RCEM QIAT (2021)

Higher Quality Improvement Assessment Tool ST5-6 Transition Year only

Trainee Name	Click here to enter text.
Trainee GMC	Click here to enter text.
Trainee Post	ST 6
Date of Completion	04/08/2019

Part A – For *trainee* to complete

Please use this tool to describe the Quality Improvement activity you have undertaken this year. At ST6 you will be expected to attach a full report of the project you have undertaken for CCT.

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1 - The project

1.1– Analysis of problem

Please write a description of the problem that you found and why you chose this Quality Improvement Project. Please include your analysis of why it was a problem in your department.

During my Specialist Trainee year 4 Emergency Medicine (EM) at the Homerton, I managed a number of asthmatic patients presenting with an acute asthma attack in the ED. During my consultation of this group of patients, 2 things caught my attention:
Firstly, not many patients had their peak flows documented at initial assessment.
Secondly, a very poor inhaler technique was demonstrated by the patients themselves.

Being asthmatic myself, I could relate to this and understood fully the importance of both performing a peak flow and having a good inhaler technique.
Poor performance had also been highlighted locally by the Care Quality Commission (CQC).
My QIP was to improve implementation of RCEM standards 7-11 when discharging asthmatic patients' home from the ED, which were variously:

- Consideration of psychosocial factors
- Checking inhaler technique
- Checking inhaler type
- Ensure correct prescription of prednisolone according to age groups
- Written discharge advice
- GP or clinic follow-up arranged within 2 working days

We did a 3-month audit of current asthma management in the department to establish local practice. The results showed poor performance against RCEM standards. To develop a better understanding as to why local performance was so poor, a survey was conducted which reflected that very few clinicians were actually aware that an RCEM asthma discharge standard existed.
I understood that to bring any change in improvement in the asthma discharge process, it was vital that the clinical staff be made aware of the RCEM standard recommendations.

1.2 – Use of QI methods

Please describe the QI methodology you chose and why, including any analysis or engagement tools you used and how they helped to complete the project.

- **Ishikawa diagram** helped identify the different categories of causes that contributed to this undesirable effect of not delivering good clinical practice.
- **Driver diagram** provided a measurement framework and helped me to translate my improvement goal to a logical set of smaller goals and projects.
- **We used the model for improvement –plan, do, study, act (PDSA) methodology** to accomplish our aim, as this repetitive approach would help us test small changes and improve them through a waste-reducing cycle. Not only is it patient centered but is also a simple, safe and effective approach for managing change in the healthcare setting.
- **Run charts.** Data was entered into run charts which helped us monitor our data over the time period and also gave a good comparison of measure before and after the implementation of changes during each PDSA cycle; and the QIP as a whole.
- The use of the **Homerton LIFE QI** was an excellent platform that helped me use this tool and understand my PDSA cycles and effect of changes.

1.3 – What was the aim of the project

Please describe the aim of your project.

The primary aim was to improve the discharge process of asthmatic patients presenting to the Emergency department in accordance with the standards set by the Royal College of Emergency Medicine. This essentially was focused on patients who had presented to the ED with a moderate to severe exacerbation of their asthma symptoms. Hence my SMART aim for the QIP:

80% of Asthmatic patients being discharged from the emergency department should meet the RCEM standards by the end of July 2019.

1.4 – Measurement of outcomes

What measures did you choose and why? What did they show? How did they help to improve the problem?
Please document your progress, any problems and/or unexpected data and include key results eg run charts/SPC (please save in the QI section of your documents on the ePortfolio)

METRICS: Six PDSA cycles were implemented using a range of outcome, process and balance measures.

1: OUTCOME MEASURES:

- Discharge of asthmatic patients from the ED meeting RCEM Standards for discharge.
- Increase in waiting times for the patients as a result of implementation of change.

Baseline data was collected for 62 patients from 21st January to 21st April. The results after implementation of change ideas / PDSA cycles is shown below. This covered 57 patients over a 12-week period.

RCEM STANDARDS		
Standard 7	Consider psychosocial factors	25.8% vs 81.3%
Standard 8a	Check inhaler technique	14.5% vs 53.3%
Standard 8b	Check inhaler type	17.7% vs 84.2%

Standard 9	Correct dose of prednisolone for 5 days	59.6% vs 81.5%
Standard 10	Give written advice	4.8% vs 21.1%
Standard 11	Advice to see GP/clinic follow-up in 2 working days	37% vs 60.8%
PATIENT OUTCOME	Return in 2 working days due to exacerbation of asthma	0

2: PROCESS MEASURES: -

- The use of my mnemonic FIT & SAFE was more consistent after the 5th PDSA cycle.
- The use of the electronic asthma clerking proforma was interestingly variable from being used to not being used at all in an alternating pattern. When looked into we found that these patients had been seen mostly by locum doctors, especially during the twilight and night shifts.

3: BALANCE MEASURES: -

Analyzing the run chart below there appears to be an upward shift or trend in the average length of stay in the emergency department post implementation of the various changes. This could have been attributed to a common cause of variance, for example, as in doctors change over in April. This is a common pattern seen every four months when new junior doctors start their ED rotation.

CONCLUSION: -

- Our findings demonstrated a significant increase across most domains of the discharge process as recommended by the RCEM, after 12 weeks of implementation of various change ideas in the department.
- There was no reattendance in the 2 working days that followed discharge from the ED.
- The overall waiting time in the department did increase due to these changes

1.5 – Evaluation of change

What changes did you decide to make during the project and how did you implement them. Describe your PDSA cycles. Please evaluate the changes, including analysis of data and what was learnt. (For projects that are incomplete at ST5, please describe your planned changes).

THE ITERATIVE PROCESS: We implemented two small change ideas over a period of 12 weeks. The first change (regular updates and reminders) consisted of four PDSA cycles, and the second change (improving documentation) consisted of two PDSA cycles.

FIRST CHANGE: - REGULAR UPDATES AND REMINDERS:

PDSA Cycle 1 of 4: To create awareness about the six RCEM standards of discharge of asthmatic patients from the ED by email to all practitioners on the 10th of May 2019.

PLAN & DO: -
On the 10th of May an email was sent out to all emergency doctors and nurse practitioners. The aim was to

communicate and remind colleagues about the six standards of discharge of asthmatic patients as was defined by the RCEM. It was a quick, safe and relatively easy method of communication which was both time and cost effective

STUDY & ACT: -

For the week that followed (12/5/19 to 18/5/19) the 6 RCEM standards were measured and the results were encouraging. RCEM standard 7(- considering psychosocial factors) measured 80% and standard 8b and 9 measured at 75%.

PDSA CYCLE 2 of 4: To create awareness amongst practitioners about RCEM standards of discharge of asthmatic patients from the ED with the help of mnemonic on the 17th of May 2019

PLAN & DO: -

A week after the first email was sent out figures showed that some of the measures showed improvement whilst others did not. Chatting to junior doctors on shop floor highlighted that there was an element of "not recalling' all six elements. **I invented the mnemonic FIT & SAFE** and emailed it to the same group of practitioners.

The mnemonic was simple to remember and implement.

- **F**actors psychosocial considered
- **I**nhaler technique checked-satisfactory
- **T**ype of inhaler used- satisfactory

  &
- **S**teroid / prednisolone dose appropriate for age
- **A**dvice on discharge written up.
- **F**ollow up with GP/clinic arranged within 2 working days
- **E**nding smoking advice if appropriate

STUDY & ACT: -

The following week's results (19/5/19 to 25/5/19) were measured and 3of the 6 outcomes were on or above target. However, I was surprised to see RCEM standard 9, which refers to the correct prescription of prednisolone- drop to 20% that week.

When analyzed, I noted that for 2 patients the dose was correct (40mg) but it was prescribed for 3 days instead of 5 days. Both these were on the late evening shift. For another patient it was not deemed necessary to give steroids despite giving nebulizers in the department, and for another patient the patient had absconded.
We were also performing quite poorly in providing written discharge advice to our patients and there was no evidence to confirm either.

PDSA CYCLE 3 of 4: To create awareness amongst practitioners about RCEM standards of discharge of asthmatic patients from the ED using social media on the 24th of May 2019.

PLAN & DO: -

Implementation of two PDSA cycles and general feedback from colleagues again highlighted the fact that people were either not receiving emails or had not read them. Sending a reminder to use FIT&SAFE on the department's social media WhatsApp Messenger group seemed a good to reinforce the use of the aide memoir FIT & SAFE.

STUDY & ACT: -

The following weeks results (26/5/19 to 1/6 /19) were measured and I admit I was disappointed at the time. Only standard 8b (checking the inhaler type) measured above 80.
Either clinicians were adapting FIT & SAFE but not documenting it, hence we had no written evidence or, due to time pressures and memory base, they were still forgetting to adhere to all six RCEM standards.

SECOND CHANGE: IMPROVING DOCUMENTATION

PDSA Cycle 1 of 2: Introduction to Asthma Clerking Proforma on Electronic Patient Record (EPR) on the 1st of June 2019

PLAN & DO: -

The asthma clinical proforma had been drawn up to standardize the documentation process and essentially covered all the RCEM standards in the discharge section. The "FIT & SAFE" mnemonic for discharge had also been integrated in the proforma. We were optimistic that this proforma would address a change for more than one of the secondary drivers as follows:

1: Help with encouraging institutional memory: remind clinicians to address all six outcome measures with FIT & SAFE.
2: Provide documented evidence: RCEM standards are being addressed.
3: Eliminating individual practices: provide a uniform documentation platform
4: Save time for documentation as it is a quick YES /NO exercise.

The proforma has two tables in it- an asthma severity table and a prednisolone according to age prescription table as advised by the RCEM.
On the 31st of May, the asthma clerking proforma went live on EPR. An email was sent out to all the relevant stakeholders and met with approval from many colleagues

STUDY & ACT: -

There was an improvement across all measures except standard 10- giving written asthma advice sheets to our patients. In week commencing 23/6/19, only four patient details were sent by the information analyst. Of these 4 patients, 1 was seen in the Emergency Department and the other 3 were seen by the out of hours general practitioners, hence this week's results were based on only one patient. *This had a very negative effect on my measures.*

SECOND CHANGE: - IMPROVING DOCUMENTATION

PDSA Cycle 2 of 2: FIT & SAFE posters on display in the department by the 1st of July 2019

PLAN & DO: -

Another survey on the 13th of June revealed that clinicians were struggling to remember what the letters in the acronym FIT & SAFE represented. On the 1st of July FIT & SAFE posters were put on display in various areas of the ED and Urgent Care Centre i: e asthma drug cupboard, nursing board, Observational Medical Unit (OMU) drug cupboard. The aim was that this would serve as a constant reminder to both the prescribing clinicians and the dispensing nursing staff, when discharging their patient home.

STUDY & ACT: -

This was PDSA 5 in the Quality Improvement project and again highlighted that we were not doing so well in giving our asthmatic patients written discharge information leaflets. We established that there were difficulties in finding the leaflet on the intranet and very few doctors and nurses were aware that there was a printable advice sheet on EPR. The following action point was agreed upon after PDSA 5

- A good **balancing measure** at this point would be to see if the waiting times had increased as a result of our interventions.

FIRST CHANGE: - REGULAR UPDATES AND REMINDERS

PDSA Cycle 4 of 4: To create awareness amongst ED staff about the asthma discharge leaflet on EPR by the 15th of July.

PLAN & DO: -

Analysis of the previous PDSA cycles highlighted that we were only giving 12% of our pts written advice upon discharge since implementation of the change ideas. There was an advice leaflet on EPR. Both doctors and nurses needed a gentler reminder to print it off when they prescribed or signed the asthma discharge medications. An email was sent out to all ED staff (doctors and nurses) on Week commencing 15/7/19 about the asthma discharge leaflet on EPR.

STUDY& ACT: -

By the end of the 6th PDSA cycle there was a modest improvement across all domains of the RCEM Standards. Documentation of psychosocial factors, checking of inhaler type and technique and correct prescription of prednisolone upon discharge were more consistent than the other two outcome measures

2 - Working with others

2.1 – Team working

Please describe your team. How did you choose them? How did the team work together? How did you encourage others contributions? How did you manage any conflict? Consider how team behaviour science might apply to your team.

The Asthma Discharge Quality Improvement Project team – 'FIT & SAFE 'team comprised of two ED consultants, two junior doctors of whom one was a GPVTS doctor (SB), and the other an ED clinical fellow (CF), one advanced nurse practitioner (ANP), 1 senior ED nurse and one QI lead for the trust. Members were introduced at various stages of the project and their valuable contribution steered this project towards its SMART aim. The team members fulfilled various roles of the Belbin model of teamwork.

-My role within the team entailed delegating roles within the team, arranging stakeholder meetings, designing the proforma, inventing the mnemonic and collecting data. ---
JC was doing a similar project on asthma management and had already set up a data spread sheet on the S-Drive of the ED computer software.
--CW was very hands on with computer software and managed the technicalities of the project.
-SB was up to date with the department's social media group and was in charge of communications and social media.
All were enthused with the project idea. They also shared the task of data collection for the process and outcome measures. No conflict was identified during the entire QIP process. We worked really well together as a team, and that was a very important factor in making this QIP a huge success.

2.2 – Stakeholder engagement

Please describe your stakeholders. How did you prioritise them? How did they affect the changes in the project? How did you manage any conflict or problems?

During the week I conducted the survey, I recognized the fact that I needed a team of my own. I did a stakeholder analysis which guided me as to who to get on board and who to approach. I used The Power/ Interest grid tool to help prioritize them. ***Stakeholder support was initiated by the ED management and clinical teams as poor performance had been highlighted nationally in the last RCEM clinical audit and locally by the Care Quality Commission (CQC).***

I found the stakeholder group with the highest power and least interest the most challenging. For example-Whilst the proforma was being drafted it had been seen by two consultants, a senior nurse practitioner, two middle grade doctors and a junior doctor. There was some difference in opinion and whilst most of the clinicians agreed to use it, there were a couple of clinicians who were averse to the idea. They admitted that they were used to their own clinical clerking and would find it hard to adapt to someone else's drafted proforma.

I reassured them that there was extra space for clinical notes and encouraged use of the other sections (peak flow assessments and FIT &SAFE) as it would support clinical management and benefit the patient.

2.3 – Patient and carer involvement (if possible)

Please describe how this project has improved the quality of care for patients or carers. How did you engage and/or involve the patient/carer voice in the change?

Not applicable to my QIP

3 – Reflection on leadership and learning

3.1– Self awareness

Personal qualities -
"What is it about you that enabled this project to improve patient care, or why did you struggle?"

Please reflect on your own personal qualities and how these affected the project. Self-awareness, values and beliefs; Your personality and how this might drive your behaviour; Seeking feedback; Your strength and weaknesses; Working under pressure; Managing conflict; Your well-being.

Being the eldest in my family I have always been the responsible 'one'. Developed confidence at an early age.
In junior and senior school, I had been elected for Class Prefect, was the School Head Girl and Captained various sports. These roles at an early age, I believe have had a big impact in shaping both my nature and personality.
I learnt team building skills through my love of sports. Being team Captain (Throwball & Volleyball) taught me how to best utilize my team players to bring out the best in them and be the winner team.
I have always recognized my weakness and have never been ashamed to say, 'I do not know how to do this'. I believe there is a learning opportunity at every curve in life and there is always something to learn from others.
I believe this attitude and team playing / leading skills has not only helped me in my QIP but also in my career in Emergency Medicine.
I have always been a night owl throughout my educational career. Even now working in EM, I prefer to do night shifts. I believe I am more productive in a busy department on a night shift and that does not stress me at all.
All these factors helped me complete my QIP in 6 months upon my return from Maternity leave.
I believe I am an approachable team leader / player. I listen to everyone's views and respect everyone is different -I think that is an important fact to acknowledge- and ever since I have recognized that 'everyone is different' and 'has their own way of doing things', it has helped me achieve my goals with much less frustration and stress.

3.2 – Learning

Longitudinal learning in Quality Improvement (from previous year) - Please outline what this year has contributed to your development and knowledge of QI

I did not understand anything about Quality Improvement until I did my QIP.
I had a meeting with TH who was our QIP lead and he clarified a lot of concepts and confusions about QIP methodology. After that it started to make sense.
I actually enjoyed drawing my fish bone diagram and my driver diagrams.
I also attended an RCEM QIP day, but by then I had almost completed 3 PDSA cycles. But the exercises on the day consolidated my learning. Last but not least, using the Homerton Life QI platform was an eye opener for me and I loved it. I feel very proud of my QIP.

3.3 – Personal Development

Longitudinal learning in Quality Improvement (future years) – Please describe your plans for the next stage of your career in QI. What do you hope to learn/achieve? How do you hope to contribute to improving patient care?

I think I would actually enjoy being a QI lead when I become a Consultant and help both trainees and non-trainees develop in Quality Improvement Projects.

EXPERIENCE OF FILLING OUT THIS FORM VS FRCEM QIP REPORT

- I enjoyed writing out my QIP more- it was like a developing story being told.
- But on the other hand, had I been given this format, I would have tailored my thought processes accordingly and would have equally enjoyed this format too.
- This is shorter and more focused
- It has broken the QIP down into sections- analysis of the problem, methodology etc. which I think is very helpful if you are writing up a QIP for the first time.
- However, having had to edit it a few times to accommodate the requirements of this proforma, I feel it does not give a true reflection of the whole process of the QIP.

Part B – For *trainer* to complete

Please use this tool to assess the Quality Improvement activity your trainee has undertaken this year.

1 – Feedback – What has been done particularly well?
Free text
2 – Learning points – What could have been done differently?
Free text
2 – Recommendation for further learning or development
Free text
4 – Overall
Please indicate the level of the trainee's performance in this QIAT
Please select - Does not meet - Meets expectations - Excellent

Signoff and actions

Please ensure this form is **signed off** by both the Assessor and Trainee via the "**Link**" button next to the form once saved.

Assessor Name	Assessor Designation / Job Title	Date
		Click here to enter a date.
Assessor GMC Number	Assessor email address	

Part C – interim arrangement (Aug 2021-Aug 2022 only) **For regional QI Panel to complete**

Please use this tool and supporting information presented to assess the Quality Improvement activity the trainee has undertaken this year.

Regional QIP panel should comprise of a minimum of 2 Consultants and utilise RCEM supplementary material to aid with benchmarking decision-making. This Panel should include the Educational supervisor who has signed off in panel B and another who has FRCEM QIP examiner experience or is/ has been an RCEM clinical leaders QIP lead. Other members such as Training Programme Director/ Head of School may be included. *Please refer to SLO 11 guidance under transitional arrangements.*

Panel final Signoff and actions

1 – Overall
Please indicate the level of the trainee's performance in this QIAT
Please select - Does not meet - Meets expectations - Excellent

2 – Additional Feedback – What has been done particularly well?
Free text
3 – Learning points – What could have been done differently?
Free text
4 – Recommendation for further learning or development
Free text

Please ensure this form is signed off by both the Assessor and Trainee via the "Link" button next to the form once saved.

Panel Assessor Name	Assessor Designation / Job Title	Date
		Click here to enter a date.
Assessor GMC Number	Assessor email address	

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