



Using QI tools and methods to sustainably and affordably improve waiting times Access QI Phase 2

This case study will show you how the Access QI teams learned to:

- Use their tools and data to understand their systems.
- Use their learning from the understand phase to design an improvement project.
- Test and implement changes.
- Sustain these changes and share their learning with others.

May 2021 – March 2022

Beginning in May of 2021, elective care services and planned care mental health teams from NHS boards across Scotland joined Access QI with a shared aim of using quality improvement (QI) tools and methods to sustainably and affordably improve waiting times.



The national Access QI programme

Beginning in May of 2021, elective care service and planned mental health teams from NHS boards across Scotland joined Access QI with a shared aim of using quality improvement (QI) tools and methods to sustainably and affordably improve waiting times. Each team consisted of Operational Managers, Clinicians involved in the delivery of services, QI Practitioners and Data Analysts to support teams to improve waiting times. Despite many challenges related to the ongoing COVID-19 pandemic, the teams attended taught modules and project workshops, and successfully utilised the <u>Access QI Improving Planned Care Pathways Toolkit</u> to diagnose systemic problems and begin to plan and implement impactful changes. This case study will show you how the teams achieved their aims by using the Access QI Improving Planned Care Pathways Toolkit, which is aligned to the stages of the QI journey. The stages are pictured below:

Creating Conditions Developing Aims Implement Build will and Implement and Develop aim conditions for change and change theory sustain where tested **Understanding Systems Testing Changes** Spread Understand current system and Identify specific change ideas, Share learning and opportunities for improvement test and refine using PDSA spread where relevant Leadership and Teams Project Management Measurement and Communication

Quality Improvement Journey

Stage 1: Project planning and management

In the first stage of their improvement projects, the teams started by establishing their project teams and the problems they wanted to improve, then deciding what methods or tools would be used to support the effective management of the projects.

Each service's project team included a lead to help coordinate the project, service leads who had the ability to make changes to processes, representatives who would be impacted (such as patients, GPs, or colleagues from other services), a QI practitioner, a Data Analyst, and a sponsor to provide executive level support.

With a team established, the next step was to use various tools to define and manage project goals, identify which stakeholders should be involved, and plan out the steps of the project.

A Urology team and an Endoscopy team from NHS Forth Valley both elected to book regular project team meetings in advance for the following 10 months to ensure people had the time reserved in their diaries.

An **NHS Fife Orthopaedics service** held three initial meetings with key stakeholders from Orthopaedic services, General Practice, Physiotherapy, plus Analysts and QI staff. They used the <u>7 Step Meeting Process</u> to ensure these meetings were effective and efficient. They met monthly to check their progress and discuss any potential areas for improvement.

Creating Conditions How did the teams get started and set themselves up for success?

NHS Grampian's Cardiac Physiology service utilised <u>Kahler's Drivers</u> and felt it enabled them to "identify the motivations and differences within the project team, which was helpful in creating the team dynamic."

NHS Fife General Surgery and NHS Grampian Radiology each developed an <u>action plan</u> to help ensure the projects progressed at the desired pace. General Surgery assigned individual ownership of each action to keep things on track. Radiology found the action plan made it easy to list and prioritise all of the required tasks needed to achieve their project aim.

"I thought it was a very open meeting and that group are a great starting point to do something big." - Project Advisor

Continue reading for more examples

Creating Conditions

NHS Grampian's Realistic Medicine team used Google Jamboard to complete a <u>stakeholder analysis</u> together over Microsoft Teams. You can watch a short video about this here.

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"This was a useful exercise as the discussion and diagram gave a level of assurance regarding the breadth of the stakeholders involved."

Project Manage

7 Step Meeting Process

The team's completed stakeholder analysis



- 1. Clarify Aim/Purpose
- 2. Assign Roles
- 3. Review Agenda
- 4. Work through Agenda
- 5. Review meeting record
- 6. Plan Next Steps and Next Agenda

7. Evaluate



The **Community Alcohol and Drug Service from NHS Forth Valley** held a virtual team development session using Microsoft Teams. They discussed Kahler's Drivers, <u>the 7 Step</u> <u>Meeting Process</u>, and Stop Start Continue. This helped them get to know each other better and explore each other's working styles, behaviours, and motivations. Read a full case study about this <u>here.</u>

After establishing a team and defining ways of working, the teams moved on to understanding their systems. This is a crucial part of the improvement journey and helps to highlight any constraints, bottlenecks, or waste in a particular service.

To understand complex systems with multiple patient pathways, teams worked with their Analysts to obtain service data pertaining to demand, capacity, activity and queues in their service, also called DCAQ data. Then, various practical tools were used to help visualise any pathway bottlenecks. Keep reading to see what the teams did to understand what was happening in their systems:



"The meetings with primary care were very helpful, especially working through patient journeys. It helped the team to understand more about the barriers primary care face... It also let us explore potential solutions which would be acceptable to all."

NHS Lanarkshire Rheumatology held two workshops: one with their own team and one with representatives from Primary Care. In these meetings, they mapped patient pathways using the results of a user survey along with data on demand, capacity, and patient outcomes.

They also audited outcomes from referrals graded routine at the time of vetting. This showed that many of these patients could be managed with advice only rather than a clinic appointment and others would have been better served with a direct referral to Occupational Therapy or Physiotherapy.

Systems

Understanding

Reasons why staff feel stress



NHS Forth Valley – Community Alcohol and Drugs Service (CADS)

When the CADS team looked at their data, they noticed that they had an above-average did not attend (DNA) rate of 40%. A survey on staff experience also identified that patients not attending was contributing to staff feeling stressed at work. They decided to focus on generating change ideas that would reduce the DNA rate.

This stage of the project showed them "the importance of the role of the Data Analyst to undertake demand and capacity modelling to identify variation in the system to enable planned care teams to focus on problem areas."

How to log a new vetted referral on TrakCare and book appointment

Process:

- 1. Outpatient work list (Security Group).
- 2. Select Urgent Manual Referral (Main Menu).
- 3. Select Urgent Referral (Sub Menu).
- 4. Search for patient.
- 5. Click on "Find".
- 6. (If searching using patient CHI number this will direct you straight to "Patient Demographics").
- 7. Select patient CHI number using the hyperlink.
- 8. Check Patient Demographics.
- 9. Update if necessary.
- 10. Select "Update".
- 11. Waiting List Entries screen will appear.
- 12. Select "NEW".
- 13. Update relevant fields (mandatory fields in BOLD).
- 14. Select Update.

NHS Forth Valley - Endoscopy

The Endoscopy team discovered that TrakCare (the patient records management system) did not provide the granularity of data they required to support their improvement objectives. As a result, they decided to create a separate workstream within the improvement project to review their TrakCare data and improve their measurement system.

They held a workshop to review and map out the high-level processes for recording data in TrakCare. Reviewing this process helped them brainstorm ways to capture the level of detail needed to appropriately schedule staff and effectively manage risk. A process map for the First Episode Psychosis pathway



NHS Forth Valley's Early Intervention into Psychosis (EIP) service held regular meetings with their multidisciplinary project team to discuss their pathway for First Episode Psychosis (FEP). To ensure all relevant perspectives were included, the team had representation from hospital services, people with lived experience of psychosis, and the voluntary sector.

To the right is their process map for the pathway.



Understanding Systems

Continued on the next page

The <u>run chart</u> on the right and the bar chart below contain baseline data that the EIP team obtained during this stage of the project. They will use it to assess the impact of changes to the service and track progress towards their project aim.

The team reflected that this process showed them "the importance of the role of the data to guide and evaluate improvement."





Appointment

cancelled

The NHS Forth Valley Urology team reviewed data from their patient records management system and completed a process map and a <u>last 10 patients exercise</u> for their Trial Without Catheter (TWOC) pathway. This showed huge variation in waiting times, lots of unneeded appointments, and steps that involved more staff members than was necessary. Read a case study about this team's work here.



The last 10 patients exercise revealed that some patients were waiting around 100 days for their appointments, when the target wait time for the TWOC pathway was only 14 days.

	Date of referral	Date seen	Days to see
Patient 1	06/08/2021	13/08/2021	7
Patient 2	04/05/2021	12/08/2021	100
Patient 3	28/06/2021	11/08/2021	44
Patient 4	28/01/2021	25/02/2021	28
Patient 5	10/06/2021	06/08/2021	57
Patient 6	26/06/2021	04/08/2021	39
Patient 7	21/04/2021	02/08/2021	103
Patient 8	08/03/2021	21/05/2021	74
Patient 9	02/07/2021	30/07/2021	28
Patient 10	24/04/2021	28/07/2021	95

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"This process has brought home to me how important it is to have access to real time, clinically relevant data."

Urology Clinical Lead



NHS Forth Valley Gastroenterology produced a Pareto chart showing which pathways had the longest and shortest waiting lists. They chose to focus on the New Routine IBD clinic as they knew that some of these patients were waiting up to six months to be seen.

Then, they used the last 10 patients tool to look at patient notes from these new routine IBD appointments. This tool can be used to look at more or less than ten patients, depending on a team's needs. They looked at 40 patients' notes and realised that IBS was the most common presenting reason for this pathway. A second Pareto chart was made to help visualise this.



Pareto chart showing the breakdown of presenting reasons for New Routine IBD appointments



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"The last 10 patients was a key exercise where we were able to do a 'deep dive'... and identify the main presenting reasons for the Routine pathway. It gave us that in-depth knowledge so we could evidence that IBS was the major presenting reason."

Gastroenterology team

Pareto chart showing which pathways contributed to waiting times the most and the least

Stage 3: Develop aim and change theory

Diagnosing pathway issues as part of stage 2 provided the teams with a lot of new information, ideas, and potential solutions. They now had to organise and describe that information in a way that would allow them to state exactly what they wanted to improve and how they intended to achieve it – also know as their aim and change theory.

An aim statement should establish a clear line of sight to a team's desired project outcome. It should allow stakeholders to understand exactly what you intend to achieve and should include the following:

- 1. What you are trying to achieve.
- 2. How much you want to achieve.
- 3. When you want to achieve it by.
- 4. Who will benefit from it.

Here are some example aim statements from the Access QI teams:



Stage 3: Develop aim and change theory

Each team's aim statement then needed to be supported by a change theory, which lays out the actions needed to achieve the aim. A change theory is best visualised through a <u>driver diagram</u>.

On this slide and the next are two examples of driver diagrams from teams mentioned above. Note how the diagrams clearly show how each primary driver, secondary driver, and change idea is connected to the project's aim statement.









Once teams had defined their aim statements and change theories, it was time to identify specific change ideas, then test and refine them. The driver diagrams above list potential change ideas developed by the teams. It was important that they come up with change ideas that would address most or all of their drivers.

There are many different approaches to coming up with change ideas to test. Here are some examples from teams:



NHS Forth Valley Gastroenterology

• After the Last 10 Patients exercise showed that IBS was the main presenting reason for the New Routine Clinic, the team conducted a review of other health boards' IBS pathways to learn what had worked for them. They found a model used by two other health boards that produced excellent results, and used this as a guide to make changes to their own pathway in collaboration with GPs and Dieticians.

NHS Lanarkshire Rheumatology

• After meeting with primary care stakeholders and surveying patients and GPs, the team learned that people wanted easier access to advice. This led them to the change idea of establishing an advice line for patients and a dedicated advice email inbox for GPs.

Click here to learn more about how to develop change ideas.

Once the teams had reached a consensus about change ideas, it was time to test them. Testing helped build their knowledge about what worked in their systems and why. They learned to use <u>Plan-Do-Study-Act (PDSA) cycles</u> to plan and try out changes, study the results, and act on what they learned. With the PDSA cycle, a new change idea is tested on a small scale and is then tweaked or refined based on the result of the test.

Keep reading to see how three teams are testing their change ideas

NHS Forth Valley's EIP service had a project aim of ensuring the timely allocation of a key worker to all patients with suspected First Episode Psychosis (FEP). Here is their PDSA cycle for the allocation of a key worker:

Key worker PDSA

Aim (overall goal for this project)								
To develop a local care pathway for FEP								
Change idea								
Allocation of a key worker								
PDSA objective: Describe the objective for	r this PDSA cycle	Cycle No: 1	What questions do you want answered for this test of change?					
• Patients assessed as experiencing FEP during initial assessment are allocated a key worker following initial assessment. The key worker is a named CPN who is the main point of contact and support for a person who has a need for ongoing care.			Does this improve time to treatment? Does this improve engagement with the service? Any challenges/issues with allocating a key worker? Feedback from staff how to make the process of allocating a key worker better Feedback from patients					
Plan			L					
Predict what will happen when the test is carried out.			Measures to determine if prediction succeeds					
FEP patients may be prioritised over other patients on the waiting list CPN workload may impact on capacity to allocate a key worker Low numbers of referrals			Time from referral to treatment DNA rates Improve outcomes for patients (reduce DUP) Staff feedback Patient experience					
List the tasks needed to set up this test of change.			Person responsible	When to be done	Where to be done			
 Establish the process for allocating a key worker Engage with the staff who will allocated as key workers Make wider team aware of the test of change Tool to collect data 			Laura/Amy/Martin Laura/Morag Laura/Amy Deborah					
Do	Describe what happened when you ran the test.							



Testing Changes

The PDSA clearly states the objective for the test of change and the prediction of what will happen, as well as the specific measures that will indicate whether or not the prediction comes true. This is an iterative process, meaning the change idea can always be adjusted and tested again if the PDSA doesn't go as planned or reveals a potential adjustment that might produce better results. The EIP team are in the process of testing this change. They have made sure they have the processes in place to capture reliable data on referral rates and waiting times so the impact of the change can be evaluated.

The Podiatry service from NHS Greater Glasgow and Clyde decided to increase their use of digital technologies in order to reduce wait times. Their change idea was to design a new hybrid clinic offering three appointment types: telephone, video, and face to face.

After the first PDSA cycle was conducted, the staff involved in the test were invited to focus groups to provide feedback and review clinic data. The team also gathered data about patient experiences using an online survey. Based on the feedback received, they made a few tweaks by adding in decision-making algorithms, escalation pathways, and an admin appointment to catch up with clinical notes. After running a successful second PDSA incorporating these changes, they scaled up the new clinic design to other locations. As the table below shows, the service has experienced a significant decline in maximum waiting times for tier 1 new patient appointments.

Maximum waiting time data from Feb 2021 to Jan 2022

	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Max Wait (Weeks)	12.7	12.7	8.0	11.1	12.1	8.6	6.0	9.3	3.1	2.0	3.2	3.9
Target Wait (Weeks)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Change from Baseline	0%	0%	-37%	-12%	-4%	-33%	-53%	-27%	-76%	-84%	-75%	-70%

Patient experience data from an online survey

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Did you feel the clinician actively listened to what you said	75.3%	19.8%	3.7%	1.2%	0.0%
Were they approachable and easy to talk to?	72.0%	26.8%	1.2%	0.0%	0.0%
Were you treated with kindness?	77.8%	19.7%	2.5%	0.0%	0.0%
Were all of your questions answered?	71.6%	23.5%	2.5%	1.2%	1.2%
Was your problem regarded as important?	57.3%	26.8%	4.9%	6.1%	4.9%



Testing Changes

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"Key learning was taken from the staff groups around managing risk. The staff were happy to embrace new technology, however, were less comfortable with clinically assessing the patient during a virtual consultation. Providing support through decision-making algorithms and telephone scripts greatly improved confidence levels and enhanced the care experience of patients."

Podiatry team

These run charts show the changes in waiting list size and DNA rate after change ideas were applied

With an aim of reducing DNAs to their Falkirk service to 30%, NHS Forth Valley's Community Alcohol and Drug Service decided to test three change ideas. They implemented text reminders for appointments and received positive feedback about these from patients, who found it useful when they had forgotten about their appointments. They also began testing joint nurse and doctor appointments to reduce the number of patient visits. This had to be paused when COVID-19 placed additional pressures on the service, but has recently been restarted. The third change idea was to utilise satellite clinics to improve engagement with the service. These clinics began in five local areas starting in December 2021 and January 2022.

They successfully lowered their DNA rate to 31.6% in December 2021, even though they were not yet testing all of these changes. Based on these early results, they will continue testing and expand their project aim to decrease DNAs by a further 10%. Moving forward, they will continue to monitor the changes by checking the impact of satellite clinics on DNAs and collecting staff and patient feedback on the service changes.



Testing Changes





Stage 5: Implement and sustain where tested

Once a team has demonstrated that a test of change has resulted in improvement, it's time to make the change a permanent part of day-to-day work. Due to system pressures related to COVID-19, some teams have not yet completed the testing phase. However, some have managed to start making more permanent changes.

NHS Fife General Surgery

- The team from NHS Fife General Surgery wanted to ensure patients were consistently seen and treated either on the same day, or at a planned appointment where they would receive the appropriate investigations. They tested a new triage tool and a Rapid Assessment Clinic.
- Data gathered up to this point suggests that many more surgical patients can be assessed, treated and discharged within 24 hours.
 These changes have been fully implemented, along with more formal processes to support their implementation and sustainability.
- For example, they have established clear booking instructions and the capacity for review appointments for the Rapid Assessment Clinic. They have also standardised the new triage tool and included the ability to escalate a case to the Registrar when GPs are seeking surgical advice.

NHS Fife Orthopaedics

- NHS Fife Orthopaedics decided to provide more orthopaedic resources at the primary care level in order to improve demand management and optimise the beginning of the orthopaedic patient journey. As this change idea requires more staff, there has not been a testing phase yet, but four additional Advanced Practice Physiotherapy posts have been agreed and will be recruited soon.
- Orthopaedics agreed to fund the posts on the condition that this will be a catalyst for a wider, whole system workforce change intended to 'front load' the primary care orthopaedic offer.
- They predict that there will be fewer inappropriate referrals to Orthopaedics as the first patient contact will be with a Physiotherapist. They will start with four GP practices with high orthopaedic demand and measure the impact on orthopaedic demand management.

NHS Greater Glasgow and Clyde Podiatry

• The Podiatry team from NHS Greater Glasgow and Clyde achieved their project aim of reducing the maximum waiting time for tier 1 new patients by 70%. This reduction has been maintained at 70% or over each month from October 2021 to January 2022.



Implement

So far, these changes have prompted positive feedback from staff and patients alike.

NHS Fife General Surgery

"It was hugely beneficial for me to be able to go home and return the following day for a test knowing that I'd be seen in clinic and the results shared with me."

General Surgery patient

NHS Fife Orthopaedics

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"I am excited for the future of the service and more committed to its development than ever."

Physiotherapist



Implement

NHS Greater Glasgow and Clyde Podiatry

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"There is a level of confidence in the data to adopt the model as future practice within NHS Greater Glasgow and Clyde Podiatry."

Podiatry team

Stage 6: Sharing learning

The final stage is to share the improvement journey and spread the learning to others who are interested in using quality improvement methods and tools to improve their own systems. If you would like to share your improvement journey, we would love to hear from you. Click <u>here</u> for more information about ways to share your learning. We are adding new case studies all the time, so be sure to visit the <u>Access QI Improving Planned Care Pathways Toolkit</u> or the <u>Access Learning System</u> again soon to learn more.

