

South London – Maternity and Neonatal Safety Improvement Programme QI Network Series - Session 2

Diagnosing: Understanding the Problem

14th September 2022



@HINSouthLondon



healthinnovationnetwork.com

Welcome!

- Please mute your microphone
- Please change your name to the **number matching your Trust and full name** – you can do this by hovering over your name on the participants list and clicking more.

1 = Guys and St Thomas
2 = Kings College Hospital
3 = Lewisham and Greenwich
4 = Kingston
5 = St Georges
6 = Epsom and St Helier
7 = Croydon
8 = Other

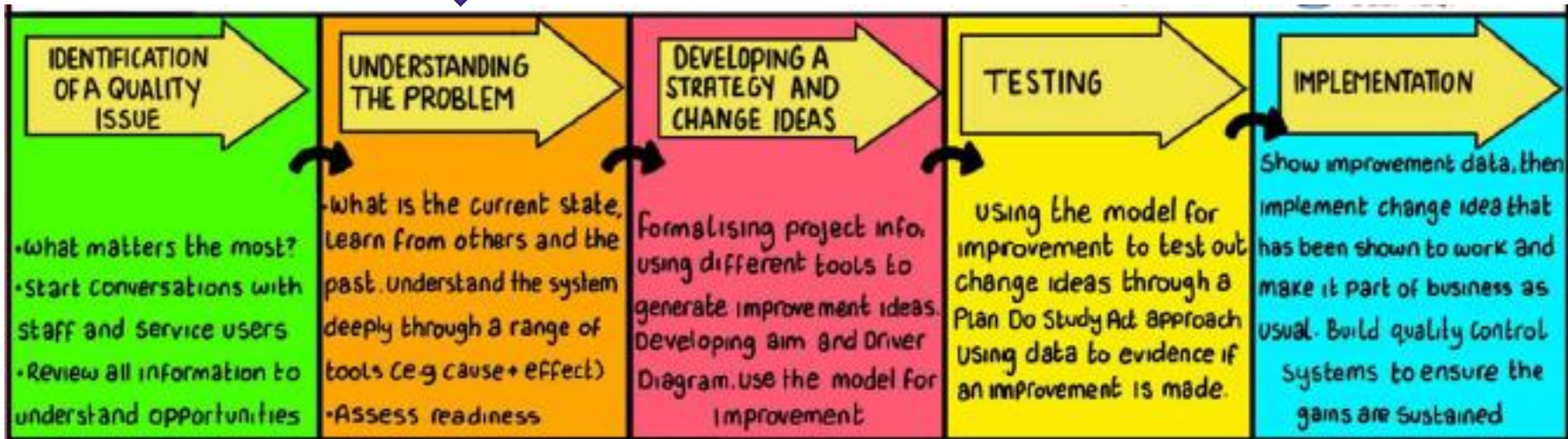
Agenda:

- Welcome and introductions
- Gathering information
- Process Mapping
- Fishbone diagram
- 5 Whys
- SMART goal
- Breakout rooms
- Next steps

Conversation Café

"How confident are you feeling about your project?"





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Communicating and involving



Gathering Information

We can use different types of information to understand a problem more deeply or to prioritise where to focus on a complex problem

Observations

Incidents

Research

Surveys



Complaints

Patient/
woman

Audits

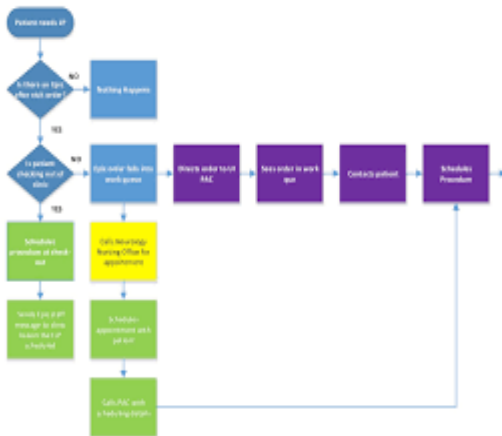
Conversations/
Interviews

Understanding the problem

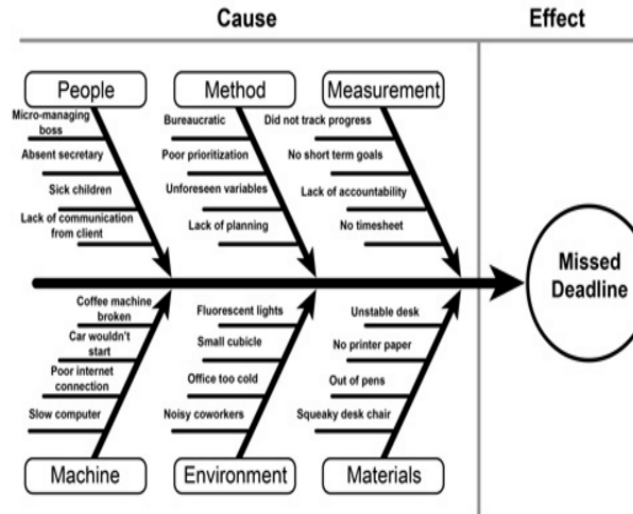
- The first step in starting a QI project is exploring the problem you are trying to solve – **with your team!**
- Experience has shown that the real problem is not always what you originally thought!
- Teams that have properly explored the problem have a greater chance of implementing **sustainable change**
- There are a number of tools available to help you and your team delve deeper into the problem

Tools for exploring the problem

Process mapping



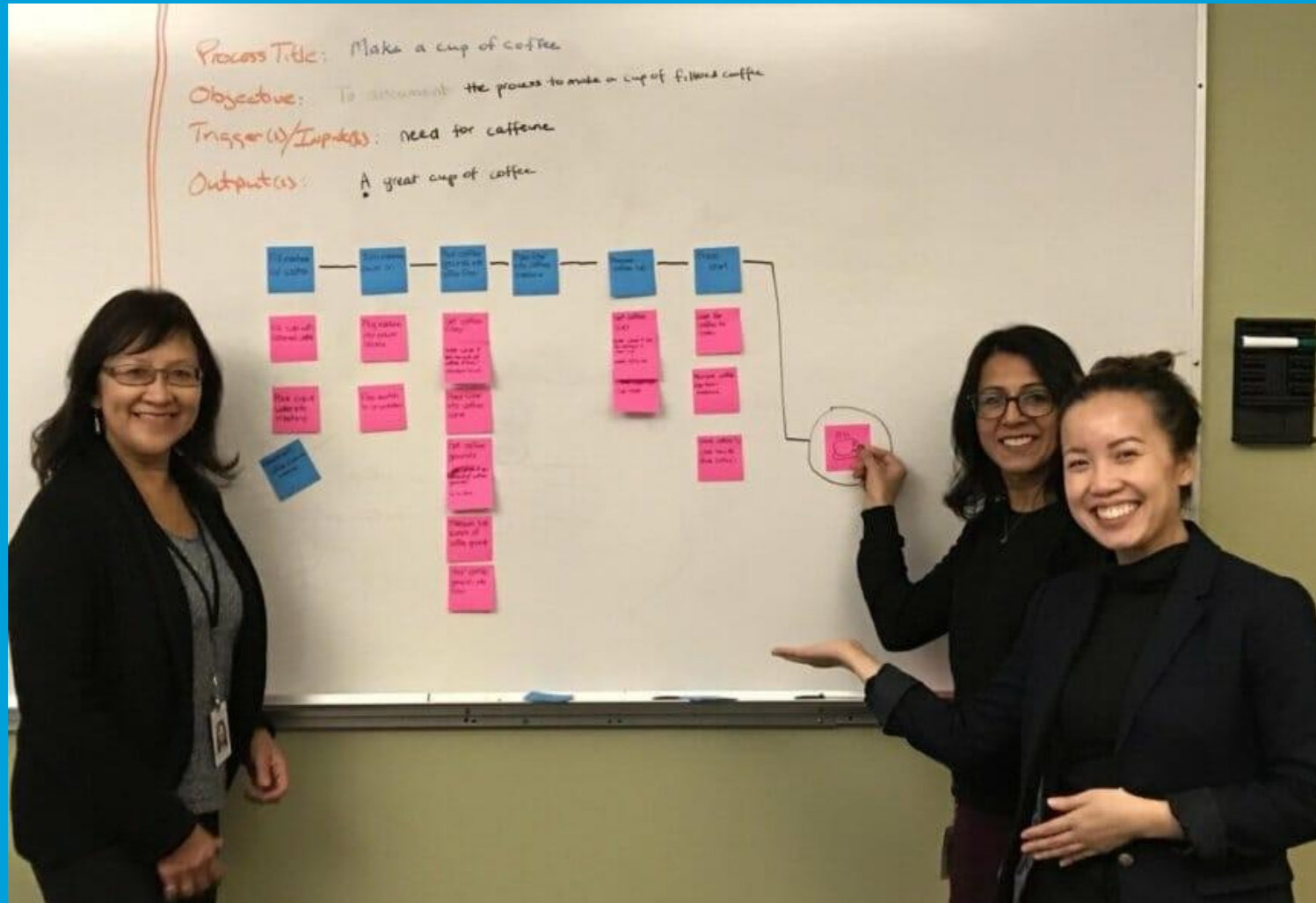
Fishbone diagram



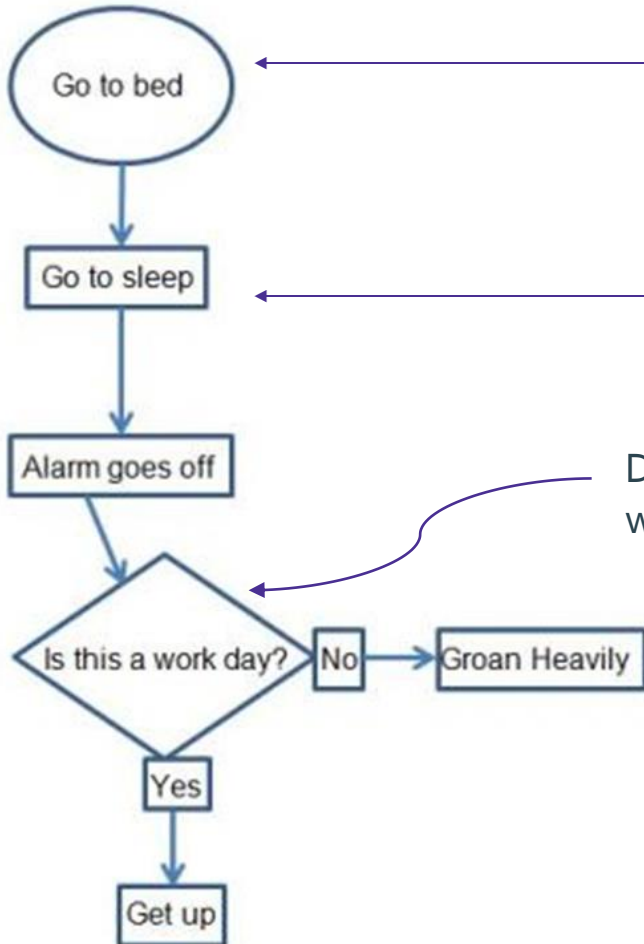
5 Whys



Process Mapping



Process Mapping



Oval: shows the start of a process and the inputs required.

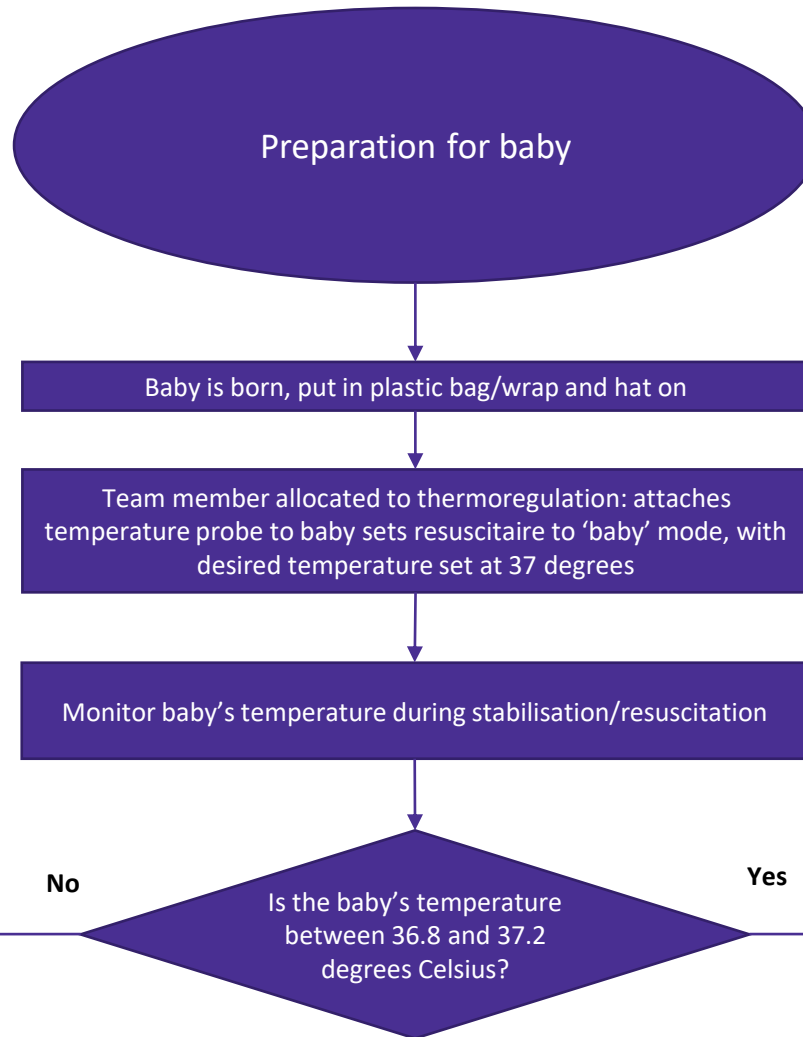
Box: shows the activities of the process.

Diamond: represents the stage in the process where a question is asked or a decision is required.

Process Mapping: Normothermia in the delivery room for babies below 32 weeks gestation

- Is the room temperature good?
- Are fans off and windows closed?
- Is the resuscitaire in the room and pre-warming, with a temperature probe ready?
- Is there a plastic bag/wrap, appropriate sized hat

Box: shows the activities of the process.



Oval: shows the start of a process and the inputs required.

Diamond: represents the stage in the process where a question is asked or a decision is required.

Process Mapping

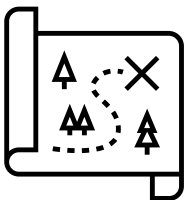
- Process Mapping is a tool to develop a 'map' of a process within a system. It will help you map out the mother and babies journey or relevant processes with a range of people who represent different roles involved.
- Process mapping can be used to help a team visualise and understand where the problems are and identify opportunities for improvement.
- Mapping is a great way of revealing the complete process – can be difficult to remember all the processes / people involved in the baby's journey.

Process Mapping

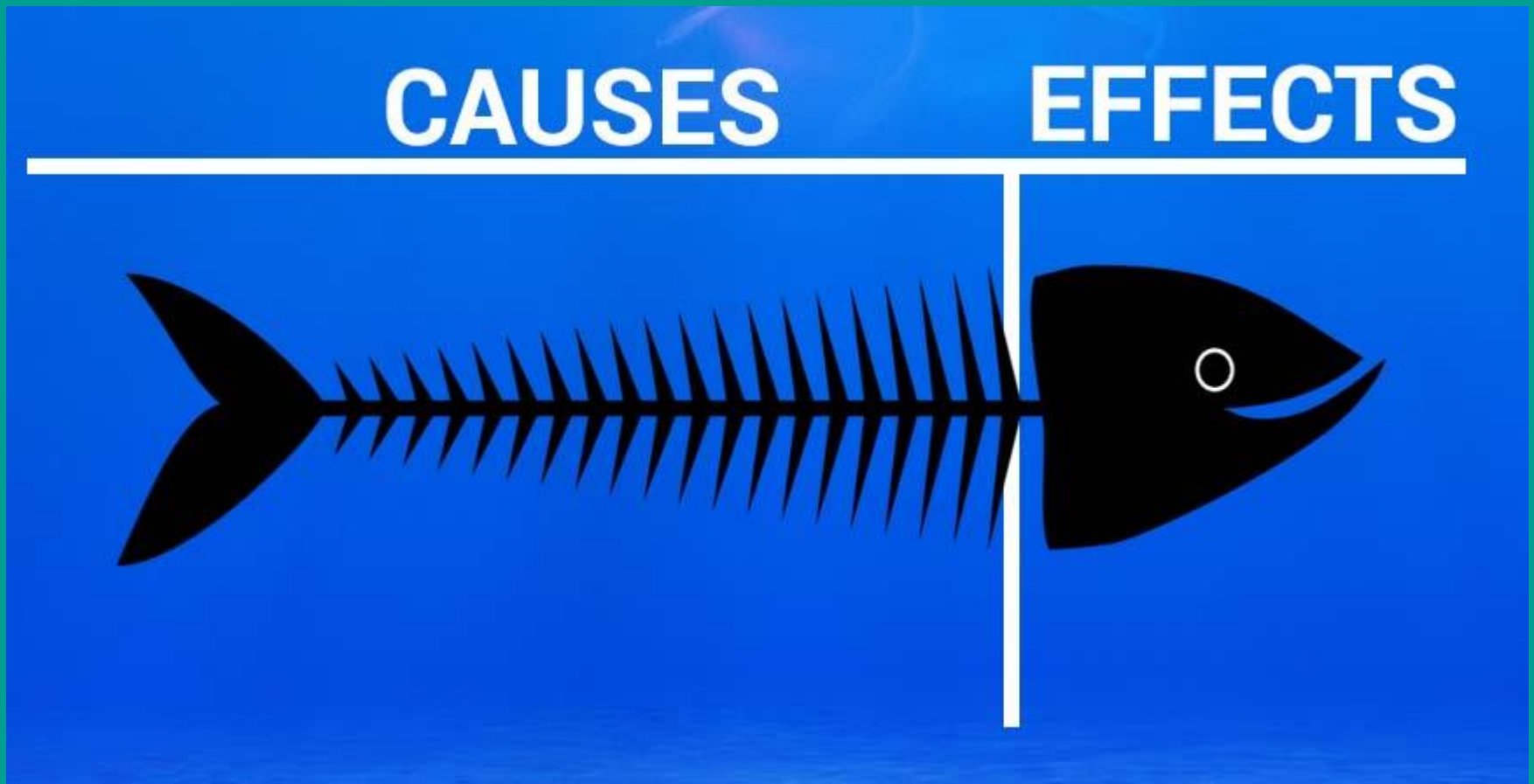
- Start with a high level process map of 5-10 steps
- Set a time limit to complete e.g 20 minutes
- What is the purpose of the session?
- Who will you invite to get a broad perspective of the process?
- Where will you hold the session?
- Large piece of paper/pens/sticky notes/whiteboard?

Process Mapping

- Work with people living the process in their day to day work. They would have better insight into :
 - What is missing?
 - What can be merged?
 - What is unnecessary?
 - What can use better technology?
- Now that the process map has been drawn up, the next step is to identify where the process can be improved.
- Testing ideas for improvement to show any side effects of changes.

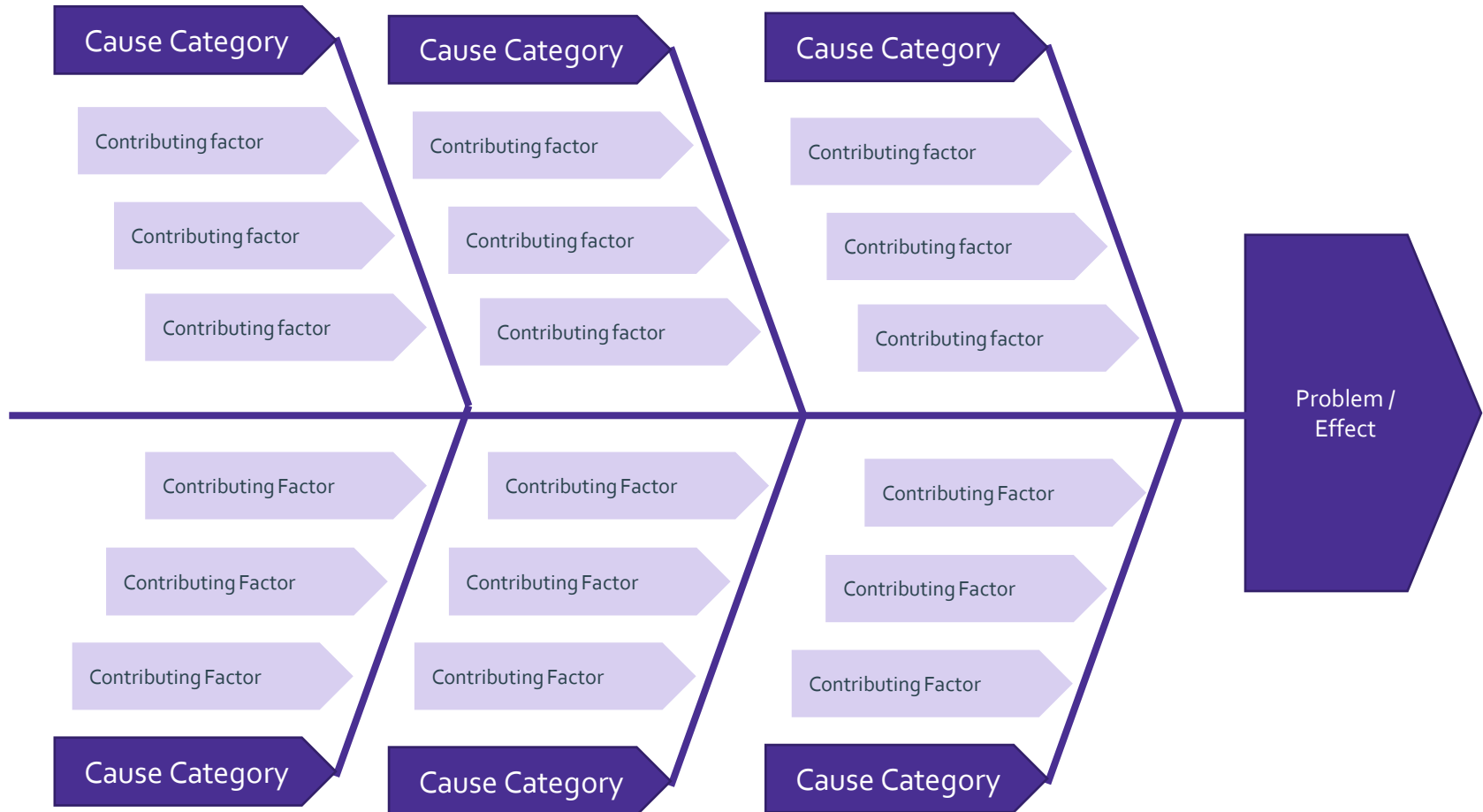


Fishbone Diagram



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Fishbone / Cause and Effect Diagram



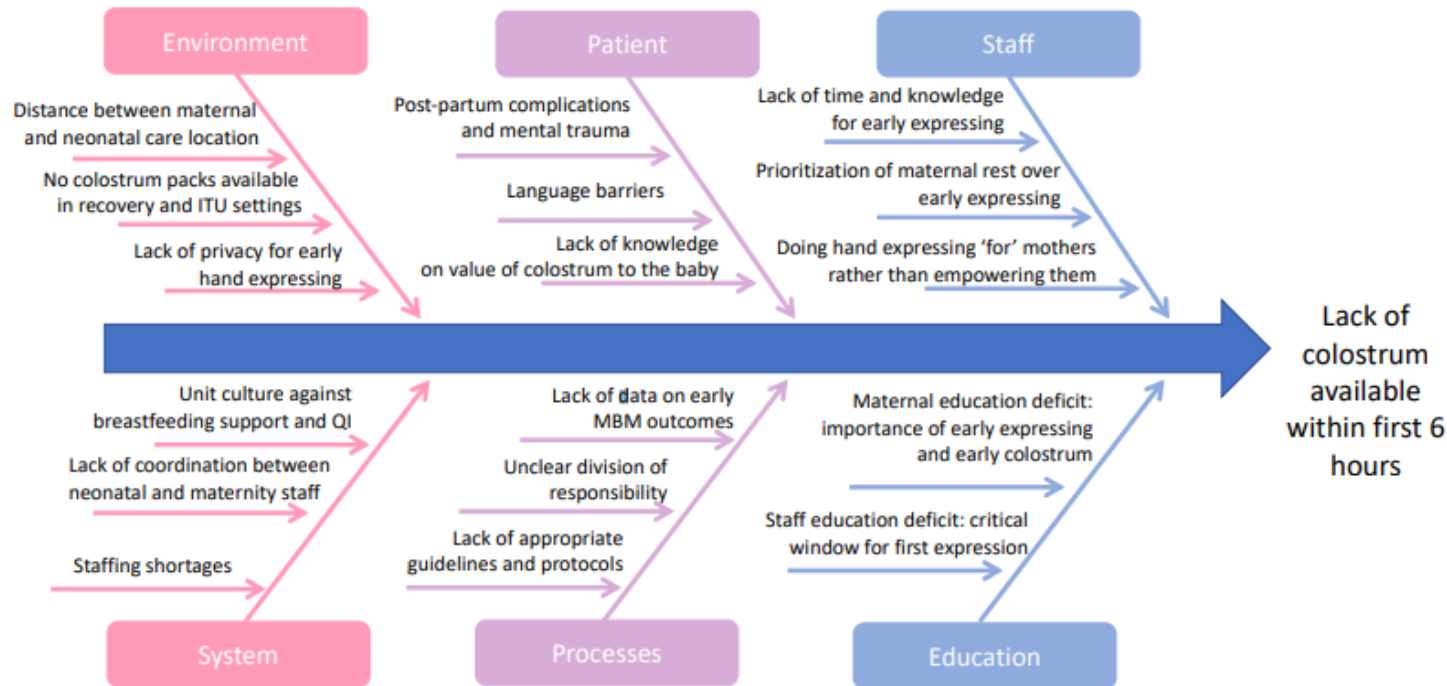
Fishbone / Cause and Effect Diagram

- Fishbone diagrams are used to identify possible causes for a problem.
- Like Process Mapping, Fishbone diagrams can help in brainstorming and visualise problems
- Fishbone diagrams sort ideas into categories.
- Identify possible causes for a problem that might not have otherwise been consider
- Involving team members who have personal knowledge of the systems involved in a problem.

Fishbone / Cause and Effect Diagram

- Potential categories for causes of the problem (as branches off the fishbone):
 - Methods/Processes
 - Equipment
 - Systems
 - People/Patients/Staff
 - Materials
 - Measurement
 - Environment
 - Education
- Keep asking “Why?”

Fishbone / Cause and Effect Diagram for early colostrum delivery



Once the fishbone / root cause analysis has been completed, you can consider addressing the contributing factors as appropriate using the Model for Improvement methodology

5 Whys : Finding the Root Cause

The key to solving a problem is to first truly understand it.

Often, our focus shifts too quickly from the problem to the solution, and we try to solve a problem before comprehending its root cause. What we think is the cause, however, is sometimes just another symptom.

One way to identify the root cause of a problem is to ask “Why?” five times. When a problem presents itself, ask “Why did this happen?” Then, don’t stop at the answer to this first question. Ask “Why?” again and again until you reach the root cause.

Institute for Healthcare Improvement, Boston, Massachusetts, USA

WHY?

WHY?

WHY?

WHY?

WHY?

Root-cause

Now start to
think of solutions

Why... Why... Why... Why... Why?

They brought in a pigeon expert.



He determined that the birds were there to eat the spiders.



Five Whys example

Define the Problem: Maternal breast milk not being received within 24 hours of birth by all babies <34 weeks gestation

1. **Why is it happening?**

Maternal breast milk (colostrum) not being transported to preterm baby on neonatal ward

2. **Why is that?**

Lack of coordination between neonatal and maternity staff

3. **Why is that?**

Unclear division of responsibility

4. **Why is that?**

Lack of appropriate guidelines and protocols

5. **Why is that? (Root cause)**

Staff education deficit regarding steps to take to help mother with early colostrum expression and when to transport to neonatal unit

NOTE: If the final "Why" has no controllable solution, return to the previous "Why."



SMART goal

S

Specific

State what you'll do
Use action words

M

Measurable

Provide a way to
evaluate
Use metrics or data
targets

A

Achievable

Within your scope
Possible to accom-
plish, attainable

R

Relevant

Makes sense within
your job function
Improves the
business in some
way

T

Time-bound

State when you'll get
it done
Be specific on date
or timeframe

Be SMART

- **Specific:** Make sure your project objective statement clearly covers the project your team is currently working on. Avoid writing overly broad project objectives that don't directly connect to the result of the project.
- **Measurable:** At the end of your project, you need a way to clearly look back and determine if your project was a success. Make sure your project objectives are clearly measurable things—like percentage change or a specific number of assets.
- **Achievable:** Are your project objectives something you can reasonably hope to achieve within your project? this is connected to your [project scope](#)—if your project scope is unrealistic, your project objectives likely will be, too. Without Achievable project goals, your project may suffer from [scope creep](#), delays, or overwork.
- **Realistic:** When you're creating your project objectives, you should have a general sense of your [project resources](#). Make sure your objectives are something you can achieve within the time frame and with the resources you have available for this project.
- **Time-bound:** Your project objectives should take into account how long your project timeline is. Make sure you factor in the time you have available to work on your project.

Weak vs strong aims

Aim	Why is it weak?	Make it stronger
<p>To facilitate delivery of normothermia by clinicians in the neonatal unit by providing practical quality improvement (QI) resources in the form of a toolkit and supporting materials</p>	<p>S: Who?</p> <p>M: How are we measuring success?</p> <p>T: By when?</p>	<p>To achieve optimal normothermic range* for 10% of babies admitted below 32 weeks gestation by July 2023 in Croydon NHS Trust</p> <p>*defined between 36.5-37.5 degrees Celsius</p>
<p>To improve the number of preterm birth babies receiving optimal cord management</p>	<p>S: How preterm?</p> <p>M: By how much?</p> <p>T: By when?</p>	<p>To increase the number of preterm babies (less than 34 weeks gestation) receiving Optimal* Cord Management by 5% by July 2023 in Kings College Hospital NHS Trust</p> <p>*defined by waiting at least 60 seconds before clamping the umbilical cord</p>

Now it's your turn – Breakout room (30mins)

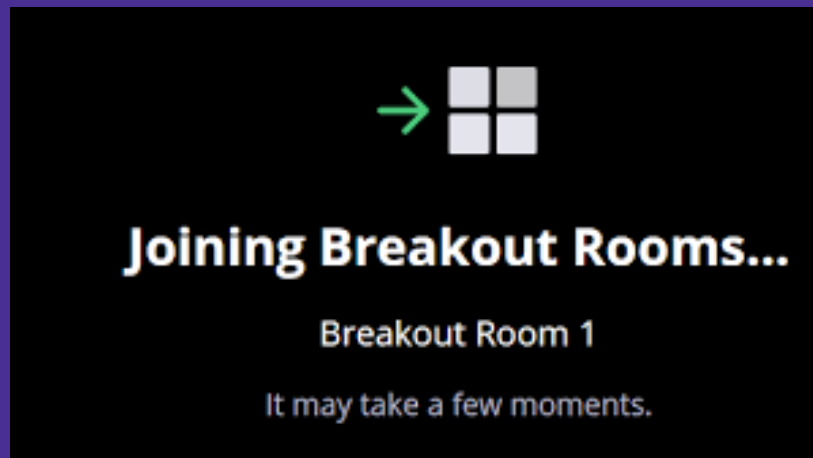
Step 1: In your Trust project team, understand what the key problem is by going through the **5 Why's** activity with your team mentor.

Step2: Define a clear SMART goal for your project

Take notes and feedback

Please now enter the room for your Trust.

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Next steps

- The next QI workshop is on 7th December, 12.30-2pm
- Your task to complete by the next collaborative session is to:
 - **Bring back baseline data related to the problem**
- If you have any questions please reach out to the MatNeoSIP lead – Gemma.dakin@nhs.net

Close and Thank you



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