The QI Assessment: A How-To Guide

This guidance has been created for 2022-23 specifically, as it includes information on regional panel sign-off for ST6 trainees who remain on the 2015 curriculum. Going forward ST6s will not require panel sign off and this guidance will be updated accordingly once the first groups of trainees on the 2021 curriculum reach ST6.

Contents

What is the QIAT?

QIAT stands for Quality Improvement Assessment Tool. It is the reporting tool, available on Kaizen, which should be used to record QI activity in the past year. It is designed for reporting primarily on one QI project.

What is SLO 11?

Specialty Learning Outcome 11, *Participate in and promote activity to improve the quality and safety of patient care*, is one of the 12 SLOs in the RCEM curriculum, and covers quality improvement and patient safety. This now means, in line with a key GMC requirement for curricula in all specialties, that QI is embedded throughout the curriculum and should be assessed at every stage of training, not just one step in the FRCEM examination. More information on SLO 11 can be found here. The motivations for this change were:

- The GMC mandated that QI be present in all curricula, reflecting the fact that quality and safety comprise much of Domain 2 in Good Medical Practice. This means that QI must be assessed in each stage of training. QI cannot, therefore, be isolated to HST as a single assessment.
- There is evidence of the educational advantage of 'interleaving' and 'spacing' content. Such approaches are supported by 'spiralling' QI through training. Experience with candidates in the FRCEM QIP showed a reluctance to engage in further QI work once that hurdle had been cleared
- A breadth of experience can be recorded and reflected upon. This will support the trainee in considering their own strengths and weaknesses in relation to QI activity they have experienced in a number of settings.

Can I do an educational QIP?

Yes. The emphasis has shifted towards learning QI methodology generally and gaining a breadth of experience as one progresses through training. There is no longer a narrow set of acceptance criteria, which means that any QI project subject area may be suitable, including education, environmental sustainability, wellbeing, cost-saving, pre-hospital, overseas setting. This should significantly open up the range of QIP topics available for the trainee to take on.

Is the QI assessment the same for everyone?

No. In recognition that a CT1 will have a different level of involvement in a QI project than an ST6, there are three different QIATs which are commensurate with their stage of training (ACCS / Intermediate / Higher). The expectations of trainee at each stage can be summarised as follows:

- *ACCS*: The QIAT records participation in QI activity. The trainee must demonstrate a basic understanding of key QI principles, reflection, and appreciation of the team-based nature of QI work
- *Intermediate*: records a project and requires additional of data analysis and an evaluation of change.
- *Higher Training*: records a project that the trainee has led on, with completion of the project by the end of training. The EM-QIAT at this level will be reviewed regionally by a panel including QI expertise to ensure there is consistency and expert insight. Review of the QIAT will be accompanied by review of supporting material, that may include copies of reports, data, feedback from presentation.

QI assessment should encourage trainees to pursue interests, include QI from a variety of settings, and introduce the concept of a personal development journey with reflection. The QIAT should then be signed-off by the trainee's educational supervisor. ***There will be a final sign-off by the regional QI panel for ST6 QIATs only*** (further details below).

How do I generate a QIAT?

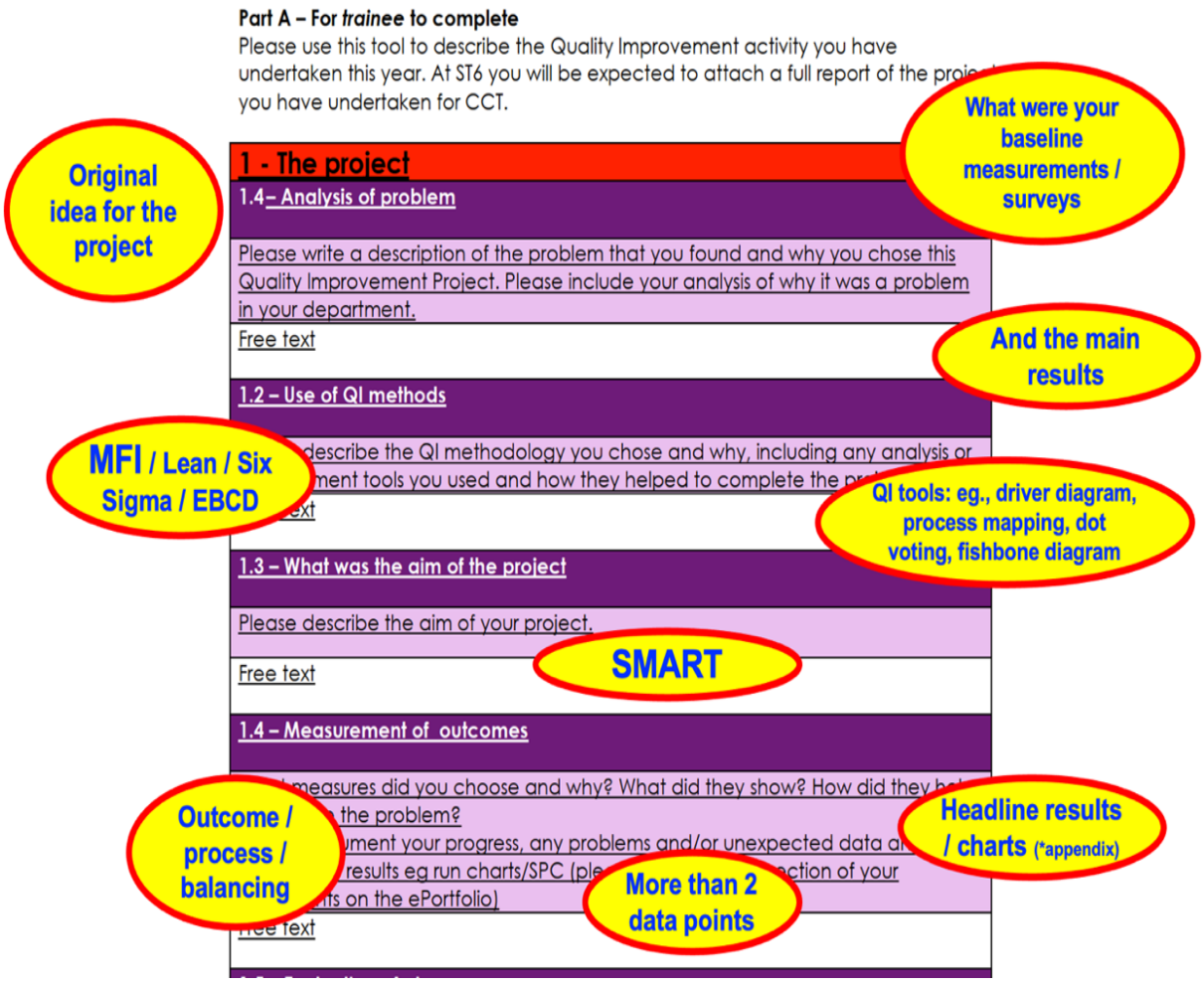
The QIAT is available electronically on Kaizen, and this is the format in which it should be submitted for marking. There are Word versions available as templates and exemplars, but these are for illustration only.

QIATs can be generated in Kaizen by entering QIAT in the search window and there are 4 form options:
QIAT (EM ST/CT1-ST/CT2) for those in core training
QIAT (ST3) for Intermediate
QIAT (ST4/ST5) for Higher trainees
QIAT (EM ST6) for ST6 trainees who remain on the 2015 curriculum

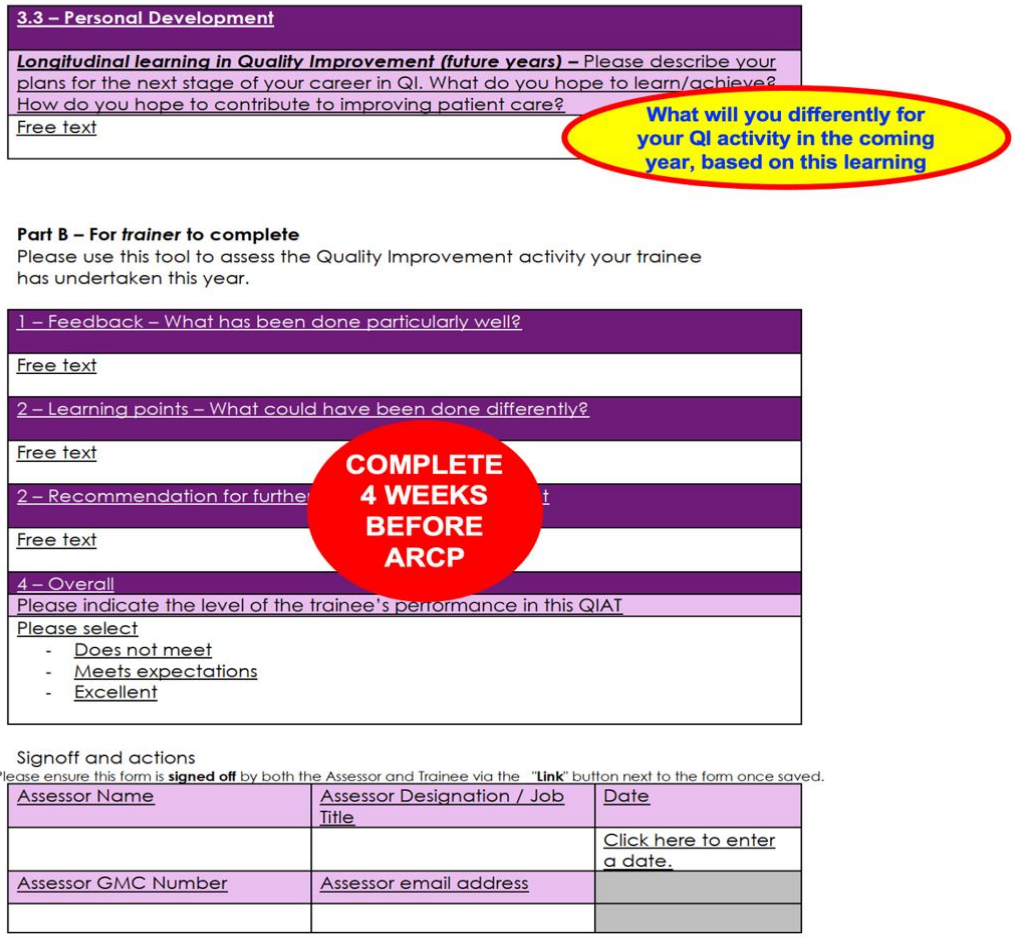
From August 2022, ST6 trainees on the 2021 Curriculum will use the same form as ST4/ST5

What do I put in the QIAT?

The QIAT requires 3 main areas of content: a report of the project itself, an account of working with others, and reflection and learning from the journey conducting the project. Below is a run-down of each section, with annotations on what should be included therein:




What were your interventions (PDSA cycles)
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).
Free text
2 - Working with others
2.1 – Team working
(Leads): why you chose this team, what the members brought to the project
Your own QIP team, your role in the team
Please describe your team. How did you choose them? How did the team
gether? How did you encourage others contributions? How did you mana
ct? Consider how team behaviour science might apply to your team.
Free text
2.2 – Stakeholder engagement
Stakeholder analysis, how you engaged with external stakeholders, issues
describe your stakeholders. How did you prioritise them? How did they
e changes in the project? How did you manage any conflict or problems?
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?
How you involved patients and users (if at all)
Free text
3 – Reflection on leadership and learning
3.1 – Self awareness
Self-Awareness:
Personality
Strengths / weaknesses
Working under pressure
Organisation / time Mx
Approach to conflict
nal qualities -
about you that enabled this project to improve patient care, or why did
?"
on your own personal qualities and how these affected the project.
ess, values and beliefs; Your personality and how this might drive your
ur; Seeking feedback; Your strength and weaknesses; Working under
ressure; Managing conflict; Your well-being.
Free text
For ST6 QIAT; refer to previous QIPs throughout training
earning
dinal learning in Quality Improvement (from previous ye
What did you learn about QI and leadership from this experience
is year has contributed to your development and kn
text



There is also an annotated run-through of an exemplar QIAT, in the appendix. With a reasonable amount of detail, a good QIAT should cover the equivalent of 7-8 pages of A4.

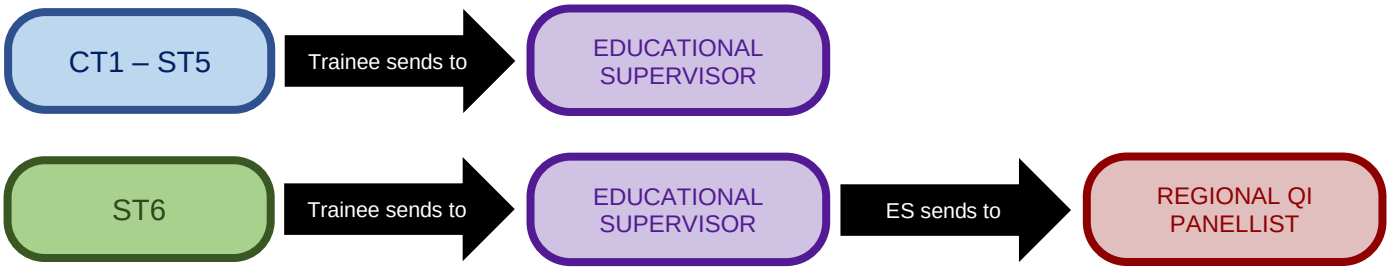
What accompanying evidence should I include?

There should be some evidence which won't fit in the QIAT. This should be uploaded into the trainee's document library. For the assessors' convenience, all uploads should be stored in a dedicated folder for the QIP. It is also recommended that you link every piece of evidence to the QIAT itself. Suggestions for evidence might include (*neither a mandatory nor an exhaustive list)*

- Driver diagram
- Stakeholder analysis
- Process map
- Fishbone diagram
- Run charts of data (or other graphical representation)
- Tabulated data
- Guidelines / pathways / SOPs

- Posters and other comms
- Teaching / QIP presentation slides

Whom do I send it to?



How is the QIAT marked?

The assessment process should follow one or two steps, as illustrated above.

Educational Supervisor: The ES should sign-off on the project after sitting down and reviewing the trainee's activity on the QIP. There should be comments about what the trainee did well, what they could have done better, and recommendations for further learning.
Regional Panel (ST6 only): The Regional Panellist will review the QIAT and the uploaded evidence before awarding a mark.

The Regional QI Panel is chaired by the Regional QI Lead, and consists of consultants from all across the region. They are experienced in supervising QIPs, are departmental QI leads and/or have marked FRCEM QIPs.

The QIAT may be graded excellent, satisfactory, or unsatisfactory. ***If unsatisfactory, this will result in an Outcome 5 at ARCP. If it is the final ARCP, an Outcome 3 will result.***

I have already passed the FRCEM QIP. What do I do?

If you have passed the FRCEM QIP, the QIAT is not a requirement for an Outcome 1 at ARCP. However, in the interests of lifelong learning in QI, it's good practice to continue QI activity during your training and record it in a QIAT for submission at ARCP. The FRCEM QIP gives you exemption from mandatory IATs until 2028.

I have only been in post for 6 months. Do I have enough to include in the QIAT?

Your QIAT(s) should record the period of time covered by the ARCP. If the ARCP period covers two posts, there should be a QIAT for each post. You can't be expected to have completed a QI project from start to finish in six months, but you will be expected to engage in QI in some form.

What if I'm on a CESR pathway?

CESR trainees had a period of 'grace' to submit an FRCEM QIP which ended in February 2022. As they must now follow the RCEM 2021 curriculum, they should accordingly produce a QIAT once a year. The QIAT should be the post-August 2022 form which requires only the educational supervisor's sign-off. Most CESR trainees will have their own annual review – be it a form of ARCP or annual appraisal – and it is suggested that the QIAT be reviewed at this meeting. Signed-off QIATs should be included in the final CESR portfolio for submission to the GMC.

Where can I find out more about the process?

As mentioned, the College has produced an informative, detailed account of the generic SLOs, including SLO 11, which can be found here. There are also some resources which are available at a regional level.

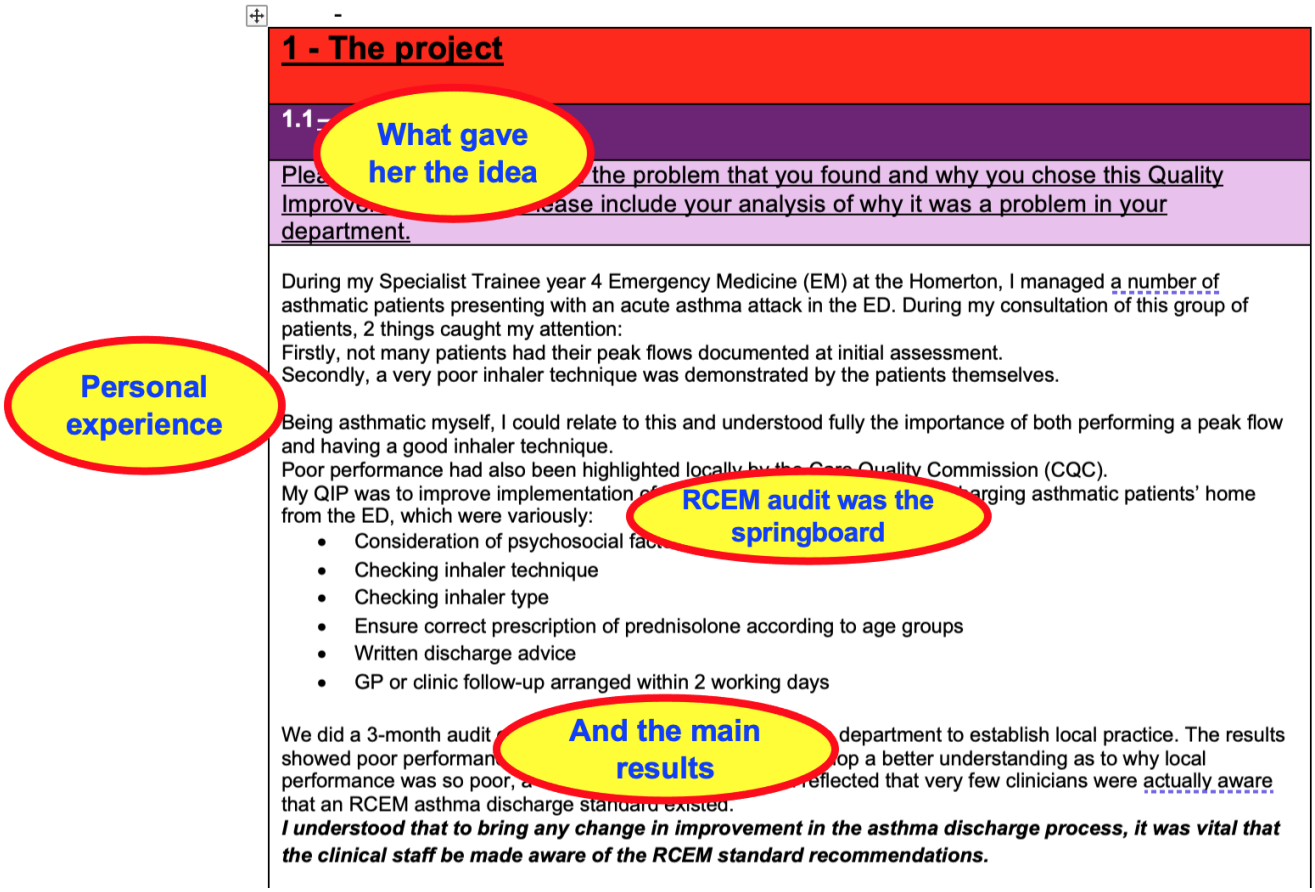
This is an open access folder of pan-London QI Training Day resources, which includes subfolders:

- Slides of the talks and workshops
- Videos
- Exemplar and template QIATs

The College also has a comprehensive guide to Quality Improvement, which covers key aspects of QI methodology in general.

APPENDIX: an annotated exemplar QIAT

Shared with the express consent of the trainee who authored it



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.

QI tools listed

MFI

- **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 [illegible] was focused on patients who had presented to the ED with a moderate [illegible] symptoms. Hence my SMART aim for the QIP:

SMART

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

- The SAFE the 5th
- The

MEASURES: -

use of my mnemonic FIT & was more consistent after PDSA cycle.

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 doct 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

Outcome / process / balancing

Headline results / charts (*appendix)

More than 2 data points (run charts in appendix)

Brief findings

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(- co… …s) measured 80% and standard 8b and 9 measured at 75%.

What were your interventions (PDSA cycles)

PDSA CYCLE 2 of 4: To creat… …about RCEM standards of discharge of asthmatic patients from the ED wit… …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.

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.

Your own QIP team, your role in the team

Asthma Discharge Quality Improvement Project team – 'FIT & SAFE 'team comprised of two ED consultants, doctors of whom one was a GPVTS doctor (SB), and the other an ED clinical fellow (CF), one ed 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.

(Leads): why you chose this team, what the members brought to the project

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?

Stakeholder analysis, how you engaged with external stakeholders, issues

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 lp prioritize them. ***Stakeholder support was initiated by the ED management and clinical teams as poor formance had been highlighted nationally in the last RCEM clinical audit and locally by the Care ality 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?

How you involved patients and users (if at all)

3 – Reflection on leadership and learning

3.1 – Self awareness

Personal qualities - it about you that enabled this project to improve patient care, or why did you

on your own personal qualities and how these affected the project. Self-alues and beliefs; Your personality and how this might drive your behaviour; edback; Your strength and weaknesses; Working under pressure; Managing ict; 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.

Self-Awareness:
- Personality
- Strengths / weaknesses
- Working under pressure
- Organisation / time Mx
- Approach to conflict

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 abou 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 exerci 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.

What did you learn about QI and leadership from this experience

3.3 – Personal Development

rning in Quality Improvement (future years) – Please describe your plans of your career in QI. What do you hope to learn/achieve? How do you hope 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.

What will you differently for your QI activity in the coming year, based on this learning