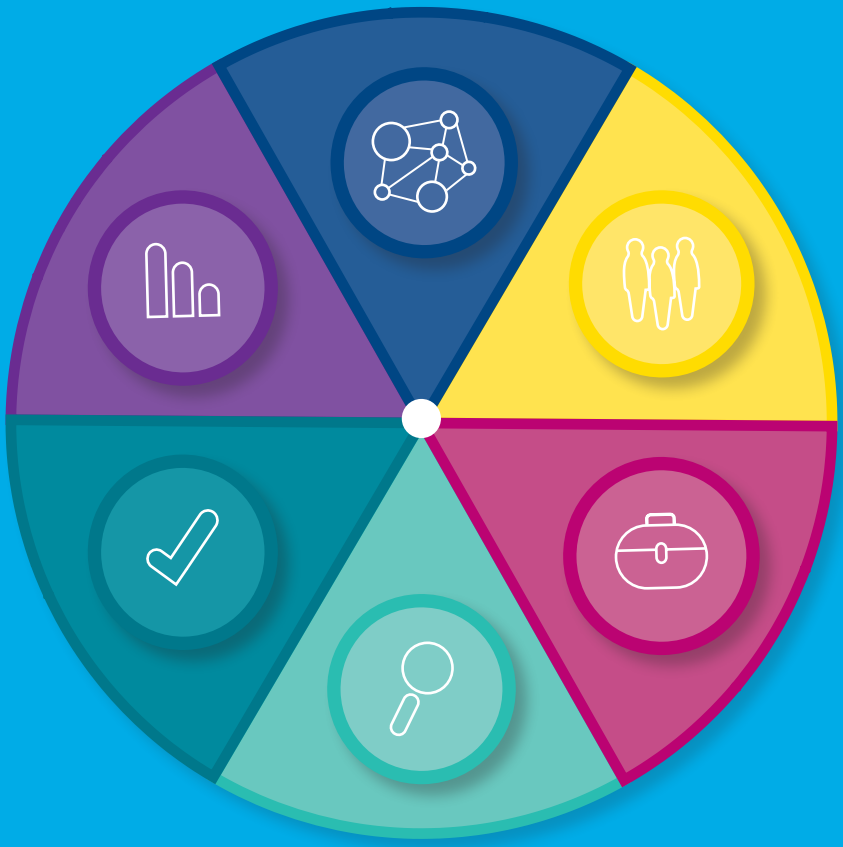
NHS Education for Scotland

Systems Thinking for Everyday Work (STEW)

A Safety & Improvement Model for Healthcare

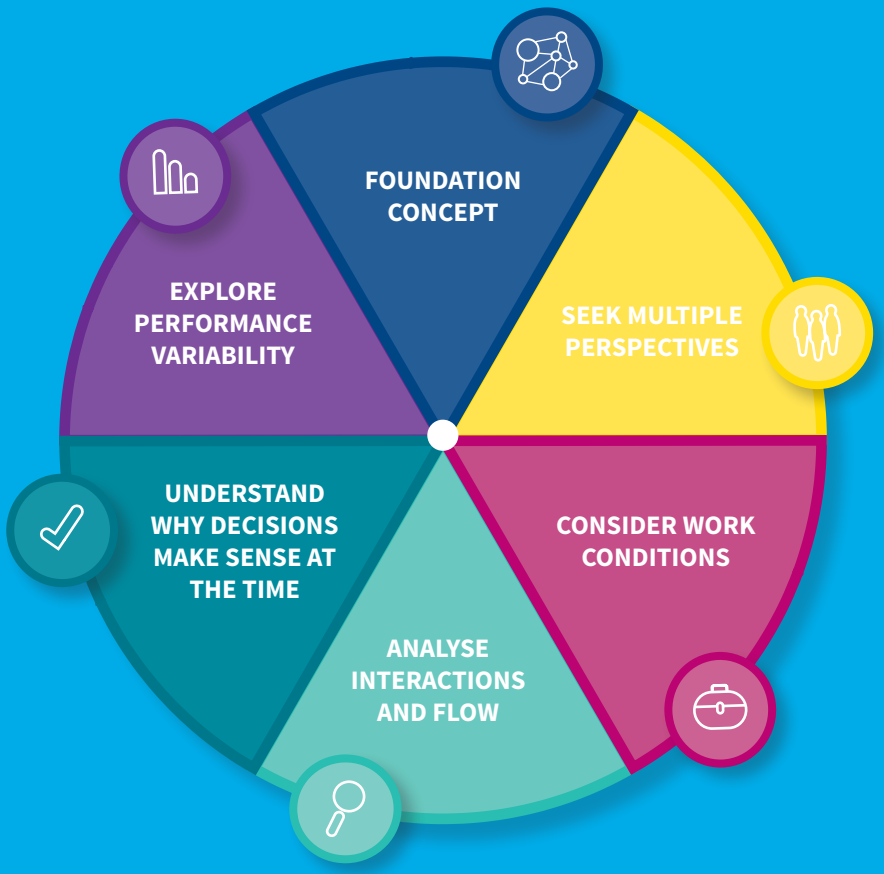


Introduction

The principles contained in these cards can be used to frame team discussions to encourage a systems approach to exploring and improving safety in healthcare.

They can help to:

- Understand the current system
- Analyse incidents (with both wanted and unwanted outcomes)
- Identify improvement priorities
- Develop change ideas and their implementation into current work systems
- Monitor, evaluate and spread change.



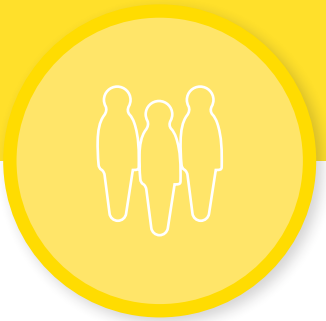
Foundation Concept

Most problems and solutions belong to the care system.
To understand safety, consider the overall care system, rather than focussing on isolated parts, events or outcomes.

- Acknowledge that the **overall performance** of the system may not be improved by maximising the performance of a single system element.
- **Define the overall care system purpose** and parameters for system success.
- **Agree boundaries** – any care system we wish to study will be closely linked and influenced by other systems. Out of practical necessity, the focus must be on the parts of the care system within our control. However, the boundaries of a system appear different to different people, so agreement should be sought on the nature, scale and scope of the boundary.

Seek Multiple Perspectives

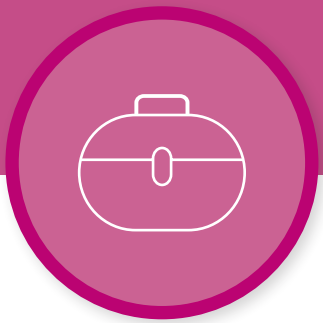
Appreciate that people, at all organisational levels and regardless of responsibilities and status, are the local experts in the work they do.



- Recognise that different people, in different roles, with different information and goals, will have **different perspectives** on a situation.
- **Explore the experiences** and views of all people that work within the system of interest (e.g. clinical, administrative, ancillary, managerial staff, patients and carers) to better understand the work system and change implementation issues when:
  - **Analysing incidents**
  - **Designing and implementing change**
  - **Monitoring and evaluating change**.

Consider Work Conditions

Appreciate that the *interacting* combination of demand, capacity, resource availability and constraints influences the way people undertake work at any given time.



- Work conditions include:
  - **Demand** – includes patients' need for information, appointments and treatment and the staff need to complete work in a certain time.
  - **Capacity** – the care system's ability to meet demand
  - **Resources** – everything needed to perform a work function
  - **Constraints** – guidelines, protocols and limits on capacity that restrict decisions and actions either positively or negatively.
- Explore and understand how demand varies over time and if this variation is matched by changes in capacity.
- Where feasible ensure essential resources are available.
- Identify leading indicators of impending trouble by anticipating changes in conditions (e.g. have extra staff after public holidays to increase capacity to meet expected rise in demand).
- Examine how work conditions affect staff well-being (e.g. health, safety, motivation, job satisfaction, joy at work) and performance (e.g. care quality, safety, productivity, effectiveness).

Analyse Interactions and Work Flow

Appreciate that interactions between people, tasks, equipment, environments (e.g. physical, social, organisational) and external influences (e.g. national policy, regulatory obligations) are complex and dynamic and affect care system performance and human well-being (e.g. patients and staff).

- When making changes to isolated parts of a care system, be mindful of the **impact on overall system functioning** and related systems by considering the aforementioned interactions.
- Explore how system interactions affect patient or information flow. Consider the **bottlenecks and blockages** to effective working.

Understand Why Decisions Make Sense at the Time

When looking back on individual, team or organisational decision-making, appreciate that people do what makes sense to them based on the system conditions experienced at the time.

- **Explore people's understanding** at the time decisions were made including their work, personal and team **goals and the system conditions** (e.g. demand, capacity, constraints and resource availability).
- **Be wary of hindsight bias** (seeing the event as predictable once the outcome is known) that can lead to a distorted picture of what happened.
- **Avoid blaming 'human error'** as a 'cause' of a problem or safety incident. This may reduce learning and future engagement in improvement activities. Consider **why it made sense for the person** at the time, including the influence of the situation, system and context.
- **Promote a 'Just Culture'**. Do not seek to punish staff for actions that are in-keeping with their experience and training. Instead understand what happened, support those involved and **improve work systems** to reduce the risk of recurrence.

Explore Performance Variability

Appreciate that people continuously adapt and vary how they work to achieve a successful outcome based on their own goals and the system conditions they face - this is everyday work.

- Acknowledge that **work conditions change** rapidly and so individual and team performance adjustments are needed for success.
- Consider how performance adjustments such as **trade-offs** and **workarounds** contribute to both successful and unsuccessful outcomes.
- Explore and understand the difference between ***Work-as-Done*** (how work really takes place) and ***Work-as-Imagined*** (how others think work is done e.g. guidelines, policies and protocols).
- Appreciate that desired work outcomes (successful episodes of patient care) and undesired outcomes (unintended patient safety incidents or poor patient care experiences) often **emerge** from the same source: **Everyday Work**.

This resource may be made available, in full or summary form, in alternative formats and community languages. Please contact us on **0131 656 3200** or email **altformats@nes.scot.nhs.uk** to discuss how we can best meet your requirements.

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