

Patient safety incident investigation

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What is a patient safety incident investigation?

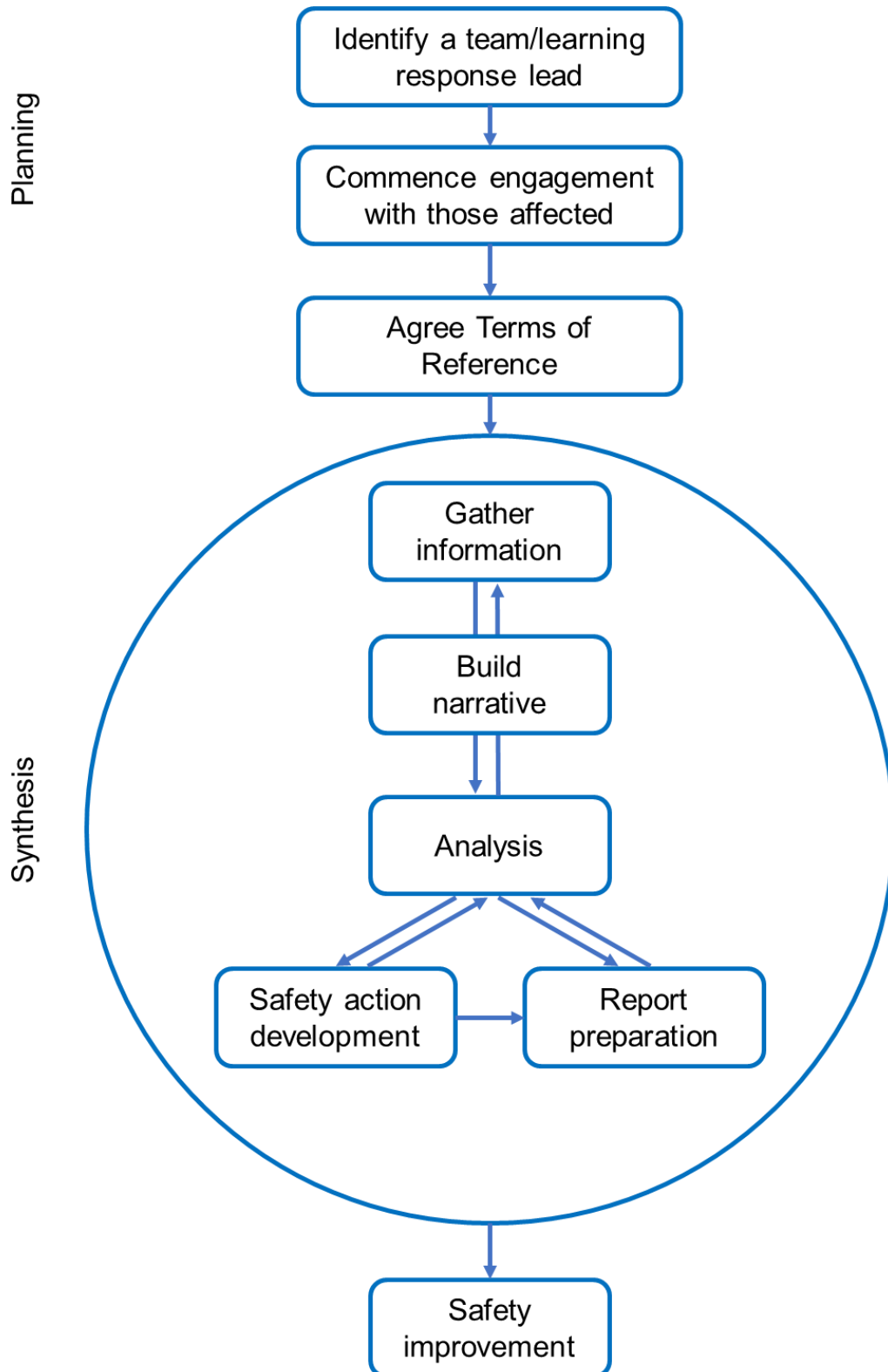
A patient safety incident investigation (PSII) is undertaken when an incident or near-miss indicates significant patient safety risks and potential for new learning.

Investigations explore decisions or actions as they relate to the situation. The method is based on the premise that actions or decisions are consequences, not causes, and is guided by the principle that people are well intentioned and strive to do the best they can.

The goal is to understand why an action and/or decision was deemed appropriate by those involved at the time.

Process

Figure 1: Overview of patient safety incident investigation stages



Stage	Description
Identify a team/learning response lead	<p>The investigation team should be formed based on factors including availability, systems-focused safety investigation knowledge and interests.</p> <p>The lead should be the single point of contact, participate in all phases of the investigation and collaborate with subject matter experts as appropriate.</p> <p>See Patient safety incident response standards for details on training requirements.</p>
Commence engagement with those affected	<p>This process should start as soon as possible.</p> <p>See Engaging and involving patients, families and staff following a patient safety incident.</p>
Agree terms of reference (ToR)	<p>The crafting of precise and clear ToRs is a critical stage as it will determine how effective the investigation is and satisfaction with its output.</p> <p>See: Terms of reference guide.</p>
Gather information	<p>In this stage the learning response leads look ‘down and into’ a patient safety incident. The objective is to gather as much information as possible about what happened.</p> <p>See: Evidence log for a template to list all information gathered.</p> <p>See: Everyday work guides (ie observations, link analysis, walkthrough analysis and interview tool) for different approaches to information gathering.</p>
Build narrative	<p>Build a detailed narrative from the information gathered.</p> <p>The narrative does not need to be broken down by time – often people operate from activity to activity rather than minute to minute. Unlike a film or a novel, incidents do not have a beginning, middle and an end.</p> <p>See: Timeline mapping template.</p>
Analysis	<p>The Australian Transport Safety Bureau (ATSB) Safety investigation guidelines (2011) defines analysis as: “the process of making conclusions or findings about something”.¹</p> <p>Analysis is an iterative process at the centre of an investigation (see Figure 1) – it may reveal the need for further information gathering, and when writing your investigation report you may identify the need for further analysis. Analysis starts at the beginning of an investigation but will be</p>

¹ The ATSB also define analysis as “the process where available data is reviewed, evaluated and then converted into a series of arguments, which produce a series of relevant findings. It is the link between the collected data and the findings of an investigation” (ATSB, 2011).

Stage	Description
	<p>more prominent after information gathering and continues until the investigation report is finalised.</p> <p>There are no detailed, prescriptive rules that can be applied in all situations. Ultimately analysis relies on informed judgement and is, to some extent, subjective. However, a system focused framework and/or tools should be used to reduce the risk of investigation conclusions and findings are overly subjective.</p> <p>The following structure can help develop useful, realistic findings that will be widely accepted:</p> <ul style="list-style-type: none"> • application of a consistent framework throughout information gathering (eg SEIPS – see SEIPS quick reference and work system explorer) • structured set of analysis stages (see Appendix) • a team-based approach • knowledge about the domain being investigated. <p>The output of the analysis stage is an agreed set of findings.</p> <p>See Work system scan and interaction map for a template to document findings.</p>
Safety action development	See Safety action development guide .
Report preparation	<p>Before writing your report consider:</p> <ul style="list-style-type: none"> • Who is going to be reading it – are there language implications? • Who needs to be involved? • When is the report required – can you meet this timeline? • How will needs of the readers be accommodated? • How should the report be formatted, including how will findings be described?

Tips

Capture multiple perspectives to reduce bias

Bias can significantly change the way data is used or interpreted. Once people know the outcome of an incident, it will be impossible for them to be without bias when looking back at what happened. For this reason, it is important to avoid forming conclusions too early.

Remember that the recollections of individuals will already be filtered through their own bias, mental models, and rationalisation. Investigation team members are not objective observers of reality – they will also be making sense of an incident and introducing biases and heuristics when doing so.

The narrative should showcase the incident from as many perspectives as appropriate. Differences in perspective do not need to be resolved in one ‘correct’ narrative. All perspectives need to be valued and this is likely to result in a complex narrative.

Capture the ‘view from inside the tunnel’²

Focus on understanding the actions as they appeared to the people ‘inside the situation’.

Strive to enable readers to ‘walk in the shoes’ of the incident’s key players. At a minimum, the narrative should use the information known at the time to show how the decisions taken made sense within the social and cultural context.

The investigation team should seek to understand how the incident was perceived by those involved and why their actions/decisions made sense at the time they were taken.

Do not use the term cause

In legal contexts the term cause is strongly associated with blame and liability. There are also semantic difficulties with the term; many complicated philosophical arguments surround what constitutes a cause.

Avoid ranking contributory factors by degree of ‘contributory-ness’

Avoid differentiating contributory factors in terms of degree of connection or perceived importance in relation to the incident. Ranking in terms of degree of contribution can be perceived as a way of differentiating the level of responsibility or blame for the incident.

² Dekker. S. (2014). The field guide to understanding ‘human error’. (3rd Ed) CRC Press

Appendix: Suggested structure for analysis

Adapted from Australian Transport Safety Bureau (2011)

Analysis phase	Description
Preliminary review	<p>Organise information in a format suitable for analysis (eg into SEIPS 'buckets' – see SEIPS quick reference and work system explorer).</p> <p>Includes systematic review of narrative.</p>
Finding identification	<p>Search for patterns or themes in the information you have collected (see Thematic review top tips) to identify hazards (ie potential sources of harm).</p> <p>The investigation may identify a range of hazards: some may be 'contributory' (ie if they had not arisen the incident would 'probably'³ not have happened); others may not be contributory but may be identified during an investigation. All should be considered findings.</p> <p>Try not to favour a particular finding, keep an open mind.</p> <p>Use a multidisciplinary team approach to ensure different perspectives are captured (see SHARE debrief guide).</p>
Risk analysis	<p>Use a structured process to determine the risk associated with identified findings.</p> <p>You could classify risk by estimating consequence and likelihood. Alternatively, simple rules of thumb can be used based on general principles such as:</p> <ul style="list-style-type: none"> • starting where the patient will experience the most difference • starting with the most common failures. <p>'Increase in risk' needs to be interpreted realistically rather than pedantically (eg the process for starting an infusion would not normally be considered a safety factor unless it was done in such a way that increased risk relative to normal operations).</p> <p>Agree the findings to be included in your patient safety incident investigation report.</p>
Analysis review	<p>Review the agreed findings to identify gaps or weaknesses.</p>

³ In most situations, it is not possible to specify that a factor was contributory with absolute certainty. Those that can be specified with more certainty are usually those most closely connected in terms of time or physical proximity, eg individual actions.