PSIRF Case Study

"Management of a Sickle Cell Crisis in a Jehovah's Witness Patient"

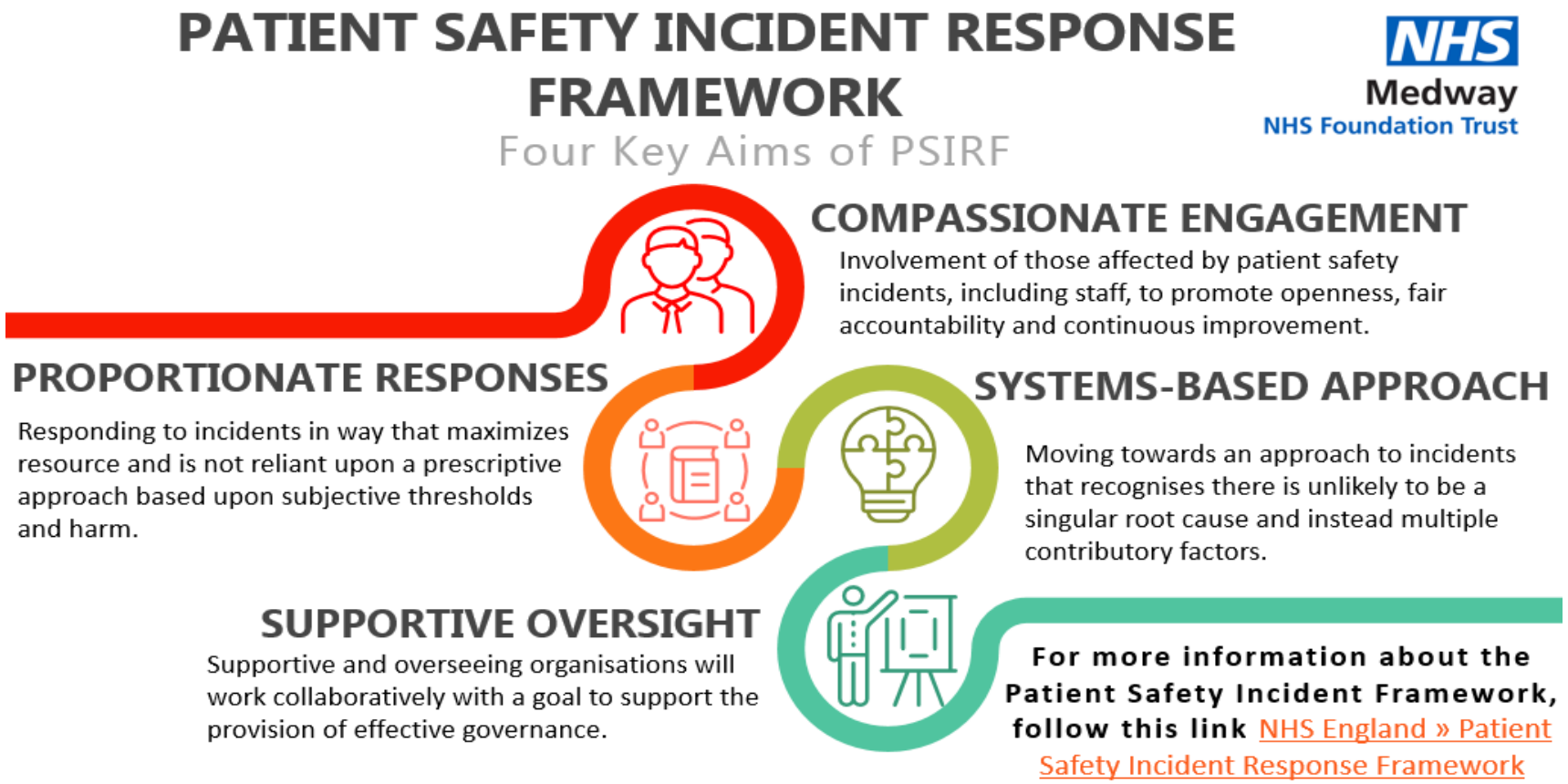
By: Kathleen Sharp, Transfusion Practitioner

NHS Medway NHS Foundation Trust

Patient FIRST

Background

- **Trust went live with PSIRF (Patient Safety Incident Response Framework) on 1st February 2024.**



Incident Summary

Medway NHS Foundation Trust

- 24-year-old female with Sickle Cell Crisis and Sepsis
- Complex co-morbidities, Lupus, DVT/PE, chronic anaemia
- Jehovah's Witness – declined Blood Transfusions
- Ambulance diverted to Medway, MHP activated in error
- Delays in EPO and iron administration
- Patient died of sepsis and multi-organ failure

How Incident Was Identified and Initial Actions

NHS Medway NHS Foundation Trust

- Inappropriate MHP activation flagged by BMS – referred to TP
- ?Breach in patient's care plan and policy (HDU)
- PALS complaint submitted by family; formal complaint escalated as potential legal action citing medical negligence and preventable death

Scoring Perspectives Compared

Clinician View: Low harm -Tragic outcome, seen as unavoidable due to transfusion refusal (scored as low harm)

Lab View: Moderate harm – protocol breach, but no transfusion given

PALS/Family View: Catastrophic harm – death linked to delay and distress

Reflects the difference between system and lived experience evaluation

PSIRF Process Applied

NHS Medway NHS Foundation Trust

1. Incident Reported : TP, Ward and PALS submissions via DATIX
2. Validated: Mismatch between patient plan and actions confirmed (Patient Safety Team – integrated all 3 DATIXs under 1 number)
3. Investigation Level Determined: Full PSII initiated (Patient Safety Team)
4. Investigation Conducted: SEIPS methodology applied
5. Findings completed: Multidisciplinary review
6. Learning Shared: After Action Review (AAR), SWARM and directorate debriefs

SEIPS Analysis –System Contributors

1. Persons:
   - Staff unaware of and unclear about patient's advanced directive
   - Limited experience managing complex haemoglobinopathies
   - Inconsistent communication and role clarity between shifts
   - Parents' views

2. Tasks:
   - MHP triggered despite known transfusion refusal
   - Delays in administration of acceptable alternatives (EPO, Iron)
   - Lack of standard task flow for high-risk patients with care limitations
   - Sepsis 6 bundle

3. Tools and Technology:
   - EPR downtime hindered access to records and decisions
   - Absence of visible alerts in system for transfusion refusal
   - Inadequate access to clinical protocols and escalation tools during downtime

SEIPS Analysis continued

NHS Medway NHS Foundation Trust

4. Organisation:

- **Failure to ensure 24/7 access to escalation pathways**
- **Policies are not enforced consistently across departments**

5. Internal Environment

- HDU stress levels impacted communication and decision-making
- Limited time and space to safely coordinate care

6. External Environment:

- Complex patient flow and interdependence between emergency services and HDU
- No national guidance on how to manage alternative care plans in sickle cell patients refusing transfusion

Key Learning and Impact

- Missed opportunity for safe, values-based care
- Confusion over advanced directive and emergency policy
- Breakdown in interdepartmental and family communication
- Undermined trust in clinical systems and governance

Positive Practice to Retain

- Specialist haematology involvement
- Excellent HDU care
- Proactive escalation by laboratory staff
- Clear prior documentation of beliefs

Improvements Implemented

- Psychological support and debriefing offered to staff involved, recognising the emotional and ethical distress experienced during and after the incident
- SOPs revised: MHP, pain/crisis pathways
- Training on ‘Advanced Decisions’ and transfusion refusal reinforced
- Weekend escalation processes reinforced
- Alerts in EPR for patients with care limitations
- Sepsis 6 Bundle Task Force created to improve early recognition and timely management of sepsis in complex patients
- **Downtime Mitigation Actions:** Paper-based backup protocols, downtime training, clarified roles during IT failure

Reflections and Summary

NHS Medway NHS Foundation Trust

- Tragic loss highlighted urgent system issues
- PSIRF enabled meaningful learning and compassionate review
- Engaged families, improved processes, supported staff
- Commitment to safe, respectful patient-centred care

Is your team ready when patient values, safety, and system pressure collide?

NHS
Medway
NHS Foundation Trust

Thank you for listening!

Acronyms

PSIRF: Patient Safety Incident Response Framework
SI: Serious Incident
MHP: Major Haemorrhage Protocol
EPR: Electronic Patient Record
EPO: Erythropoietin
HDU: High Dependency Unit
BMS: Biomedical Scientist
PALS: Patient Advice and Liaison Service
AAR: After Action Review
SWARM: Structured What-Why-Action Rapid Meeting
SEIPS: Systems Engineering Initiative for Patient Safety
SOP: Standard Operating Procedure

NHS
Medway
NHS Foundation Trust

Sources

Medway NHS Foundation Trust

- NHS England. Patient Safety Incident Response Framework (2022).
- NHS Kent and Medway PSIRF Implementation Guidance (2024).
- SEIPS Human Factors Model Reference Guide.
- SWARM Huddle Toolkit – NHS England.