

**INVOLVE
PATIENTS
TO ENHANCE
TRANSFUSION
SAFETY**



DO YOU KNOW
WHO I AM?

IS THIS
FOR ME?

DOES THIS
MEET MY SPECIAL
REQUIREMENTS?



Patient powered transfusion safety

Dr Shruthi Narayan
Medical Director, SHOT



Outline



Importance of partnering with patients for transfusion safety



Opportunities for engaging patients



Resources available and next steps



Providing assurance regarding safety of transfusions in the UK

The risk of serious harm is 1 in 15,397 components issued

~2.2 million blood components were issued by the four UK Blood Services in 2022

The risk of transfusion-transmitted infection is much lower than all other transfusion related complications

The risk of death related to transfusion in the UK is 1 in 1 in 63,346 components issued

Note: This is a representative image and not accurate to scale

Cumulative data for SHOT categories 1996-2022 n=28877

Errors as a percentage of total reports 2014- 2022

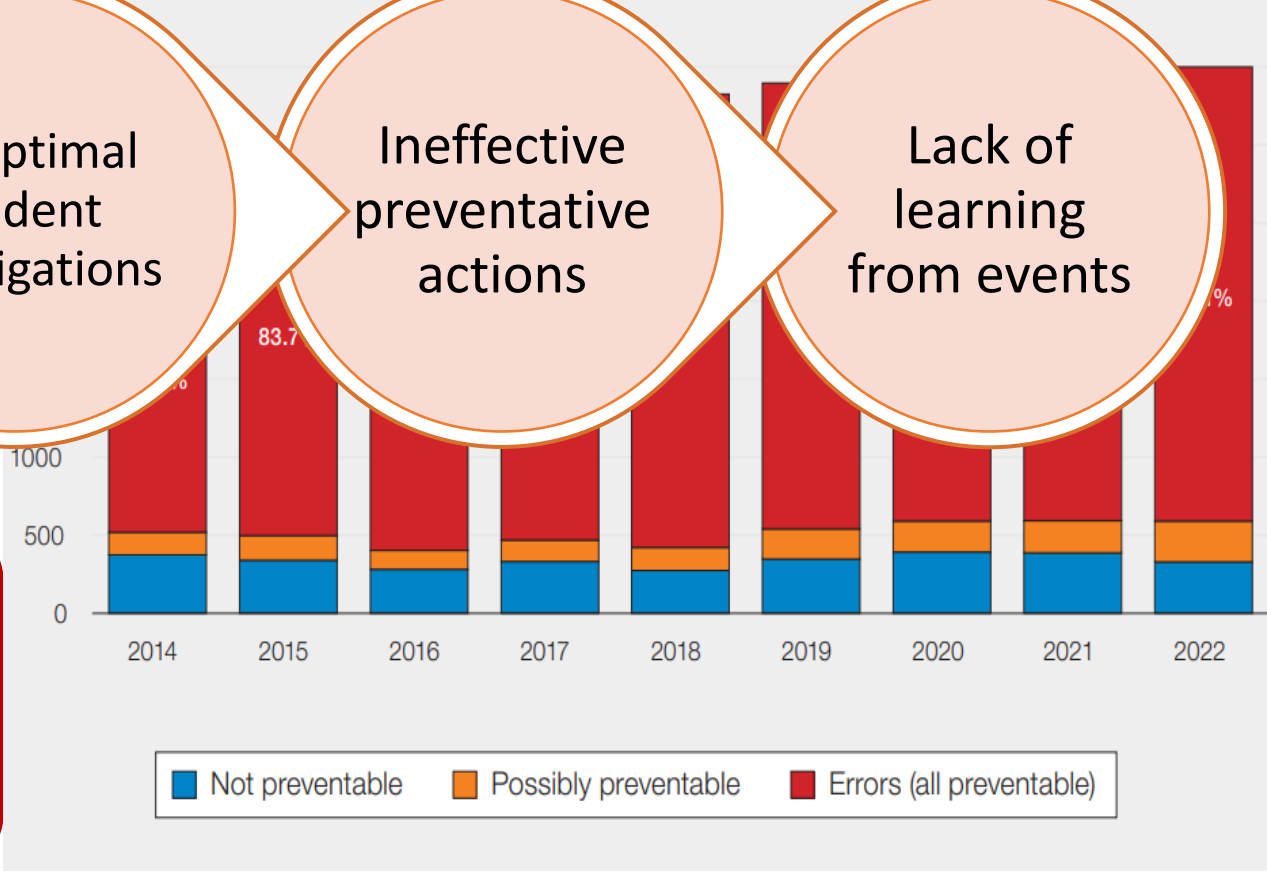
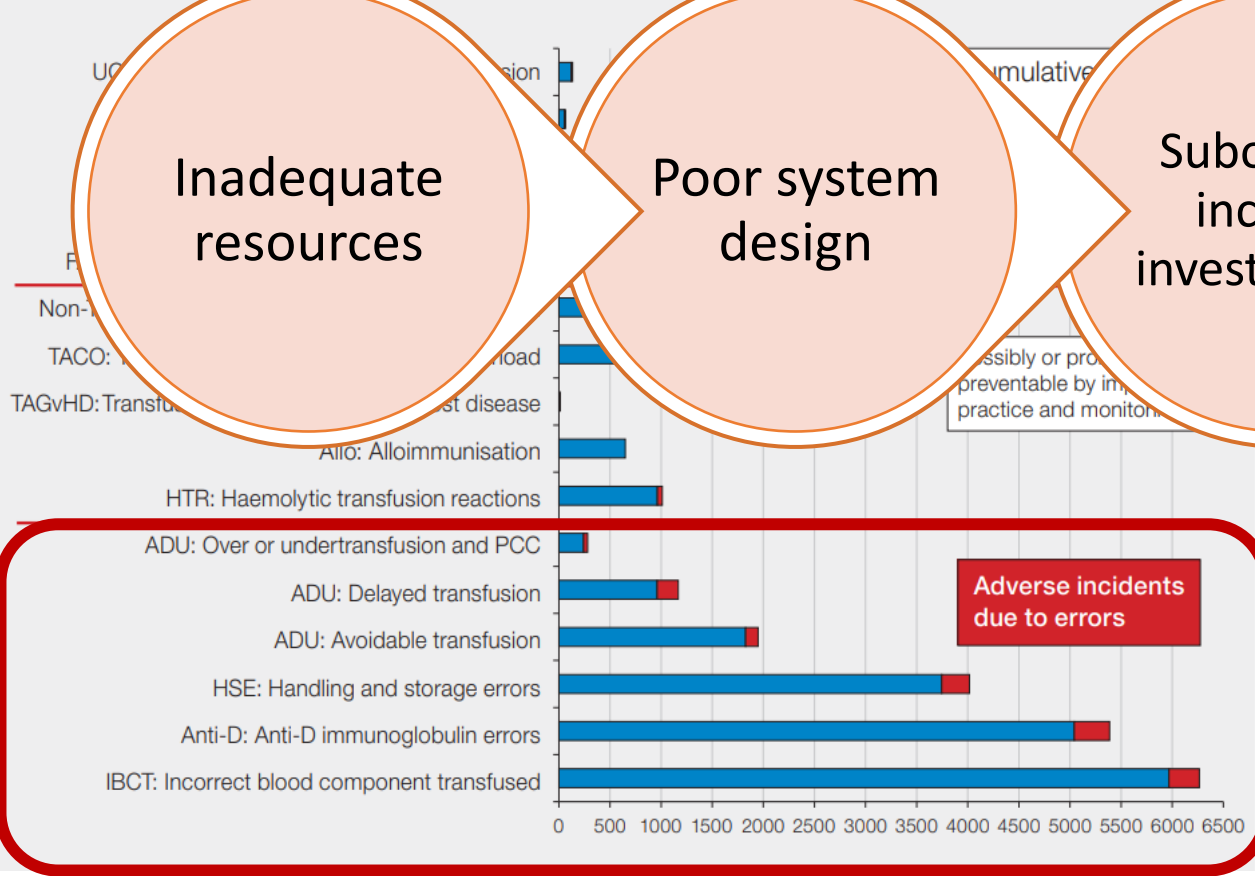
Inadequate resources

Poor system design

Suboptimal incident investigations

Ineffective preventative actions

Lack of learning from events



Illustrative cases: Near miss where a patient could have potentially received another patient's blood

- A woman in her 30s underwent an emergency caesarean section and intra-operative cell salvage (ICS) was facilitated. Blood loss was estimated at 900mL
- At the end of the surgical procedure the patient was moved to recovery before the ICS process was completed producing 226mL of salvaged red cells (O D-positive)
- An anaesthetist then took the labelled reinfusion bag from theatres to the bedside of what they thought was the correct patient in recovery. The bag was hung on a drip stand and connected to a cannula in the patient's arm, but the infusion was not commenced
- The doctor was initially questioned by the patient 'is that mine?' and then challenged by the midwife. Checking the patient's details on the labelled blood bag against the wristband revealed that the doctor was in the wrong bay with a different patient (B D-positive). The infusion was disconnected and removed
- Timely intervention by the patient and the midwife prevented the transfusion of the wrong blood into the wrong patient. The process was updated following this incident whereby a patient receiving cell salvaged blood must leave theatre with the red cell transfusion connected and running

Non-irradiated component administered despite the patient highlighting the specific transfusion requirement



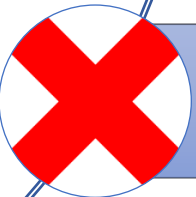
A female patient in her 60s with acute myeloid leukaemia was admitted to a haematology ward for chemotherapy (purine analogue)



As she had symptomatic anaemia, neutropenic sepsis and a Hb of 76g/L she was transfused two units of red cells and 1 unit of platelets. The units issued and transfused did not meet the specific requirements as they were not irradiated

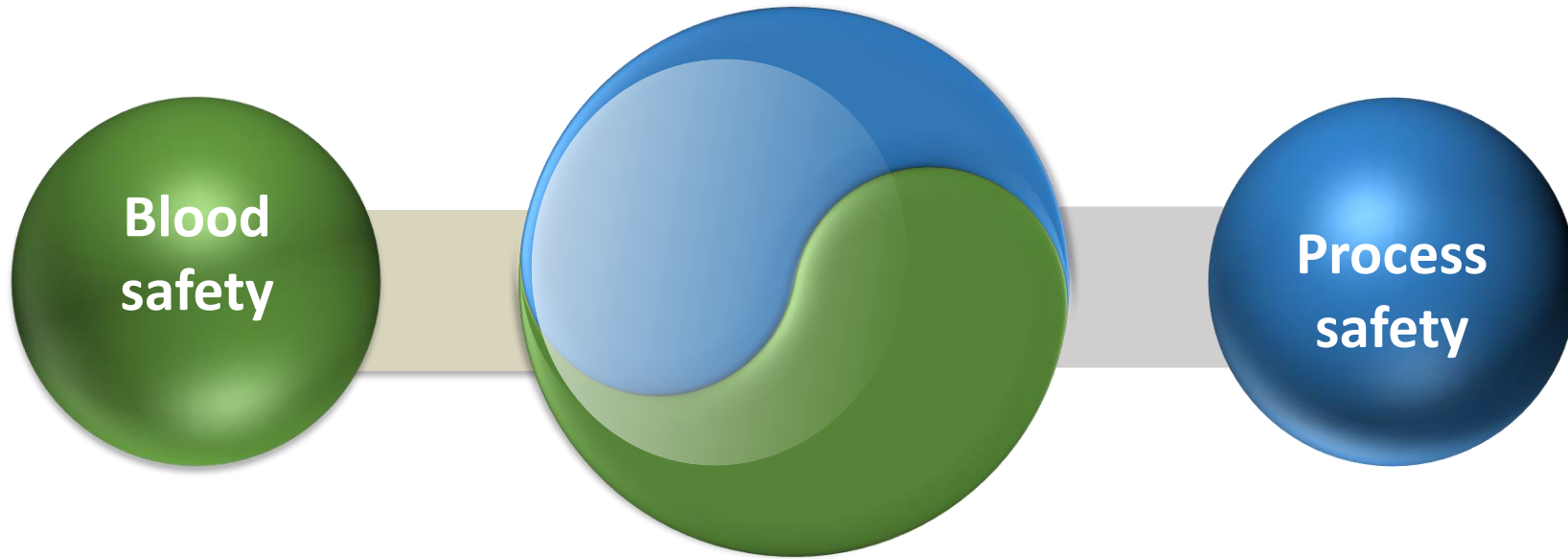


The transfusion laboratory was not informed that the patient required irradiated components and as there was no flag on the LIMS to alert the BMS to the irradiation requirements, standard units were issued



The patient asked staff to check that the components had been irradiated but this was not acted upon. Staff had assumed that the components were irradiated but did not check

Transfusion safety



Transfusion safety is not just about safe blood components, it is also about process-based safety.

Optimising learning from transfusion incidents

1

Using human factors principles and systems thinking (different models/frameworks)

2

Asking the right questions, investigator training

3

Intervention hierarchy- choosing system oriented, long-term solutions

4

Safe and effective implementation of IT vein to vein supported by staff training

5

Involving patients in aspects of personal and organisational safety

6

Promoting awareness of human factors, cognitive bias, capacity planning

7

Aligned with rest of the NHS – patient safety strategy

8

Promoting just, learning safety culture, non-punitive approach

Six simple rules for safe transfusions

Think and act S.A.F.E.T.Y

S

Safety culture- open, learning, just culture

A

Appropriate and timely decisions with timely provision of blood components

F

Focus on people (patients, staff and donors)- not just patient centered but partnering with patients

E

Effective, clear, safe and timely communications

T

Training and competency assessment of all staff involved in transfusions- technical and non-technical skills

Y

Yes, to safe systems- adequate resources, safety checks- checklists, using IT into transfusion pathway

Safe transfusions for all- learning from haemovigilance



SHOT

Serious Hazards
of Transfusion



Involving Patients

Partnering with
patients to improve
transfusion safety

When healthcare providers work closely with patients and their families

Improved health outcomes



The healthcare system is safer

Patients have better experiences

Terminology

**Patient
engagement**

**Patient
involvement**

**Partnering with
patients**

Co-production

Patient engagement continuum

All engagement levels are appropriate, and patients, families, and carers should be determining together with care providers and leaders what the most appropriate level of engagement is for each situation (Patient Engagement Action Team 2019).

Taken from: Engaging Patients in Patient Safety – a Canadian Guide (Patient Engagement Action Team 2017)

Engaging patients



**At an individual
level to enhance
safety**



**Organisational
aspects of
transfusion safety**

How to engage with patients and families?

Quantitative

Patient surveys (although not always wholly quantitative) can be used to understand how people use services and whether they are satisfied with their care. Surveys can also be used to compare changes in perception and quality over longer time periods.



Qualitative

Consultations, interviews, focus groups or patient stories can provide more detailed insights into people's care, for example what went well and what could be improved.

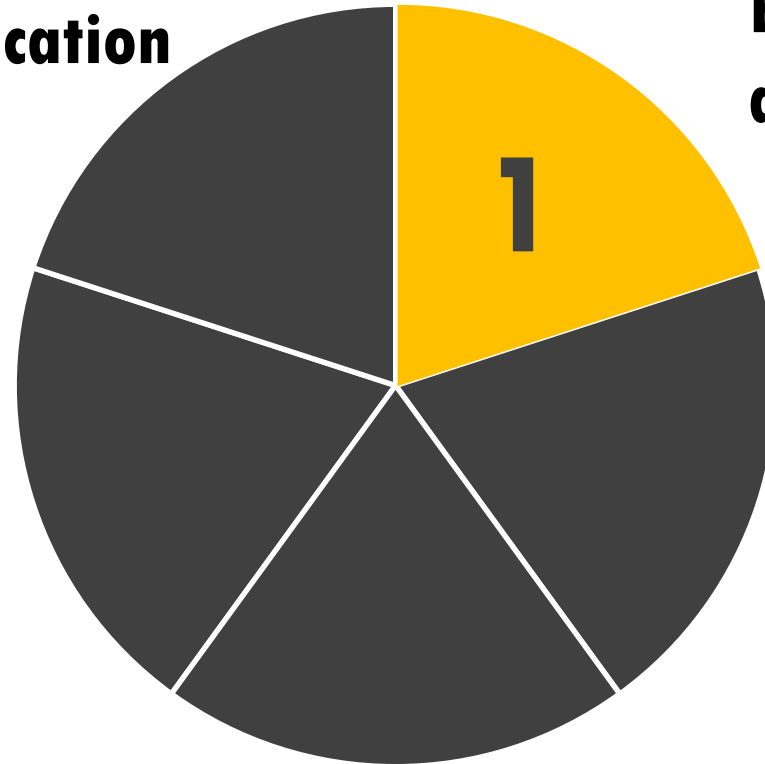
Key points to note for effective patient and public engagement

Staff training and communication

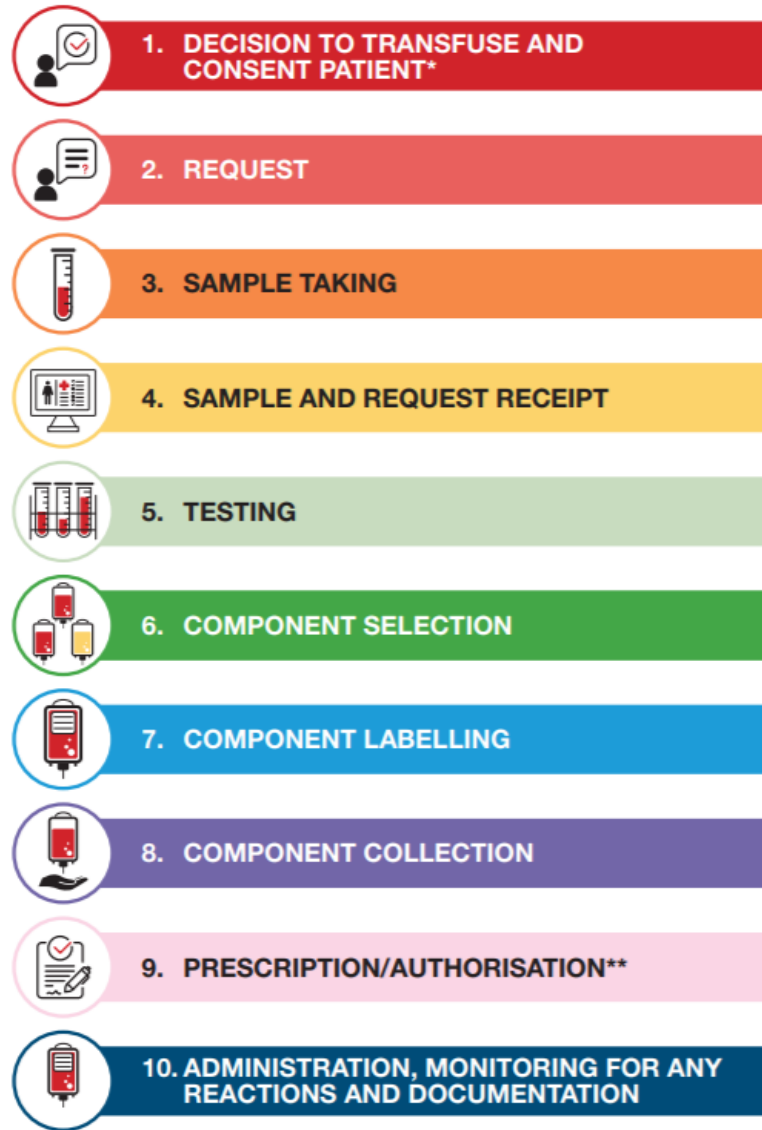
Embedding this into day-to-day practices

Address the challenges of language, terminology and health literacy

Proactive rather than reactive



Need for effective leadership and accountability surrounding engagement and co-production



**Note that the pre-transfusion sample may have been taken in advance (for e.g. pre-op) while the decision to transfuse is made at a later date.*

***Once the decision to transfuse has been made, the prescription/authorisation may be written at variable times during the sequence but must be checked at the final stage.*

Staff are encouraged to use the SHOT Safe Transfusion Checklist with every transfusion episode.

Critical points in the laboratory

Misidentification of patients is a significant cause of avoidable harm. Patient identity must be verified effectively and accurately at every step in the transfusion pathway. All staff must be aware of the importance of correct patient identification and this must be confirmed in accordance with local policies.

Critical points where positive patient identification is essential

Opportunities for patient engagement in the transfusion pathway engagement



Decision to transfuse

A

- Questioning the rationale and appropriateness for transfusion, risks, benefits, alternatives, number of units and type of components, and providing consent


B

- Provide information about any past transfusion history, complications/reactions, and any known antibodies

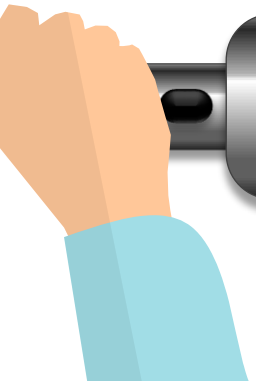


Sample taking:

Check if the blood samples have been labelled correctly, positive patient identification; participating in the safety checks: checking the wristband or other means of identification with correct details



Administration and Monitoring



1

Checking the wristband or other means of identification with correct details; positive patient identification asking for name, date of birth and details checked against the unit of blood

2

Asking questions about what they can and cannot do while receiving a transfusion

3

Asking how they should feel during the transfusion and what to expect e.g., how often their temperature, observations should be checked/taken

Making sure their observations are taken

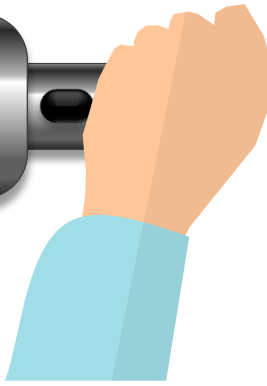
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Monitoring how they feel

5

Reporting to staff if they do not feel well or if they think there is a treatment complication, both during and after transfusion

6



Communications

- Discharge summary and communications to GP
- Post-transfusion information



In case of any safety incidents



Participate in incident investigations,
provide information and share
insights

Degree to which patients might be actively engaged in the transfusion process depends on:



Patient's awareness about how to be involved



Their ability to participate which largely depends on their physical and cognitive capacity



Their willingness to participate and take on an active role

Davis RE, Vincent CE, Murphy MF. Blood Transfusion Safety: The Potential Role of the Patient. *Transfus Med Rev.* 2011;25(1):12-23. <https://doi.org/10.1016/j.tmr.2010.08.003>

Patient webpage on the SHOT website

Aide memoire for patients receiving blood transfusions - Tips to help enhance transfusion safety

What can you do to stay safe?

Transfusions

1. Correct identification

Staff must check your identification (first name, surname, date of birth and unique identification number; in Wales, you will be asked your home address as well) before blood sampling and before transfusion. Accurate identification prevents transfusion errors and wrong components from being transfused. You should challenge any healthcare worker who does not ask and check your name and date of birth.

2. Bring any red cell antibody cards you may have been given in the past.

It can help your treating team keep your records up to date and help you get blood that is appropriate for you.

3. Make sure your clinician knows about any allergic reactions or any adverse reactions you have had to transfusions in the past. Also make sure that the clinician knows about any special transfusion requirements you may have (e.g., need for irradiated blood components).

This can help you to avoid getting a transfusion that could harm you.

4. Make sure your treating team are aware of your medications, especially blood thinners and aspirin/related medications.

Some of these medications may impact transfusion decisions.

5. Labelling of blood samples must be done accurately, in your presence and must be legible. They must contain your identification details.

Labelling errors can result in the sample being rejected by the transfusion laboratory and you may need to attend for another blood test. There is also a risk of wrong transfusion if samples aren't labelled correctly. You should challenge any healthcare worker who takes a sample but doesn't label it by your side.

6. Ask for information about your planned transfusions in terms you can understand—both when blood components for your transfusion are prescribed and when you get them:

- What is the transfusion for?
- What blood component/s is/are being transfused?
- How is it going to be given and how long will it take for the transfusion?
- What side effects are likely? What do I do if they occur especially when I am back home?
- Are there any alternatives to transfusion?
- Are there any precautions that I need to be aware of?

7. Ask for written information about the transfusion which provides information about risks, benefits, and alternatives. If you have any questions about the transfusion, ask.

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If you know what might happen, you will be better prepared if it does or if something unexpected happens.

Several patient information leaflets about blood transfusions are available and can be accessed using this link: <https://hospital.blood.co.uk/patient-services/patient-blood-management/patient-information-leaflets/>

8. Understand that "more" is not always better.

It is a good idea to find out why a test or treatment including transfusion is needed and how it can help you. Not all tests or transfusions are essential.

9. When the blood component is being connected prior to administration, ask is this what has been prescribed/authorised for me.

You should challenge any healthcare professional who has not checked your name and date of birth, as stated by you, against the unit and the prescription.

10. You will be monitored regularly during your transfusion. Unless essential, routine transfusions will be carried out during "normal working" hours. Ask for help if you feel unwell during a transfusion and speak up if you have any concerns regarding your transfusion and/or monitoring.

11. When you are being discharged from the hospital, ask your clinician to explain the treatment and follow up plan after discharge.

This includes information about any delayed complications, making sure you know when to schedule follow-up appointments. Make sure a transfusion summary including any special requirements and reactions you may have had are recorded in the discharge summary and ask about it if it isn't there.

12. If you have had a blood test, do not assume that no news is good news. Ask how and when you will get the results.

13. Learn about your condition and treatments by asking your doctor and nurse and by using other reliable sources such as NHS fact sheets/websites.

Please do not hesitate to speak up if you have any questions or concerns.

*The term "clinician" is used in this leaflet to refer to the person who helps you manage your health care which could be a doctor, a nurse, midwife, or other trained healthcare worker.

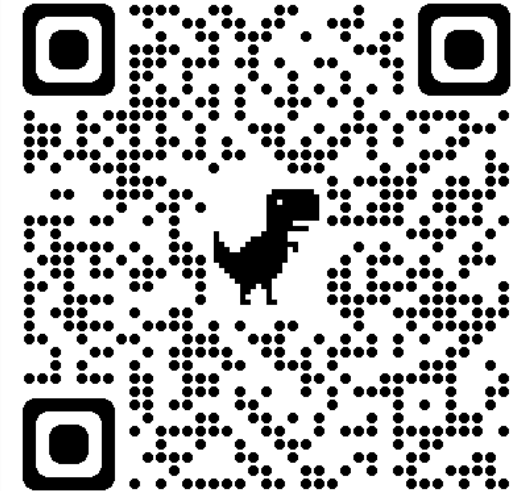
Based on "Tips To Help Prevent Medical Errors: Patient Fact Sheet". Content last reviewed November 2020. Agency for Healthcare Research and Quality, Rockville, MD.

<https://www.ahrq.gov/questions/resources/20-tips.html>



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**Key SHOT recommendation
from the 2021 Annual SHOT
Report:
Partnering with patients to
enhance safety:**

Staff must ensure that they involve, engage and listen to patients as 'partners' in their own care, including transfusion support. Engaging patients, their families, and carers as 'safety partners' helps co-create safer systems, identify, and rectify preventable adverse events.

It is important to note that:



The responsibility of delivering safe care remains in the hands of the healthcare professionals.



Patients should not feel that if they do not wish or are unable to contribute to their own safety they will, as a result, receive substandard care.



Involvement should be encouraged, but patients should not feel pressured into being partners in their own safety if they are not comfortable or able to do so.



It is important to note that patients taking ownership of their own care does not and should not diminish the responsibility of health professionals.

Actions to implement the recommendation:

Actions required:

Hospital senior management should:

- Ensure that organisational systems and processes are designed to be patient-centred
- Develop/implement policies and procedures for engaging patients, families and carers in their own care as well as in quality improvement patient safety initiatives and healthcare design

Clinical transfusion staff should:

- Be trained to listen to patients, communicate effectively using structured communication tools and involve patients in decision making where possible
- Encourage patients to ask questions and provide leaflets, signpost videos and apps as relevant relating to transfusion support as applicable to the patient
- Ensure that patients receive copies of all clinical letters including discharge summaries, outlining their condition and treatment, in simple language, as well as copying these letters to the patient's GP
- Proactively involve patients in their care (monitoring, follow up, making choices regarding treatment) with shared decision making
- Encourage patients to raise concerns, participate in incident investigations as appropriate and provide feedback on actions taken
- Recognise when patients may not want to take any responsibility for safety issues and instead trust that they are being provided with competent care

Patient and Public Engagement in Health and Care across Wales: Bevan Commission Report

Undertake research with key stakeholders including patients and public to inform would be helpful in taking this issue forward.

Improve knowledge of and understanding of existing training resources, tools and support for staff and the public. Build upon existing assets and developments to date such as Coproduction Wales.

Capture and use the feedback and innovative ideas and solutions from patients and the public through an easy-to-use mechanism or tool.



Develop a co-ordinated approach to engagement by ensuring engagement, patient experience, communication and involvement leads work together.

Establish a national group that brings together engagement teams with patients, the public, and clinicians to share experiences, learning, best practice, and work collaboratively to develop more effective engagement across Wales.

Maximise the potential of the Citizen Voice Body for Health and Social Care (CVB) to lead and hold to account better public and patient engagement .

[Patient-and-Public-Engagement-in-Health-and-Care-across-Wales.pdf](#)
(bevancommission.org)

World Health Organisation

[9789240032705-eng.pdf \(who.int\)](https://www.who.int/publications/m/item/9789240032705-eng.pdf)

GLOBAL PATIENT SAFETY ACTION PLAN 2021–2030

**Towards eliminating avoidable
harm in health care**



- One of the seven strategic objectives of the Global Patient Safety Action Plan 2021-2030: **SO4- Engage and empower patients and families to help and support the journey to safer health care**
- **One of the guiding principles: Engage patients and families as partners in safe care**
- **Framework for Action- The 7X5 Matrix**

4



Patient and family engagement

4.1
Co-development
of policies and
programmes with
patients

4.2
Learning from
patient experience
for safety
improvement

4.3
Patient advocates
and patient safety
champions

4.4
Patient safety
incident
disclosure to
victims

4.5
Information and
education to
patients
and families

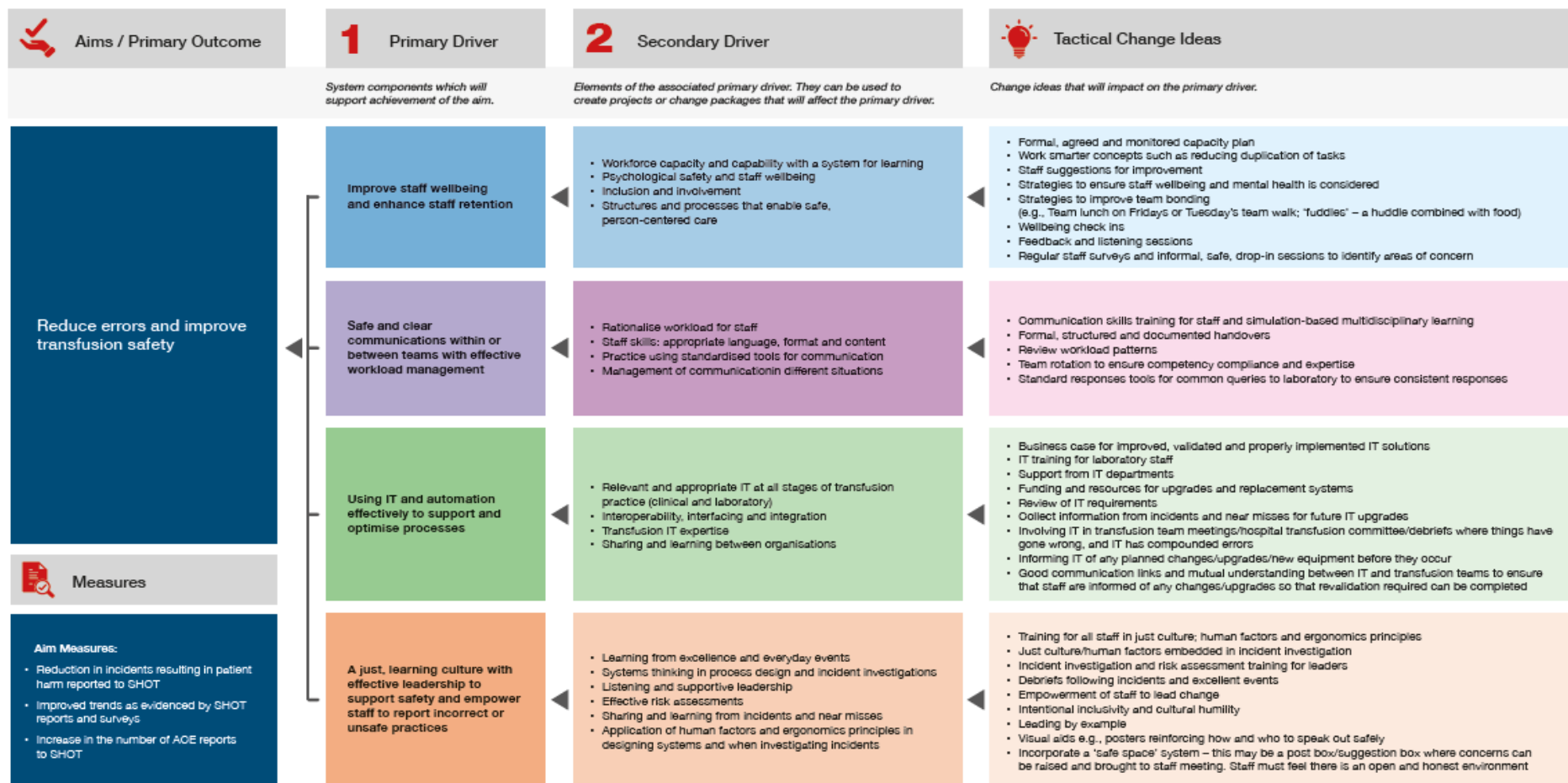
Driver diagram

DRIVER DIAGRAM TO HELP IDENTIFY TACTICAL CHANGE IDEAS TO ENHANCE TRANSFUSION SAFETY

The Problem: Continuing trend in preventable transfusion errors reported to SHOT leading to patient harm including deaths. Common contributory factors identified include issues with staffing, training, safety culture and automation/IT.



A driver diagram is a simple, visual tool used to conceptualise issues and determine the system components which will then create a pathway to get to the goal. This tool that helps support staff to systematically plan and structure improvement projects. Drivers are the factors/areas that you need to change to see improvement. Change ideas are the tactical changes to processes and things that staff could do differently which will impact on the drivers recognised. This is a dynamic document with some suggestions that teams can build on and amend to suit local needs.



Measures

Aim Measures:

- Reduction in incidents resulting in patient harm reported to SHOT
- Improved trends as evidenced by SHOT reports and surveys
- Increase in the number of AOE reports to SHOT

USEFUL RESOURCES

<https://www.ini.org/resources/Pages/Tools/Driver-Diagram.aspx> | <https://www.england.nhs.uk/wp-content/uploads/2022/01/qsir-driver-diagrams.pdf> | <https://learn.nes.nhs.scot/2278/quality-improvement-zone/qi-tools/driver-diagram>



PARTNERING WITH PATIENTS TO ENHANCE TRANSFUSION SAFETY

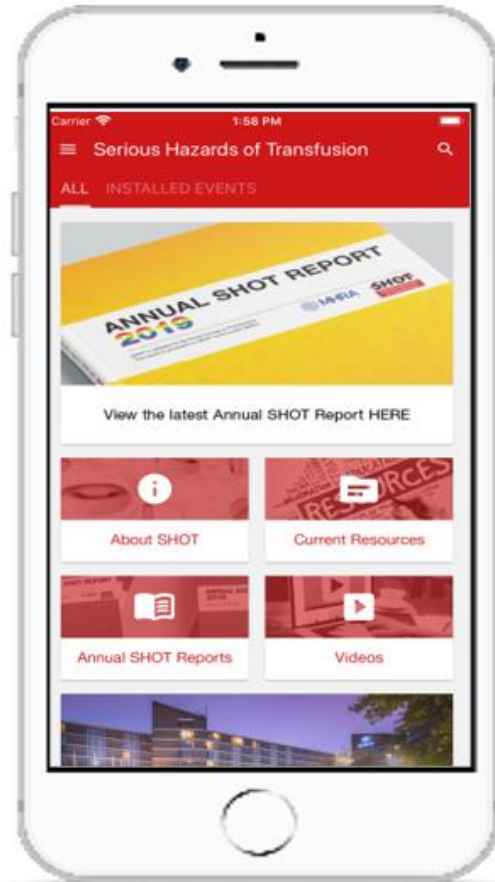
**INFORM, INVOLVE,
AND LISTEN TO
PATIENTS TO
IMPROVE SAFETY**



SHOT
Serious Hazards
of Transfusion

Resources

DOWNLOAD THE NEW SHOT APP

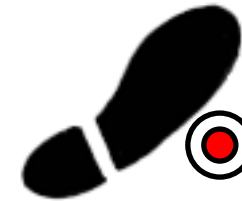
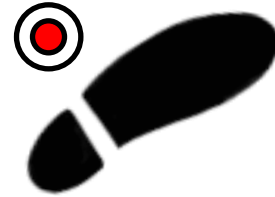


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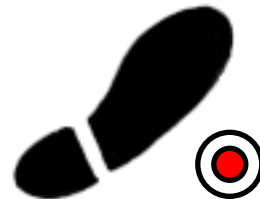
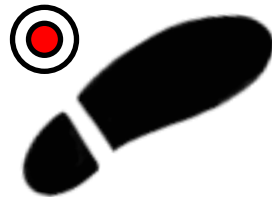


Effective, reliable and resilient systems with feedback loops

Tactical change ideas to address key issues



Share experiences and lessons learnt widely



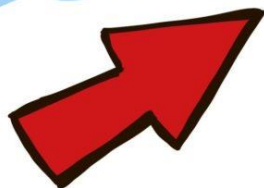
People focused – staff, patients and donors; all involved in the care pathway

**Actions
needed**



Understanding enablers, challenges, opportunities for change

SAFETY
IS A...



TEAM
EFFORT

SHOT

Serious Hazards
of Transfusion



Your Questions Please