

Swim Lane Process Mapping for Collaborative Groups Transcript

May 2021

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Welcome to ‘Swim Lane Process Mapping...a tool to support partnerships and engagement’. We’ll spend about 25 minutes together learning about this specific method of process mapping and its benefits.

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Our objectives in this module will be to:

Consider use of process mapping as a tool to support partnership and engagement.

Learn what a swim lane process map is and why we should use them

Assembling the right team with the right expertise

Build and review a swim lane process map together

We are assuming in this module that you have had a chance to review and learn the basics of process mapping presented in that prior module of this course. You’ll see a link for the basic ‘101’ level process mapping module on the next slide

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In the QI Basics ‘101’ process mapping module, we learned some key attributes and feature of why process mapping is such a helpful and insightful tool and its worth recalling these points as they apply to any type of process mapping:

The power of process mapping lies in the visual representation of your daily work

Enables a team to translate their ‘mental model’ of what they think happens into a group ‘shared model’ of what actually happens

There are always “aha moments” of discovery which happen most often when mapping out your current process and team member realize that what they think happens and what actually happens don’t really synch up

Captures important ways your work is unique and how the work is done

Process mapping helps us understand how People, Process and Technology are integrated together

We also benefit greatly when gather multiple stakeholders to diagram a process map and discover ways to work better together

Opportunity to correct broken processes or design a best possible new or future state process.

These benefits come about when we gather a team that both directly carries out the work and understands the process intimately or are subject matter experts that can help design new processes (whether brand new or a redesign or rework (the future state) of an existing process).

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Creating a visual diagram of your process enables your team to ask critical questions about how the process works and through this process make the needed improvements on an existing process...or



improve the new or future state before implementing and testing it out. Listed here are several common issues that your process maps (both swim lane and basic maps) can and may reveal:

- Bottlenecks & Sources of delay (what's holding up the process?)
- Rework due to errors (are there quality issues that result that may be part of the process design?)
- Role ambiguity (who does what or is responsible for certain steps and tasks)
- Unnecessary or duplicate steps
- Long cycle times (getting from the start to the finish of the process is longer than expected or needed)
- Lack of adherence to standards (we want our processes to be consistent and reliable)
- Lack of information (are we missing some information input needed to complete the process or reduce the cycle times and/or avoid delays)?
- Lack of quality controls

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What is a swim lane process map and why should we use them?

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Like all process maps, a swim lane process map helps us unravel and clearly document the steps involved in a workflow, decisions that need to be made, how the process starts and when the process ends. Generally, it helps us understand 'who does what when'.

In the swim lane diagram example here, we see the process of a typical annual exam at a clinic with the focus on identifying patients for prediabetes screening. The actors or participants are segmented into their own 'swim lanes' (the patient, front desk or reception, medical assistant, and the provider (MD or NP) and the process is drawn out from top to bottom and left to right. The process starts in the upper left with the circle indicating the patient comes into the clinic for the exam. We follow the patient on their journey through the clinic where they interact with each of the roles (the square boxes or steps) and see that there are several decisions or questions (diamonds) that need to be answered and direct the patient through a different set of steps depending on the yes/no answers...or they may skip a few steps in the process that are not relevant to them based on those answers. Lastly, the process is completed at the bottom right where the circle indicates that the exam or encounter is complete, and they leave the clinic. This is an example of a process that is contained within a single organization and the process maps helps us understand which roles (the boxes in the left-hand column) are responsible for steps related to the pre-diabetes screening.

Imagine if this process map did not include swim lanes. It would be much more difficult to identify the 'Who' of 'who does what when'.

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In this second swim lane process map example, which we'll create together in just a few minutes, we zoom out a bit and are now using the same set of tools and techniques to depict a process that takes place across multiple organizations: a food shelf, a primary care clinic, a housing assistance organization and a legal services organization. Of course, each organization will have many roles (as we saw in the previous primary care clinic process), but at this level, we are concerned about how multiple organizations in a community interact to complete the multi-stakeholder process of screening and referring patients and community members to one another.

You'll also note in this example that the process can end in multiple ways, at the primary care clinic or when services have been delivered by the housing and/or legal services organizations (as indicated by

multiple circles which terminate the process on the right-hand side of the diagram). The processes within each organization are likely much more complicated with more steps and decision points than depicted on this map, but the point is to document the process to the level needed by the collaborative team. Each organization could, if desired, map out the individual processes that occur within their organization, just as we saw in the previous primary clinic example. The example here may seem complex if you are seeing a swim lane process for the first time, but keep in mind we are limited by the size of your screen. With a large white board or using a wall in a conference room, the swim lanes can become much longer, and the number of swim lanes can also be increased to accommodate more process actors.

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When we build a swim lane process map, we consider all the factors that we do for a standard or basic process map.

We start by thinking about what process we wish to document and need to ‘frame the process’ or put some boundaries around it. What starts or ‘triggers’ the process and ultimately when does it stop and what is the output of the process? Simply put, where and how does the process begin and end. These are represented by circles as we saw in the process map on the previous slide.

Who are the stakeholders and customers (or beneficiaries of the work being accomplished through the process you are mapping out)? The stakeholders in a multi-organizational swim lane diagram are represented by each swim lane in the diagram.

As you map out the steps and decision points in the swim lane diagram, keep asking ‘who does what when’. By repeatedly asking this series of questions, you will advance through the process step by step.

Lastly, be sure to think about when the responsibility for the next step is owned by a different organization which is where you jump from one swim lane to the next and will have an arrow or connector to indicate that transition across the swim lanes.

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Assembling the team and appreciating expertise

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Before diving into the deep end and commencing your swim lane process mapping, you’ll need to confirm that you have the right people at the table. Make sure you have identified who actually does or will do the work within the scope or boundaries of the process you are defining. If it is within a single organization, think back again to our primary care clinic example, make sure you have the subject matter experts in the room from the departments or designated roles that will carry out the process. If the process is a multi-organizational one, make sure each organization who will carry out steps within the process has a representative at the table who can fully represent the work they do as well as capacities and abilities to implement and carry out the designed process.

It does indeed ‘take a village’ of diverse expertise and knowledge to understand and provide insights into the workflow that you will be mapping out and/or designing for the first time.

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When you assemble your team, remember a few of these dynamics and ‘rules of the road’ to help your swim lane process mapping session function as best possible.

First off, recognize that the work you are taking on involves change of some sort...whether designing a completely new process or revising or modifying an existing process...you are creating changes within your organization, team and staff...and we know that change is hard as we are by nature creatures of habit and routines. Change can be even more difficult depending on the culture that exists in your organization...some may take easier to it and others may be on the other end of the spectrum and resistant to changing the tried and true path and forging a new or unfamiliar one. Maybe you’ve heard the saying ‘Culture eats strategy for lunch’? That is also true when considering whether your organization will or will not adapt to the changes you propose for your processes.

Be sure to clearly state that the team will ‘take our stripes off at the door’...in other words, leave your titles and hierarchies outside and create a level playing field where all contributions have equal value and weight. Furthermore, try to be objective as possible in your work and not bring the agendas into the room during the mapping exercise. These are, of course, ideals, but the point is to elevate voices that typically may not have as much input and tone down those that are the usual decision makers and most vocal.

And just like in a brainstorming session, we don’t want to quash creative thinking and diverse perspectives. Try to follow the mantra ‘Seek first to understand and then to be understood’ which helps to first value the contributions of others...especially those that are closest to the actual work that is done.

Lastly, this is not easy work...so be sure to celebrate the successes along the way and at the conclusion of your work. Depending on the number and depth of detail that you wish to map out, this may be a multi-hour or sometimes even multi-day session...so be sure to recognize the incremental progress and totality of your great work!

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Building a swim lane process map

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There are multiple ways to build and document a swim lane process diagram. The best option is to gather in meeting room with a large, long white board with plenty of working space. The larger the group, the larger the board and size of sticky notes you’ll need to insure everyone can see and read the swim lanes and steps you are documenting. Just like in the basic process maps, write down your steps on a sticky note but hold back from connecting the processes with lines until you are confident of the order of the steps.

You can also use a multiple easels and flip charts along with the sticky notes. As these diagrams often get longer or wider than you expect, you may run short of left to right swim lane space on paper flip charts, so you may also consider simply using a large empty wall and masking tape to get your sticky notes to adhere...but probably not a good idea to draw any lines or connectors on your wall!

Whichever method you use to physically document the process, once you complete your map with your team, pause, review and then revise as needed. Sticky notes are designed to be moved...so do move and reorder them (often times just to make space for additional steps your team didn’t identify and document on your first pass through) and once you are fully confident, then draw your connector lines in. We’ll see this in our example in some upcoming slides

Once you have the diagram completed and lines drawn in, the next best step is convert this to an electronic diagram so you can share this among your team for further confirmation and revision and also more broadly distribute as needed...especially when working with multiple organizations. Microsoft Visio is the typical 'go to' application to do this and there are others, such as the web based 'Mural.co' application or lucidchart.com. You may be able to do this in some other applications like Microsoft PowerPoint or other graphics applications, but Visio is built to help you do this and even has specific swim lane functionality built into it to make it less tedious. As mentioned, you may wish to try on online app like Mural or LucidChart

In the world of virtual work and team meetings, you can consider working all-electronic and doing a live swim lane diagram. Once again, one of the apps mentioned here may be the good option to accomplish this, but you'll need someone who is very adept at creating these diagrams on the fly, while sharing their screen as your team describes the process. Without a skilled person at the helm of these electronic mapping apps, the focus shifts away from what the team is trying to accomplish to the mechanics of the person struggling to build the map. The big benefit of starting with a process workflow app is that you skip the entire physical diagraming process and have the electronic diagram when your meeting is complete. Your circumstances, resources and available skill sets may dictate which method you choose.

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Let's start creating a swim lane diagram together ...but first...a refresher about the shapes we will be using.

A circle or oval represents that start and finish of the process...these beginning and ending points are what 'frames our process' or puts boundaries around it.

Most of your mapping will be using square or rectangles representing the tasks or steps...identify 'who does what when'. The 'when' for our purposes is really the sequencing of the steps. We'll also use the diamond shape to represent a question. Pose these questions in your process so that a simple yes or no will enable branching off into the following steps.

If you have some large square or rectangular sticky notes you can use those for steps, rotate them 45 degrees to get a diamond decision shape and just draw a circle in them to represent the start and finish points.

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To help you understand the step by step process of creating a swim lane process map, we'll use the cross-sector, 4 organization example shown previously that will follow an individual on their journey to obtain social services as well as health care services.

The community member (or patient...as viewed from the healthcare perspective) starts out by seeking food assistance at a local food shelf. They end their visit to the food shelf by having a conversation with one of the staff there who recognizes their need for some health care services and refers them to a local primary care clinic. The clinic has a Social Determinants of Health screening process in place and conducts a screening during the encounter and determines that the patient has some unmet housing and legal services needs that would help improve their health and address several concerns. They create a referral for the patient to both services (this could happen manually on paper and using the phone, or it could be done using an e-referral automated system to make the referral). The individual that we are following through this process is able to follow up and connect with both the housing and legal

services community-based organizations ...and while their journey certainly continues on after that, for purposes of our example, the process has been completed.

As you see on the right side of the slide, we've identified our actors, stakeholders, service organizations (there are many labels we could attach to these organizations) and we'll created a vertical set of boxes listing each of them

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This is basically our 'blank canvas' and we are now ready to start adding the starting point (also known as the process 'trigger' event) and add in the subsequent steps and decision points (which will be yes/no questions) and then complete the process. Recall that you can draw this swim lane 'canvas' on a white board, use paper flip charts, use paper and tape and create it on a wall....use whatever resources works best for you, but make sure that you draw large enough for the entire group to be able to read and follow along. If you are working virtually from a desktop or laptop you may need to zoom in and out frequently as each of your participants may have different screen sizes...as small as 11" on a laptop, with others have 22, 27 inch or larger monitors. Just be aware of keeping everyone engaged and able to view your progress as you go (consider asking your virtual participants if they are able to read their screens as you zoom in an out and scroll up and down through the diagram as you build it).

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The event that starts or triggers the process is the community member arriving at a food shelf to seek assistance. This is documented with a circle and then we add a step where the food shelf conducts a basic needs screening and identifies that the person they are assisting also has some medical needs which they can make a referral for to a local primary care clinic. You might immediately recognize that we've packed several steps into one box at the Food Shelf. You could likely expand the whole single step in our example into its own process map for the food shelf. You'll need to discuss with your team how much detail is needed. For example, you don't need to map out all the steps at the food shelf but need a bit more detail than just a single step or box.

Therefore, building the flow chart first with sticky notes and not creating connectors is a good approach. You might scrap the single step and rewrite that into two steps or even three. Keep asking your team how much detail you'd like to see and if you have enough detail to understand how the process works.

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The next step for our community member is to visit a primary care clinic and the team documents three steps, left to right, then a decision or question along the way plus one more step.

Among our team members that are helping to describe and define the process, we have medical assistant from the clinic that helps the team document these steps (and they refer to the individual as a patient).

The patient checks in at the front desk...the first box on the left...then is given a Social Determinant of Health screening to identify any social needs...a questionnaire which they fill out (the second box or step in this swim lane) and then proceed to have their medical encounter ...and then we need to answer a question to proceed in our mapping work. Did the patient screen positive for social needs? Our assumption for the moment is yes (and we'll later address what happens if the answer is 'no'). The

final step at the clinic is where a Community Health Worker then makes a referral to both the housing assistance and legal services organizations with the patient's agreement.

As a brief clarification, our example may be a bit different from a process that you are documenting in that the example here may not look the same for every community member, they may start with one of the other organizations...but the idea is that each organization has the ability to screen community members for other needs and make referrals to those organizations. You may be documenting a process that unfolds identically every time and doesn't change much based on the individual and their needs and you'll find yourself using more square or rectangle shapes with basic steps. The higher the variability in your process, the more decision diamonds you may need which add steps and variation to the process.

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The patient has now received a few referrals to follow up on at both the housing assistance and legal services organization. The order that this occurs in is not important for our example, and we'll end up drawing the appropriate connectors for that once we are done.

At the housing assistance organization, the community member (no longer a 'patient') checks in with their front desk staff and then has a conversation with an advisor followed by services being provided after that conversation. The steps are documented in three boxes from left to right. The same is true for the interaction with the legal services organization and we document those three steps in the same way in their swim lane, the final one at the bottom of the process map.

There are just a few more steps and ways of completing this process that we'll look at next

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In the housing assistance and legal services swim lanes, we can conclude the process with a circle, and we could choose to put that in either swim lane but chose (arbitrarily) the legal services lane. We have chosen to create just one circle or process termination step rather than one each in the housing assistance and legal services lane (there wouldn't be an issue with doing that) and our connectors will both lead to that circle.

We have one more item to resolve in the primary care clinic swim lane...and that is to answer the question 'what happens if the patient did NOT screen positive for social needs and had no reason to connect with housing assistance or legal services?'

One of our connectors coming off the diamond question step in the clinic swim lane would state 'NO' as a response and lead to the circle at the end showing 'Complete. No further needs. We'll see the connectors in the next slide.

One of the other steps in the process that we also need to document is that when our community member receives housing assistance and legal services, they send notification to the clinic in a 'close the loop' fashion to let them know they have connected with the patient/community member. We'll draw a separate set of connectors from the final boxes in each of those swim lanes to the 'services delivered' box in the primary care clinic swim lane...which then will be connected to the final 'Complete' circle at the end of that same swim lane.

The team thinks they have documented the processes to a sufficient level that they all understand the order of the steps, decisions, how things branch off from those decision diamonds and also when each of the series of steps reaches a conclusion.

None of the connectors have been drawn in and this is intentional. A good practice is to take a break, and then have your team do a final walk through of the process and make any final revisions, add a

missing step or decision as needed and then agree that you are ready to tie it all together with the connectors. This method avoids having to erase work if you are using a whiteboard, mark out lines that would have been drawn on a paper charts...or delete connectors if you are using an app and screen sharing with your team.

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The team now draws in the connectors as they discussed and talks through the process a final time to confirm that have identified 'who does what' and in which sequence. Follow the connectors starting with the first circle in the food shelf swim lane.

When you follow the steps and connectors with arrow heads pointing in the direction of the process flow, you'll see the decision diamond in the middle of the clinic swim lane. If the patient doesn't screen positive for social needs, the answer to that question is 'No' and we draw a connector to the circle indicating the process has been completed at that point. If the answer is 'Yes', you can see that the clinic then makes the referrals and the connector branches off down to the housing assistance and legal service swim lanes. Those processes could occur in any order. At the end of the steps in each of those lanes ...two connectors branches off the final box...one leads to the circle indicating 'Complete' in the legal services swim lane, and the other leads to the clinic swim lane where the clinic confirms that the housing and legal services were delivered...and then connect to the complete circle.

One of the assumptions we made in this example is that the process we are documenting flows easily from one organization (one swim lane) to the next. When you are documenting your processes, you may discover that your process has many handoffs or transitions between swim lanes. Once again, having some space to document, using sticky notes and shifting things around in during your process mapping exercise 'on the fly' will help you keep organized. While drawing the connectors in last provides flexibility and time savings, if your team feels that the process is getting too complex with too many boxes and they can't follow the flow well...there is no reason that you can't add some connectors. You may have some portion of your process confirmed and can draw in the connectors...but may need some confirmation or further team discussion on some particular area of branching and that's where you might hold off from drawing those connectors in.

The team in our example did a great job, took their time, carefully reviewed their process, drew in all the connector and now have a completed swim lance process map!

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Let's conclude our session with a summary and a few parting thoughts

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As you saw in the example, the power of process mapping (whether swim lane or the standard method) lies in the creation of a visual representation of a process which your team can discuss ...and confirm that you are all on one page and have confirmed what you believe to be true about the process (whether documenting and existing process ...the current state...or designing a new or future state process)

This map can then help you to translate what you've designed into the real world ...implementing and operationalizing a process

Additionally, the process map can help others to understand the process who might not be part of your mapping team as well as for training purpose or potentially improving or optimizing your process at some future point in time



As the saying goes, a picture tells a thousand words...and your swim lane process map can help communicate much in a single glance vs. lengthy written narratives about how the process is designed or currently functions

We'll end here by repeating the key to creating a process map...and that is understanding and communicating visually 'who does what when!

Good luck to you and your team as you engage in creating your own swim lane process maps!

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