Practicalities of investigating incidents

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with thanks for the slides and content to

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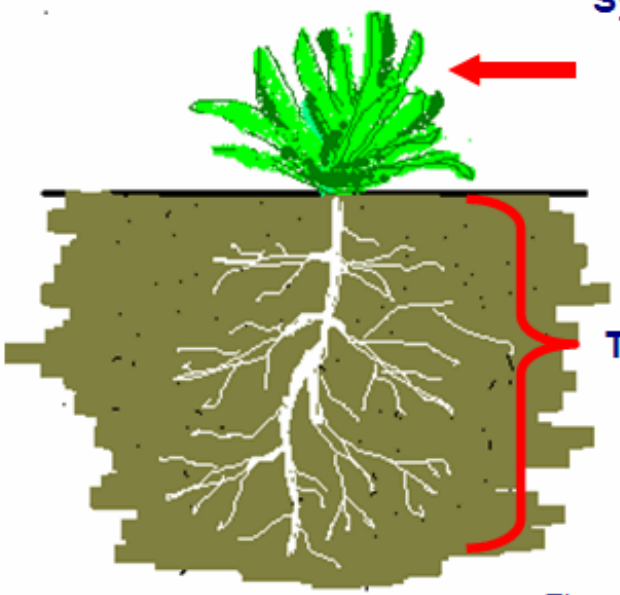
RCA Practicalities

1 - investigation

Root Cause Analysis Basics



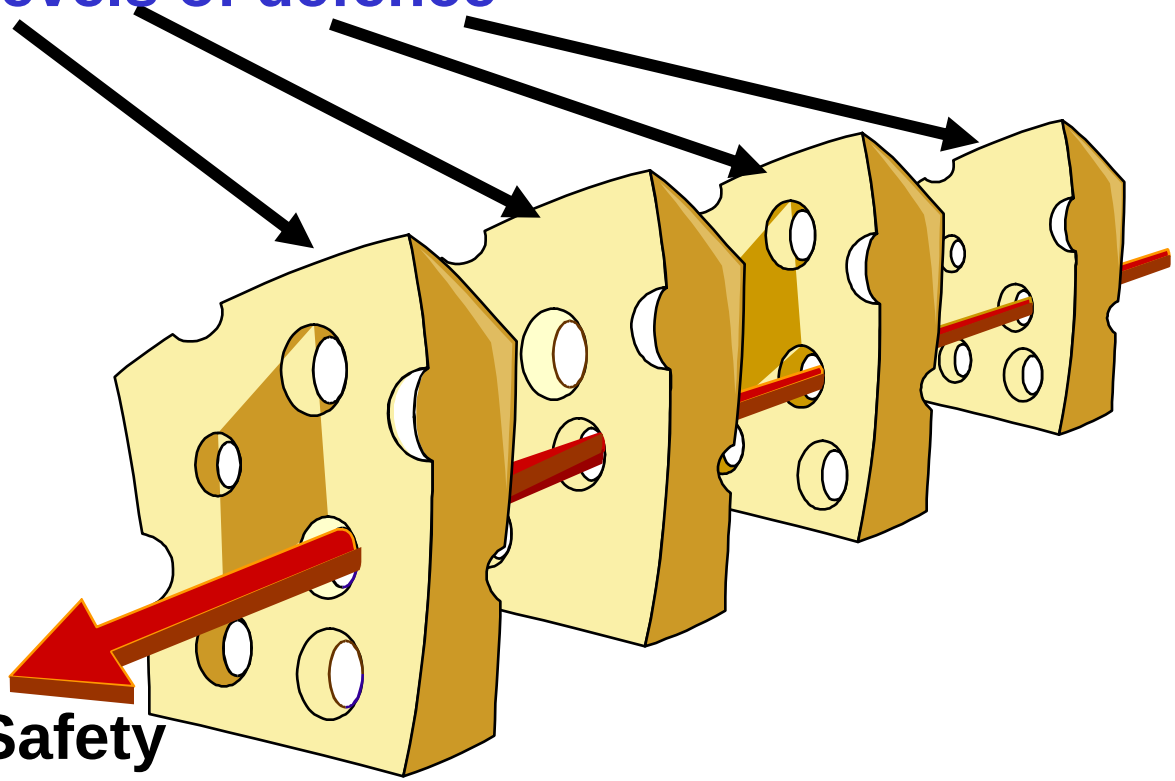
Symptom of the problem.
"The Weed"
Above the surface
(obvious)

The Underlying Causes
"The Root"
Below the surface
(not obvious)

The word root, in root cause analysis, refers to the underlying causes, not the one cause.

Reason's Swiss cheese Model

Levels of defence



LATENT CONDITIONS

poor design, procedures, management decisions etc..

Patient Safety Incident

ACTIVE ERRORS

Case study

- Clip 1

Case study

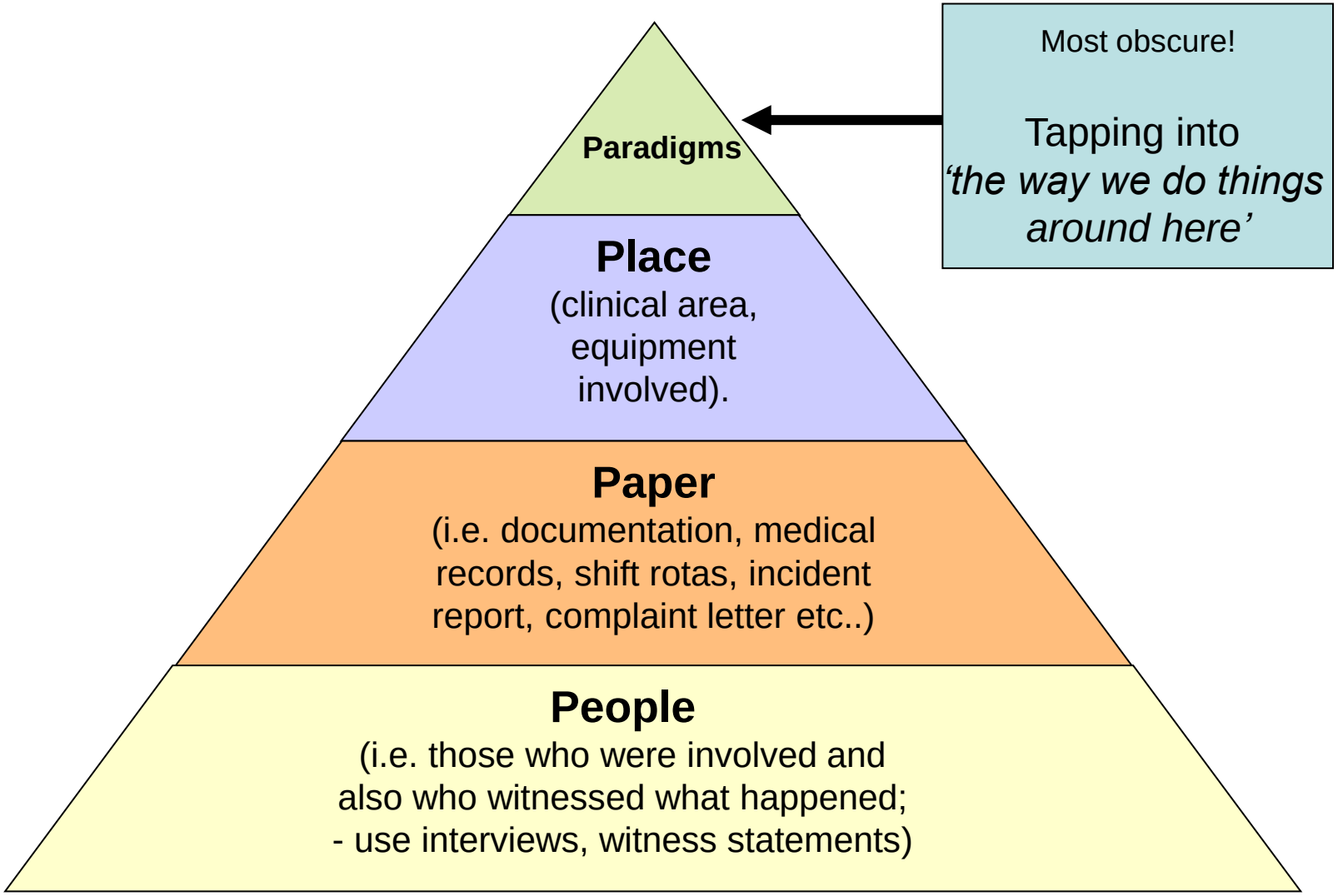
Group questions

- How would you start the investigation?

- What types of information would you want to look at?

Step 1

GATHERING INFORMATION


Most obscure!
Tapping into
'the way we do things around here'
Paradigms
Place
(clinical area, equipment involved).
Paper
(i.e. documentation, medical records, shift rotas, incident report, complaint letter etc..)
People
(i.e. those who were involved and also who witnessed what happened;
- use interviews, witness statements)

Be aware of..

- Cognitive biases: hindsight and outcome bias
- Witness memory degradation

Quick exercise

- Short video 2

Step 2

COLLATING INFORMATION INTO A TIMELINE

Tabular timeline

Policy/Protocol (What should have happened)		
Event date and time		
Event (What actually happened)		
Supplementary information		
Missing info. /data gaps		
Notable practice		

Identify WHAT WENT WRONG (i.e. active errors, violations etc..) and WHEN

DO NOT VENTURE INTO ANALYSIS!!

But remember – mapping can go too far!!

Case study

- Clip 2

Step 3

IDENTIFYING CARE AND SERVICE DELIVERY PROBLEMS

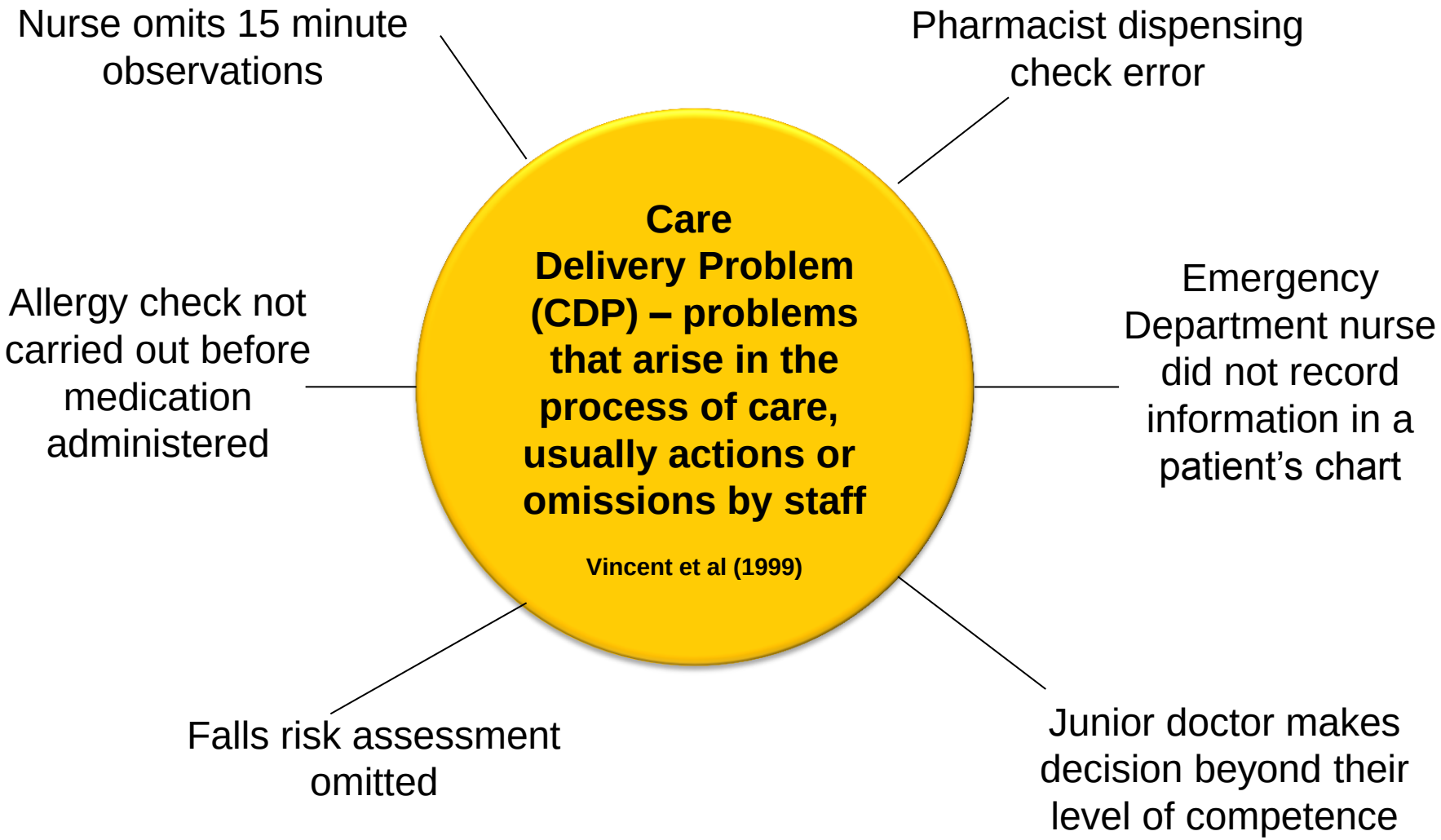
What are Care/ Service Delivery Problems?

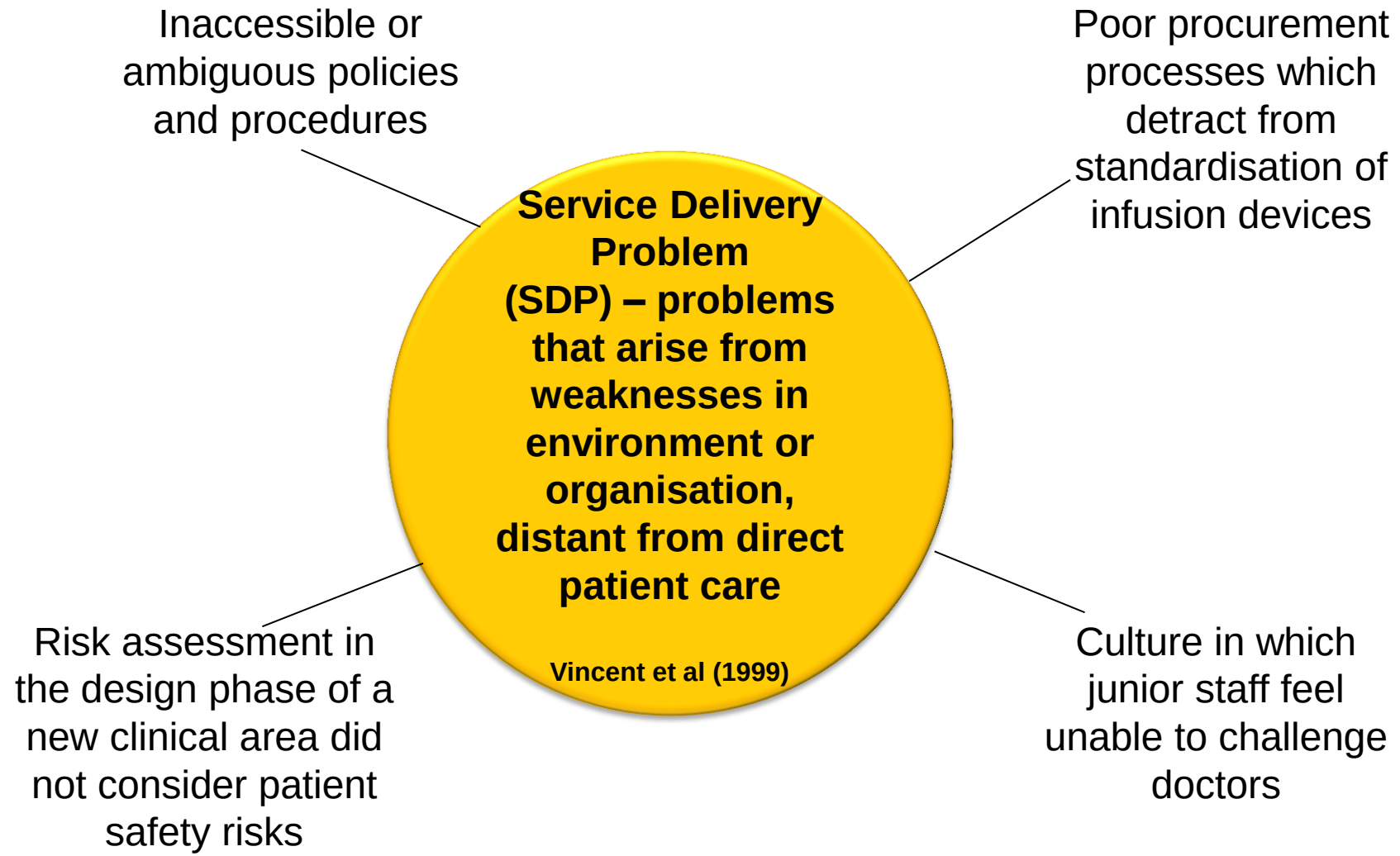
Every point where:

- *Something happened that <u>shouldn't</u> have*

OR

- *Something that <u>should</u> have happened, didn't.*


Nurse omits 15 minute observations
Pharmacist dispensing check error
Allergy check not carried out before medication administered
Care Delivery Problem (CDP) – problems that arise in the process of care, usually actions or omissions by staff
Vincent et al (1999)
Emergency Department nurse did not record information in a patient's chart
Falls risk assessment omitted
Junior doctor makes decision beyond their level of competence


Inaccessible or ambiguous policies and procedures
Poor procurement processes which detract from standardisation of infusion devices
Service Delivery Problem (SDP) – problems that arise from weaknesses in environment or organisation, distant from direct patient care
Vincent et al (1999)
Risk assessment in the design phase of a new clinical area did not consider patient safety risks
Culture in which junior staff feel unable to challenge doctors

Identifying CDPs/ SDPS: Change Analysis

1. Describe the normal procedure.
2. Compare this with the “map” of your incident.
3. List the changes.
4. These changes to the normal are CDPs & SDPs
5. Did the changes contribute to the incident?

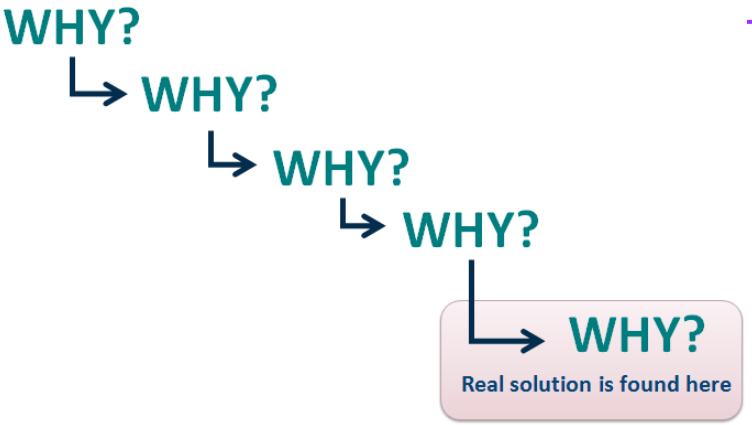
What is a lesson learned

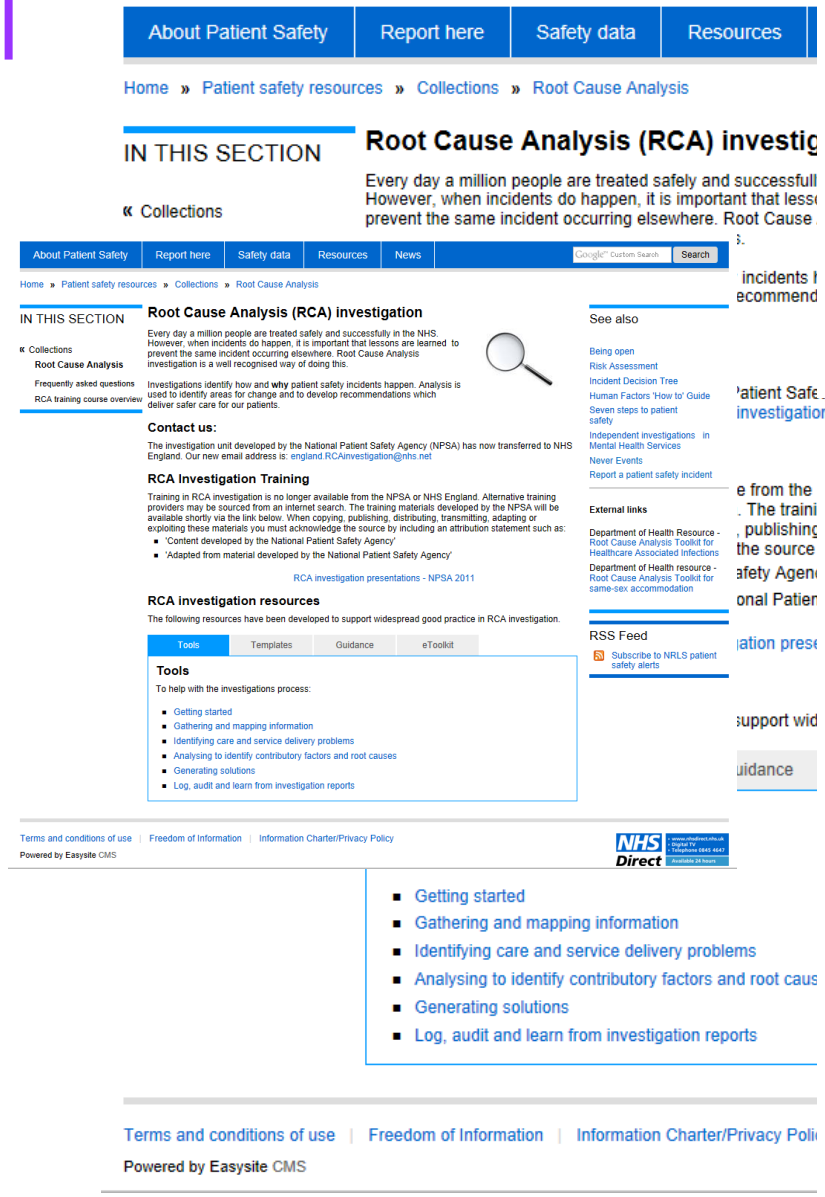
The NPSA define a lesson learnt as

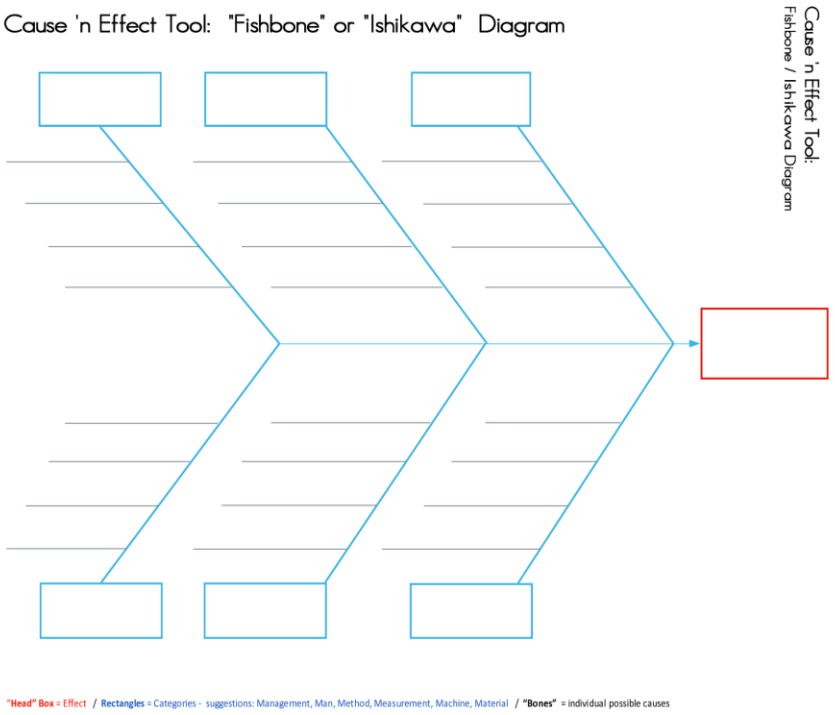
'…key safety and practice issues which may not have directly contributed to this incident but which are significant and will be useful learning for others…'

Step 4

IDENTIFYING CONTRIBUTORY FACTORS







http://www.nrls.npsa.nhs.uk/resources/collections/root-cause-analysis/

Step 5

IDENTIFYING THE ROOT CAUSES

Root causes

- The fundamental contributory factors which had the greatest impact on the system failure.
- Think ‘system’ not active errors
- Think, what needs to be resolved, to minimise chances that the same incident will occur again.

Group question

- What are the root causes in the case study?
- What effective solutions would you propose to prevent a recurrence?

Case study

- Clip 3

Step 6

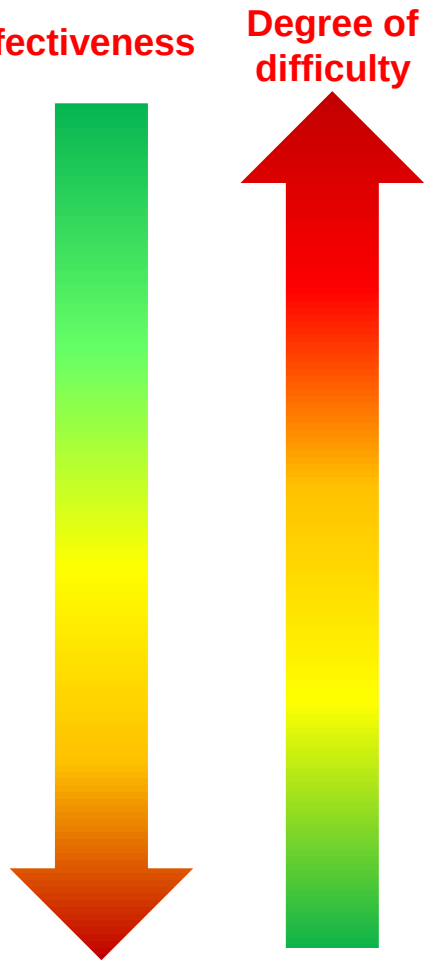
SOLUTIONS

Solutions - Hierarchy of effectiveness

Stronger Actions
Change cultural approach
Architectural / physical plant or equipment changes
Standardise and usability testing of equipment or care plans
Simplify the process and remove unnecessary steps

Moderately Strong Actions
Effective use of skill mix
Eliminate look and sound-a-likes
Eliminate / reduce distractions
Checklist / cognitive aids

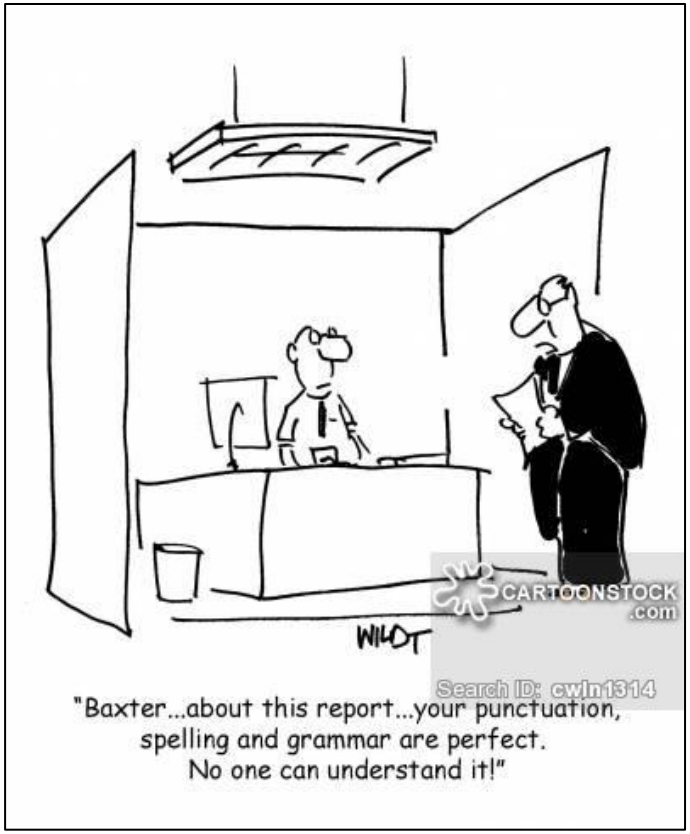
Weaker Actions
Double checks
Warnings and labels
New procedure / policy
Re-Training focused on an individual not cohort



From: C Lee, K Hirschler. How to make the most of actions and outcomes

Intuitive design

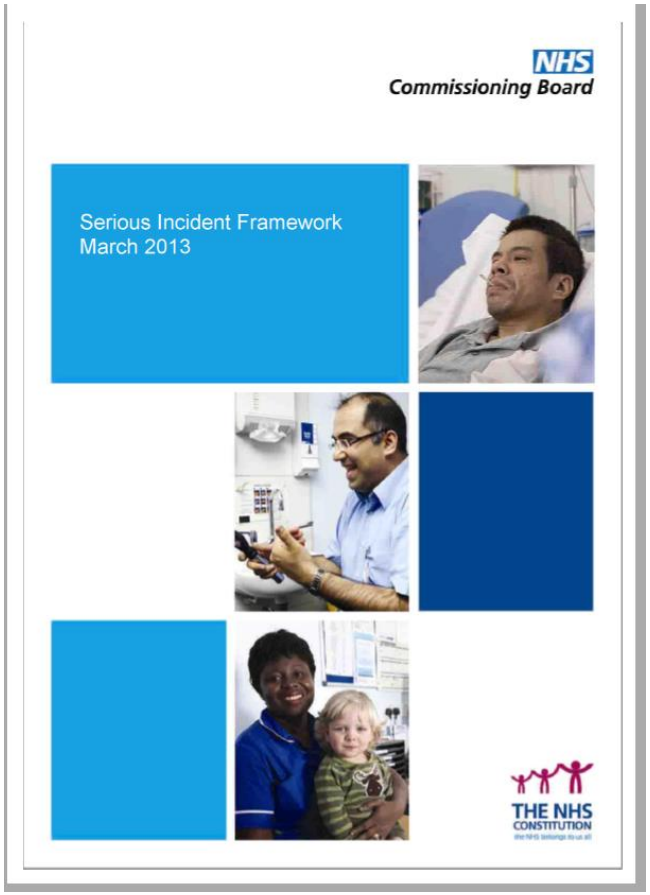
- Make it possible to only carry out a task one way
  - the **safe** way!
- Think intuitive!
- Design to do safely

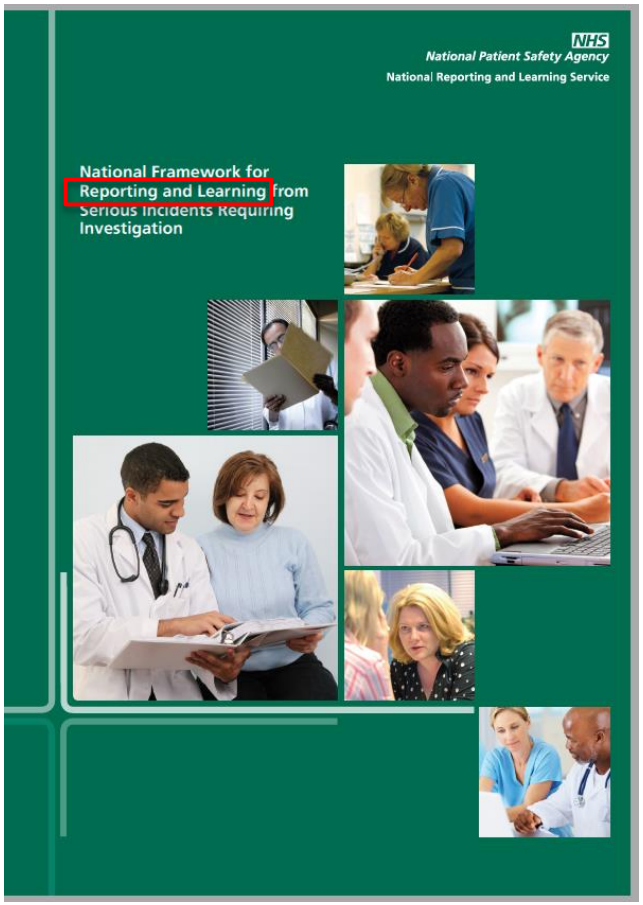


RCA Practicalities

2 – Report writing

Purpose


NHS
Commissioning Board
Serious Incident Framework
March 2013
THE NHS
CONSTITUTION


NHS
National Patient Safety Agency
National Reporting and Learning Service
National Framework for
Reporting and Learning from
Serious Incidents Requiring
Investigation

Group work

- Read through the incident investigation report
- 10 minutes to analyse the report.
- Feedback to rest of the training delegates

How to write a report…practical tips

1. Style phrases to make it clear you had the benefit of hindsight:

- "Following thorough investigation and with the valuable hindsight this provided, three root causes were identified …."

2. Show logical flow from one stage of the investigation to the next

- Contributory factors were identified using fishbone diagram analysis (see Appendix B). At this point in the investigation, the investigation team prioritised Care Delivery Problems X and Y for further analysis. The rationale for prioritising these two issues at this stage in the investigation was…STATE YOUR RATIONALE

How to write a report…practical tips

3. Tell the reader the process you have followed:

- 'In accordance with best practice for carrying out root cause analysis investigations (NPSA, 2011), root causes were identified by:
  - Reviewing the frequency with which different themes and clusters of problems occurred on the fishbone diagram.
  - Identifying the spines on the fishbone diagram where the most contributory factors clustered.
- The outcome of this stage of the investigation was the identification of the following root causes:…'

How to write a report…practical tips

4. CREDIBILITY: Reference literature you have referred to that supports your conclusions

- For example, if there is a situational awareness failure, reference Endsley (1995) or Sarter and Woods, (1991)

- Endsley, M.R. (1995b). Toward a theory of situation awareness in dynamic systems. Human Factors 37(1), 32–64.
- Sarter, N.B. & Woods, D.D. (1991). Situation awareness: A critical but ill-defined phenomenon. International Journal of Aviation Psychology, 1, 45–57.

How to write a report…practical tips

5. ***Remember report writing takes time***

6. ***Remember you get so close to the report you cannot see the wood from the trees so…get the Governance Team's help to review the report***

A risk manager's perspective

University College London Hospitals NHS
NHS Foundation Trust

uclh

Report Writing – My Personal Experience

Report writing……what would I like to see?

- Background to incident – clear and full explanation – 'set the scene'
- Clear sequence of events.
- Analysis of the incident – use of the change analysis/fishbone
- Completed report

What do I actually see…….

- Commonly…….
- Incomplete report:
  - headings deleted
  - pages deleted
  - blank pages
- Confusion:
  - lack of information to explain incident or service in which incident occurred
  - lack of clarity with wording to determine issues
  - skirting around issues

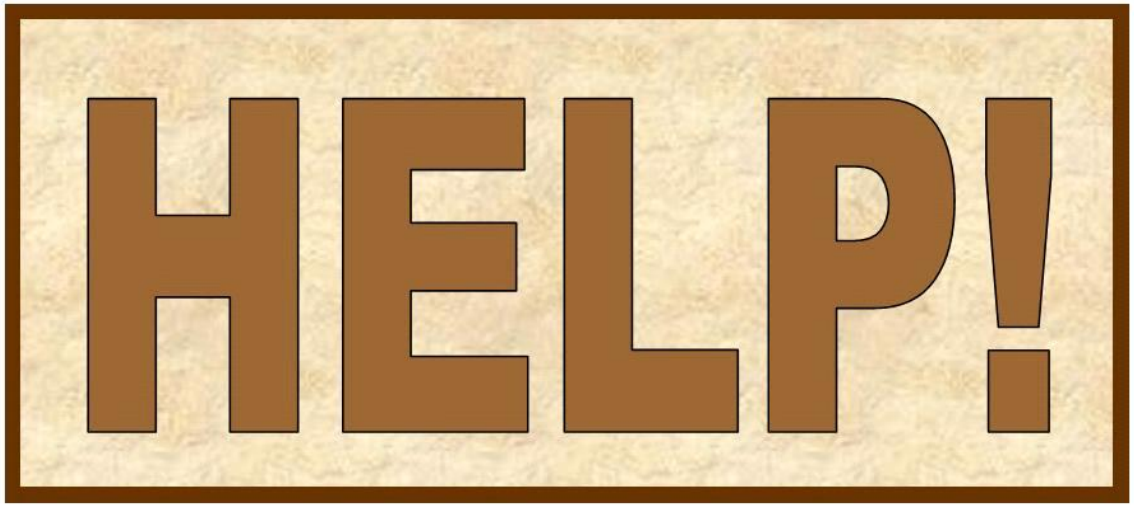
Wording……write for someone from another planet

- Keep it as simple as possible
- Assume people don't know anything
- Explain!
- Be objective…..base your report on fact – guidelines/policies/statements/interviews.
- Be specific with wording…..not vague
- Don't use abbreviations…..unless first explaining them.

If help is offered…….

……accept it.

If you don't know……..seek



7 things to remember

1. Your RCA is only as good as the info you collect
2. You have to understand what happened before you can understand why it happened
3. Interviews are NOT about asking questions
4. Your knowledge (or lack of it) can get in the way of a good RCA
5. You can't solve all human performance problems with discipline, training, and procedures
6. Often, people can't see effective corrective actions even if they can find the root causes
7. All investigations do NOT need to be created equal but some investigation steps can't be skipped

M Paradies. TapRoot 2011

Specialist Pharmacy Service
Medicines Use and Safety

Incident categorisation workshop

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in your groups - 1

- have you ever reported an incident?
- what incident reporting system do you use?
- are you aware of the high level categories?
- medication categories in use in your organisation
- surprises?
- last reviewed?
- who would you contact to revise?

Adverse drug reaction (when used as intended)
Contra-indication to the use of the medicine in relation to drugs or conditions
Mismatching between patient and medicine
Omitted medicine / ingredient
Patient allergic to treatment
Wrong / omitted / passed expiry date
Wrong / omitted patient information leaflet
Wrong / omitted verbal patient directions
Wrong / transposed / omitted medicine label
Wrong / unclear dose or strength
Wrong drug / medicine
Wrong formulation
Wrong frequency
Wrong method of preparation / supply
Wrong quantity
Wrong route
Wrong storage
Other
Unknown