

A Human Factors approach to developing a learning toolkit for the NHS

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SUMMARY

Despite huge effort invested in investigating patient safety incidents in the NHS, mounting evidence pointed to a need for a fresh approach. To enable the NHS to move from Root Cause Analysis (RCA) to a more flexible and proportionate approach to learning from safety events, a human factors informed Learning Response Toolkit was developed.

KEYWORDS

Systems thinking, Investigation, Safety events

The need for change: What prompted the development of a new learning response toolkit?

Root Cause Analysis (RCA) has been the cornerstone of healthcare's approach to safety investigation for over two decades, this is despite evidence questioning the applicability of this method to the analysis of complex systems (Peerally et al. 2017; Card, 2017).

Recent research has also highlighted that guidance describing how to transform insight gathered during investigation processes (whether via RCA or another approach) into meaningful improvements is scarce (Lea, et al. 2023).

The new NHS England Learning Response Toolkit was designed to address the above methodological issues and more. The toolkit forms part of wider structural changes in how the NHS responds to safety events introduced by the Patient Safety Incident Response Framework (PSIRF, NHS England, 2022) and the NHS Patient Safety Strategy (NHS England, 2019).

The process of change: How was the new toolkit developed?

Stage 1: Discovery

Discovery included a literature review and discussions with professional networks. The aim was to identify a set of tools with the potential to be tailored and applied by healthcare organisations to support systems analysis and learning from healthcare safety events.

The discovery exercise identified seventeen tools, methods, and approaches. The tools were assessed against five criteria aligned with wider aspirations of PSIRF. Assessment led to a selection of tools being short-listed for further development.

Stage 2: Prototyping

Prototypes were developed in collaboration with method experts. The intention was to ensure systems thinking was embedded in all tools created. Prototypes took the form of guidance notes and prompts rather than templates to complete. The aim was to enable flexibility in response, focused on creating a psychologically safe space for facilitated discussion rather than form filling and box-ticking.

Stage 3: Formative testing

Formative user testing was used to understand the usability of the prototype tools and the applicability of the tools to a range of safety events across and between different healthcare settings.

Participants included learning response leads/investigators within healthcare organisations and national organisations. Participants were asked to trial the prototypes as part of their current learning response processes and to feedback on usability, accessibility, and potential applications. The tools were tested in a range of clinical settings.

Stage 4: Iterating

Prototypes were updated in response to formative usability testing. Feedback also prompted the development of an additional guide to conducting thematic analysis and a safety action development guide.

The Learning Response Toolkit was published alongside the wider PSIRF in August 2022.

What next?

In its entirety, the toolkit provides a comprehensive set of tools for responding to safety events and proactively developing improvement efforts.

Organisations are encouraged to test and adapt the tools while ensuring a system thinking remains at the heart of their approach. Some tools have been adapted to fit specific contexts (e.g., falls SWARM, Royal College of Physicians, 2023).

To simplify the toolkit and to ensure cohesion across the various tools, a single framework was used to encourage systems thinking. However, it is important to recognise that this provides a single lens or ‘world-view’ through which safety events are considered. Other perspectives on safety exist and may prompt different findings and actions in relation to safety events (Wiig et al, 2020). Future work could explore how to incorporate these different lenses into the toolkit as well as further refining existing tools and incorporating new approaches.

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