NHS Blood and Transplant

Donor Haemovigilance

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SOUTH EAST COAST RTC EDUCATION CONFERENCE
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Outcomes for today

- What is haemovigilance?
- Needs of patients *vs* wants and needs of donors
- Describe the donation process, and its effect on safety of the blood supply and the safety and retention of donors
- Clinical complications of blood donation
- Review how NHSBT Blood Supply monitors negative consequences of blood donation
- Discuss human factors

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Haemovigilance

- “Haemovigilance comprises surveillance procedures covering the whole transfusion chain from collection of blood (components) to follow-up of its recipients…” (WHO, ISBT)
- Consider in the context of blood donation
  - Whole Blood: Allogeneic, Autologous
  - Apheresis: Platelets, Plasma, Granulocytes

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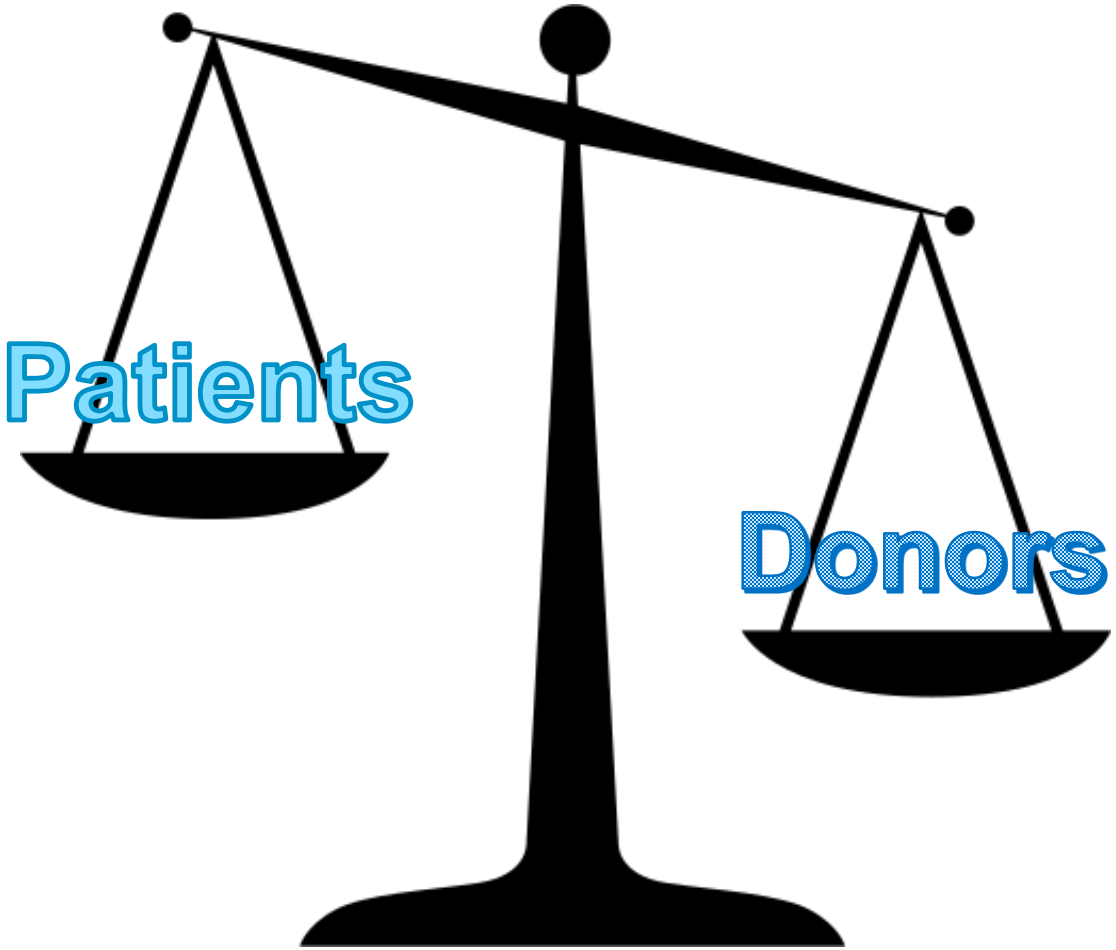
Getting the Right Balance



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Initial Journey of Blood

‘What happens when I give blood?’ 1 min 36 sec

https://www.youtube.com/watch?v=FXmkVg8a2Mo

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Murphy's Law- examples

- Positively identify the donor
- Perform Health Screening
- Get signed consent from the donor
- Check haemoglobin ($CuSO_4$ screening test / HemoCue)
- Check that the numbers on the blood pack, donor record and samples match

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Donor Complications

Venepuncture related (local- arm complications)

- Contusions/ Haematomas
- Sore arm/ Tendon injury/ Nerve injuries
- Arterial punctures
- Local allergic reactions
- Others: Thrombophlebitis (traumatic vs infective), Infection, Upper arm DVT, Chronic regional pain syndrome

General- vasovagal reactions.

- Immediate
- Delayed

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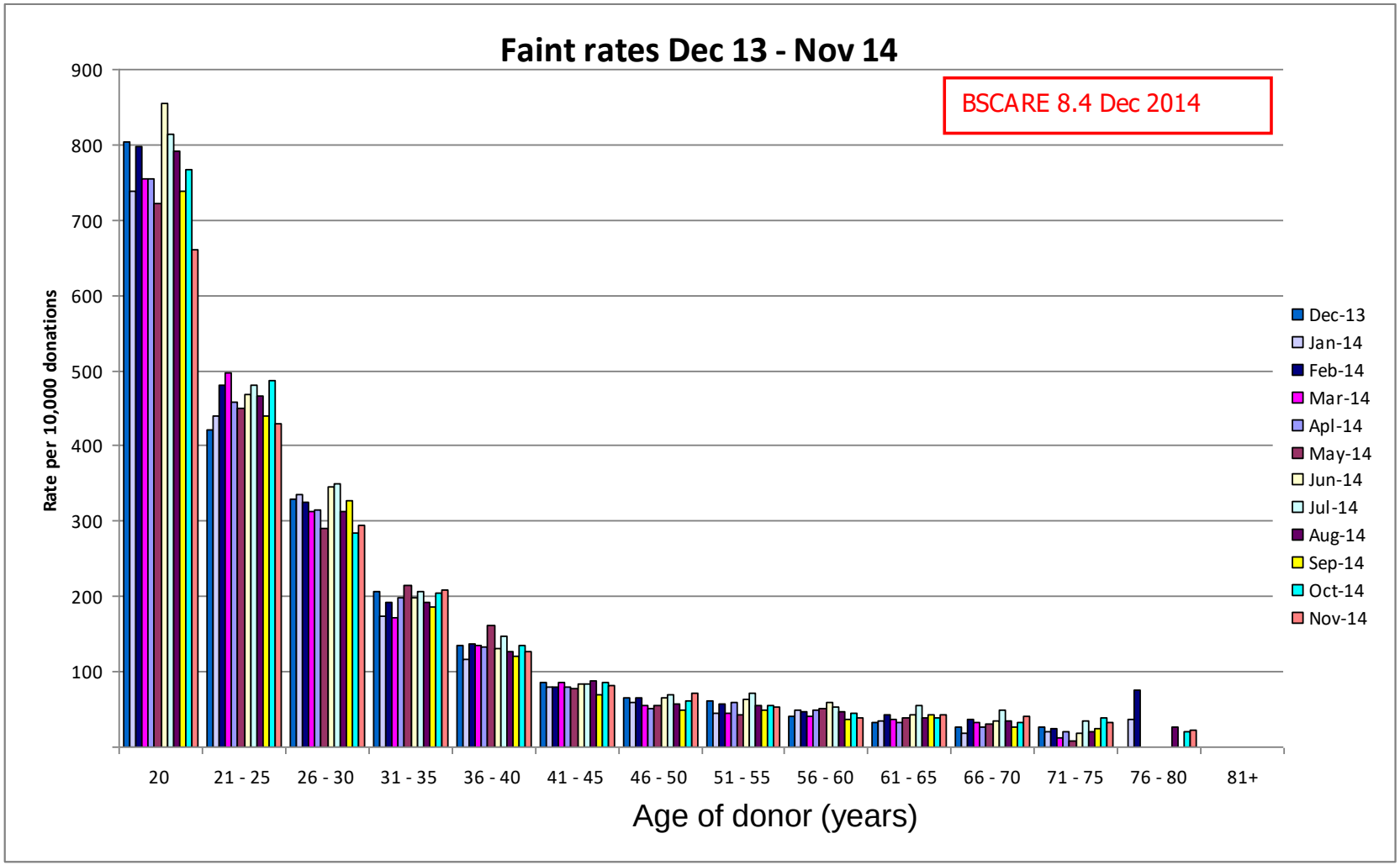

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Clinical Governance

- Logging of incidents in QPulse
- Grading of Quality Incidents- Major, SAED, other
- Root Cause Analysis meetings; Imputability
- Quality team and BDLT
- Regional CARE >> BSCARE >> CARE
- Reporting to SHOT

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Example QI

- An donor underwent apheresis for platelets but the donor carer picked up another donor's card
- There were subsequently 5 points where the error should have been picked up

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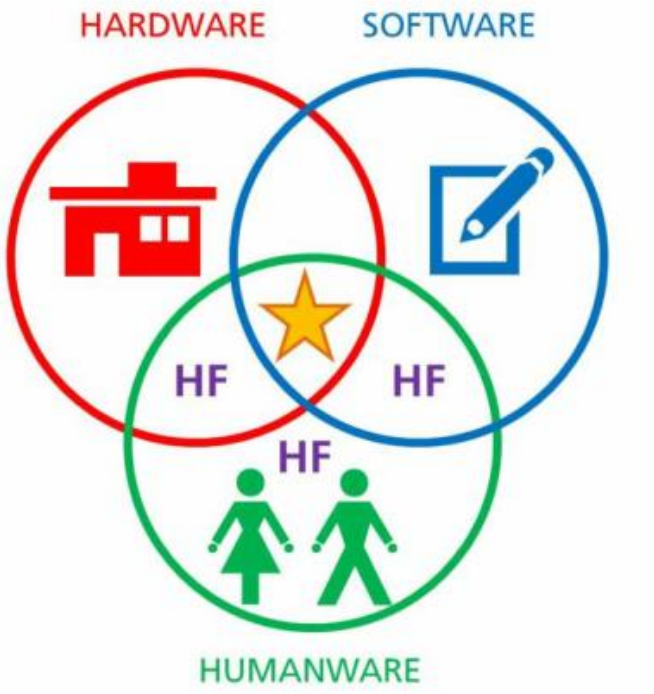
Human Factors and NHSBT

- Hardware- physical attributes of the organisation
- Software- how the organisation defines itself- the policies and procedures, guidelines, and rules
- Humanware- people within the organisation who ‘make the business happen’
- Human Factors are HOW the people within the organisation interact with hardware, software, and each other



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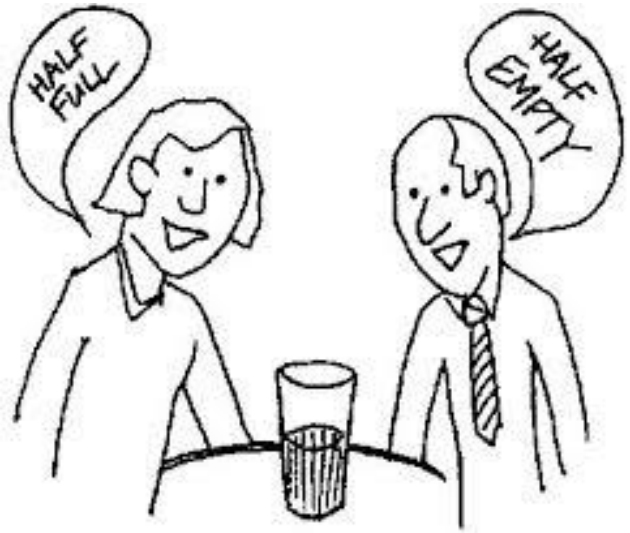
Why things go wrong- Errors

- Memory
- Decision making
- Action
- Perception



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Why things go wrong- the context

- Training
- Distractions
- Mentoring
- Procedures

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Why things go wrong-
Non-conforming

- Not following procedure
- Taking short-cuts
- Not appreciating the risk

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The Reason?

- It is important to work from the premise that:

PEOPLE DO NOT COME IN TO WORK TO DO A BAD JOB

… so it is important to understand why people do what they do

e.g. they may not know the consequences of not following procedures

e.g. there may be a culture of doing things a certain way

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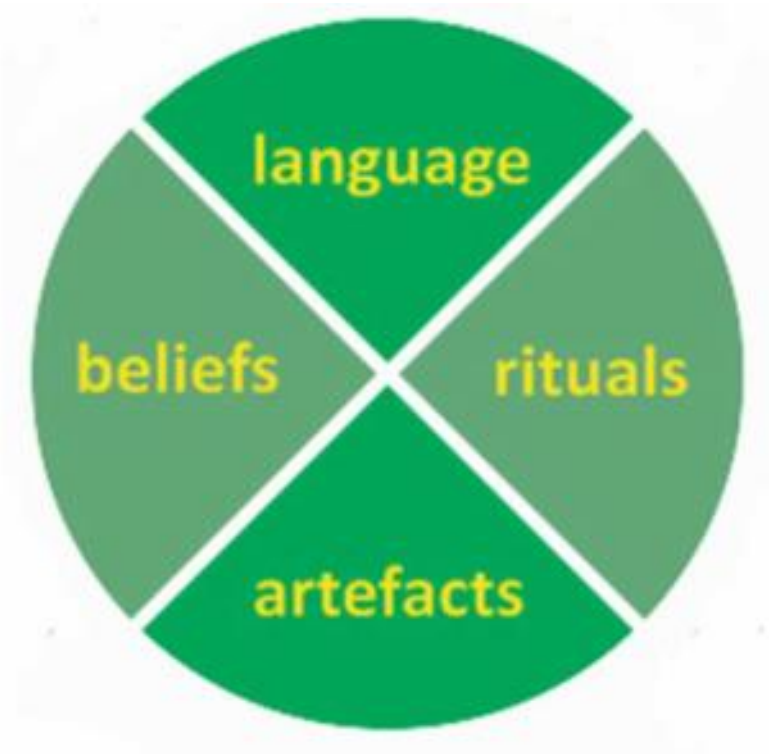
The make up of Human Factors



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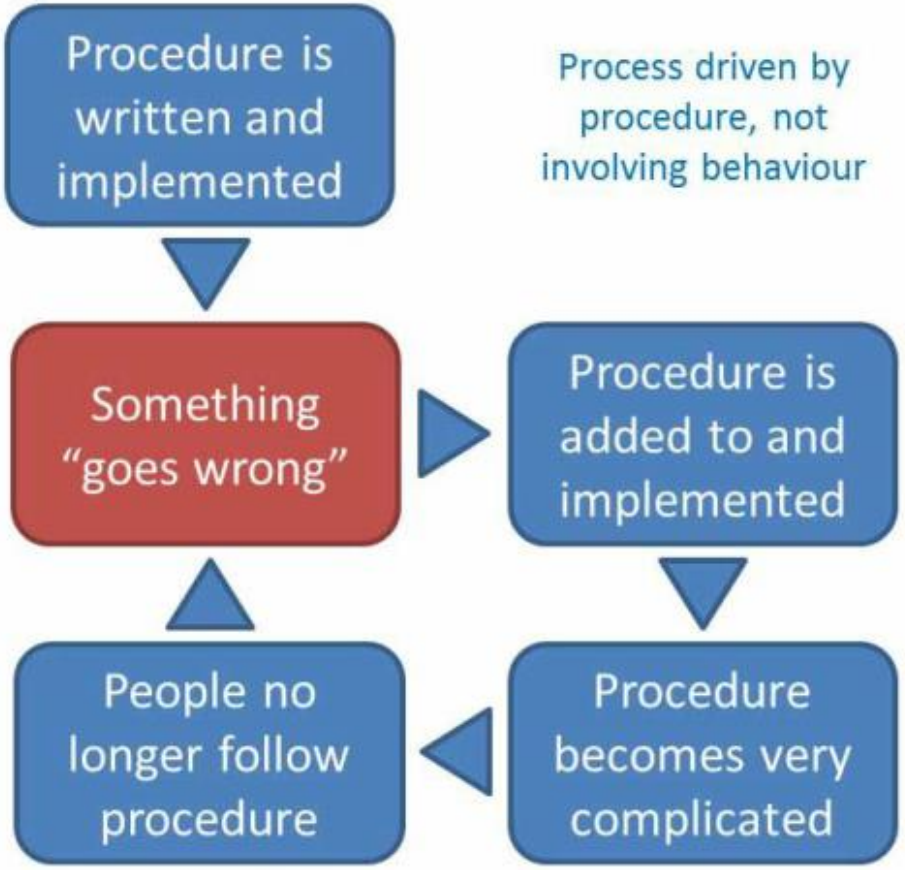
What can happen if Human Factors are not considered?



As things "go wrong" the procedure is re-written to stop the same thing happening again.

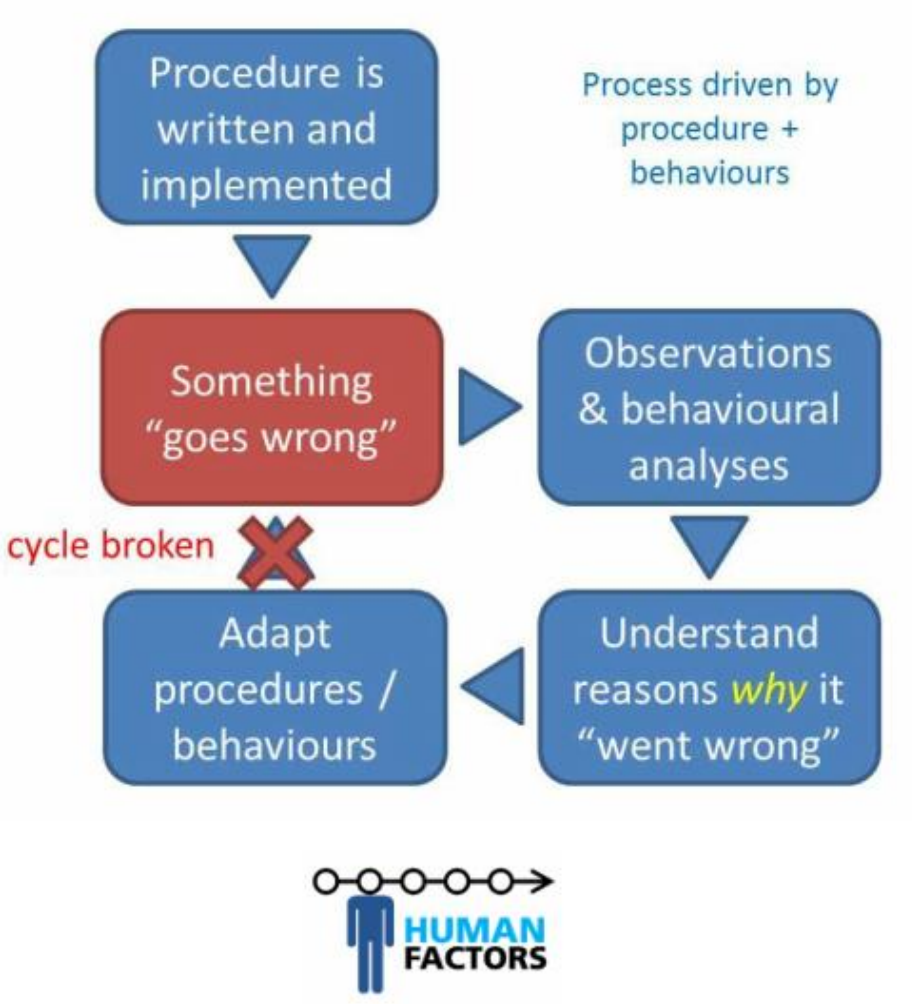
The procedure is added to time and time again and starts becoming unworkable.

People stop following the procedure to try and make things work.

More errors occur and the procedure is further re-written.

Why people made the error is not addressed.

What happens when HF tools and techniques are introduced?



As things "go wrong" the situation is investigated as to why the situation happened using:

- Behavioural Analysis
- Observations

If the procedure is at fault then it will be changed.

If the behaviours/culture is wrong then this will be addressed and the procedure maintained.

This means we need a better model for apportioning ownership when something goes wrong – **A Just Culture**

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Important aspects of Human Factors

- Just Culture
- Behavioural Analysis
- Observations

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The current ‘blame’ culture

There are only two states – you are either to blame or not to blame for something going wrong.

There is little indication of the reasons why you acted in the way you did.

This is where a **Just Culture** is used - we acknowledge that we are all humans and that we all make mistakes but that we need to report them so we can learn from them and mitigate them.

In a Just Culture errors should be acknowledged, understood and embraced.

It needs some new terminology…

Note:
Many organisations, like NHSBT, have tried a “No Blame” culture – this simply does not work; if something goes wrong then it **is** somebody’s fault – the *reason* for that fault is important, though.

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Just culture- terminology

ERRORS
when the action is unintended and made unwittingly

SLIPS (PHYSICAL)
when the action was purely made as a one-off error

SLIPS (MENTAL)
when the action was thought to be in accordance with the rules but just forgot at that moment

RULE-BASED MISTAKES
when the action was thought to be in-line with the rules (in error)

KNOWLEDGE-BASED MISTAKES
when the action was made because of lack of knowledge

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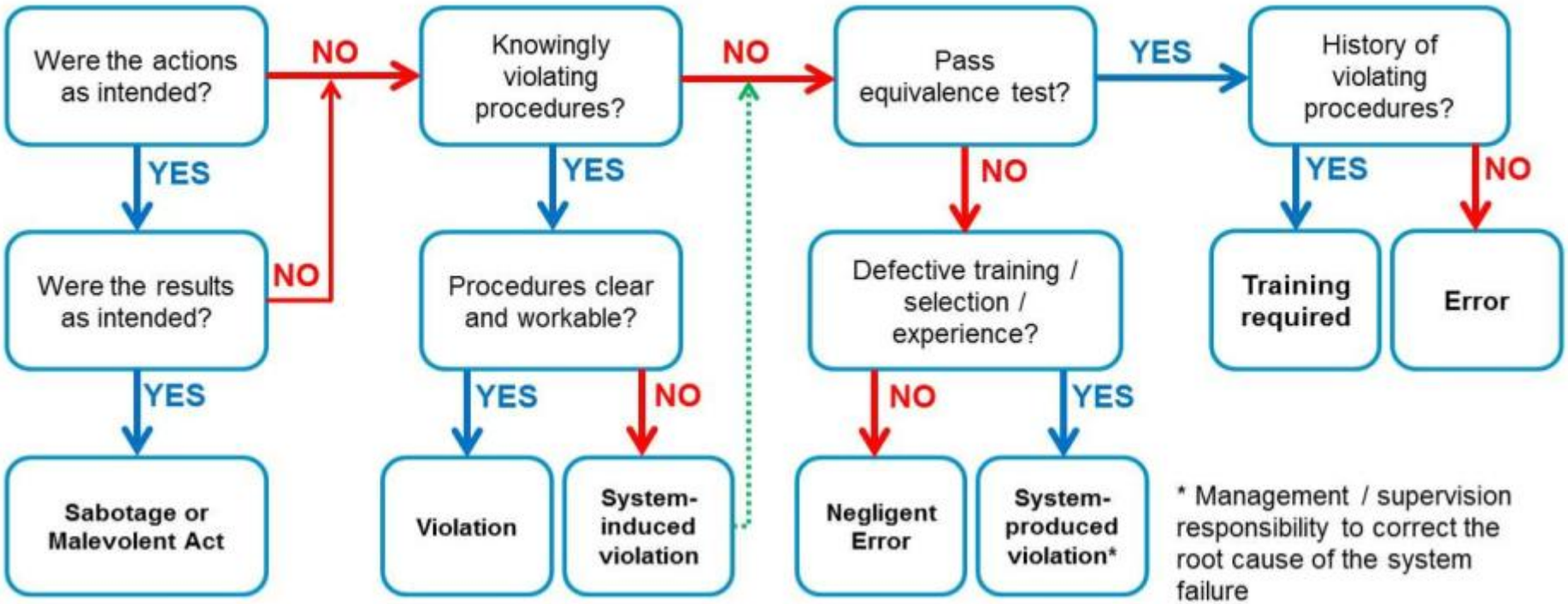
Typical Just Culture process



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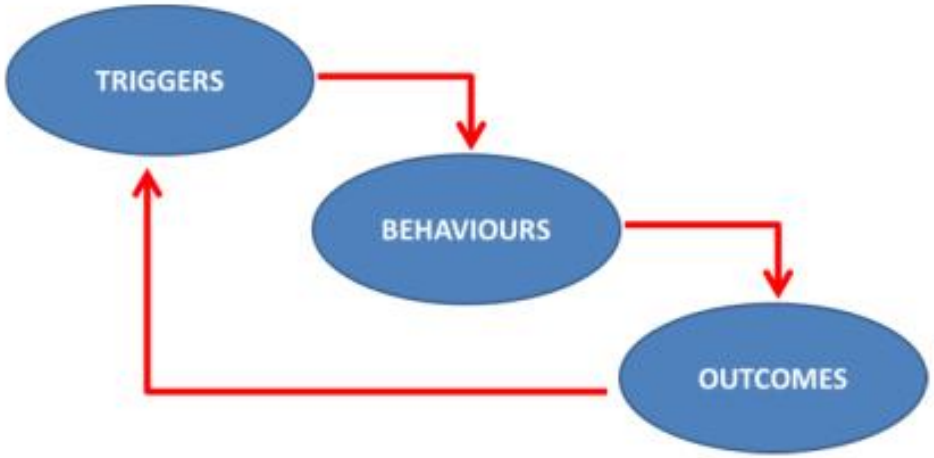
Behavioural analysis

- All behaviours have a trigger
- The behaviour is intended to bring about a desired outcome
- Sometimes unintended outcomes happen because of the behaviour
- Good / Bad outcomes lead to reinforcement / stopping behaviour



Observations

Human Factors rely heavily on observations – to see what people are *doing*

But we have challenges with observing:

- as soon as we *know* we are being observed we change the way we do things
- suddenly things become much more difficult to do if we feel that we are being "judged"
- we all end up "performing" for the observer, rather than doing what we normally do
- it is stressful!

Human Factors Observations are:

- Not about the person
- Not judgemental
- Do not question competency
- Do not criticise individual skills or techniques
- Do not score individuals

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Conclusions

- Haemovigilance is about monitoring to maintain quality and safety
- Patient vs donor needs leads to tension
- Lots of things can go wrong
- NHSBT monitoring of blood donation
- What human factors are and their role
- Aspects of human factors: behavioural analysis, observations, just culture

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Acknowledgements

- Some slides from NHSBT training module ‘Introduction to Human Factors’

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