Rapid adverse event review tool – Healthcare consumer acquired COVID-19 adverse events

This rapid review tool provides a step-by-step process to review healthcare consumer acquired COVID-19 adverse events occurring in Victorian health services. The tool guides reviewers through the basic steps of undertaking an adverse event review to examine what happened, how it happened, and why it happened. This document provides simple step-by-step instructions for reviewers using the rapid review tool.

The tool is systems-focused, which means it supports reviewers in applying a systems lens when identifying factors that contributed to the adverse event occurring. Thereby, the tool is in line with contemporary safety science which shows that adverse events in complex systems such as health occur due to multiple interacting factors residing in different areas of the system[[1]](#footnote-2). The tool will also support consistency in reviews across health services, efficient sharing of findings between health services and systems learning at a state level by making it possible to aggregate key themes contributing to healthcare consumer acquired COVID-19 adverse events across health services.

The review tool is intended to be used for healthcare consumer acquired COVID-19 events that occur in a hospital setting and also includes prehospital care. This also includes sentinel events.

Prior review experience would be beneficial but is not required to use the tool. If you require support in using the tool, please contact the SCV Patient Safety Review team ([irtreviews@safercare.vic.gov.au](mailto:irtreviews@safercare.vic.gov.au)).

Table 1. Rapid review – step by step instructions

|  |  |
| --- | --- |
| Rapid review steps | Instructions |
| **Enter patient details** | Provide basic patient background details as gathered from patient health records. |
| **Enter review team and governance details** | Enter details on who is reviewing the event, who is endorsing the report and recommendations, and who the report will be shared with when complete. |
| **Describe what happened** | Provide a succinct, chronological summary of what happened in the event. |
| **Identify who needs to be interviewed** | Identify who needs to be interviewed to inform the review of the event and help you to identify how and why it happened. |
| **Identify what other information needs to be collected** | Identify what other information needs to be collected to inform the review of the event and help you to understand how and why it happened. |
| Review the information you collected to examine why the event occurred (data analysis) | |
| **Identify systems factors contributing to the event and other important safety lessons** | Identify the different systems issues that contributed to the adverse event occurring, by completing the table in the tool. Identify what did not work well, and what systems and processes did work well despite the adverse outcome occurring and note those in the tool. |
| **Identify systems improvements and develop the action plan** | Identify gaps and improvements that need to be made in the system to prevent the event from recurring and address the contributing factors identified in the previous step. Identify the actions that need to be completed to implement the proposed changes, who is responsible for implementation, the due date for the completion and how you will measure the success of the change. |

#### Patient details

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | |
| ID  Name |  | | | | Date of birth | | / / | | Postcode | | |  | |
| Date of death (if applicable) / / | | | | | | | **Cause of death (if applicable)** | | | | | | |
| Gender | | | Female | Male | | Non-binary / gender diverse | | | | | Prefer not to say or not provided | | |
| Main language other than English spoken at home | | Nil (English only) | | Mandarin | | | | Italian | | Arabic | | | Cantonese |
| Greek | | Vietnamese | | | | Spanish | | Hindi | | | Tagalog |
| Other (please specify) | | | | | | | | | | | |

#### Health service admission details

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | | |
| Date of Admission | | / / | | | | Admission Diagnosis | |  | | Ward |  | | | | |
| Treating specialty team | | |  | | | | | | | | | | | | |
| Past medical history | | | |  | | | | | | | | | | | |
| Admitted to ICU  Date(s) admitted to ICU / / | Yes | | | | No | | **Admitted to ICU more than once?** | | Yes  *If yes, how many times:* | | | | No | | |
| Was the patient intubated? | Yes | | | | No | | **Details entered in central death register (if applicable)** | | |  | | | | | |
| Was this event reported in VHIMS (RiskMan)? | Yes | | | | No | | If yes, which Incident Severity Rating (ISR)? | | | 1 | | 2 | | 3 | 4 |
| Was this event a sentinel event? | Yes | | | | No | | If yes, when was it reported to SCV? | | | / /  *If not reported yet, why?:* | | | | | |

#### Patient COVID details

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| Date of positive COVID-19 test (if known) | | / / | | | | | | | | |
| COVID positive pathway status (pre hospital admission) | | Accepted | | Not offered | | | | Declined | | |
| Reason declined (if available): | | | | | | | | |
| Harm to patient due to COVID-19 | | Death – direct result of COVID-19  Harm – Permanent or long-term loss of function – ISR 1  Harm – Major – required advanced treatment – ISR 2  Harm – Minor – increase in length of stay – ISR3/4 | | | | Death – contributed to by COVID-19 | | | | |
| Vaccination status | Unvaccinated | | Vaccinated (first dose) | | Vaccinated (second dose) | | | | Vaccinated (third dose) | |
| ransfer to hospital | | Transferred and died in transit to hospital | | Transferred and died in ED/UCC | | | | N/A (no death) | | |
| Mode of transfer | | MICA ambulance | | Road car ambulance | | | Private vehicle | | | Other  ARV  NEPT  Fixed Wing  HEMS |
| Hospital ED/UCC transferred to | |  | | | | | | | | |

#### Nominated family contact person

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| Name |  | Relationship |  |
| Contact number |  | Contact email |  |

#### M&M or IDCR Review team

|  |  |  |
| --- | --- | --- |
|  | Name (optional) | Position |
| Review Lead |  |  |
| Review team member |  |  |
| Review team member (optional) |  |  |

#### Endorsement of report and recommendation actions by relevant review committee

|  |  |  |  |
| --- | --- | --- | --- |
|  | Name | Date | Signature |
| Chair of relevant review committee or coordinator of M&M |  | / / |  |

#### Sharing copy of report with relevant stakeholders

|  |  |  |
| --- | --- | --- |
|  | Name | Date |
| Governance committee at health service |  | / / |
| Governance committee at health service 2 |  | / / |
| Executive Director, Quality and Safety |  | / / |
| CEO, health service |  | / / |
| Relevant DHHS committee/division |  | / / |

## What happened in this event?

|  |
| --- |
| Provide a chronological description of what happened, including the outcomes (no more than 1 page – can be a visual timeline diagram, or written) |
|  |

## Who and what needs to inform the review?

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Identify who needs to be interviewed to inform this review**  (*Focus on open questions, minimise closed questions and avoid leading questions to manage the influence of bias on interviewee responses. Example questions to consider: Please describe what happened from your perspective; please describe systems and processes that were in place to prevent COVID-19 transmission at the time; is there anything you think we could do differently to prevent a similar event from occurring?)* | | | | | | | | | | | |
| **Frontline staff** | | | | | | | | | | | |
| Specialty teams – nurses | Specialty teams – doctors | Cross specialty clinical staff | Allied health staff | Pharmacy | Non-clinical | Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | |
| **Operations management** | | | | | | | | | | |
| NUMs/ANUMs | | | Medical heads of specialty | | Infection Prevention | | Patient Quality & Safety | Equipment Manager | Facilities Manager | IT support services |
| (Pre)hospital staff involved in patient care | | | Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |  | |  |  |  | |
| **External** | | | | | | | | | | |
| Family and/or carers of patient | | | Department | | Prehospital staff involved in patient care | | GPs | Pathology provider | Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**What information needs to be collected?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identify the data from which systems and processes need to be collected to inform this review | | | | |
| **Patient systems**  EMR  Physical records  Referral letters  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Staff systems**  Rosters  Training module attendance records  Other \_\_\_\_\_\_\_\_\_\_\_ | **Governance and administration**  Policies, procedures and guidelines  Meeting minutes  Existing action plans/improvement work  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **Prehospital care**  (Pre)hospital policies, procedures, and guidelines  Patient transfer information  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **External**  Government policies and procedures  Equipment suppliers, manuals and information  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Systems factors contributing to the event

*A contributing systems factor is a systems issue that contributed to the adverse event occurring, as evidenced by the information collected.*

***Instructions: Describe systems contributing factors identified in the relevant table sections below. Systems contributing factors may be added to the rapid review template post review to be reused for future reviews. To ensure that all systems contributing factors have been considered, please review the people and systems selected under ‘who and what needs to inform the review’ and consider their role in this event.***

|  |  |  |
| --- | --- | --- |
| System layers | Which systems factors contributed to the death (this is what didn’t work well)?  *Please identify systems factors that contributed to the death occurring, as evident by the information collected* | Which systems factors were working well?  *Please describe any systems factors that were working well, despite the adverse outcome of this event* |
| **Regulations, government, and external influences** | | |
| How did regulatory and governmental factors as well as external influences contribute to the event?  *e.g., Economic, and regulatory context; legislations; links with external organisations (e.g., ambulance services, other health services, medical colleges); other external influences (e.g., geographic location).* |  |  |
| **Organisation and management** | | |
| How did organisation and management factors contribute to the event?  *e.g., Financial resources & constraints, organisational structure; policy, standards, and goals; safety culture/just culture.* |  |  |
| **Task and technology** | | |
| How did task and technology factors contribute to the event?  *e.g., task design and clarity of structure; availability and use of protocols; availability and accuracy of test results; decision-making aids.* |  |  |
| **Work environment** | | |
| How did work environmental factors contribute to the event?  *e.g., staffing levels and skills mix; workload and shift patterns; design, availability, and maintenance of equipment; administrative and managerial support; physical environment.* |  |  |
| **Team** | | |
| How did teamwork factors contribute to the event?  *e.g., Verbal communication; written communication, supervision and seeking help; team structure (congruence, consistency, leadership, etc).* |  |  |
| **Staff** | | |
| How did staff factors contribute to the event?  *e.g., knowledge and skills, physical and mental health.* |  |  |
| **Patient** | | |
| How did patient factors contribute to the event?  *e.g., condition (complexity & seriousness); socioeconomic background; other pre-existing conditions (physical, cognitive, sensory impairments etc); living conditions (alone, extended household, shared accommodation etc); CALD background; sole carer; unsafe home environment; geographical location etc.* |  |  |

## Summary of contributing factors themes (findings)

|  |
| --- |
| Please provide a summary of contributing factor themes identified, taking into consideration all selected contributing factors above. |
|  |

## Are there any other related safety lessons learned that were identified but did not directly contribute to the event?

*A learning describes a systems issue that did not work well, but where there is no evidence that it directly contributed to the adverse event under review.*

|  |  |
| --- | --- |
| ID | Lesson learned |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

## Identifying systems improvements – Action Plan for key stakeholders

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Action plan – In-hospital COVID-19 related deaths  *Identify feasible and practicable systems improvements to address the contributing factors identified above* | | | | | | | |
| **ID** | **What systems improvements will be required?**  **(Strength of action - weak, moderate, strong (see Appendix 2))** | **Which systems contributing factors theme / lessons learned with this address?** | **How will this action be implemented?** | **Who is responsible for implementation?** | **When will it be implemented by?** | **How will success be evaluated?** | **Current status of action implementation** |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |

## Appendix 2: Guide to strength of recommendations

|  |  |  |
| --- | --- | --- |
| Recommendation strength | Recommendation category | Example |
| Strong actions | Architectural/physical changes in surroundings | Change the location / orientation of the front reception desk to ensure staff can see who is entering the site at all times. |
| Strong actions | New devices with usability testing | Provide ready-to-use pulse oximeters with easy-to-understand instructions, to households considered at risk or otherwise vulnerable. |
| Strong actions | Engineering control (functions which force the user to complete the action) | Automatic system in place for remote daily monitoring of patient clinical observations with escalation trigger in place if unreported. |
| Strong actions | Simplify process and remove unnecessary steps | Tailor automatic SMS/email messaging to the needs of patients and families to reduce message fatigue. |
| Strong actions | Tangible involvement by leadership | Participate in site safety audits, interact with staff, support access to required expertise, ensure staffing and workload is balanced. |
| Moderate actions | Increase in staffing/decrease in workload | Make back-up staff available at open-access hubs to assist at times when client visits peak. |
| Moderate actions | Software enhancements or modifications | Greater use of video capabilities or wearable health devices for routine monitoring of patients. |
| Moderate actions | Eliminate/reduce distractions | Improve soundproofing of interview / consultations rooms so practitioners are less exposed to distractions and noise. |
| Moderate actions | Education using simulation-based training with periodic refresher sessions/observations | Practice client de-escalation strategies in a simulated environment, with after-action critiques and debriefing. |
| Moderate actions | Checklist/cognitive aids | Develop a checklist for practitioners to support client needs identification and goal directed care planning. |
| Moderate actions | Eliminate look- and sound-alikes | Do not store medications that look alike next to one another in a pharmacy, dispensary or supported accommodation setting. |
| Moderate actions | Standardised communication tools | Develop and implement templates for minimum client referral, handover, or transition notes. |
| Weak actions | Double checks | One person checks a site is secure at the end of the day, another person reviews their assessment before leaving. |
| Weak actions | Warnings | Add alert notifications to client management systems or case management software. |
| Weak actions | New procedure/memorandum/policy | Develop a new policy for staff with the goal to increase compliance. |
| Weak actions | Training | Train staff in following policies, protocols, and procedures. |

1. Read, G., Shorrock, S., Walker, G.H. & Salmon, P.M. (2021). State of science: evolving perspectives on ‘human error’. *Ergonomics*, DOI:10.1080/00140139.2021.1953615 [↑](#footnote-ref-2)