Improvement Cymru Academy Toolkit Guide

Process Mapping

What is Process Mapping?

All systems are made-up of multiple processes which we are all involved both at home and at work. Process mapping allows you to visually see how a process actually works so that you can understand the existing process and develop ideas about how to improve it. The level of detail required on the process map will be dependent on the problem you are addressing. The most important thing to remember is to focus on the process not the people in the process.

Rationale

The aim is to make things clearer and provide insight into very often complex processes/systems. A Process map captures what, when, where, who and how things happen. It helps teams to understand what really happens rather than perceptions of what happens and hence enable teams to make decisions based on facts.

When to use?

Process mapping should be used prior to any improvement as it will help you gain a better understanding of how a whole system works. If changes are made without understanding the current system, problems might arise at another point in the process/ system. A process mapping session aims to identify the actual steps of the process/ pathway - 'a walk through' approach. It provides an opportunity for teams to experience what works well or not to see the bottle necks, repetition(s) and delays in a process.

A Process map captures what, when, where, who and how things happen, we need to understand these elements to be able to make sustainable improvements. There are several different types of Process maps:

- Process maps
- Swim lane diagrams

- Value stream mapping
- SIPOC (Supplier Inputs Processes Outputs Customer)
- Spaghetti diagram

How to use?

However, it is recommended to initially create a high-level process map. This allows you to take a ‘bird’s eye view, from far away’ and captures a few, but vital steps in the process. It also allows you to identify who needs to be involved in mapping out the pathway or process in more detail.

It is important to involve as key stakeholders from across the whole process/ pathway being mapped. A time is to be set aside through a workshop or meeting with either a space that has plenty of wall space or using a virtual platform, but it is important that whoever is facilitating the session has a good working knowledge of the platform used to utilise post-its and white boards. Either way the session is interactive whereby you will be generating a visual product with lots of comments, thoughts, and ideas.

Preparation prior to session:

- Identify a suitable venue (plenty of wall space) or appropriate virtual platform.
- Define the objective or focus of the process mapping session.
- Define the scope of the process you intend to map. This is the start and end of the process. This helps you to identify the stakeholders to invite but it will need to be confirmed at the start of the mapping activity.
- Invite all relevant stakeholders who are involved in the process. This might include practitioners such as doctors, nurses and pharmacists. This may also be patients, service users and their families and responsible adult. Representatives from support services, such as Pathology, Radiography, Social services, external organisations. This list not exhaustive.
- Ideally no more than 15 to 20 representatives.
- Organise the event for two half days or one full day. Ensure you have adequate time. If planning two sessions, these should be no more than two weeks apart.

- Prepare the representatives for the session with adequate information to actively contribute. They may need to bring information with them for the session.
- Identify a facilitator for the session whose role is to keep the session on track, remind representatives of ground rules as necessary, record issues, ideas and observations (unless there is a second person to assist with this) and to ask probing questions to enhance discussion.
- You will need equipment such as mapping paper (lining wallpaper or a roll brown paper works well, sticky notes, marker pens, Blu Tack, scissors, and Sellotape) or a virtual platform with "post-it"/sticky note function.
- As you will generate lots of information you will also need to seek additional support to gather/record this information. It is always helpful to include flip charts and record ideas 'car parks' or/ and worries.

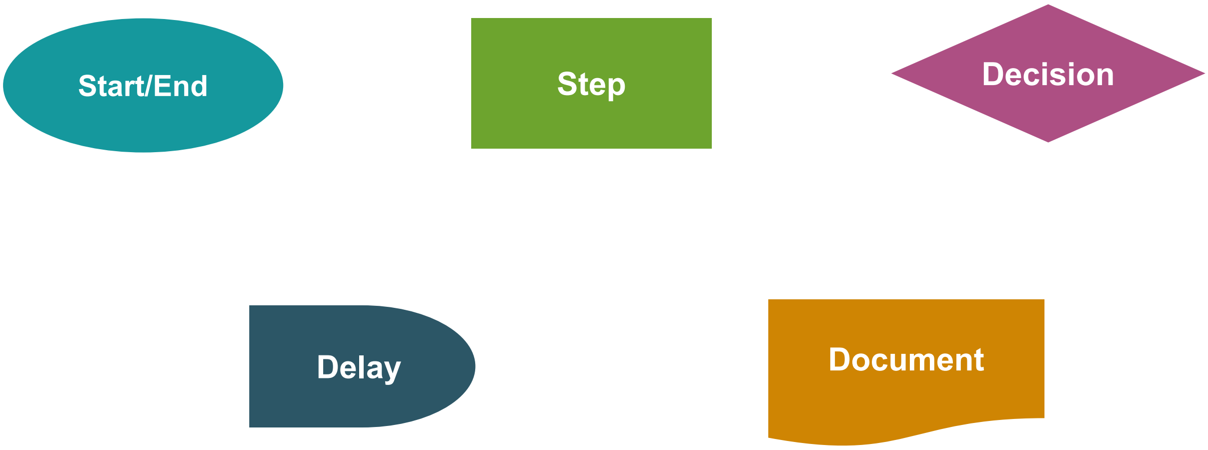
Prepare the virtual space/ room:

- Prepare virtual space with the use of white boards/ post-its.
- Prepare the space begin with sticking the mapping paper onto the wall.
- Prepare flipcharts (Capture ideas/ concerns).
- Make sure the room layout is conducive to what you are trying to achieve, this is not a formal meeting.
- Label the access/pathway that you are mapping at the top of the paper.

During the session:

- Ask all present to introduce themselves (name, role, etc.).
- Agree the ground rules and boundaries for the session.
- Agree on the scope of process and the level of detail to be captured.
- Use the *'ideas car park'* to capture any ideas and solutions generated during the session.
- Map the process, making sure you capture what happens most of the time, not the one-offs.
- Use post-it notes to capture each step.
- Use symbols (see below) to capture start/end, steps, decisions, delays, documentation; these can be drawn on the post-it notes.

Symbols used in a Process mapping:

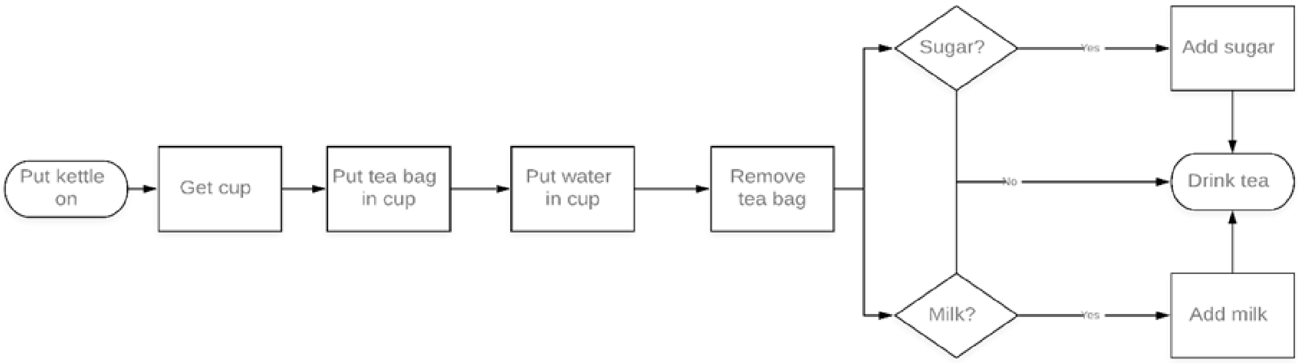


Start by capturing the high-level process

A high-level process map should be no more than 6 to 10 steps (Including the start and end points). This provides a panoramic view of a process and shows the major blocks of activity.

Example: High-level map ‘Making a cup of tea’.

Diagram 1: A high-level map:

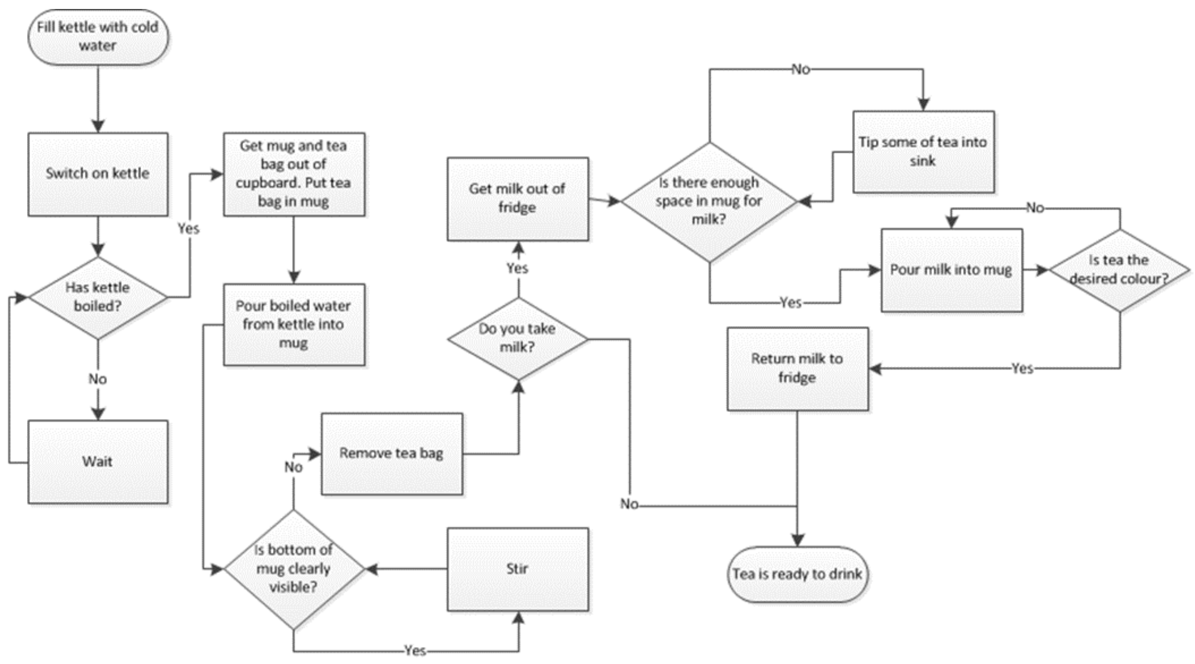


Detailed process map

Now that you have the high level process map you can capture the detailed process of each high level step. This enables you to identify the complexity in a process and identify what works and what doesn’t work well in the process.

From the detailed process map you can identify any specific part of the process you wish to focus on in greater detail and depth. You can capture the timing of each step and who undertakes each step. This helps in identifying improvements to the process.

Diagram 2: A detailed map:



What next?

Once you have mapped your process it is time to analyse and identify opportunities for improvement. You may wish to consider using further improvement tools such as Ohno's eight waste or TIMWOODS *(please see Improvement Cymru Academy TIMWOODS Toolkit Guide).*

Helpful Tips

Ensure your Process map crosses functional boundaries: you want to see the whole, end-to-end process, not just the piece of the process inside your department.

Remember that improving one process does not always improve a service that flows through several departments.

Remember to map what 'actual happens' current state, rather than what should be happening.

Additional resources

If you would like to learn more about making improvement to your workplace take a look at our website for what we offer you https://phw.nhs.wales/services-and-teams/improvement-cymru/improvement-cymru-academy/ or email us improvementcymruacademy@wales.nhs.uk to find about the improvement courses we can offer.

References

Citoolkit.com (2019). Process-mapping. [Online] Available at: https://citoolkit.com/articles/process-mapping/ [Accessed 29 June 2022]

Damelio, R. (2011) The Basics of Process Mapping, 2nd edition, CRC Press. Taylor and Francis Group.

NHS Institute for Innovation and Improvement (2005*). Improvement Leaders' Guide Process mapping, analysis and redesign. Genera; improvement skills*. [online] https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/ILG-1.2-Process-Mapping-Analysis-and-Redesign.pdf [Accessed on 29 June 2022].

Simpleimprovement.co.uk (2019). Process mapping. [Online] Available at: http://www.simpleimprovement.co.uk/Process%20Mapping.pdf [Accessed 29 June 2022].