

## Understanding your pathway: The 'Last 10 Patients' QI tool

Experience and key learning points from NHS Lothian Dermatology pathway



This case study aims to:

- Introduce the use of the 'Last 10 Patients' tool to highlight the key queues and delays affecting patient flow within a pathway. The tool can be downloaded <u>here</u>.
- Show how a team in NHS Lothian used the tool to understand:
  - The length and number of 'milestones' (such as initial assessment or 1<sup>st</sup> biopsy) of their chosen pathway;
  - The variation in patient waits at each milestone and how this can be mitigated;
  - How to prioritise their key pathway 'milestones' in order to develop test of change ideas for improving patient access.

#### NHS Lothian - Background

NHS Lothian is one of the three boards involved in the Access QI programme.

All boards in Scotland were invited to apply, outlining in their application an indication of their chosen specialities they wished to focus on and a rationale for this choice.



#### Why Dermatology?

In NHS Lothian, the dermatology service has:

- A high volume of referrals;
- Long waiting times for skin cancer patients.

Additionally, there is an anticipated UK increase (7%) in melanoma demand by <u>2035</u>.

Therefore the service was one of the three that NHS Lothian felt would benefit from a more immediate service redesign through a QI approach to reducing patient waiting times.

#### Q: What does our pathway look like?

Determining what the pathway looks like (the patient experience) and therefore, the scope of the work required, was the first question the team identified that they needed to answer.

#### A: The Last 10 Patients tool

Team members felt that talking to clinicians was essential but wanted to identify the current patient waits within the pathway. However, they had limited time and resources to do so.

Previously members of the teams had received training from the <u>Lothian Quality Academy</u>. During this they were introduced to the 'Last 10 Patients' tool where mapping patients pathways can enable the development of a more robust process map to include:

- Variation in the length of patient waits along your specified pathway;
- How differences in practice/workload is contributing to variation, unnecessary delays and comprising safe care.

The team decided to consult the tool guidance for more details

How does the tool work?

#### Overview of key stages

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The team discovered that the Last 10 Patients tool has four key stages:

• Identify the case files for last 10 patients treated along a pathway for review.

 Develop a data collection tool to record key stages (milestones) of a patients journey (1<sup>st</sup> assessment, data sent to pathology) and any 'further comments' (contextual details you feel are important)

• Select a start date and record dates of key stages (milestones) for the patients as they progress from your defined start and end points. N.B. Don't get stuck in the details, this is to track overall differences in patient waits.

• Map out the pathway stages and remember that variation can be caused by multiple things such as:

- Different workload/capacity to do work
- Different types of patients

"Looking at 10 patients ...you'll start to see patterns emerge "

The full guidance on

found here.

how to use the Last 10 patients tool can be

**NHS Lothian team member** 

Now lets see how NHS Lothian used the tool

#### Getting started

Now they had identified their tool the team realised that before they could start mapping there were key questions they needed to answer.

## "When should our pathway start?"

Skin cancer (specially Melanoma) is unique in NHS Lothian as <u>ALL</u> referrals go to dermatology. Therefore, GP referral was identified as the natural start point by the team.



"How will we identify patients who have gone through their entire pathway journey? This could take months and we do not have the time to wait!"

The team realised that they could retrospectively use cases from the last Multidisciplinary Team Meeting (MDT) two months earlier. At MDTs cases are reviewed following samples being sent to the pathology department. The team made an assumption that patient cases presented there would likely have completed their pathway (or have been referred to oncology).

### "What should be our pathway endpoint?"

After speaking to the oncology department the team learned that waiting times was not a key issue for that service therefore this was taken as a natural end point for their pathway.

#### Key learning point

Deciding to use existing data gave the Lothian team the ability to map the patient flow within the pathway quickly.

This innovative solution differs from the guidance but can provide the same result.

However, remember that if there have been any recent changes to pathway procedures/processes then retrospectively reviewing cases may not give you realistic understanding of your pathway.





\*dates have been changed for data protection purposes.

\*\*unadjusted dates were used (for example patient unavailability and holidays not included).

#### The Mapping process

Using case notes the team were able to complete the template provided in the <u>guidance</u> to understand the patient's flow through the pathway.

The team had identified that there were nine milestones in their pathway:

- 1. Initial assessment
- 2. 1<sup>st</sup> biopsy
- 3. Pathology
- 4. MDT multidisciplinary team meeting
- 5. Plastics referral
- Plastics outpatient appointment (OP)
- Plastics inpatient appointment (IP)
- 8. Pathology (again) for results/tests
- 9. Oncology referral

The tool had demonstrated that there was considerable variation in patient flow within the pathway as well as some unexpected ordering.

#### Which ones can you spot?

Move to the next slide to see those highlighted by the team

Patient 7 – based on clinical need, the patient was expedited to plastics for care. This resulted in the patient not having an initial plastics OP appointment.



#### Key learning point

Q:The team noticed that presenting the pathway this way could be misleading. Why?

A: It gives the impression that the pathway is linear which, as we can see for patient 9 it was not.

See the next slide to see their alternative visual!

Patient 9's pathology report returned on day 37, discussed at MDT on day 45 and a plastics referral on day 38.

Looking at the case notes it was clear that the clinician saw the pathology report and decided it needed referring to plastics ahead of the MDT discussion. Again, the pathway was expedited.

#### Last 10 Patients: Alternative presentation

The team in Lothian found that presenting the same data as a graph was easier for team members to follow as it clearly shows patient flow within the pathway chronologically rather than the expected pathway order. The graph also incorporates time to show the days in between each key stage.



Would this format help you?

#### What next?

Once the Lothian team had collated the data about patient flow within the pathway they decided to use the waiting times between milestones to perform a <u>Pareto analysis</u> (shown below) using mean waiting times.

This confirmed that the longest waits were between the initial biopsy and receiving the pathology report so now they had a clear recommendation that understanding that delay could produce the biggest reduction in patient waiting times.



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#### Key learning point

Remember how you present data can be misleading. The Lothian team found that other visual tools helped them explain the variation in patient waits clearer. You may wish to consider using similar graphs to increase understanding and clarify what your data is showing.



"When we went (to the Melanoma Action Plan group) we could say we have done a recent exercise which showed where we need to focus efforts and which pathology confirmed (the delays between biopsy and pathology report)"

NHS Lothian team member



## **Conclusions from the Lothian team**

"This Last 10 patients exercise was a validation of where we felt the pressure points were (across the pathway)"

NHS Lothian team member

#### Key learning point

The team are now working with the pathology department to develop their first change idea for the pathway:

 standardise how dermatology departments across sites request biopsy reports for 'urgent suspicion of cancer' patients and to make it easier for pathology to identify such samples.

The Last 10 patients evidence was seen as essential in helping the multidisciplinary pathway discussion at the Melanoma Action Plan Group.

