

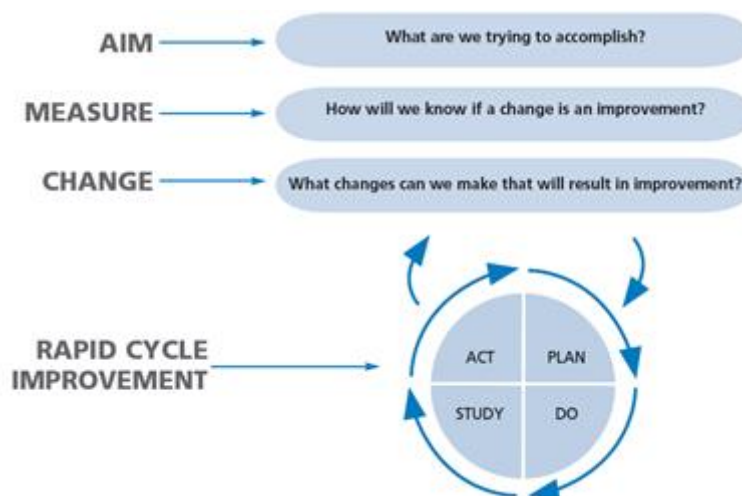
How to do a Quality Improvement Project



Introduction

As a trainee you are in good position to identify things in practice that ‘frustrates’ you and has an impact on safety of patients. This guide has been developed to help you complete a quality Improvement project -otherwise known as a QiP during your training, as required by the RCGP. QiPs are very similar to audit – both look at the quality of care provided and aim to improve it. Both require measurements to demonstrate change. QiPs are about making small incremental changes and measurements can be done weekly or even daily to test the impact of the changes. In contrast audits have set criteria, each with their own defined standards to measure against and tend to have two sets of measurements over a longer time period. Doing a QiP allows changes to be tested both quickly and successfully and is easier to do in a short time frame (such as a four to six month trainee post). The QiP should be written up in the relevant section on the e- portfolio and done in ST1 or ST2 (unless you have no GP post). As well as this guide, there is further advice available on the marking schedule, examples of QiP projects and further learning resources on the RCGP website and you are strongly advised to read this advice as well before starting your project.

The Model for Improvement is a recognised tool for doing a Quality Improvement Project in a health care setting and be used as a framework to help you do your QiP. More Details are available on www.ihl.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard3.aspx. It asks three questions.



Aim



First of all you need to decide what the aim of your project is going to be. Trainees often identify things they think should change to improve patient care. Projects can also be chosen following a significant event; complaint; an area of care you feel passionate about or inspiration from other QiPs. The project should aim to improve patient safety or care and be 'SMART'

Specific - do not make it too broad and choose something you are interested in. Words such as increase /reduce help to set a clear goal.

Measurable – ensure that there is something you can easily measure to demonstrate any change. It can be qualitative data (descriptive) as well as quantitative data (numerical data).

Achievable - ensure the data is easily collectable and keep the aims simple.

Relevant - project should be focused on patient safety

Time defined – choose something that can be done in time frame –you need to be able to complete at least two sets of data measurement.

For example a 'SMART' aim looking at doing 6 week baby checks in a timely manner could be 'To improve the percentage of 6 week baby checks performed between start of week 6 and end of week 8'.

What are you trying to accomplish

You should also include in your write up what triggered you to choose your QiP, a brief summary of the current evidence/guidance supporting good practice in this area and how your QiP will improve patient care.



How are you going to engage the team, patients and other stakeholders.

Once you have decided on your project, you need to consider who you need to involve in the project to achieve your aim. Ask

- Who will be affected by any change proposed
- Who will be involved in the implementation of the change
- Who will be responsible for ensuring that any changes will be sustained when you leave.
- Who may you need for advice

Possible stake holders include other doctors, administrative staff, practice manager, pharmacists, health visitors, nursing team and patients. You need to think how you plan to engage them and communicate the impact of changes with the rest of the team. Using doing 6 week baby check by end of week eight as an example, not only were the practice team involved, but other primary health care teams were contacted to share their policies and mothers of young babies were asked about their experiences of booking a six week baby check.

Describe what baseline data or information you gathered

The next stage of the model of improvement is to ask how you will know that a change is an improvement. For any project it is important to undertake some form of measurement to demonstrate the impact of any changes, as not all change leads to improvement. Measurement can

be both quantitative (numerical) or qualitative (descriptive) data. Examples of qualitative data include questionnaires and interviews. Your project should include data both before and after the implementation of any change. Data at the beginning of the project could be collected retrospectively.

In the example of the baby check, quantitative data included the percentage of baby checks completed by eight weeks. Qualitative data was also collected in the 6 week baby check example by asking patients of their experiences – a mother commented ‘it was difficult to change appointment as I did not want to bring the other two children with me’.

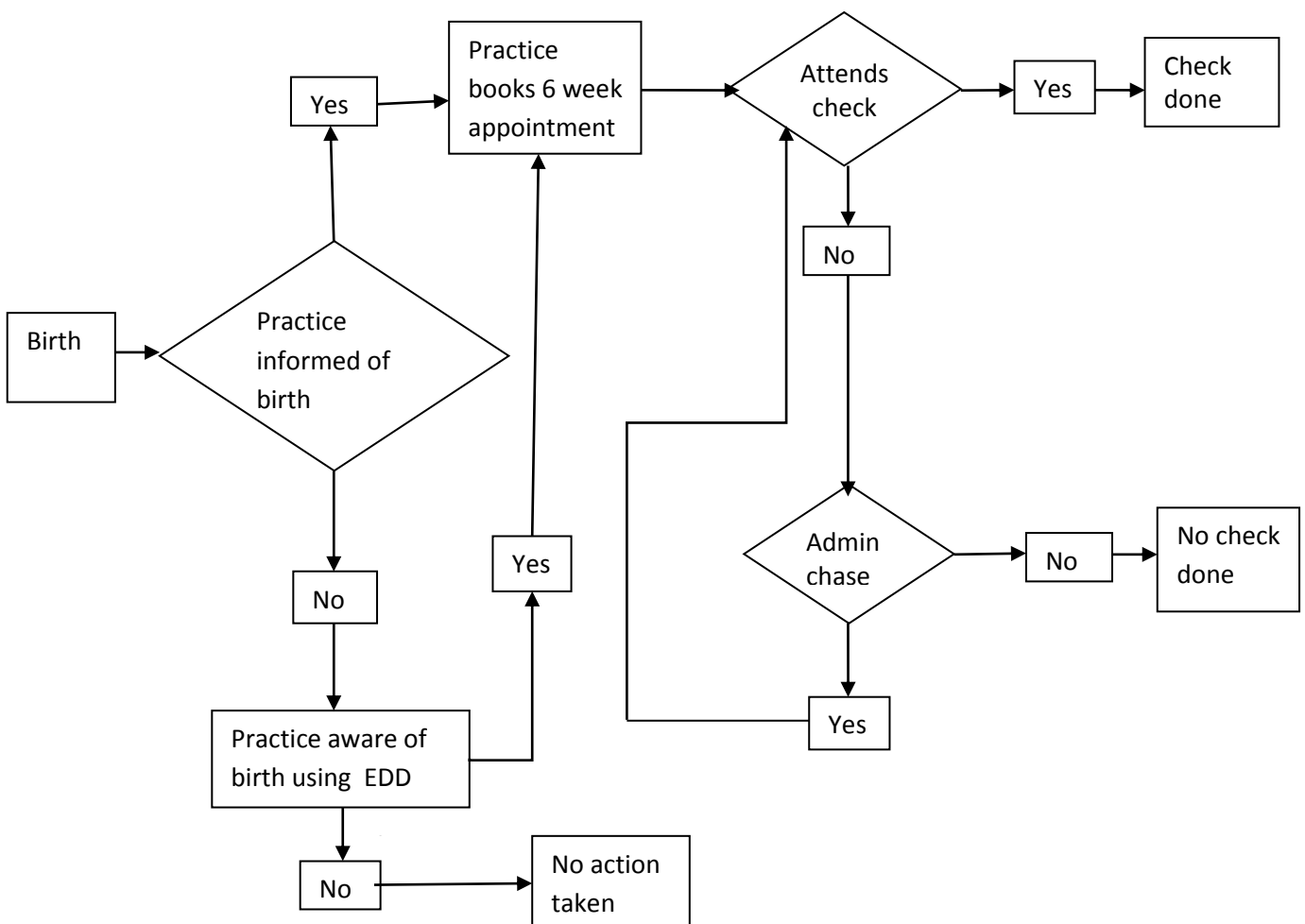


Quality Improvement Tools or Techniques Used

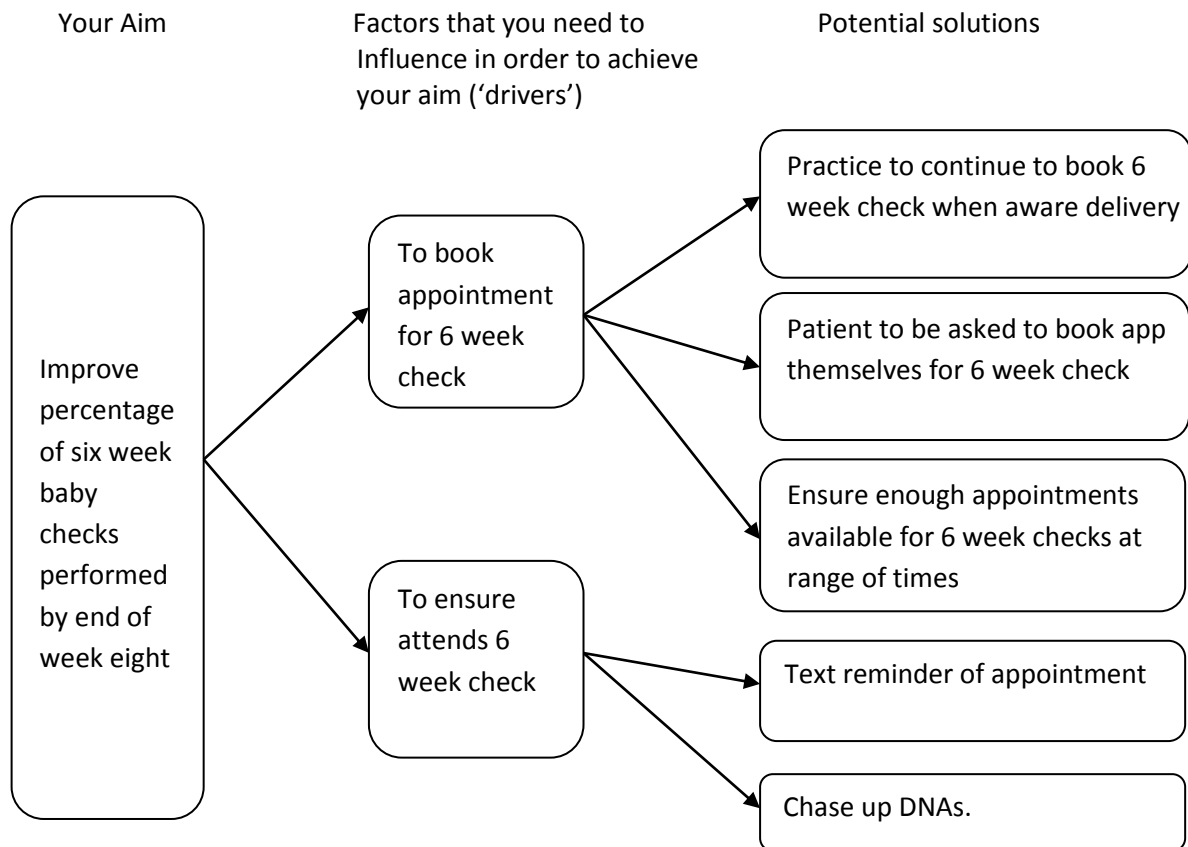
The final question in the Model for Improvement asks what changes can we make that will lead to an improvement?

There are several quality improvement tools that you could use to help generate change ideas including process maps and driver diagrams.

Process maps are a really useful tool to help you understand exactly what is currently happening to help identify any problems. The process map shown below looks at how babies are invited for a six week check in one practice. It identified that there was no formal system of following up patients who had not attended, and so generating a suggested change to the process.



Driver diagrams can also be used to generate ideas for change. Ideally generating a driver diagram should be done with the rest of the team who are familiar with the different aspects of the problem you are trying to improve. Not only can this approach generate a lot of different ideas, but it is a great way to involve the team. You can also involve patients – both the patient participation group and patients affected by the problem can suggest ideas. You can ask everyone to think of as many solutions as possible to achieve the aim and then add the drivers. You can then decide on one or two potential solutions (also known as change projects) and do a series of measures to see if they are successful.



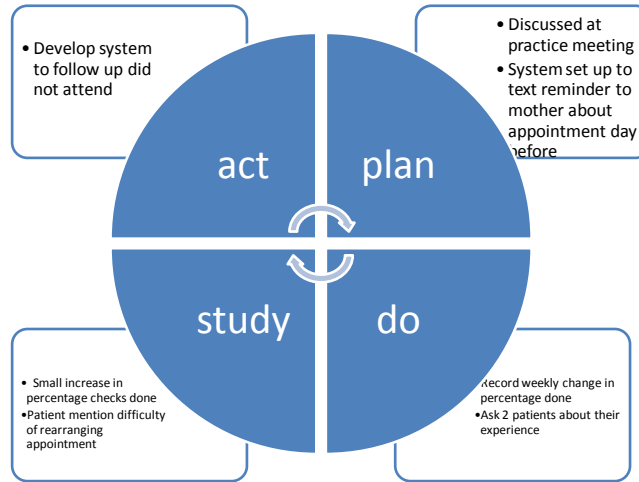
Another quality improvement tool is the PDSA cycle. This is similar to the audit cycle, but tends to involve making a small change, studying the effect (including any unintended consequences) and then planning the next change. The changes in a QiP can be small and ideally there should be at least two PDSA cycles for each QiP project.

1. Plan – document the objective, the initial plan, identify who will be doing the test, how will it be done, and when the change will be made
2. Do – undertake the change, gather the data and document any problems,
3. Study - analyse the data and summarise learning
4. Act - what changes will you make based on the outcome of the first change and develop a plan for the next cycle to make it better.

The PDSA cycles illustrated below demonstrated 2 changes made in the process of 6 week baby checks in the practice.

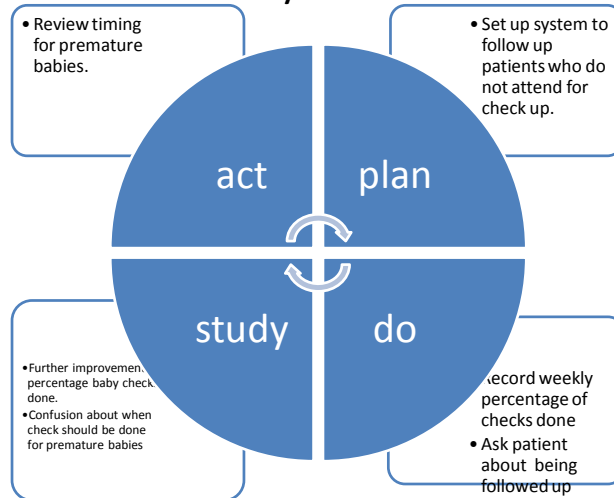
Improve percentage of 6 week baby checks done by end of week 8

Cycle 1



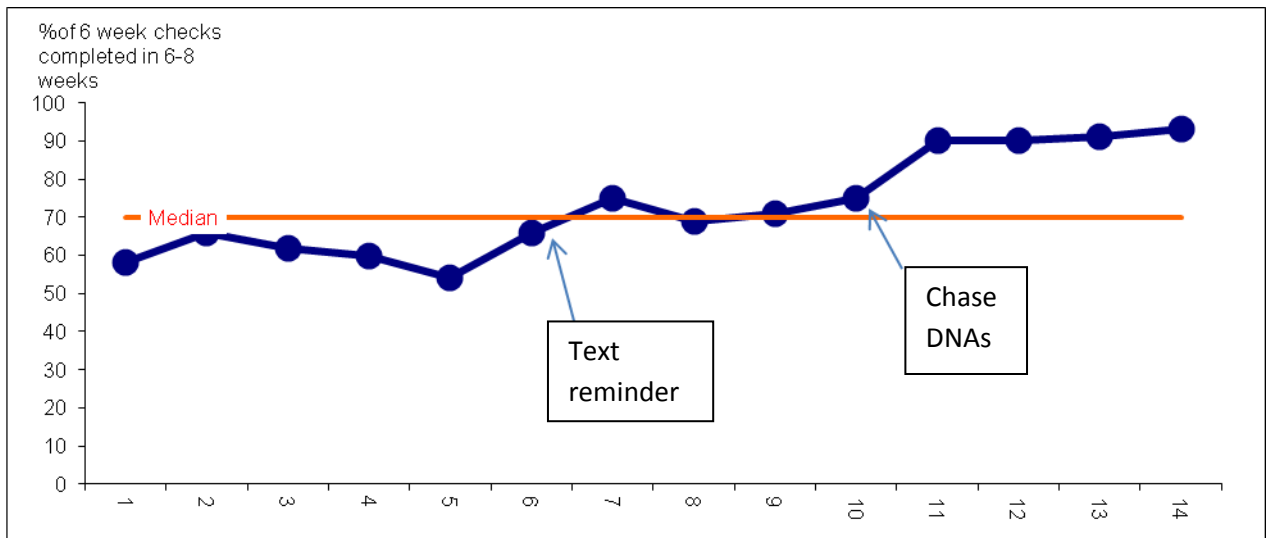
Improve percentage of 6 week baby checks done by end of week 8

Cycle 2



Describe the data or information gathered to demonstrate the impact of the change used

There are many ways to present your measurements. One of the best ways is to plot measurements each time they are taken on a run chart - a line graph of data plotted over time. Run charts measure data frequently and demonstrate if changes are leading to an improvement. Further details about run charts are available on www.ihl.org/resources/Pages/Tools/RunChart.aspx. The package will even plot your run chart for you. Using the 6 week baby check again, the run charts below illustrate the impact of the two changes introduced.



Summarise and Sustainability

At the end of your project, you should summarise the changes made as a result of your project. This could include exploring why the change has been ineffective. Ideally you should present your findings to the team at a practice meeting and reflect on the process and any feedback you receive. An important part of any quality improvement, especially if the changes have improved quality, is ensuring that the process will continue once you leave the job.

Reflection

The final process involved reflecting on the process of undertaking a QiP – what have you learnt, what worked well, how did you work with others and what would you do differently in the future.

Resources

Institute for Health Care Improvement www.ihl.org

NHS Scotland Quality Improvement Hub <https://learn.nes.nhs.scot/741/quality-improvement-zone>

RGCP QI Guide 2015 <http://www.rcgp.org.uk/clinical-and-research/our-programmes/quality-improvement/quality-improvement-guide-for-general-practice.aspx>

East Midlands Website on Quality Improvement <http://tiny.cc/resourcesqi>