

Mapping Your Way to Improvement - Using Process Maps to Chart the Patient Experience

Presenters:

Melanie Ridley, HANC QI Consultant
Gabe Deckert, HANC Project Director

Webinar Instructions

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You can switch your audio connection by clicking on the three dot ellipsis icon found at the bottom of your screen.

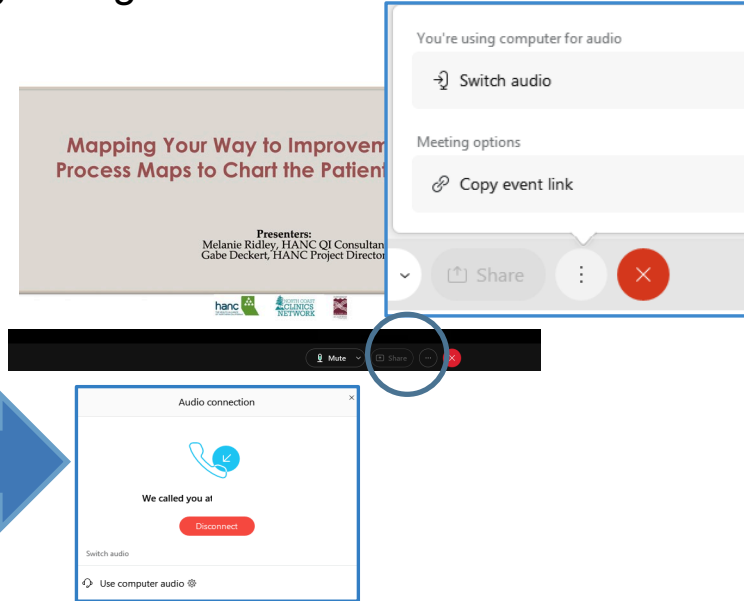
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Figure 1

Figure 2

Dial call-in number

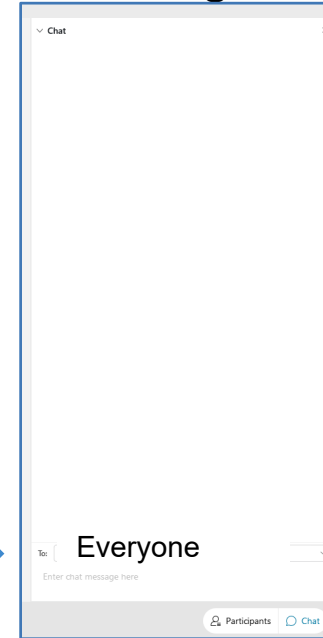
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Chat Instructions

- All attendees have been muted to eliminate any possible noise/ interference/distracton.
- Please take a moment and open your chat box by clicking the chat icon found at the bottom right-hand corner of your screen and as shown in **Figure 1**.
- If you have any questions, please type your questions into the chat box, and they will be answered throughout the presentation.
- Be sure to select “**Everyone**” when sending a message.

Figure 1



Mapping Your Way to Improvement - Using Process Maps to Chart the Patient Experience

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Learning Objectives

Purpose: Provide strategies and tools to understand the systems and processes within your healthcare setting.

Participants will be able to:

- Build consensus across staff and teams on the current state of process
- Gather feedback from stakeholders to identify opportunities for improvement
- Use process maps to envision the future state for your improvement work

What is Lean Thinking?

- Lean appears to be a technical system - use the tools, change the process, gain efficiencies.
- **Lean is actually a way of thinking and behaving** - a new focus leading to new behaviors and therefore new culture.

Simple definition - deep meaning

2 Principles	2 Habits
Continuous Improvement of Customer Value Respect for People	Improvement Coaching

Adapted content from Mike De Luca, Torre Consulting

Lean Terms

Term	Definition
Customer	The patient
Value	Service, product or solution that the patient wants or needs
Value-added	Any activity that results in change in the form, fit or function for the patient
Waste	Activities that are not valuable to the patient
A3	Named for the paper size (11"x17") that was originally used for this one-page summary or storyboard of the improvement work

Lean Thinking: What is Waste?

Categories:

- **Process waste** “any activity that consumes resources without producing value for the customer” = Muda
- **Overburden** = Muri
- **Unevenness** = Mura

Process Wastes, Muda

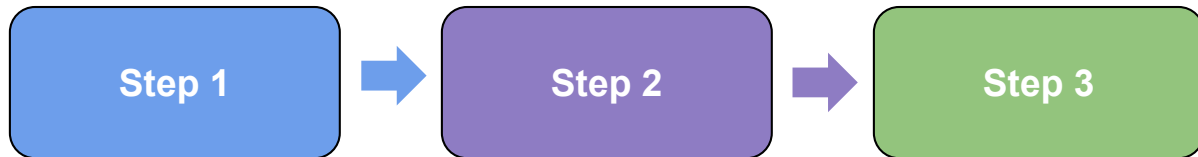
Defects: Rework, re-dos, corrections	Transportation: Needless movement of materials and information
Overproduction: Making more than the customer needs	Inventory: Idle/in-process materials, supplies or information; batches
Waiting: Delays and queues of all types	Motion: Excess movement; searching for people, supplies, information, etc.
Neglect: Skills, capacity or capabilities of people, equipment and systems	Extra-processing: Unnecessary steps, excess checking and inspection

Adapted content from Mike De Luca, Torre Consulting

What is a Process Map?

A visual aid for:

- Picturing our work processes
- Showing each step of a process sequentially
- Linking events that result in a particular outcome
- Identifying challenges, opportunities, waste, and areas for improvement



Why use process mapping in QI?

Process mapping has the potential to support QI projects by engaging stakeholders to create a shared understanding of the systems they are trying to change

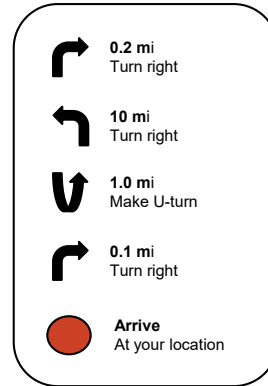
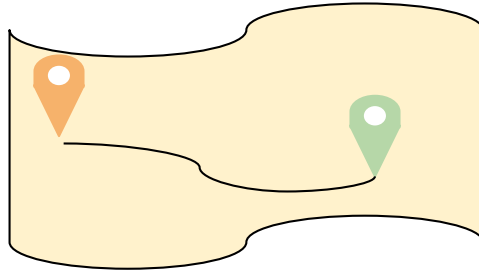
- Show others how a process is done
- Identify problem areas and opportunities for improvement
- Engaging those who are responsible for or affected by the process in improvement work
- Support consensus and agreement toward a shared solution
- Understand the system you are working to change

“Process mapping is a process of building consensus”

What is a Process?

A process is a set of activities that transforms inputs into value-added outputs.

Process **≠** **Procedure**



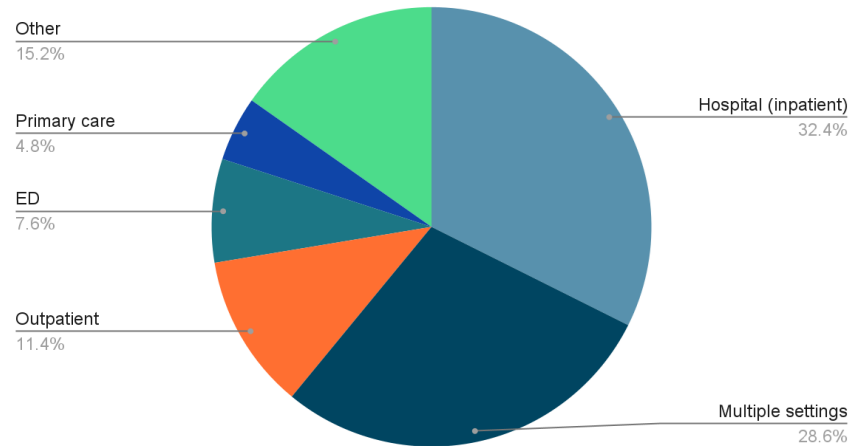
Adapted from source: Navvia video, What is a SIPOC Diagram? <https://www.youtube.com/watch?v=dpz8J7h1yDY>

How is process mapping being used in healthcare?

A review of 105 journal articles on process mapping showed:

- Most projects (91%) clearly defined the service line (value stream) being analyzed
- About half (55%) of projects gathered data and information to prepare the process map; others reported using meetings across staff/teams
- 15% reported patient involvement
- 15% Reported team training on process mapping at the start

Healthcare setting of process mapping projects



Antonacchi, G., Lennox, L., Barlow, J. *et al.* Process mapping in healthcare: a systematic review. *BMC Health Serv Res* 21, 342 (2021). <https://doi.org/10.1186/s12913-021-06254-1>

What is a process map?

There are many variations and names:

SIPOC Diagram

Identifies all of the components of a process (inputs, outputs, resources)

Process Map

Identifies each activity towards achieving the specific output or outcome

Swim Lane Diagram

Visualizes the hand-offs from one person team to another

Value Stream Map

Overview of the process and identifies time, resources, or information required

What is a process map?

By documenting the details of the process in a visual form, your team can analyze and identify opportunities for improvement.

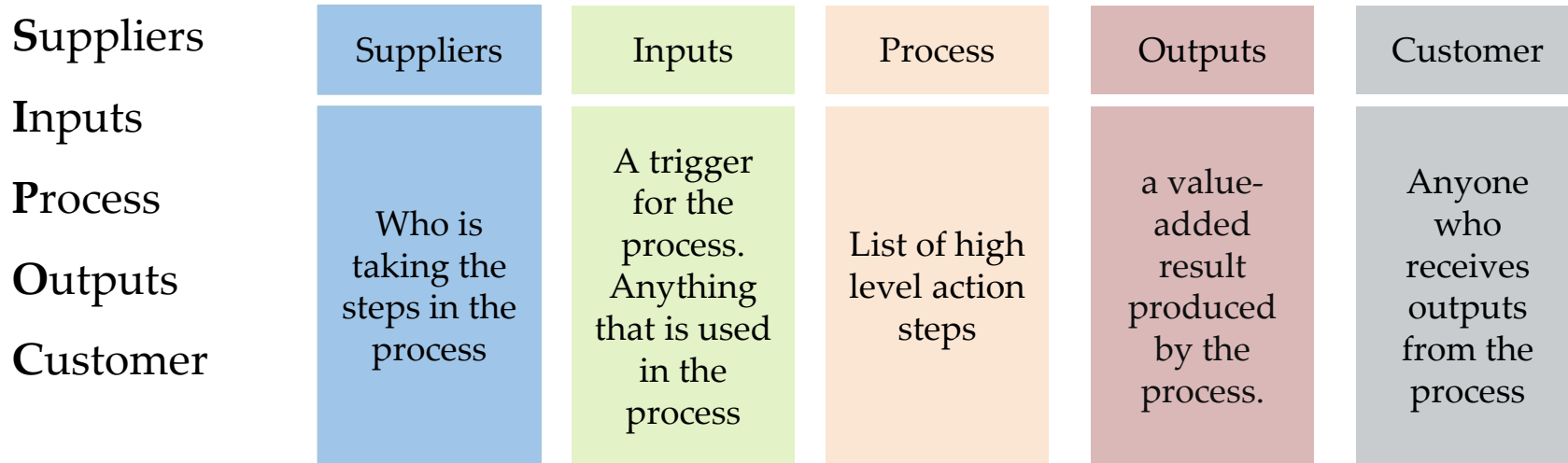
- Visual representation of a process or workflow
- Shows each step of a process sequentially
- Solicits input from and builds consensus among those who do the work
- Highlights gaps and cracks (e.g., missing steps, workarounds, shortcuts)
- Shines a spotlight on wasted efforts (e.g. non value-added steps, bottlenecks)

“You cannot improve what you cannot see.”

Adapted from ABCs of QI: Process Mapping

SIPOC Diagram

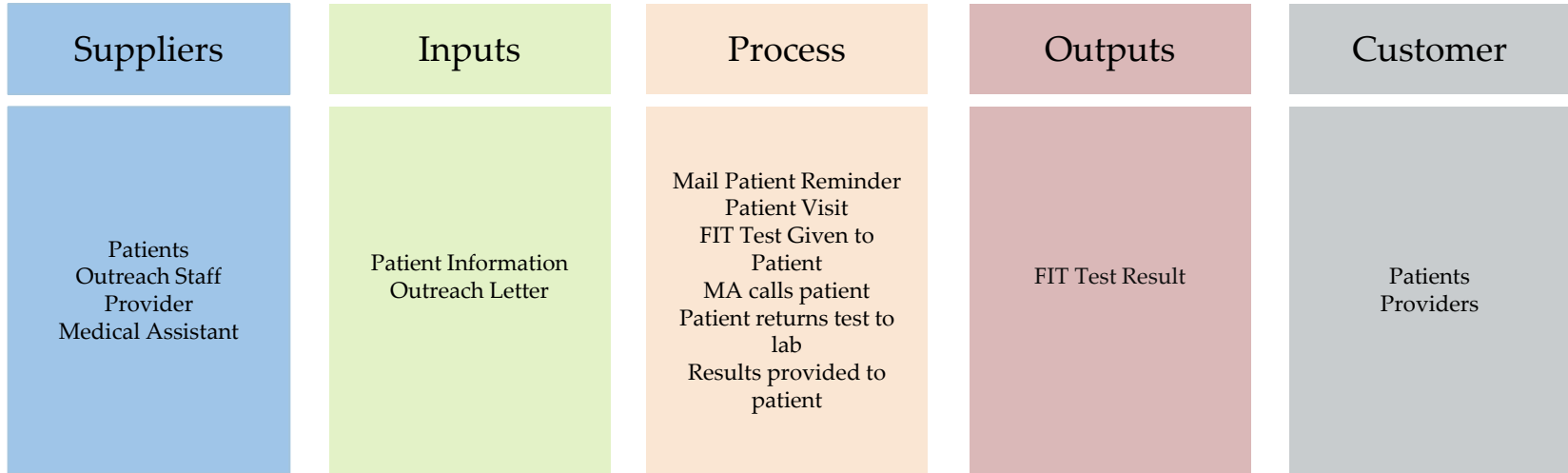
Defines all of the critical parts of a process



Adapted from source: Navvia video, What is a SIPOC Diagram? <https://www.youtube.com/watch?v=dpz8J7h1yDY>

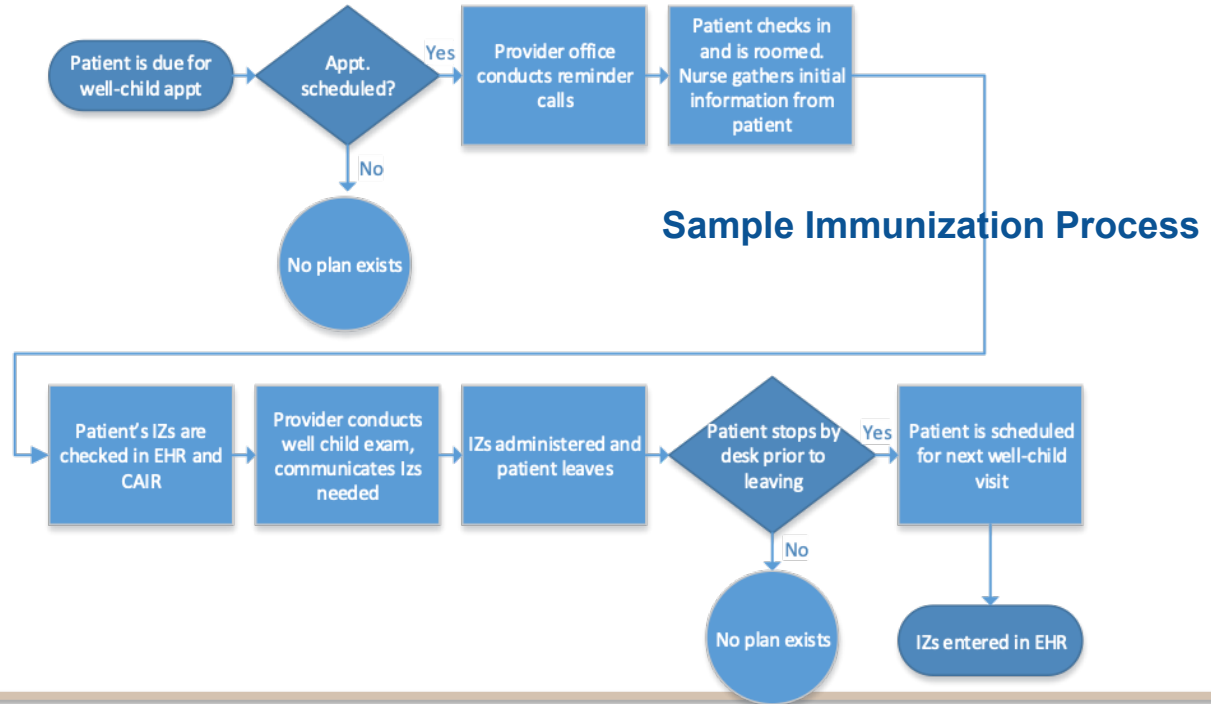
SIPOC Diagram Sample

Colorectal Cancer Screening



Process Map or Flow Chart

- Tool that visually describes the flow of work
- Shows what action steps are involved in a process
- Identifies where re-work might happen
- Highlights gaps in understanding of how to address patient needs



Process Mapping Symbols



- **Start and End:** Oval used to show inputs (materials, information or action) that starts a process and outputs (the results) at the end of a process



- **Activity:** Rectangle represents one task/ activity/step in the process (from perspective of patient or customer)



- **Decision:** Diamond represents a decision point in the process

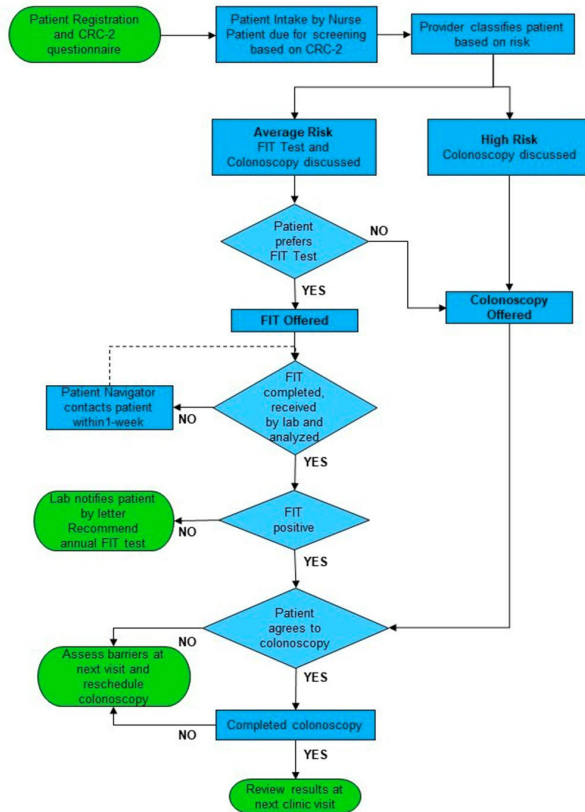


- **Break:** A circle identifies a break in the process

Process Maps in Clinical Workflows

Sample of a clinical workflow for Colorectal Cancer Screening

Source:
https://www.researchgate.net/publication/328534597_Faecal_immunochemical_testing_implementation_to_increase_colorectal_cancer_screening_in_primary_care



Swim Lanes Diagram

A swim lane map is similar to a flowchart or process map in that it outlines the steps in the process and decision points.

- The primary difference is that a swim lanes diagram places actions in “lanes” delineated by the person or team responsible for the specific action or set of actions.
- In this way it can help you to see those points where there is a hand-off of responsibility, patients, or things as part of the process.
- This hand-off can be either physical or electronic (such as in your EHR)

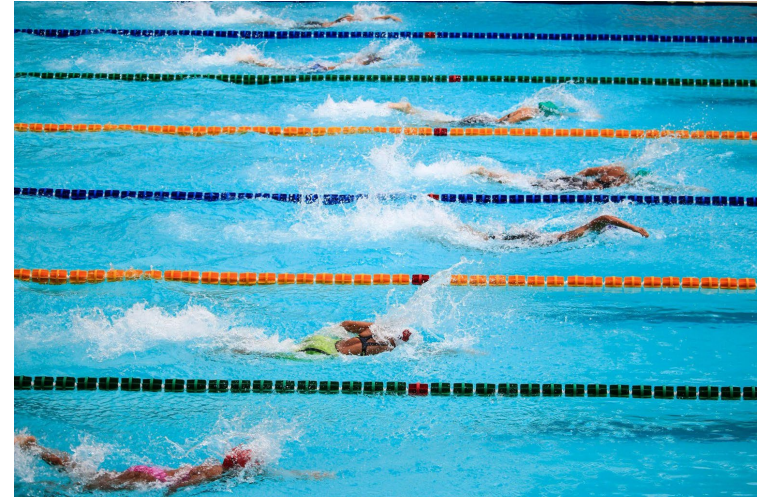
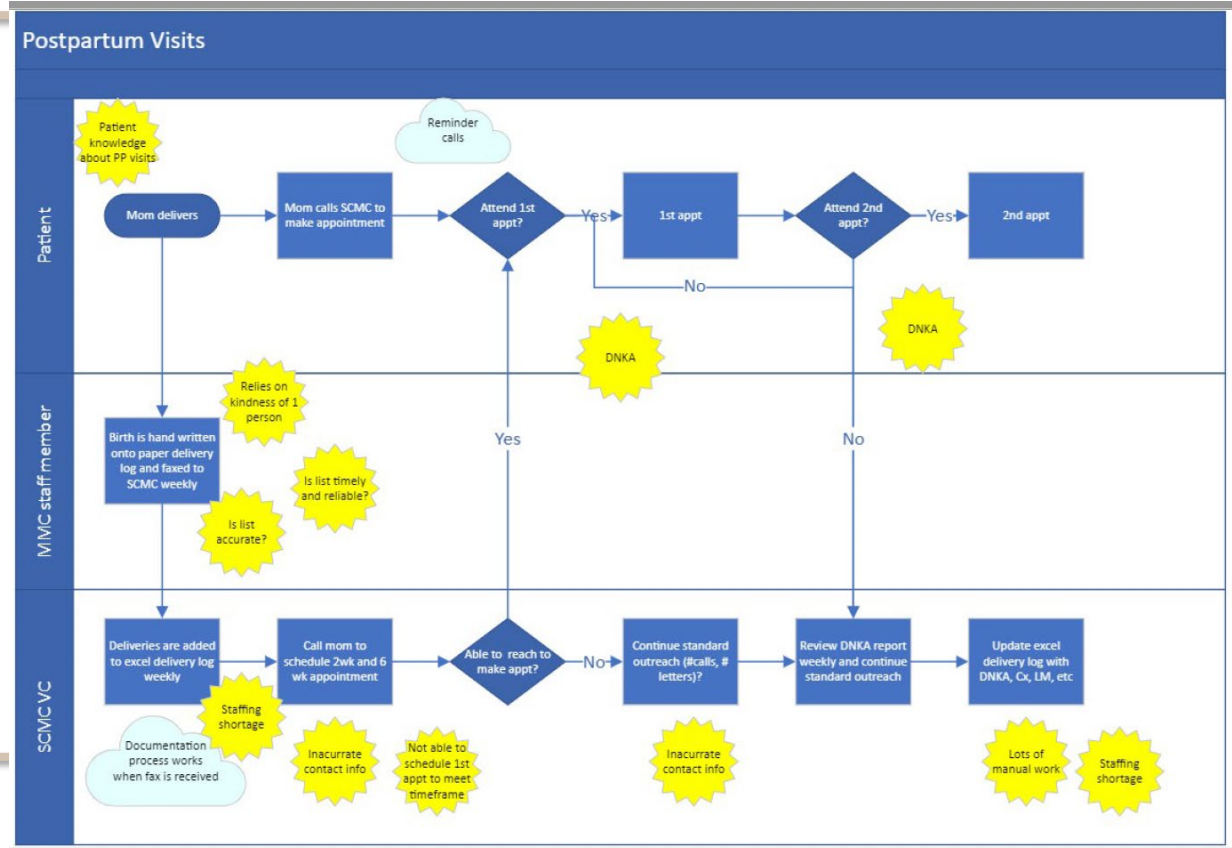


Image: <https://www.pexels.com/photo/underwater-photography-of-swimmer-711187/>

Swim Lanes Example

Shasta Community Health Center Postpartum Visits

- The yellow stars “kaizen bursts” represent a pain point or a broken part in a process



Value Stream Map

- A collection of all of the activities – both value-added and non-value added – that generate a product or service that meets customer needs
- A tool to identify, quantify, and communicate waste in a service
- Grounded in the question, “what value is being delivered to the customer?”
- A high level overview of the key action steps in a service line
- Annotated with data about the process, such as process time between steps, delay times or other key process measures

The Value Stream Map is a tool employed to diagnose the present and to outline an action plan for an ideal future.

<https://www.linkedin.com/learning/creating-flowcharts-for-beginners/flowcharts-swimlanes-and-more?resume=false>

Value Stream Map Sample

Question for you!

Type your response in the chat:

On a scale of 1-10, how confident are you in your process mapping abilities?

1

What's a process map?

5

I can figure it out, I think

10

Process mapping is my superpower!

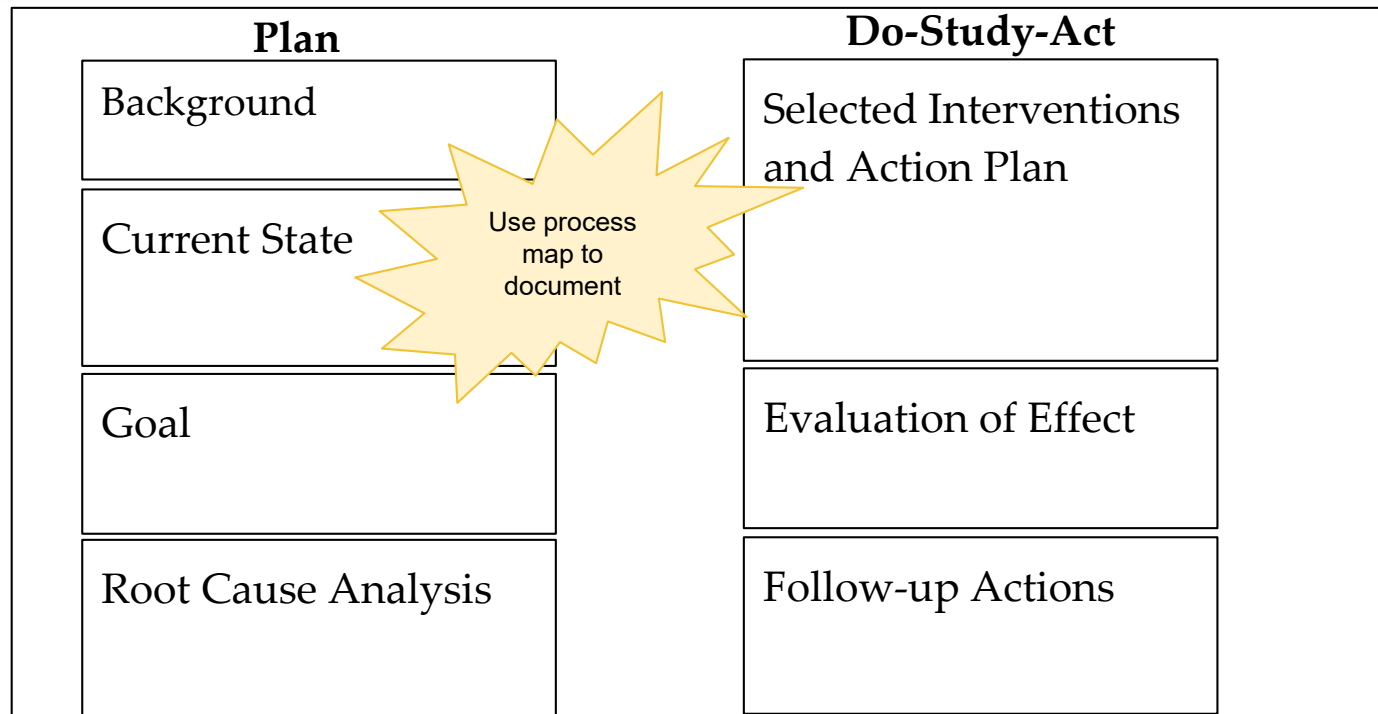
* Adapted from a presentation by Katie Amaya, Shasta Community Health Center. Thanks!

Where Does Process Mapping Fit Into PDSAs?

It's a good place to start!

- Mapping the process you are going to be studying may inform what problem(s) you are trying to solve
- Value stream mapping can help you visualize pain points from the perspective of the patient (end user)
- Process of building your process map will inform your A3 and help focus your tests of change in a PDSA

Where Does a Process Map Belong in an A3?



Help Select Your Process Measures

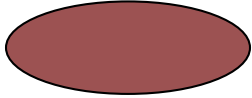
Measurement plans for PDSA or other improvement projects likely include one or more process measures

Process measures help us to:

- See whether a change has been accomplished
- Understand why we did or did not achieve our aim
- Make visible how a change in the process impacts other people or actions

Process mapping can help identify meaningful process measures for PDSAs and other improvement projects

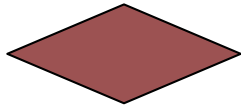
Process Mapping Symbols



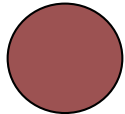
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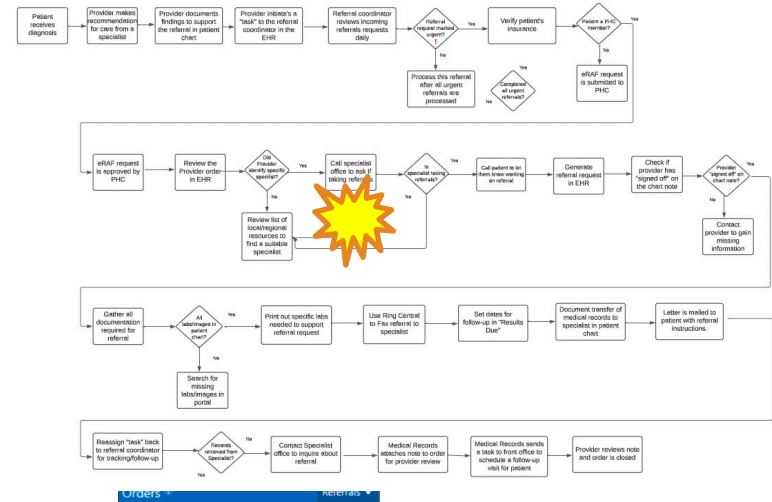
Back to...Process Vs. Procedure

A story...

- Health center is working to improve referrals to specialty care (closing the loop!)
- Well documented workflow procedures for how to complete each step in the process
- Hard to envision where things get stuck, where there are non-value added steps, and how to improve

Items Required for a Specialist Referral:

Specialist Referral Process Map – DRAFT 2-3-23



Process Mapping Steps

- Define the service and the patients touched by the process
- Train your team on how to use process mapping before you begin
- Gather team members who are closest to the process
- Involve a patient
- Gather any data or information that might inform your understanding of the process
- Walk through or observe the process prior to mapping
- Map out “as-is” process through a brainstorm of the steps (sticky notes!)
- Include:
 - Enough detail to analyze and understand where problems occur
 - A view from the patient perspective who is involved in and receiving something as a result of the process (output)
 - Name of process, Creator(s), Date of creation and modification

Analyze a Process Map

- Identify holes/differences in the process -- “Pin yourself to the problem”
- Identify wasted effort
- Keep in mind the aim of the process
- Brainstorm solutions
- Develop PDSA cycles to test ideas for how to improve

Key Questions for Analyzing a Process

Purpose	What?	What is done?	Eliminate
	Why?	What is the purpose? Is the purpose accomplished? Why is it necessary? What if it were eliminated? What would make it unnecessary?	Combine Rearrange
Place	Where?	Where is it performed? What alternate locations are viable? Can the departments be reorganized?	
Sequence	When?	What other sequences would work? Can it be combined with another event? What are the implications of other sequences?	
Person	Who?	Who performs the task? Who else could perform it?	
Means	How?	What other methods are available? What other process technologies exist? Can smaller scale processes be used?	Simplify

When to Use a Process Map

Examples

- Workflows, Policies and Protocols
- Standing orders
- Clinical guidelines
- Job aid
- PCMH accreditation

ACTIVITY!

We are going to role play a process mapping exercise. We will need volunteers.

Instructions for our volunteers:

1. You will receive a script in the chat.
2. Team Member 1 begins, reading the first passage of the script.
3. Team Members will take turns responding as part of the activity according to the script.
4. Mappers will help in building our process map
5. Ready? Let's go!

Questions & Answers



Thank you!

Webinar Evaluation Link: Insert Link here and in chat

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