

Improvement Cymru Academy Toolkit Guide



**Suppliers, Inputs,
Process, Outcomes
and Customer**

What is a Suppliers, Inputs, Process, Outcomes and Customer (SIPOC)?

A SIPOC is a tool that summarises the inputs and outputs of one or more processes in table form. It is used to define a business process from beginning to end before work begins using a SIPOC diagram. This can be useful in understanding the requirements of a process to fulfil, and expectations of the customer to ensure the customer receives the goods requested.

Background

SIPOC traces back to the Total Quality Management programs in the late 1980s. It is used today in Six Sigma and lean manufacturing, including business process management. It isn't meant to provide too much detail, but rather give decision-makers key information about each process. Most often, SIPOC diagrams are used to improve our understanding of the processes associated with customer experience.

When to use a SIPOC

SIPOC diagrams are useful for focusing a discussion, helping team members agree on a common language and understanding a process for continuous improvement. It gives a one-page overview of the system you are working in to highlight the steps and the requirements from start to finish.

How to create / use a SIPOC

Identify your suppliers:

Who are the suppliers that will provide you with your input? There may be different suppliers for each input. If this is the case list all suppliers. A supplier is anyone who has a direct impact on the output.

Identify Inputs:

Identify the materials and resources needed for the process.

Outline the process:

This is an overview of the process. This is the starting and end points of the process listing the high-level steps of actions and subjects.

Define the outputs:

These can be materials, services, products, or information required.

Identify the customer / customers:

Define who or what you are targeting with the outputs of your process. The customer does not have to be external; this could be members within a team and senior stakeholders.

Analyse the customer requirements:

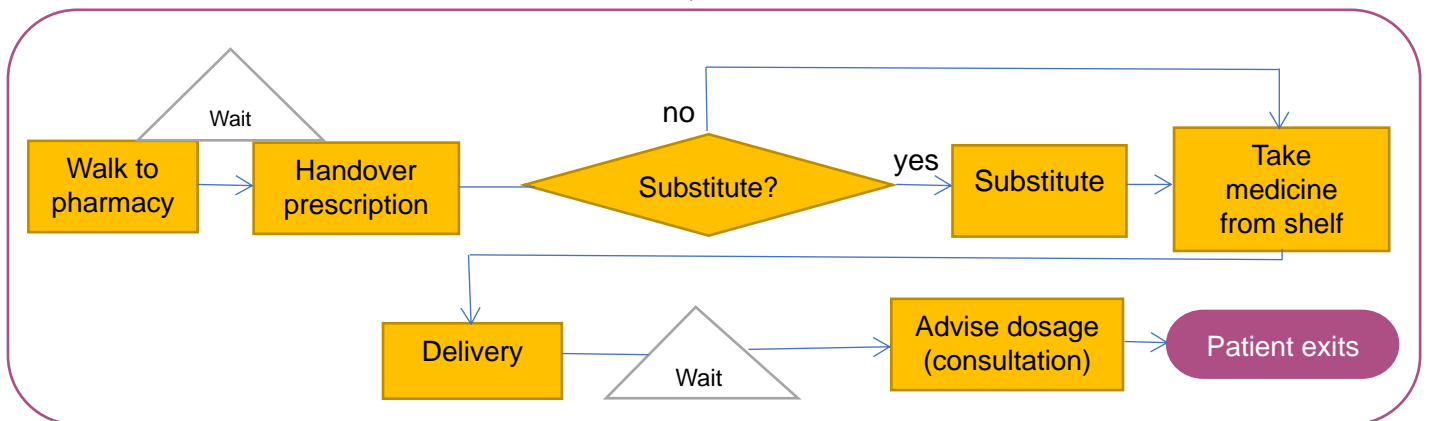
What are the process measures or requirements for the product or service. These are usually determined by the customer or regulatory body.

Some Examples:

Here is an example of collecting a prescription from a pharmacy. As you can see using the SIPOC process allows you to identify the requirements of each section within the SIPOC form with your team, then exploring the process in as much detail as you need, this may be high level or a more detailed level dependant on the requirements.

SIPOC Example: Collecting a prescription from a pharmacy

Suppliers	Inputs	Process	Outputs	Customer
Who are the suppliers?	What components, knowledge or materials need to be introduced into the process?	What are the steps in the process where are the key issues?	What are the final products or services for the customer as a result of the process?	Who are the customers of the process? Who are the end users of that the business sells?



Here's another example of making a pizza, which captures the key elements from start to finish and the stakeholders required to deliver the product to the customer.

SIPOC – MAKING A PIZZA

Suppliers	Inputs	Process owner:	Outcomes	Customers
<i>The person or entity that provides an input to the process</i>	<i>What goes into the process and is transformed</i>	<i>The person(s) whose approval is needed to make fundamental changes to the process</i>	<i>The outcome can be the product or service</i>	<i>the person or entity that receives or uses the outcome of a process</i>
1. Grocery Stores 2. Food warehouse 3. International deliveries	1. Dough 2. Sauce 3. Peperoni 4. Cheese 5. Peppers 6. Onions 7. Ham 8. Herbs	Domino O'Leary Key stages in the process: <i>Series of steps to transform the inputs into outputs outlined in bullet points</i> <ol style="list-style-type: none"> 1. Prepare Dough 2. Add Sauce 3. Add toppings 4. Add cheese 5. Bake in oven 6. Remove from oven 7. Package or serve 	Modular training content at required level (<i>awareness – practitioner</i>): 1. Whole Pizza 2. Pizza Slices	1. Dine In 2. Take Out 3. Home Delivery

Helpful tips for SIPOC:

Here are the top 5 benefits of a SIPOC diagram.

- Helps to define a process. A SIPOC diagram provides an overall look at a process.
- Helps to identify problems within a process.
- Helps to improve communication.
- Helps to reduce waste.
- Can be used for multiple purposes.

Summary

A SIPOC diagram helps you to determine the right input and process as per the requirements of the customers by knowing their needs and requirement and manipulating the process to bring the results or outputs that you are expecting in the future.

Additional Resources

<https://phw.nhs.wales/services-and-teams/improvement-cymru/improvement-cymru-academy/> or email us at improvementcymruacademy@wales.nhs.uk to find out about the improvement courses we offer.

Further reading

Simplilearn (2023). What is a SPIOC Model? Overview, Benefits and Examples.

Accessed from <https://www.simplilearn.com/what-is-a-sipoc-model-article> (Accessed 14 August 2023)

Six Sigma Daily (2017). What is a SIPOC Diagram? Accessed from

<https://www.sixsigmadaily.com/what-is-a-sipoc-diagram/> (Accessed 14 August 2023)

YouTube Link

HTO & Beyond (2018). SIPOC Diagram explained. Accessed from

<https://www.youtube.com/watch?v=j9oWnnbtkOo> (Accessed 21 Jul 2023)

Improvement Cymru (2023). SIPOC – Lee McQuaide. Accessed from

<https://www.youtube.com/watch?v=zxE2bAtPysM> (Accessed 21 Jul 2023)