures on services that have undergo reconfigurations as a result of the Covid-19 pandemic.

Data submission period

Data can be submitted online from **4 October 2021 – 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 to be collected

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

Q1	Does your ED have a named lead for infection prevention and control in the ED? ***NB*** *this position is not the same as a Trust-level lead*.	• Yes/No
Q2	Does your ED have a process in place to ensure staff decontaminate their hands before and after every direct patient contact?	• Yes/No
Q2 a	Are ED staff trained in hand decontamination procedures?	• Yes/No
Q2 b	Is there a process in place to ensure regular local hand hygiene observation audits are undertaken?	• Yes/No
Q3	Has your organisation self-assessed against the RCEM Infection Control Checklist?	• Yes/No • (Optional question if Yes) how many points in the checklist was the answer Yes?

Patient details

Q1	Reference (do not enter patient identifiable data e.g. NHS number or hospital number)	
Q2	Date and time of arrival or triage – whichever is earlier	• dd/mm/yyyy • HH:MM
Q3	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 stated e.g. unwilling to state
Q4	Was the patient screened on arrival for (tick all that apply):	• COVID-19 symptoms • Other infectious diseases • Vulnerable conditions • No recorded evidence • None
Q5	Patient with identified vulnerability was isolated in a side-room? *If the patient had no identified vulnerability select 'No vulnerability identified'.*	• Yes dd/mm/yyyy HH:MM *(optional)* • No • No recorded evidence • No vulnerability identified
Q6	Was the patient identified as potentially or confirmed as infectious?	• Yes • No • No recorded evidence
Q6.1	IF Q6 = Yes After the patient was identified as potentially or confirmed as infectious, were they moved to appropriate area?	• Yes dd/mm/yyyy HH:MM *(optional)* • No • No recorded evidence

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.

Please see page 8 for definitions

Data Sources

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

Flow of data searches to identify QIP cases

For information about using the Emergency Care Data Set (ECDS) or your ED's electronic patient record to identify relevant cases, and to extract data from your system, please see **Appendix 1**.

Using the codes list in **Appendix 1**, first identify all patients attending your ED between the relevant dates, then by age at time of attendance, then through the other relevant criteria.

If your ED is reliably using the Emergency Care Data Set (ECDS), then your IT department or information team should be able to a) pull off a list of eligible cases for you, and b) extract some or all of the data you need to enter. Please see **Appendices 1** and **2** for the list of codes they will need to identify eligible cases or extract the data.

REFERENCES

1. National Institute for Health and Care Excellence. Infection prevention and control - NICE quality standard (QS61). London: NICE, 2014. http://www.nice.org.uk/guidance/qs61/resources/infection-prevention-and-control-2098782603205 (accessed 21 Sep 2021).
2. Royal College of Emergency Medicine. Emergency Department Infection Prevention and Control (IPC) during the Coronavirus Pandemic. 2nd ed. London: RCEM, 2020. https://www.rcem.ac.uk/docs/RCEM%20Guidance/RCEM%20Guideline%20COVID%20IPC%20(Feb%202021).pdf (accessed 21 Sep 2021).
3. NHS.uk. Symptoms of coronavirus (COVID-19). https://www.nhs.uk/conditions/coronavirus-covid-19/symptoms/ (accessed 21 Sep 2021).

APPENDIX 1: ECDS codes to support case identification

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
Date and time of arrival or triage – whichever is earlier	EMERGENCY CARE ARRIVAL DATE EMERGENCY CARE ARRIVAL TIME	an10 CCYY-MM-DD an8 HH:MM:SS	Date Time
Ethnic group	ETHNIC CATEGORY	A B C D E F G H J K L M N P R S Z 99	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 stated e.g. unwilling to state Not known e.g. unconscious

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.

Organisation standards

	Relevant questions	Analysis plan (conditions for the standard to be met)
1	Q1 (Organisational data)	Yes (Met) No (Not met)
2	Q2 (Organisational data)	Yes (Met) No (Not met)
2a	Q2 a (Organisational data)	Yes (Met) No (Not met)
2b	Q2 b (Organisational data)	Yes (Met) No (Not met)
3	Q3 (Organisational data)	Yes (Met) No (Not met)

Clinical Standards

	Relevant questions	Analysis sample	Analysis plan – Conditions for the standard to be met
1	Q4	All patients	**Title:** Standard 1 – Patient screening on arrival **Analysis:** Met: Q1 (if all of the following are selected: COVID-19 symptoms, other infectious diseases, vulnerable conditions) **AND** 'No recorded evidence' is not selected
1a	Q4	All patients	**Title:** Standard 1 - Patient screening on arrival breakdown – Covid symptoms **Analysis:** Met: Q1 (if the following is selected: COVID-19 symptoms) **AND** 'No recorded evidence' is not selected
1b	Q4	All patients	**Title:** Standard 1 - Patient screening on arrival breakdown – other infectious diseases **Analysis:** Met: Q1 (If the following is selected: other infectious diseases) **AND** 'No recorded evidence' is not selected
1c	Q4	All patients	**Title:** Standard 1 - Patient screening on arrival breakdown – vulnerable conditions **Analysis:** Met: Q1 (If the following is selected: vulnerable conditions) **AND** 'No recorded evidence' is not selected
2	Q5	All pts with identified vulnerability (Q5= Yes/No/No recorded evidence)	**Title:** Standard 2 – Patients with identified vulnerability isolated in a side room **Analysis:** Met: Q5 = Yes **Additional Chart:** SPC of ΔT(Q5-Q2)
3	Q6 Q6.2	Q6 = Yes	**Title:** Standard 3 – Patients identified as potentially or confirmed as infectious were moved to an appropriate area **Analysis:** Met: Q6.2 = Yes **Additional Chart:** SPC of ΔT(Q6.2-Q2)