UKKA UK Kidney Association

KQIP Kidney Quality Improvement Partnership

# KQIP Quality Improvement Understand the problem before finding solutions

## PD Mentoring Programme Development Day
## 21st April 2026

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DAYLife Helping more patients dialyse from home

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# 10 steps in QI

KQIP Methodology

1. Agree an area for improvement using data
2. Prepare to lead a QI team
3. **Understand your system and problem**
4. Define project aim and scope
5. Identify and engage stakeholders
6. Define drivers and develop change ideas
7. Agree measures including baseline data
8. Test change ideas using PDSA cycles
9. Display data over time to understand impact
10. Sustain and share improvements




*IHI Model for Improvement*

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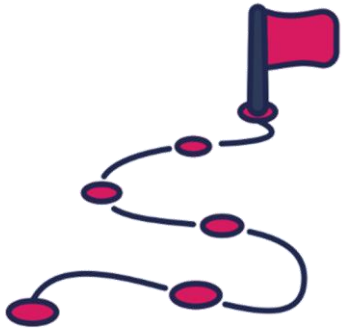
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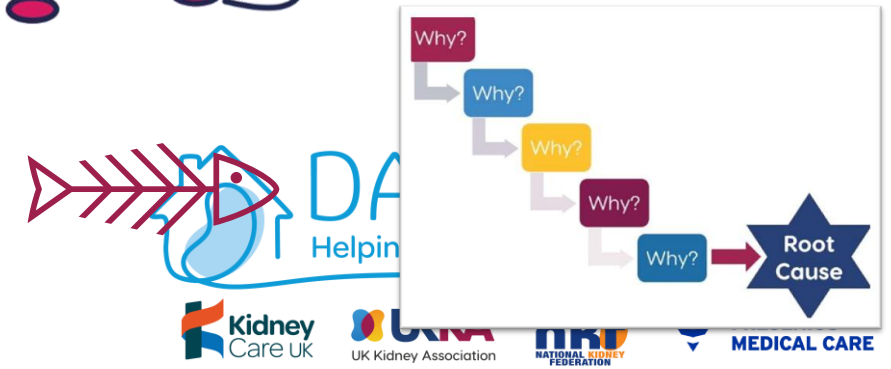
# Aim and Objectives

**The aim of this workshop** is to provide you with the skills to understand the problem before finding the solutions

**You will have an understanding** of some methods to understand your problem:

- Affinity Diagram
- Fishbone diagram
- Root cause analysis using “5 whys”
- Pareto 80/20 chart
- Process mapping your pathway






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# Affinity diagram

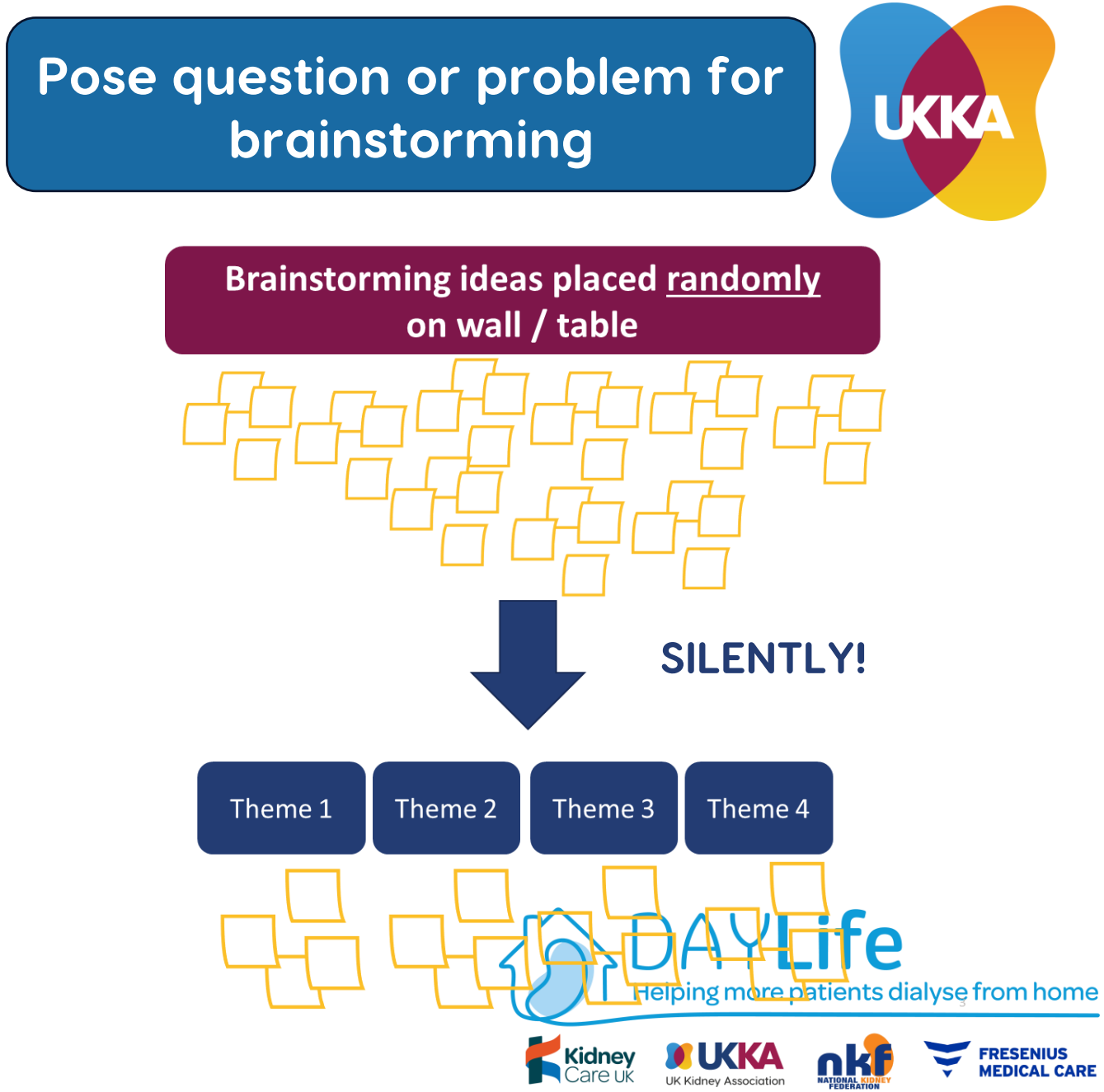
- Graphical tool to organise a collection of unstructured ideas
- Builds on idea-generation / brainstorming
- Encourages creativity to address difficult issues where answers are unknown
- Allows formation of non-traditional connections
- Identifies themes and drivers of change
- Works well with 5-6 participants
- Can be done at any stage of a project




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# Affinity diagram method

- **Step 1** – pose question or problem for brainstorming
- **Step 2** – participants write ideas (avoid one-word answers) on sticky notes and place randomly on wall or large table
- **Step 3** – **silently** – participants move sticky notes into themes, continuing until all notes are in themed groups
- **Step 4 – talking** – participants agree names for themes and write on cards




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# Affinity diagram – tips for participants

## Silent grouping of ideas into themes

- Go for rapid gut reactions
- Continue until all the ideas/notes have been grouped
- If some are “stand-alone” don’t force them into an existing group
- If some belong to more then 1 group, make a copy and add to each relevant group
- Participants continue to silently move the notes until all are happy
- Notes may be moved more than once
- If a note applies to more than 1 theme, make copies and place in each relevant theme

# Affinity diagram – tips for participants

## Talking – participants agree names for headings for each group

- Create a header-card for each one, which captures the essence of what links all the ideas in that group
- Avoid one-word headers
- Draw and record the finished diagram (see next slide)

# Question or name of problem

eg. what are the barriers to PD?

Peritonitis

- Patient awareness
  - idea
  - idea
  - idea
- Staff training
  - idea
  - idea
- Patient education
  - idea
  - idea
  - idea
  - idea
  - idea
- Refresher training
  - idea
  - idea
- Patient compliance
  - idea
  - idea
  - idea

**Review the output with your team!**

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# What next after affinity diagram?

- It depends on what stage you are at in your project

- Capture the output in a cause and effect (fishbone) diagram
  OR
- Use to create a driver diagram

- Use to communicate with wider stakeholders

- Use to identify PDSA cycles to be planned

# Cause and Effect diagram (Fishbone)

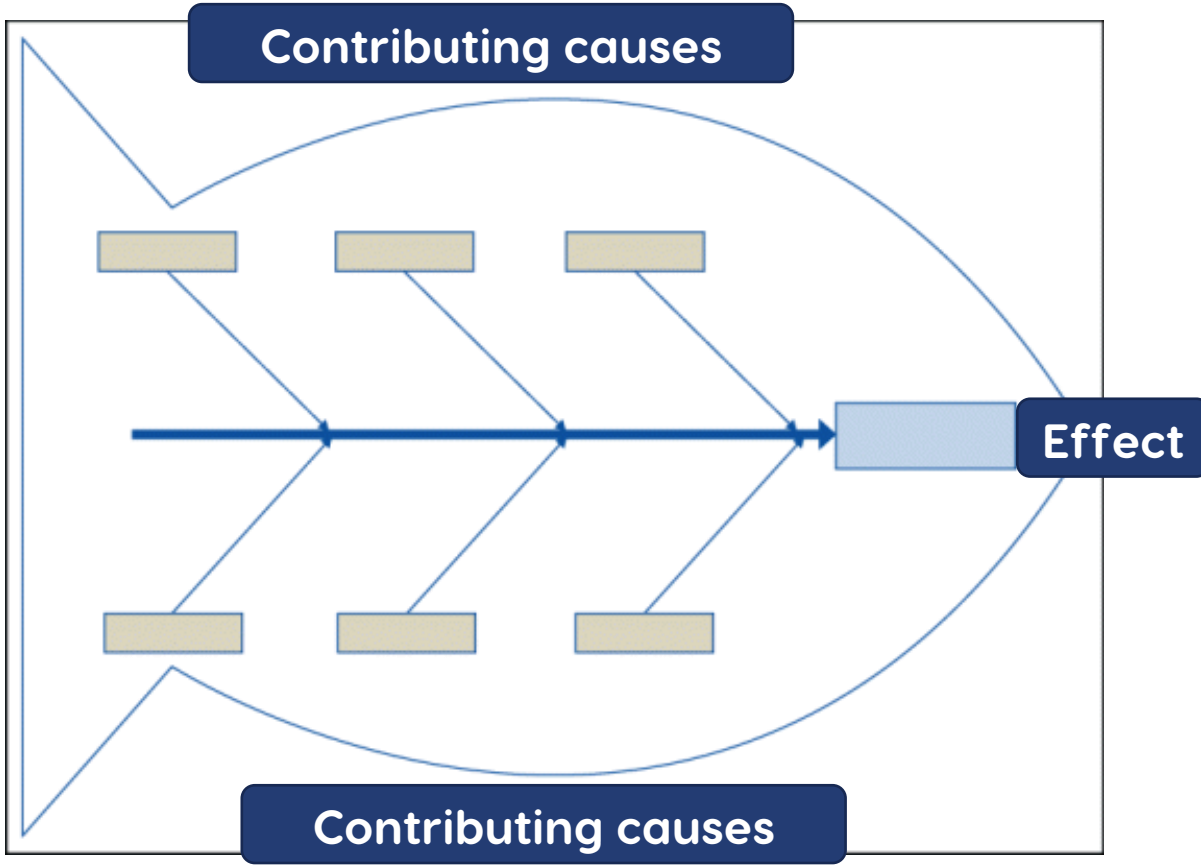
Sometimes call a **fishbone diagram**

Helps you to think through and fully understand a **problem**

Group members gain a **shared insight**
**Quick –** 20-40 minutes

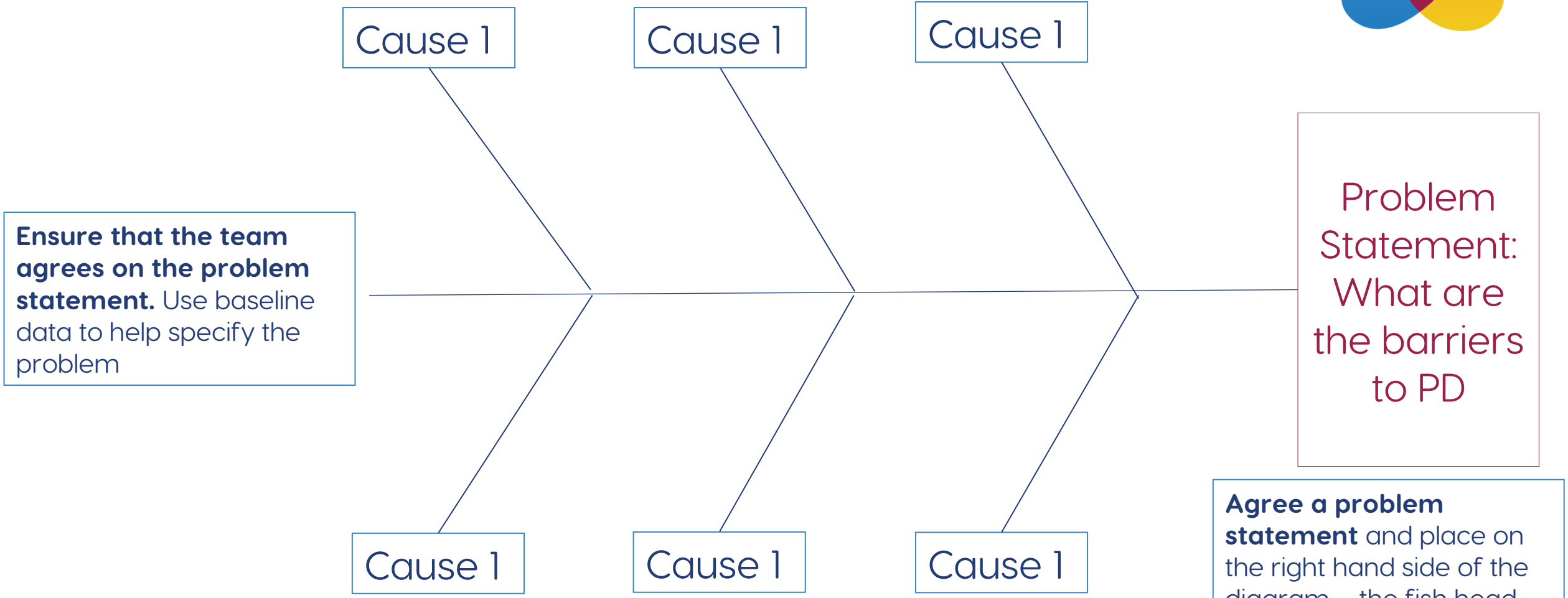
Develop **possible solutions**

Creates a snapshot of **collective knowledge**




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# Constructing your fishbone diagram

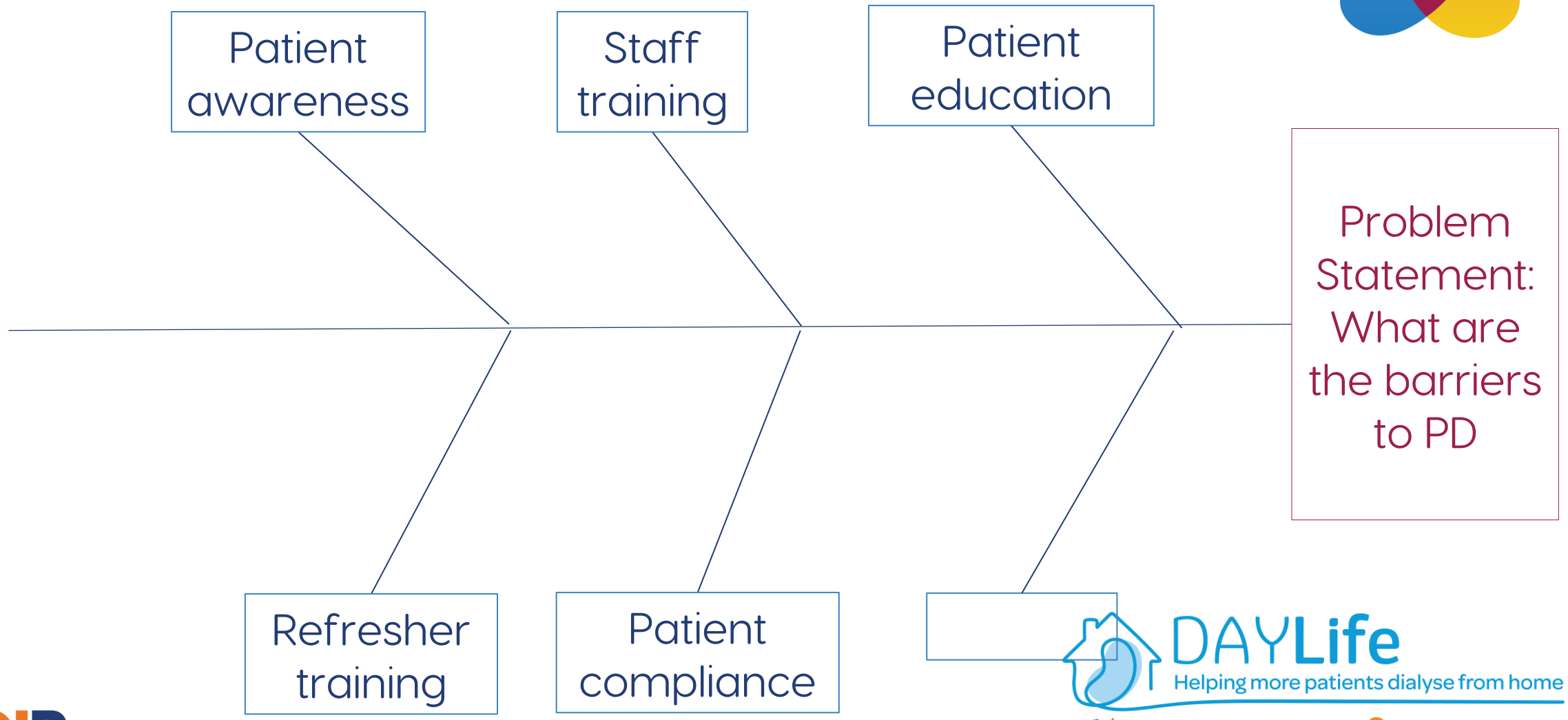



**Ensure that the team agrees on the problem statement.** Use baseline data to help specify the problem

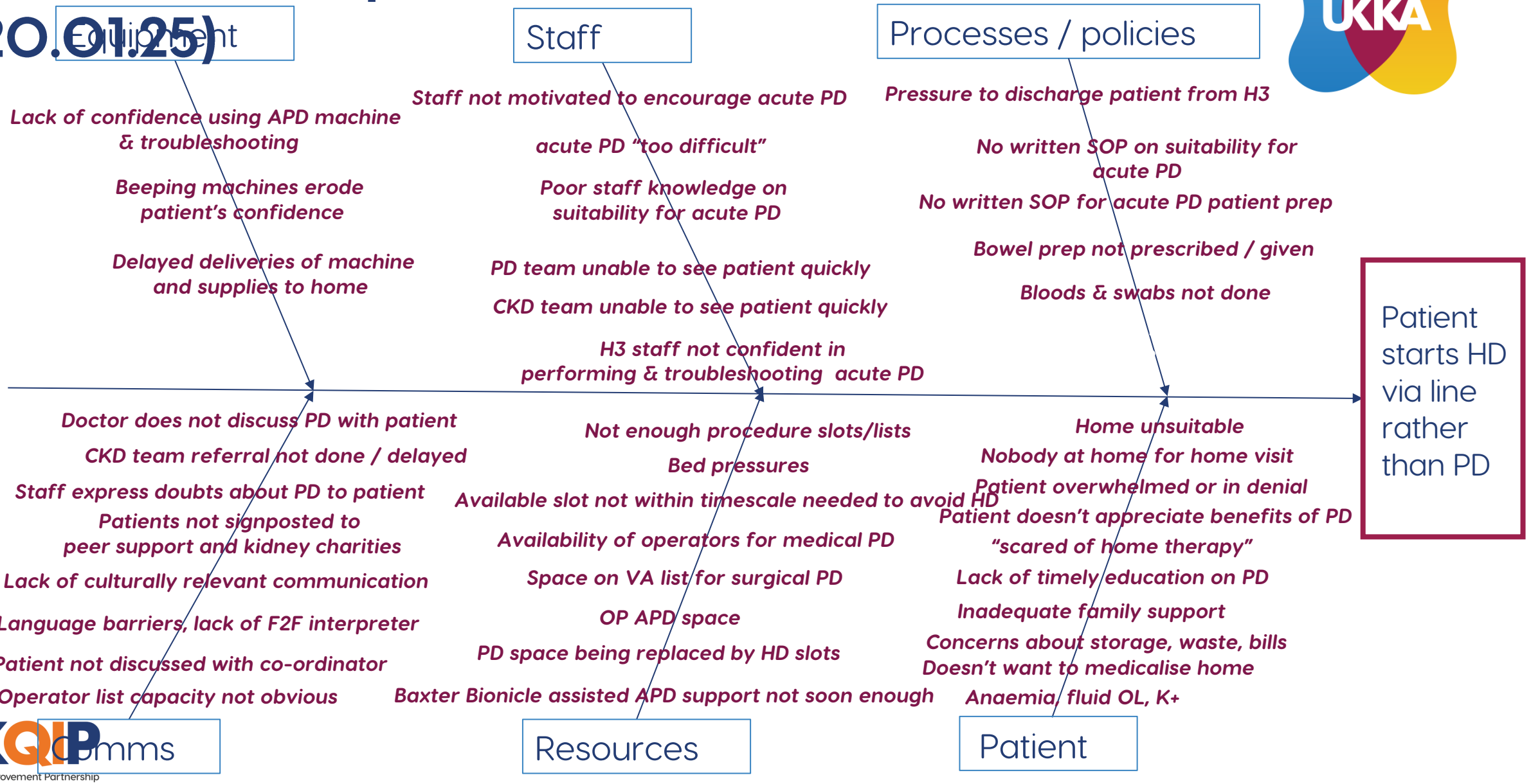
**Agree a problem statement** and place on the right hand side of the diagram – the fish head

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# Agree the major cause categories



# Understand the problem – barriers to acute PD (20.01.25)




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# 5 Whys

**Quick** – meet as a team

Find the **real underlying causes,** not just the symptoms

Can help to determine **the relationship between root causes** of a problem

Helps to focus resources in the **correct area**



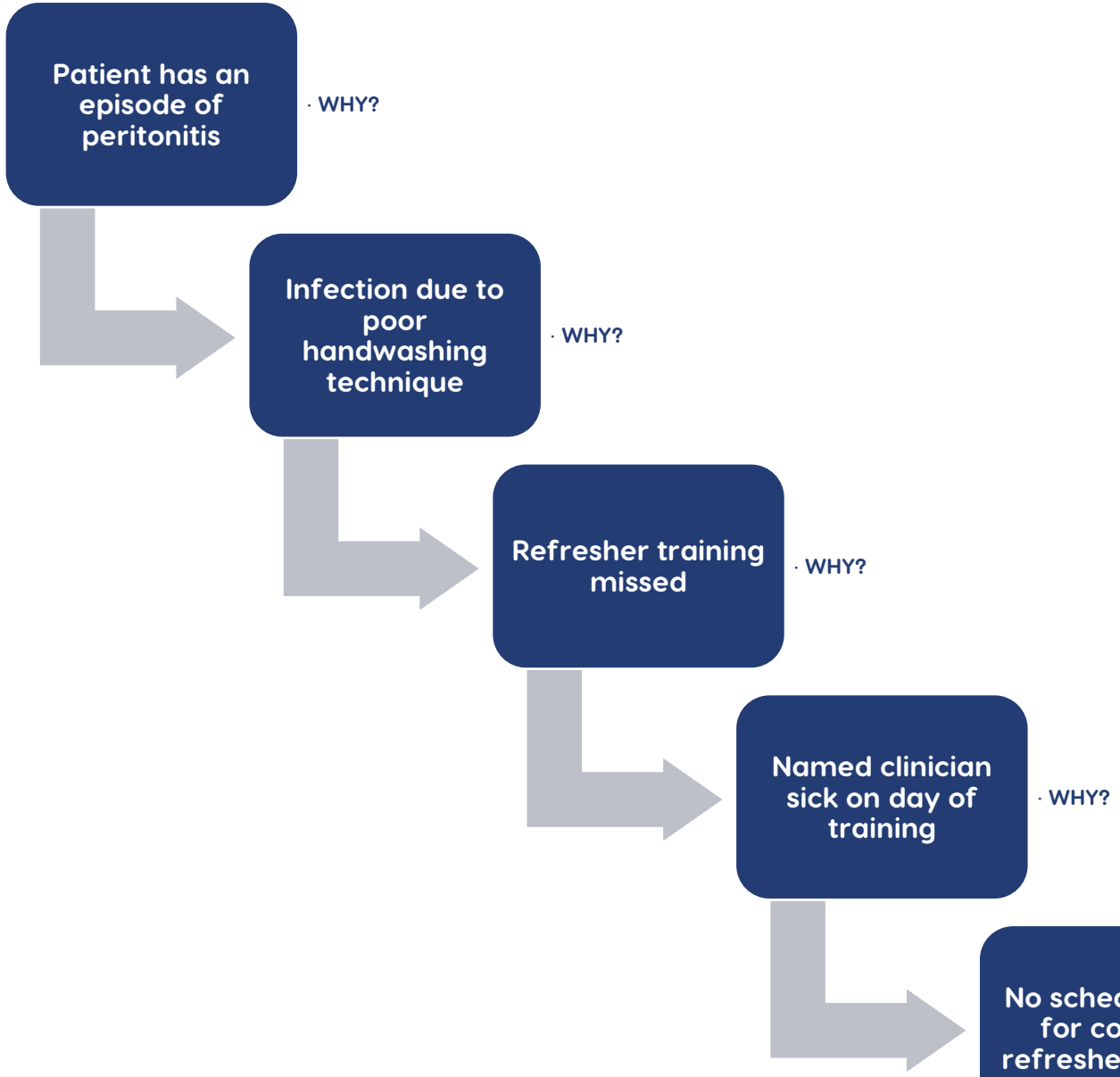
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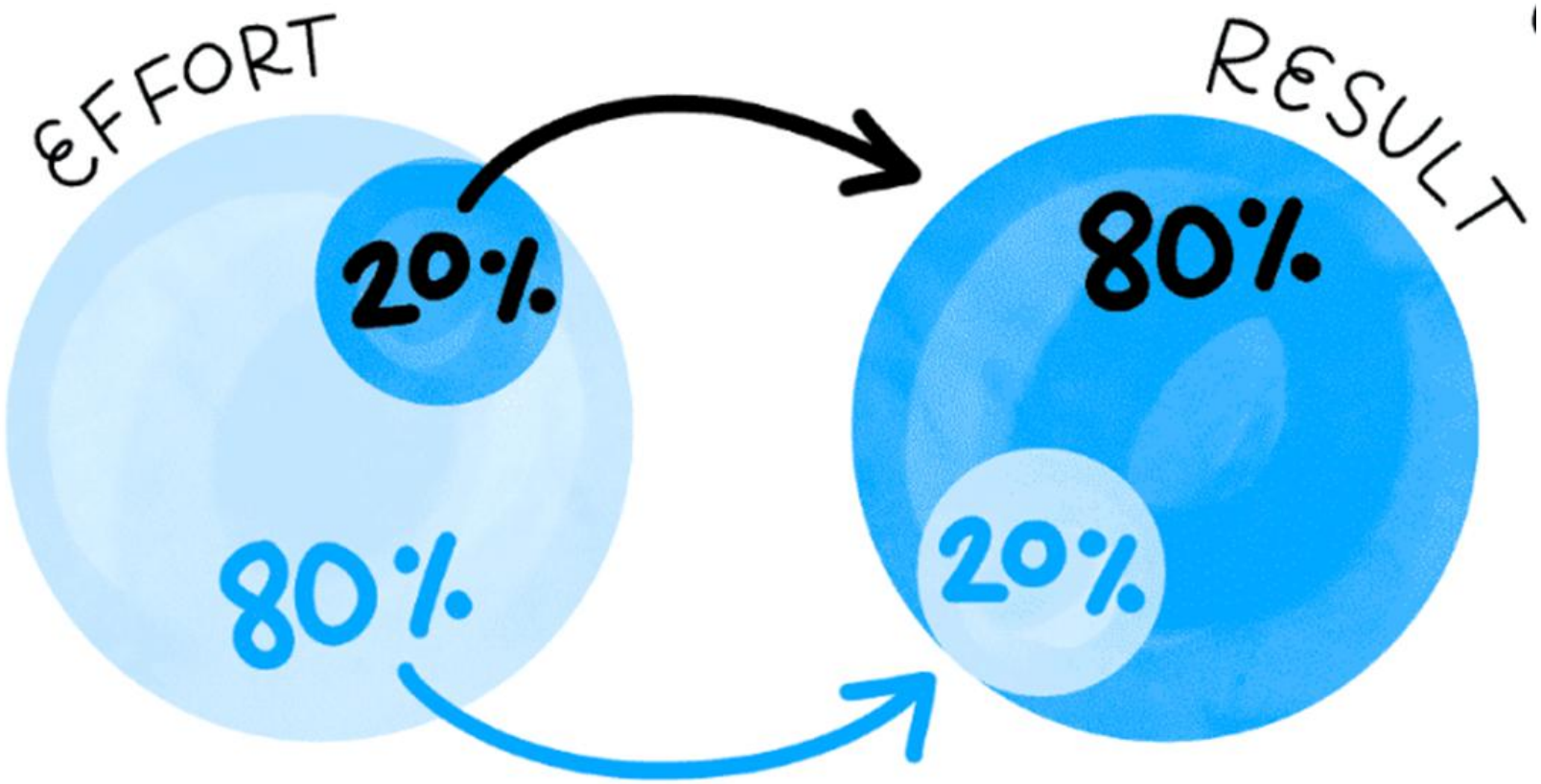
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# 5 Whys – why do patients have episodes of peritonitis?

1. Ask why the effect happened
    2. Ask why no. 1 happened
        3. Ask why no. 2 happened
            4. Ask why no. 3 happened
                5. Ask why no. 4 happened
                    6. Keep asking until you reach the end


Patient has an episode of peritonitis
· WHY?
Infection due to poor handwashing technique
· WHY?
Refresher training missed
· WHY?
Named clinician sick on day of training
· WHY?
No schedule/plan for covering refresher training

# The Pareto Principle



# The Pareto Principle

- 80% of the effects are a result of 20% of the causes
- Use in combination with other improvement tools
- Guiding principle and rule of thumb to help you identify the vital few to focus your efforts on for improvement work

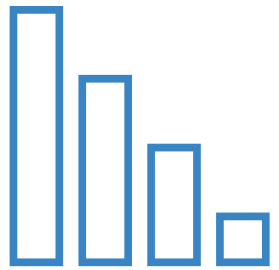
# Pareto chart

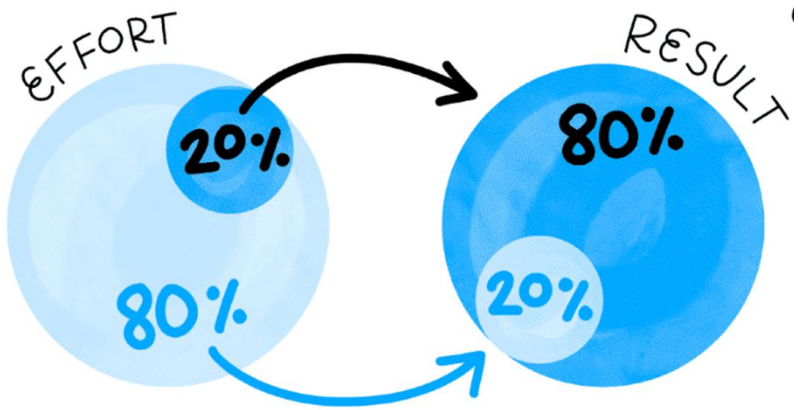
Focus efforts on the **problems that offers the greatest opportunity for improvement**

Principle = **roughly 80% of the effects come form 20% of the causes**

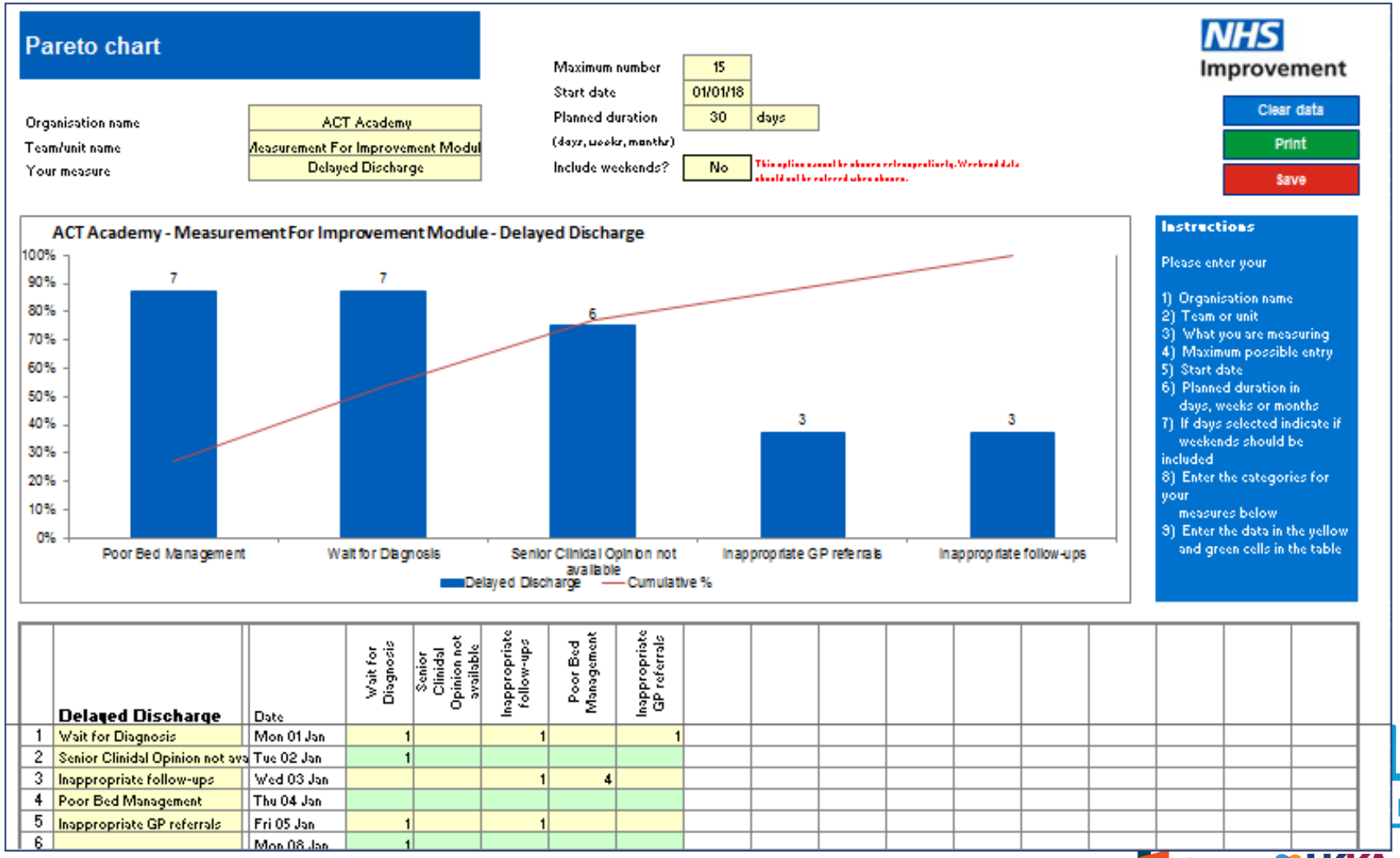
Helps to quickly identify the **major causes of a problem**

Useful to use a pareto **after a fishbone diagram.**





# Pareto chart tool from NHS Improvement website



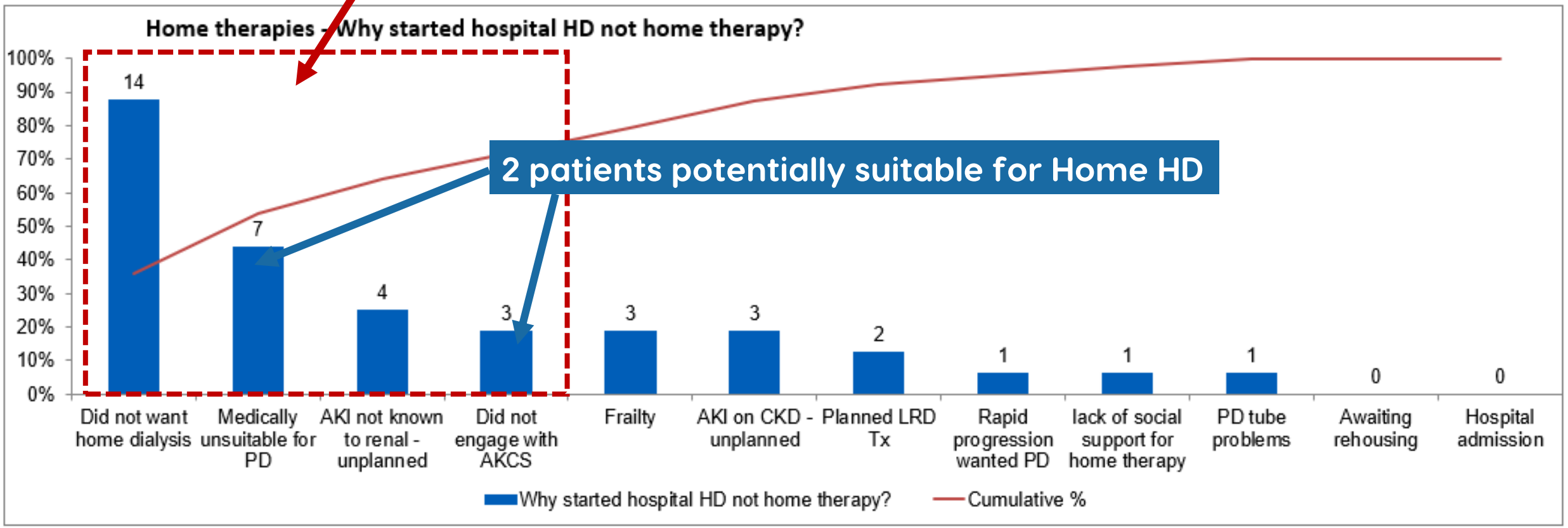

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# Why not home therapy?
# – dialysis starters Jan-Apr 2023 – Pareto chart

**We should focus on these areas to make a significant impact**




**2 patients potentially suitable for Home HD**

# Process mapping

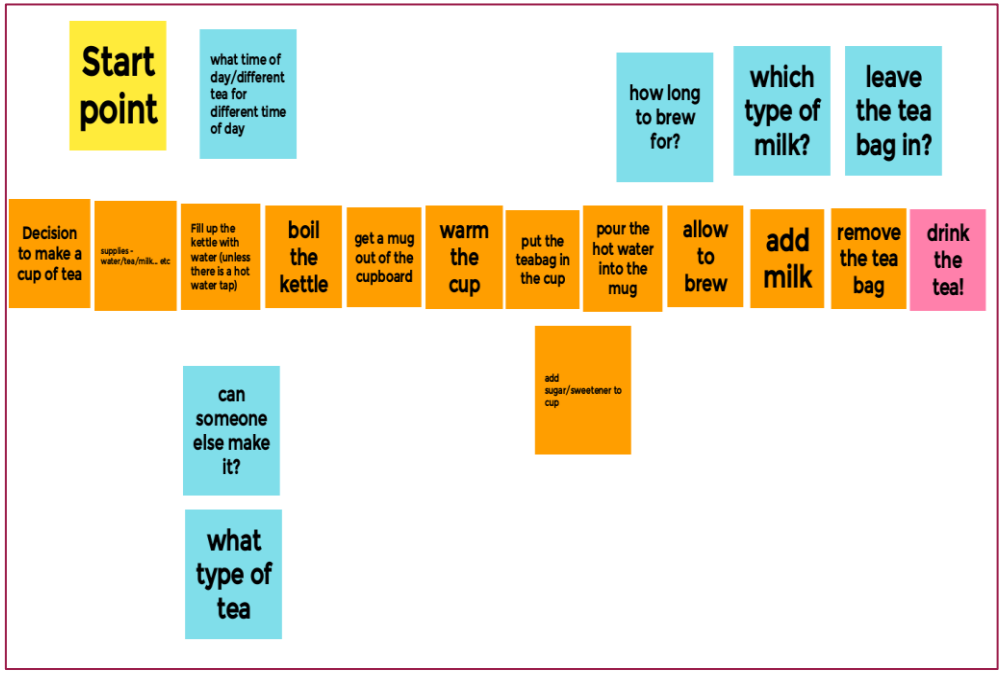
**Visual picture** of current pathway

**Promotes understanding of reality** of the process

**Exposes** areas of **duplication, waste, unhelpful variation, and unnecessary steps.**

**Builds relations** within the team, across functional and organisational boundaries.

**Highlights** possible **unintended consequences later of changing something** in the pathway.




**Follow what usually happens**
**Don't get stuck on occasional events**

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# Understanding the System – Acute PD Process

START – H3 patient likely to need inpatient dialysis

Review clinic letters for modality, postcode, are they known to renal and AKC team

Assess suitability for PD using the QRG

if complex abdominal scars, may need surgical insertion under GA on VA list

Patients highlighted on the on-call handover and H3 daily morning meetings

Referral to CKD team

CKD referral often incomplete

CKD team process referral

Document patient details on CKD team 'white board' word document

CKD team see patient on the ward ideally with carers in attendance, give leaflets etc.

Option to take to education room in renal OPD if well enough

CKD team liaise with PD team and ward team and document decision in patient notes

CKD team assess home suitability; PD patients are prioritised (usually within 2 working days)

Decision made for PD or not

PD nurses do "PD prep" with patient and carers, consent form, consultant does abdo exam

if complex abdominal scars, ?need surgical insertion on VA list

H3 doctors prescribe bowel prep and meds (EPR order set "PD catheter insertion")

Ensure order set is used to avoid errors

PD team list for PD insertion under LA (regular list on Fridays + limited ad hoc capacity

PD insertion capacity limited by 2 operators

H3 nurses administer bowel prep

Bowel prep sometimes given late if prescribed as stat

**PD tube inserted under LA in H3 procedure room, AXR to check position, initial PD exchange done**

Medical decision whether to start PD as IP or wait 7-14 days

If needed, PD starts with CAPD in the daytime on bedrest

PD team order and plan delivery, usually 3 working days

**Patient discharged home**

May need outpatient APD until delivery of supplies

PD team review patients by phone and do home visit to check wellbeing, wound etc.

FINISH - Patient begins home training, usually takes 3-5 days

Ward nursing staff may lack the knowledge, skills and confidence to talk to patients about PD as a treatment option and/or do acute PD treatment including troubleshooting

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