

Open Book

Learning from close calls and adverse events

Learning Review

The Health Quality & Safety Commission's (the Commission's) National Adverse Events Reporting Policy 2017 (1) supports health and disability service providers to use various review methodologies.

This Open Book introduces the Learning Review, a process originally developed in the United States Forest Service. It takes a systemic approach to developing a learning culture and improving organisational resilience, and shifts the focus of the review process from causation to prevention.

This report is relevant to all staff and team members who manage adverse event reviews.

About the Learning Review

A Learning Review centres on understanding the actions and decisions of workers by mapping systemic conditions that influence human actions.

How the Learning Review came about

Ivan Pupulidy, the developer of Learning Reviews, wanted to find a better way to review accidents and incidents informed by human factors, organisation resilience, social construction and complex adaptive systems thinking. His dissertation, titled 'The transformation of accident investigation from finding cause to sensemaking' (2), outlines how the Learning Review was developed.

The Learning Review is influenced by the work of Sidney Dekker (3), Professor at Griffith University Brisbane, Erik Hollnagel (4), Professor at the University of Jonkoping, Sweden and Karl Weick, Professor at the University of Michigan (5).

Responding to complex health systems

Health care involves complex systems, where frontline workers have to make high-stakes decisions within rapidly changing circumstances. Complex systems require effective teamwork if work is to be done in the safest way possible.

In such settings, Ivan Pupulidy questions the validity of concepts such as cause and effect, and a single objective narrative, and warns of the impact of hindsight.

In response to these concerns, the Learning Review considers actions and influences, to embrace the complexity of multiple perspectives and limit the impact of hindsight bias.

Main aims of the Learning Review (6)

The first main aim of the Learning Review is to develop resources that help frontline staff learn from an adverse event. It is critically important for frontline staff to recognise changing conditions as soon as possible and to develop ways to be sensitive to those changes (situational awareness). Improving or activating situational awareness is a key step in the successful adaptation to changing circumstances (7).

The Learning Review process encourages the development of a range of learning 'products' that are tailored to the needs of those involved.

Second, as a major role of leadership is to create a workplace in which workers can be successful, the Learning Review should provide leadership with an understanding of the conditions they can manage to increase the likelihood of success.

'Using the Learning Review approach, the New Zealand forestry industry has been successfully improving its incredibly high-risk operational systems since 2015.

'The beauty of this process is that the learning comes from operational people. They are the ones who face the risks and challenges each day. They are the ones who recognise the conditions and pressures present during an event. And they are the ones who have the expertise to understand and suggest practical, innovative ways to mitigate or eliminate system vulnerabilities.' (Brionny Hooper, Scion)

Key differences in the Learning Review approach

Those who have reviewed adverse events before will see much that is familiar in the Learning Review, but there are some key differences in the approach.

First, the interview process is aimed at understanding how the decisions and actions taken made sense to workers at the time they were made and in the context in which they were made. This focus on 'work as done' is described by Sidney Dekker as 'getting into the tunnel' (8). It aims to reduce the impact of hindsight bias by letting those involved unfold the story for the reviewer.

The second significant difference is the role of focus groups. Sense-making is mainly done through focus groups of frontline experienced workers and consumers, usually people who have similar roles and experience to those who were involved in the adverse event.

The group is presented with the information in narrative and visual form by a facilitator and asked whether they have had similar experiences and what was learnt from such experiences.

The group is asked for recommendations on how to prevent such events recurring and to consider technological and systems solutions.

Other focus groups may add further value, such as technical or academic experts.

Simulated Learning Reviews

The Commission's adverse event learning programme workshops provide an opportunity to conduct a simulated Learning Review. Due to COVID-19, workshops will be available via Zoom rather than person-to-person from October 2020. Please [see the Commission website](#) for details.

Endnotes

1. Health Quality & Safety Commission. 2017. [National Adverse Events Reporting Policy](#).
2. Pupilidy IA. 2015. *The transformation of accident investigation: from finding cause to sense-making*. Tilburg, the Netherlands: Tilburg University.
3. Dekker SW. 2015. The psychology of accident investigation: epistemological, preventive, moral and existential meaning-making. *Theoretical Issues in Ergonomics Science* 16(3): 202–13.
4. Hollnagel E. 2009. *Safer complex industrial environments: A human factors approach*. CRC Press.
5. Weick KE. 1995. *Sensemaking in organizations* (Vol. 3). SAGE Publications, Inc.
6. United States Department of Agriculture Forest Service. 2017. [Learning Review Guide](#).
7. Burke CS, Stagl KC, Salas E, et al. 2006. Understanding team adaptation: A conceptual analysis and model. *Journal of Applied Psychology* 91(6): 1189.
8. Dekker S. 2006. *The Field Guide to Understanding 'Human Error'*. Farnham, UK: Ashgate Publishing Ltd.