

Sentinel event program

Root cause analysis report – Part A

# Event details

| **Sentinel event number:** |       | **Health service ID:** |       |
| --- | --- | --- | --- |

| **Event date:** |    /    /      | **SCV notification date**: |    /    /      |
| --- | --- | --- | --- |

| **RCA report due date:** |    /    /      | **RCA report date submitted:** |    /    /      |
| --- | --- | --- | --- |

| **Extension granted** [Mark box with an X where appropriate] | Yes | [ ]  | No | [ ]  |
| --- | --- | --- | --- | --- |

# Root cause analysis investigation team

**Please provide position (not name) of the root cause analysis team**

| **Lead investigator:** |       |
| --- | --- |

| **Team members:** |       |
| --- | --- |

| **Consumer representative member:** |       |
| --- | --- |

| **External/independent member:** |       |
| --- | --- |

# Outcome

**Following the investigation, the RCA investigation team (select appropriate boxes):**

| Identified system and process improvement opportunities | [ ]  |
| --- | --- |

| Identified system and process improvement opportunities unrelated to the event | [ ]  |
| --- | --- |

| Was unable to identify any root causes | [ ]  |
| --- | --- |

# Endorsement

**Lead investigator**

| **Signature:** |       | **Date:** |    /    /      |
| --- | --- | --- | --- |

**Chief executive officer (or authorised delegate)**

| **Signature:** |       | **Date:** |    /    /      |
| --- | --- | --- | --- |

| **RCA findings to be reported to the board (or relevant board subcommittee) on the following date:** | **Date:** |    /    /      |
| --- | --- | --- |

Please do not include any identifying information in Part B of the root cause analysis report other than the sentinel event number and health service identification code in the header.

Part A and Part B will be separated on submission of the root cause analysis report to the Sentinel Event Program to remove any identifying details.

Root cause analysis report – Part B

# Description

| Provide a description of the event and the outcome for the patient: |
| --- |
|       |

# Detection

| Provide a description of how the event was detected: |
| --- |
|       |

# Clinical practice performance issues

| Provide a de-identified description of any clinical practice performance issues identified during the investigation and plans to support performance improvement: |
| --- |
|       |

# Patient, family and/or carer contribution

[Mark box with an X where appropriate]

| **Did the patient, family and/or carer contribute to the investigation?** | Yes | [ ]  | No | [ ]  |
| --- | --- | --- | --- | --- |

| Provide description of contribution or reasons for non-contribution: |
| --- |
|       |

# Timeline



# Cause-and-effect diagram



# Root causes

|  | Outline the root causes of the event identified during the investigation: |
| --- | --- |
| **1.** |       |
| **2.** |       |
| **3.** |       |
| **4.** |       |
| **5.** |       |

# Learnings

There may be occasions where an investigation identifies process, system or clinical practices issues that did not materially contribute to the sentinel event, but provide important learnings and opportunity for improvement in healthcare service delivery. Key learnings may also arise in circumstances where no root causes are identified.

|  | Provide a description of any learnings identified as a result of the investigation: |
| --- | --- |
| **1.** |       |
| **2.** |       |
| **3.** |       |

# Recommendations – strength of recommendation

Outline the recommendations to address the root causes and/or learnings identified during the investigation: Use Appendix 1: Recommendations hierarchy to identify the strength of each recommendation.

|  | Recommendations: | Strength: |
| --- | --- | --- |
| **1.** |       |       |
| **2.** |       |       |
| **3.** |       |       |
| **4.** |       |       |
| **5.** |       |       |

# Contributing factors

Indicate which of the following factors were contributory to the sentinel event, not contributory or were not considered during the investigation:

## Staff factors

| **Fatigue** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Inattention/distraction** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Knowledge/skills** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Alarm fatigue** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Language** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Literacy/comprehension** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Medical history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Physical history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Social history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Patient factors

| **Fatigue** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Inattention/distraction** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Knowledge/skills** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Language** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Literacy/comprehension** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Medical history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Physical history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Social history** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Physical environment

| **Environment layout not matched to work process** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Lighting** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Noise** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Overcrowding** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Temperature** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Policies, guidelines and decision support

| **Could not locate policy/guideline** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **No relevant policy/ guideline to follow** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Policy/guideline availability unknown** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Policy/guideline not current best practice** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Policy/guideline not followed** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Policy/guideline not yet implemented** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Policy/guideline used but not useful** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Decision support not used** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Decision support unavailable** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Teamwork factors

| **Individual responsibilities not clear** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **No identified leader** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **No senior/specialist support sought** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Staff not supervised** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Supervision inadequate** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Team structure inappropriate** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Team structure unclear** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Workforce factors

| **Inappropriate staff levels** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Rostering/shift patterns** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Skill mix** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Time pressure** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Workload** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Training inadequate** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Working beyond skill level** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Working outside expertise** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Induction not adequate** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

| **Skill gap not recognised** | Contributing factor | [ ]  | Not a contributing factor | [ ]  | Not considered during investigation | [ ]  |
| --- | --- | --- | --- | --- | --- | --- |

## Other

| Provide details of any other contributing factors identified during the investigation not listed above: |
| --- |
|       |

# Risk reduction action plan (RRAP)

| No. | Recommendations to address root cause | Strength of recommendations | Actions to achieve recommendations | Outcome measure  | Executive position sponsor | Position responsible/ accountable  | Date due for completion |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |       |       |       |       |       |       |    /    /      |
| 2 |       |       |       |       |       |       |    /    /      |
| 3 |       |       |       |       |       |       |    /    /      |
| 4 |       |       |       |       |       |       |    /    /      |

# Plan for shared learning

Outline the plan to share the recommendations and learning from this event:

| Internally: |
| --- |
|       |

| Externally: |
| --- |
|       |

# Appendix 1: Recommendations hierarchy[[1]](#footnote-1)

| Recommendation strength | Recommendation category | Example |
| --- | --- | --- |
| **Strong actions** | Architectural/physical changes in surroundings | Replace revolving doors at the main entrance into the building with powered sliding or swinging doors to reduce patient falls. |
| **Strong actions** | New devices with usability testing | Perform pre-purchase testing of blood glucose monitors and test strips to select the most appropriate for the patient population. |
| **Strong actions** | Engineering control (forcing functions which force the user to complete the action) | Eliminate the use of universal adapters and peripheral devices for medical equipment; use tubing/fittings that can only be connected the correct way. |
| **Strong actions** | Simplify process and remove unnecessary steps | Remove unnecessary steps in a process; standardise the make and model of medication pumps used throughout the organisation; use barcoding for medication administration. |
| **Strong actions** | Tangible involvement by leadership | Participate in unit patient safety evaluations and interact with staff; support the RCA process; purchase needed equipment; ensure staffing and workload is balanced. |
| **Moderate actions** | Redundancy | Use two RNs to independently calculate high-risk medication dosages. |
| **Moderate actions** | Increase in staffing/decrease in workload | Make float staff available to assist when workloads peak during the day. |
| **Moderate actions** | Software enhancements or modifications | Use computer alerts for drug–drug interactions. |
| **Moderate actions** | Eliminate/reduce distractions | Provide quiet rooms for programming PCA pumps; remove distractions for nurses when programming medication pumps. |
| **Moderate actions** | Education using simulation-based training with periodic refresher sessions/observations | Conduct patient handover in a simulation lab environment, with after-action critiques and debriefing. |
| **Moderate actions** | Checklist/cognitive aids | Use pre-induction and pre-incision checklists in operating rooms; use a checklist when reprocessing flexible fibre optic endoscopes. |
| **Moderate actions** | Eliminate look- and sound-alikes | Do not store look-alikes next to one another in the medication room. |
| **Moderate actions** | Standardised communication tools | Use read-back for all critical lab values; use read-back or repeat-back for all verbal medication orders; use a standardised patient handover format. |
| **Weak actions** | Double checks | One person calculates dosage, another person reviews their calculation. |
| **Weak actions** | Warnings | Add audible alarms or caution labels. |
| **Weak actions** | New procedure/memorandum/policy | Remember to check IV sites every two hours. |
| **Weak actions** | Training | Demonstrate the defibrillator during an in-service training. |

|  |
| --- |
| To receive this publication in an accessible format phone 9096 5426, using the National Relay Service 13 36 77 if required, or email Safer Care Victoria <safercarevictoria@dhhs.vic.gov.au>Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.© State of Victoria, Australia, Safer Care Victoria, August, 2017Available at [Safer Care Victoria](http://www.safercare.vic.gov.au) <www.safercare.vic.gov.au> |

1. Recommendations hierarchy and examples are based on *Root Cause Analysis Tools*, VA National Center for Patient Safety <https://www.patientsafety.va.gov/professionals/onthejob/rca.asp> and *Closing the Loop Program*, Department of Health, Western Australia <http://ww2.health.wa.gov.au/Articles/A\_E/Closing-the-Loop-Program>. [↑](#footnote-ref-1)