
# Medication errors- practice review

Liz Cooper

# working **together**…

confidentiality

respect

diversity of opinion can be enriching

look for the benefits of an alternative opinion

positive challenge

naïve questions are valuable

go “off piste”……

enjoy ourselves

# aims

To review the occurrence of medication errors in your service, look at causes , audit practice and carry  changes forward

# Discussion:

- Having reviewed the errors , issues in your own services what were your findings ?
- Did you find :

- Missed medication
- Over/ under dosage
- Lack of knowledge

# Definition:

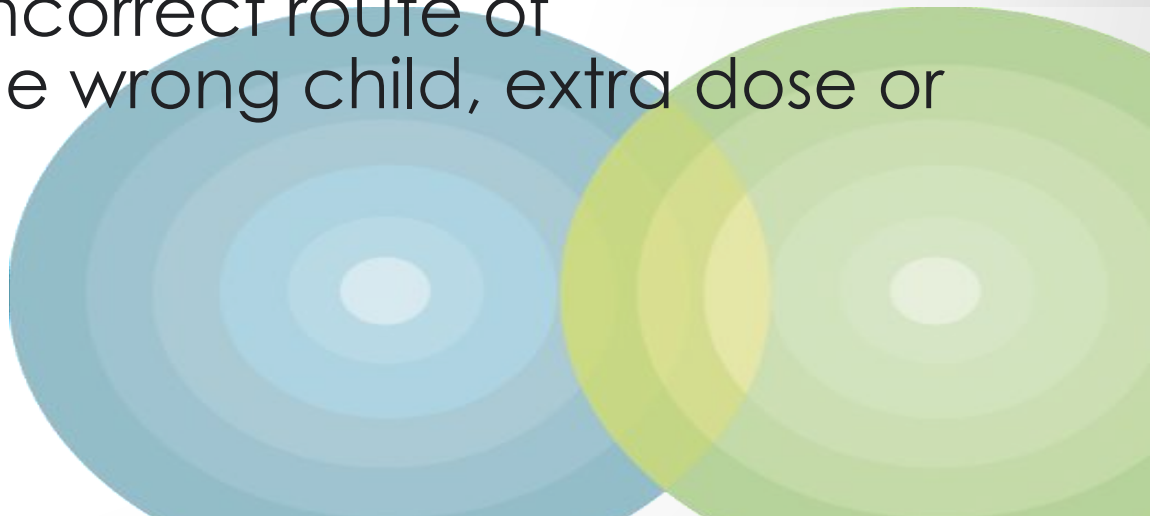
- Medication errors are any Safety Incidents where there has been an error in the process of prescribing, preparing, dispensing and administering, monitoring, recording or providing advice on medicines. Medication errors can occur at many steps in children's care, from ordering the medication to the time when the child is administered the drug.

(*adapted from NHS Resolution Site 2022*)

# Most common errors- findings from root cause analysis

- Wrong person…… surprisingly common .
- Omission- drug missed at the right time.
- Wrong time - delay, missed drug given too late.
- Prescribing- wrong drug , wrong dose, wrong type .
- Medications going missing
- Unauthorised drug.

- Administration errors including the incorrect route of administration, giving the drug to the wrong child, extra dose or wrong rate.

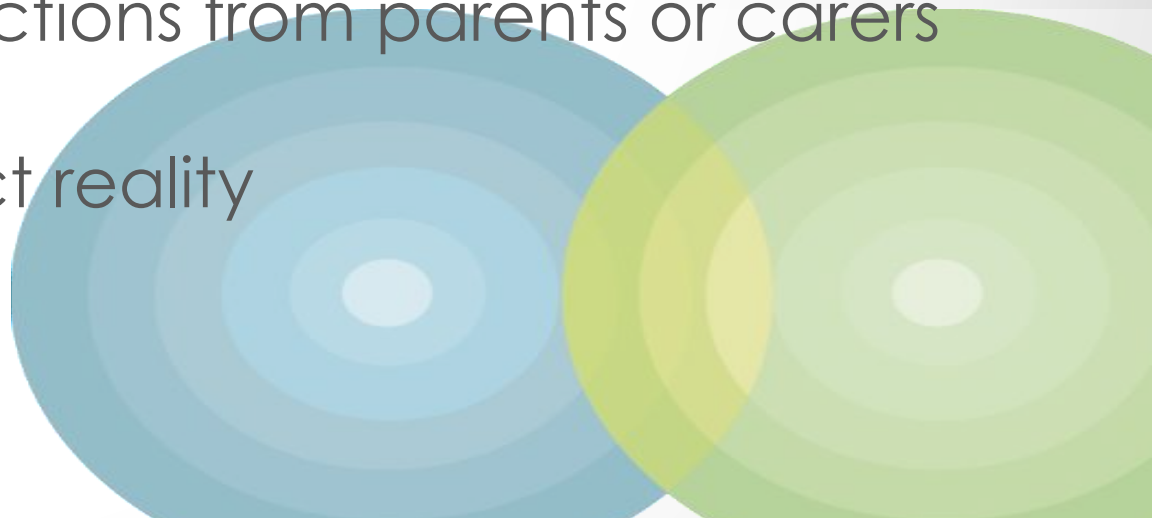


# Annex A Questions

- Have staff received specific training since the last inspection in relation to children's healthcare needs?
- Do you have systems in place to ensure that the administration of medication is accurate?
- Have you had to take any action as a result of any medication error?

# Common contributing factors to errors:

- Adequate space
- Shifts-staff tiredness, poor planning
- Capacity
- Time ?poor planning again?
- Interruptions
- Not enough staff
- Staff not trained
- Overwriting by staff
- Taking telephone changes or instructions from parents or carers
- Poor oversight and monitoring
- Policy not fit/unclear, doesn't reflect reality
- Anything else??



# Understanding why errors and patterns occur

- Using root cause analysis

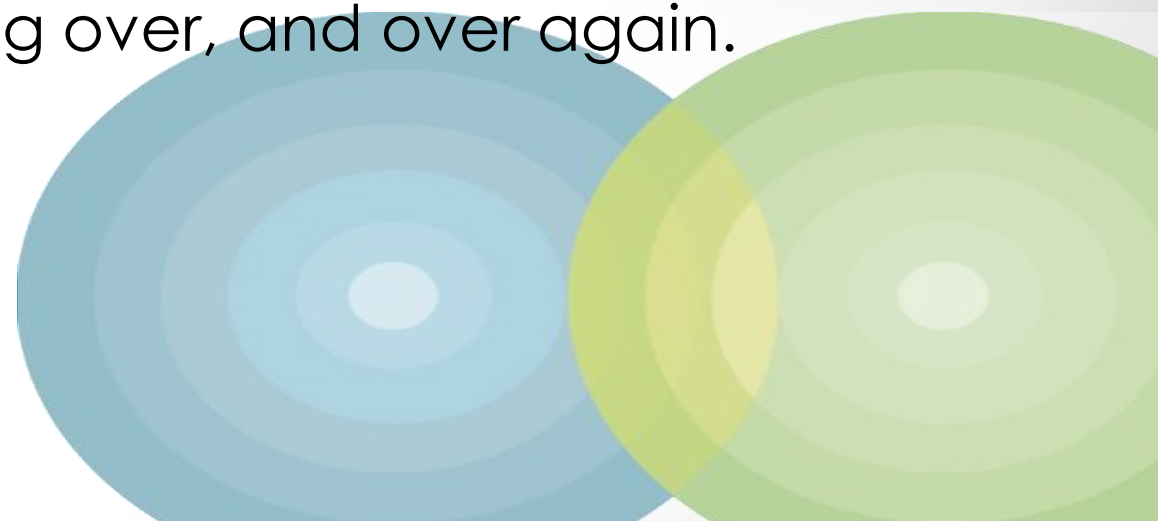
**Root Cause**. A **root cause** is a factor that caused a nonconformance and should be permanently eliminated through process improvement. **Root cause analysis** is a collective term that describes a wide range of approaches, tools, and techniques used to uncover **causes** of problems.

Sounds dire !!! Can't you tell it came from the car industry!
Rephrased it means that:-

-**Root cause analysis** is an approach for identifying the underlying causes of an incident so that the most effective solutions can be identified and implemented.

# Tracing a Problem to its Origins-

- What do you do when you have a problem/incident/ accident / pattern at work?
- Do you jump straight in and treat the symptoms, or do you stop to consider whether there's actually a deeper problem that needs your attention?
- If you only fix the symptoms – what you see on the surface – the problem will almost certainly return, and need fixing over, and over again.



# Tracing a Problem to its Origins

- Root Cause Analysis (RCA) is a popular and often-used technique that helps people answer the question of why the problem occurred in the first place. It seeks to identify the origin of a problem using a specific set of steps, with associated tools, to find the primary cause of the problem, so that you can:
- Determine what happened.
- Determine why it happened.
- Work out what to do to reduce the likelihood that it will happen again.
- RCA assumes that systems and events are interrelated. An action in one area triggers an action in another, and another, and so on. By tracing back these actions, you can discover where the problem started and how it grew into the symptom you're now facing.

You'll usually find **three** basic types of causes:

* **Physical causes** – Tangible, material items failed in some way

* **Human causes** – People did something wrong, or did not do something that was needed. Human causes typically lead to physical causes

* **Organisational causes** – A system, process, or policy that people use to make decisions or do their work is faulty

# Cause or Symptom

- Symptom: Visible indications of an issue. A sign that there is a problem.
- “An indication of the existence of something, especially and undesirable situation” OED

- Cause: Underlying, fundamental reasons behind it.

# Step approach

- RCA assumes that systems and events are interrelated. An action in one area triggers an action in another, and another, and so on. By tracing back these actions, you can discover where the problem started and how it grew into the symptom you're now facing.
- **Step One: Define the Problem**

What do you see happening?

What are the specific symptoms?

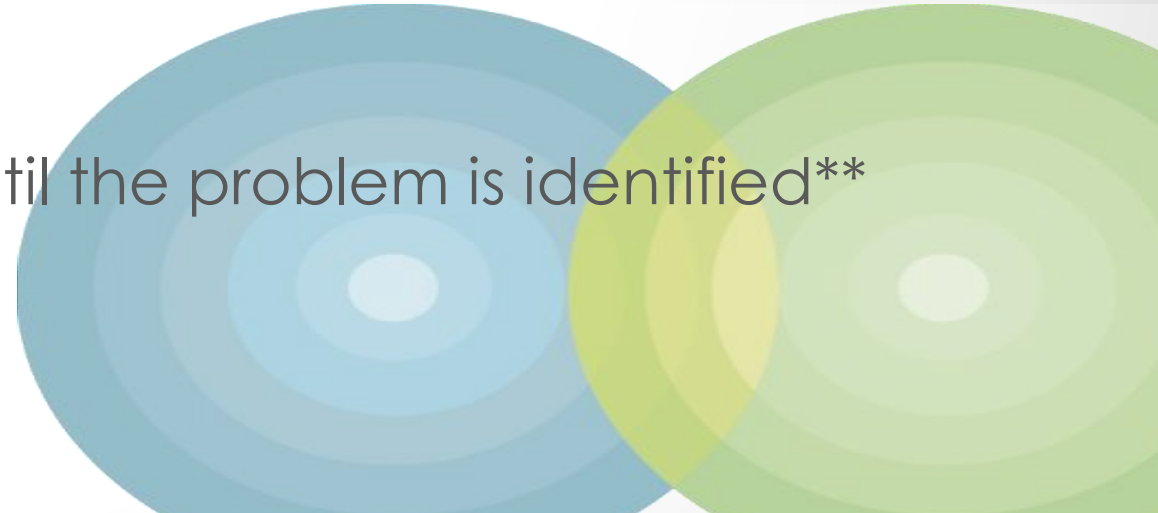
- **Step Two: Collect Data**

What proof do you have that the problem exists?

How long has the problem existed?

What is the impact of the problem?

** There is no point looking for solutions until the problem is identified**



# Step approach continued……

- **Step Three: Identify Possible Causal Factors**
- What sequence of events leads to the problem?
- What conditions allow the problem to occur?
- What other problems surround the occurrence of the central problem?
- During this stage, identify as many causal factors as possible. Too often, people identify one or two factors and then stop, but that's not sufficient. With RCA, you don't want to simply treat the most obvious causes – you want to dig deeper.
- DIG!!

Work with the team

# Step approach continued.....

- **Step Four: Identify the Root Cause(s)**
- Why does the cause factor exist?
- What is the real reason the problem occurred?
- **Step Five: Recommend and Implement Solutions**
- What can you do to prevent the problem from happening again?
- How will the solution be implemented?
- Who will be responsible for it?
- What are the risks of implementing the solution?
- Analyse your cause-and-effect process, and identify the changes needed for various systems. It's also important that you plan ahead to predict the effects of your solution. This way, you can spot potential failures before they happen.

Use the 5 whys??

Use Ishikawa Cause and effect diagrams- aka "The Fishbone."

Ask "so what?"

# 5 Whys

- Used to analyse problems within an organization. It involves identifying a problem and asking "why?" until you determine the main cause.
- It's best to use five whys for simple or less complicated problems that are likely to have a small number of possible causes. You might use it once the RCA has started to identify contributing causes to problems to explore each one.
- Step **1-assesmble a team:** Use people who are close to the problem. Don't limit to management-use all levels where possible.
- Step 2**-Identify a single problem and clearly define it**
- Step 3**-Ask 'Why'?** Agree the initial cause-it must be directly linked to the problem. Make sure you haven't identified a **symptom.** Where more than one cause is identified, explore as a individual strands.
- Step 4-Keep asking "*why?*" until you find the root cause or causes of the problem.
- Step 5- Make an **action plan.** The aim of the plan is to prevent similar issues arising in the future.
- Step 6- **Evaluate the results**

# Ishikawa or Fishbone model of cause and effect

- According to **Ishikawa**, quality improvement is a continuous process, and it can always be taken one step further. With his cause and effect diagram (also called the "**Ishikawa**" or "fishbone" diagram) this management leader made significant and specific advancements in quality improvement.
- It is best used with your team/ group .

Ensure everyone feels safe

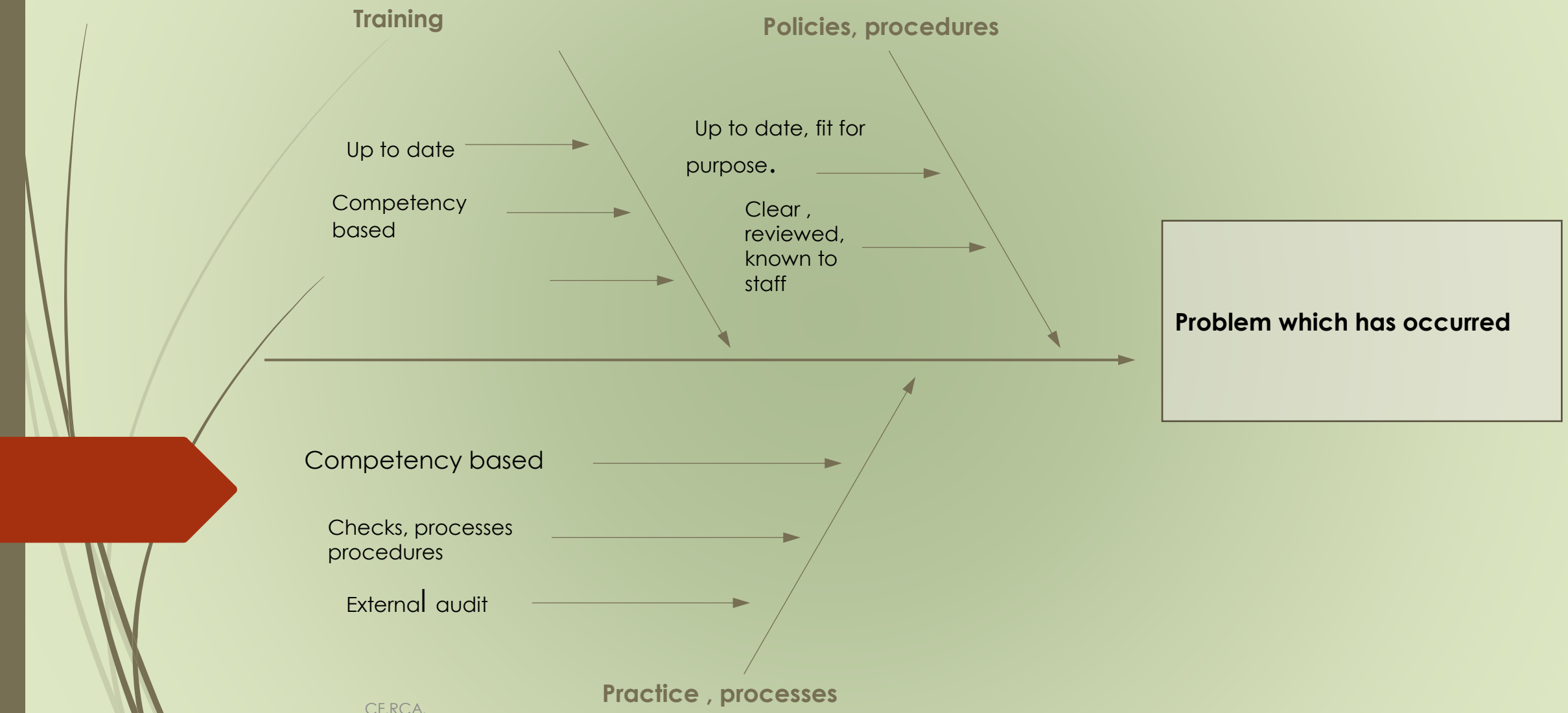
Identify the problem which has occurred

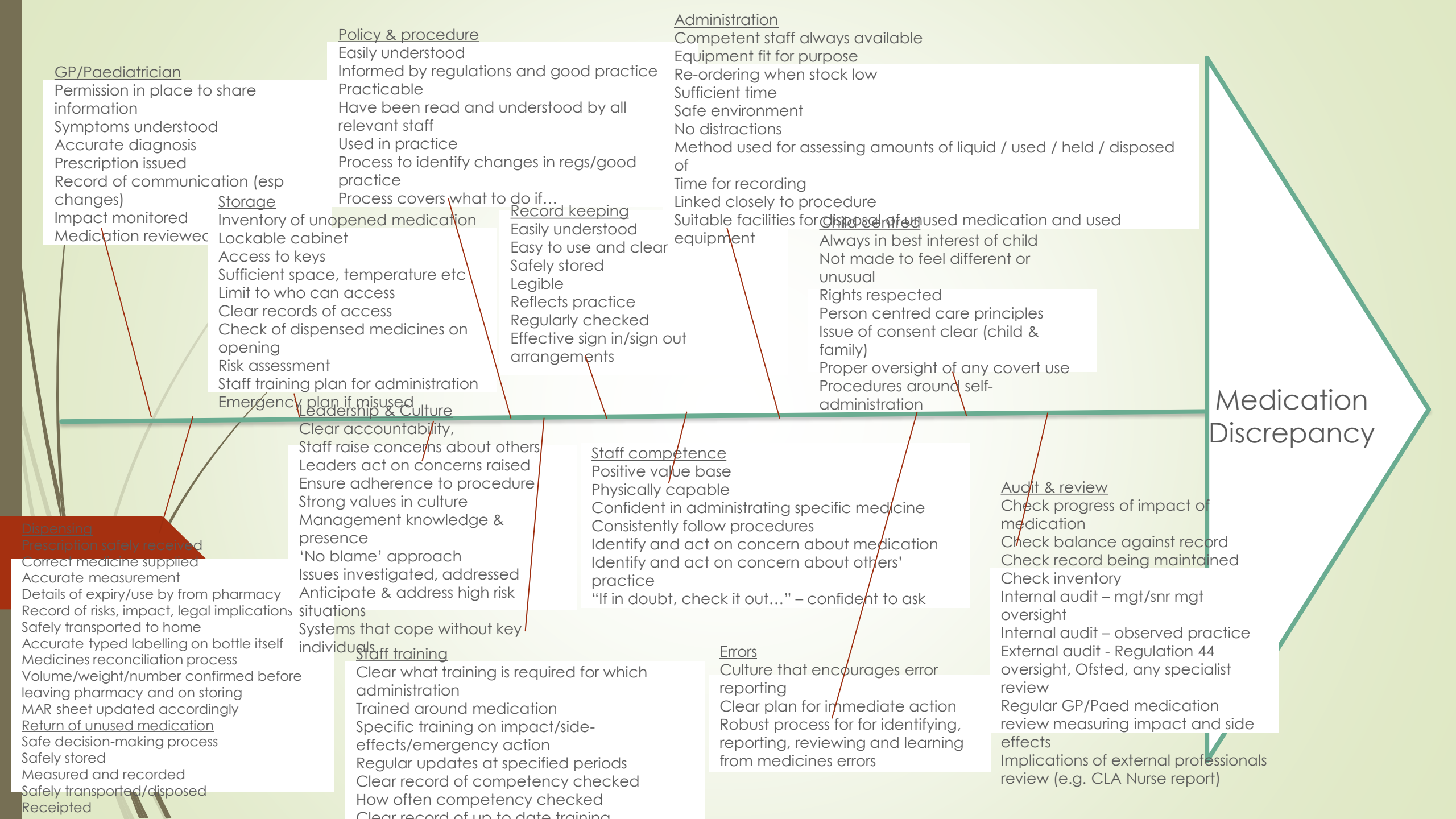
Brainstorm everything that should be in place so that the issue should not have arisen.

Look at your headings- was everything in place as it should have been ? Did everything happen as it should have?

IF NOT –WHY NOT? USE THE 5 WHYS. IDENTIFY THE ROOT CAUSE.

# Root cause analysis- from problem-example




GP/Paediatrician
Permission in place to share information
Symptoms understood
Accurate diagnosis
Prescription issued
Record of communication (esp changes)
Impact monitored
Medication reviewed
Policy & procedure
Easily understood
Informed by regulations and good practice
Practicable
Have been read and understood by all relevant staff
Used in practice
Process to identify changes in regs/good practice
Process covers what to do if…
Administration
Competent staff always available
Equipment fit for purpose
Re-ordering when stock low
Sufficient time
Safe environment
No distractions
Method used for assessing amounts of liquid / used / held / disposed of
Time for recording
Linked closely to procedure
Suitable facilities for disposal of unused medication and used equipment
Storage
Inventory of unopened medication
Lockable cabinet
Access to keys
Sufficient space, temperature etc
Limit to who can access
Clear records of access
Check of dispensed medicines on opening
Risk assessment
Staff training plan for administration
Emergency plan if misused
Record keeping
Easily understood
Easy to use and clear
Safely stored
Legible
Reflects practice
Regularly checked
Effective sign in/sign out arrangements
Child centred
Always in best interest of child
Not made to feel different or unusual
Rights respected
Person centred care principles
Issue of consent clear (child & family)
Proper oversight of any covert use
Procedures around self-administration
Medication Discrepancy
Leadership & Culture
Clear accountability,
Staff raise concerns about others
Leaders act on concerns raised
Ensure adherence to procedure
Strong values in culture
Management knowledge & presence
'No blame' approach
Issues investigated, addressed
Anticipate & address high risk situations
Systems that cope without key individuals
Staff competence
Positive value base
Physically capable
Confident in administrating specific medicine
Consistently follow procedures
Identify and act on concern about medication
Identify and act on concern about others' practice
"If in doubt, check it out…" – confident to ask
Audit & review
Check progress of impact of medication
Check balance against record
Check record being maintained
Check inventory
Internal audit – mgt/snr mgt oversight
Internal audit – observed practice
External audit - Regulation 44 oversight, Ofsted, any specialist review
Regular GP/Paed medication review measuring impact and side effects
Implications of external professionals review (e.g. CLA Nurse report)
Dispensing
Prescription safely received
Correct medicine supplied
Accurate measurement
Details of expiry/use by from pharmacy
Record of risks, impact, legal implications
Safely transported to home
Accurate typed labelling on bottle itself
Medicines reconciliation process
Volume/weight/number confirmed before leaving pharmacy and on storing
MAR sheet updated accordingly
Return of unused medication
Safe decision-making process
Safely stored
Measured and recorded
Safely transported/disposed
Receipted
Staff training
Clear what training is required for which administration
Trained around medication
Specific training on impact/side-effects/emergency action
Regular updates at specified periods
Clear record of competency checked
How often competency checked
Errors
Culture that encourages error reporting
Clear plan for immediate action
Robust process for for identifying, reporting, reviewing and learning from medicines errors

# Group work

- Using RCA and 5 whys, explore the possible causes behind the following scenario
- Identify the problem
- Focus initially on: Human, physical, organisational causes
- Group under ‘Ishikawa’ headings
- Identify the potential causes
- Discuss interrelations
- Explore the potential solutions to each cause

- GROUP WORK
- There have been a number of medication recording errors over the past 6 months.
- These include missed records, incorrect records (signed in the wrong place and at wrong times) and those that don't appear to fit in with policy (your policy states that 2 people must sign at all times but only one signature is seen)
- In the past 6 months, the organisation has moved from paper to online records
- IT connectivity has been inconsistent and a paper record is running alongside the online one
- The medicines are stored in the office and there is no dedicated space to administer them
- There has been a recent change in RM
- A new CEO and RI started about 8 months ago and new policies have been introduced
- There has been a high turnover of staff at both homes
-

# Follow on……or starting point- useful for the DSL

- **Failure Mode and Effects Analysis (FMEA)**

Spotting Problems Before a Solution Is Implemented

Asking the question - "What Could Go Wrong?“ This is particularly useful where high levels of risk are involved. You can use this when considering a high risk placement – you identify what could go wrong and then look at the risk profile generated. Are these risks you can reasonably, safely mitigate?

- **Impact Analysis**

Identifying the Full Consequences of Change. while doing the TRCA and identifying changes to made take a little time to think things through.

If we do this how will it impact on…..? Avoid confusion and disruption later on and the “I wish I had thought of that moment.”

# Other factors to consider

- Equipment
- People in the broader sense
- Visitors
- Other professionals
- Environment
- Health and safety
- safeguarding

# Now the uncomfortable bit in any RCA for the leader-

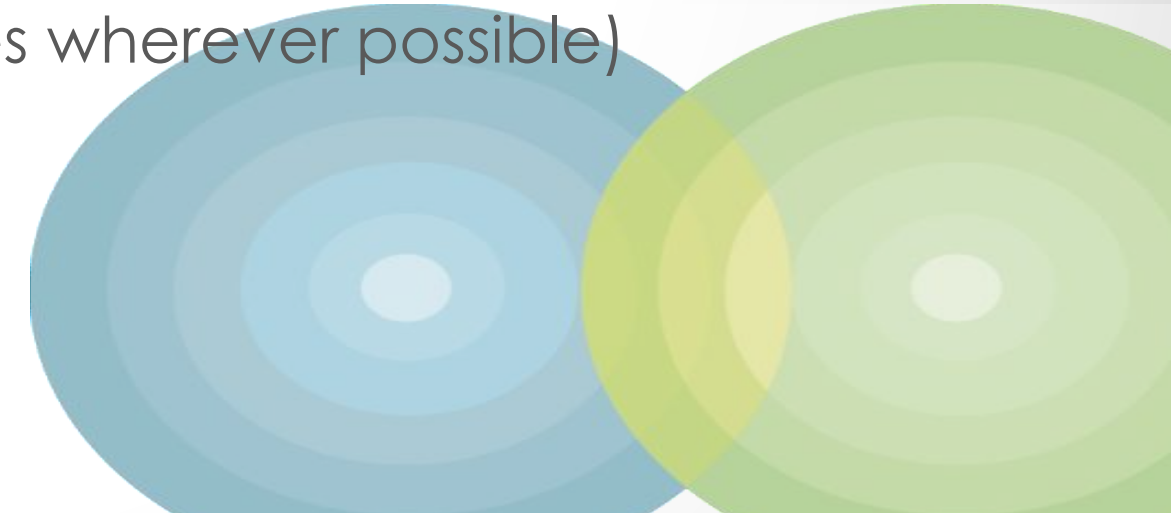
- **You cannot assume** . You have to :
- THINK THE UNTHINKABLE-
- Could it be deliberate
- Do the drugs have a street value?
- Could it be malicious
- Could someone be perpetrating fabricated or induced illness (previously MSBP) –think Lucy Letby, Beverly Allitt.
- Brainstorm it all.

# Policy and procedural considerations

- What to do if a child declines
- What to do if the child is sleeping
- What to do if the child is visiting elsewhere
- School protocols
- Correct administration of specific formulations eg patches, inhalants, creams, eyedrops
- What to do when children have mental capacity issues
- What equipment should be used-eg syringes for small amounts of oral medication, measuring cups etc

# Policy and procedural continued

- Returning medicines
- Spat out medicines
- Concealed administration
- As required medicines/PRN. Do MAR instructions include:
  - What it is for
  - What dose (avoiding variable doses wherever possible)
  - Minimum time between doses
  - Maximum doses in 24 hours



# Covert administration

- There is no legislation that bans covert medication. However, it should be avoided unless life threatening.
- Any decision to give medication covertly must be transparent and include other authorities-Dr, parents, s/w, advocate
- Decision making process and review dates must be in the care plan.
- Process must be explicit in the care plan and on the MAR
- Must be reflected in policy
- If a child is refusing consider:
  - Why they are refusing
  - Their mental capacity
  - The necessity of the medication and the effects that the child is experiencing

# Reduce errors.....

- A medication error is an error in the process of prescribing, dispensing, preparing, administering, monitoring or providing medicine advice, regardless of whether any harm occurred.
- Homes  should have "arrangements for reporting adverse events, adverse drug reactions, incidents, errors and near misses."
- If a young person  is unwell as a result of the medication error or incident, or an error is noticed , medical assistance should be sought straight away.
- All notifiable incidents should be reported to Ofsted/ CSIW.
- Medication policies should include how to deal with medication errors, incidents and near misses.

# Reduce errors……

- Homes should have a clear reporting system for medication errors, incidents and near misses.
- There should be a regular schedule for investigating and reviewing medication errors, incidents and near misses by a designated member of staff with learnings and actions shared with all staff members involved with medicines.
- Homes should have clear auditing pathways with knowledgeable auditors. Policies and procedures should have clear information about how why and what to audit.
- Any other thoughts?
-

# Any queries?

- Please let me know of any questions or queries before we meet again.

- Liz.cooper@dialogueltd.co.uk