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Service Improvement
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Tracer study



Tracer study

What is it?

A tracer study helps you to understand processes around paperwork and information flows. These processes are often a source of hidden delay.

Using this tool can help you to identify hidden bottlenecks in processes that run parallel to the main patient journey processes, eg the NHS e-Referral Service, listing patients for surgery and accessing patient notes.

It will reveal information to help you identify and reduce sources of unnecessary delay, time lost owing to duplication and work that does not make sense or add value to the patient experience.

When to use it

Use the tracer study when you want to understand the flow of information that supports clinical care processes. You can use this tool in addition to [conventional process mapping](#) to give a more detailed picture of what happens in real time within information processes and flow.

How to use it

The resources you will need include:

- planning time and good communication (staff who are involved need to know what they need to do and why)
- a clear information capture form
- analysis time
- follow up time (meeting or possibly interviews).

1. Select the process and the paperwork (or electronic equivalent) that you would like to track. The most revealing ones will be those that cut across different departments.
2. Anticipate the start and end points for the paperwork so you know how to get hold of them at the end of the tracer study.
3. Make contact with the groups you expect to have contact over the paperwork. Explain to them what you are planning to do and why you are doing it. Stress the importance of understanding the patient experience in their journey and where it could be improved.

It's worth spending some time engaging people with the work. This will be time well spent when you get to the stage of looking for and making suggested improvements.

4. Start off with a small number of items to trace, perhaps 10 consecutive records. Develop a tag for example, a coloured sheet of paper or a pop-up for electronic records. On this tag, table the information you require each time the item changes hands. See example below:

Figure 1: Tag information

PLEASE READ THIS

We are asking for your input in helping us to understand the process of information flow in [name of department or area]. To do this we are following a report form to help identify possible improvements.

Please sign a new row each time you use the report form. You may be asked to take part in a short interview about the information on the report form.

Please complete the next empty row on the table below, thank you.

Who/where did you receive the report form?	Your details	Who will you send the report form to?	Comments
Name:	Name: Job title:	Name:	
Name:	Name: Job title:	Name:	
Name:	Name: Job title:	Name:	
Name:	Name: Job title:	Name:	

Ask everyone coming into contact with the tagged document to sign and date the marker.

- Keep additional information requested simple – perhaps just have an ‘additional comments you wish to make’ column on the tag.
- When you have the tagged items back, map out the process for the 10 consecutive tags on the same sheet of mapping paper.
- If you want more qualitative information you can always follow up with a discussion and ask the relevant people more detailed questions about the process. For example:
 - What do they do with the paperwork?
 - How well do they think the particular process works?
 - Any thoughts on the quality of the information?
 - Any thoughts about handovers?
 - Any thoughts about how things could be better?

The focus should be on what happens and what they actually do, in addition to what they think should happen. Sometimes people find it difficult to say what actually happens and you may need to let them talk about both what they do and what they should do.

It is helpful to get the people together who completed the tracer exercise to discuss what the map shows, identify where the delays are and any other problems.

A difference between what should happen and what does happen may suggest a problem that is worth exploring. Be sure to fully define and scope who should be involved – clinical and non-clinical colleagues.

Look at opportunities to redesign the process, for example:

- Can the number of steps and the number of people who need to come into contact with the paperwork be reduced ie steps that don't add value to the patient or that can be combined?
- Look out for times when paperwork is grouped together and dealt with in batches.
- Look for times when paperwork is processed or decisions are being made out of order.

The important thing is to get people on board with both the causes of delays and the potential solutions.

What next?

Test out the chosen suggested improvements to see if they have a positive impact.

- The [model for improvement](#) and [PDSA](#) to carry out the tests.
- Do more tracer studies to see the impact of these and spot more opportunities to make more improvements.
- It may be useful to do a [spaghetti diagram](#) to help understand movement of the paperwork and improve flow and/or the layout of a department.

Additional resources

Hornby, P and Symon, G (1994) Tracer Studies in Cassel, C and Symon, G (eds.) *Qualitative Methods in Organisational Research*, London: Sage

Symon, G, Long, K and Ellis, J (1996) The Co-ordination of Work Activities: Cooperation and Conflict in a Hospital Context, *Computer Supported Cooperative Work*, 5 (1). pp. 1–31

Background

The tracer study is a research technique that is an adaptation of process mapping methodology. It was developed for use in the NHS by Gillian Symon.