AUSTRALIAN INSTITUTE
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University

Operationalising the World Health Organization's International Classification for Patient Safety

Data Dictionary Version 2

Australian-modification

2018

International Classification for Patient Safety

Background:

The *Conceptual Framework for the International Classification for Patient Safety Version 1.1* was released by the Word Health Organization in 2009. The Conceptual Framework was primarily designed to provide common concepts, definitions and language for the collection of information regarding adverse incidents involving patients that occurred in the healthcare system. While the Conceptual Framework is a comprehensive informational model, its use as a taxonomy for patient deaths following medical or surgical complications requires testing. The Conceptual Framework did not provide definitions for each item, the key 'concepts', 'classes' and the hierarchical ordering of items in the Conceptual Framework were not clearly identified. Neither were the classification categories in the Conceptual Framework mutually exclusive or exhaustive.

Research objective:

To operationalise the Conceptual Framework to be able to identify patient characteristics, incident types, contributing factors, ameliorating actions and coronial recommendations for patient deaths following medical or surgical complications.

Modified Conceptual Framework:

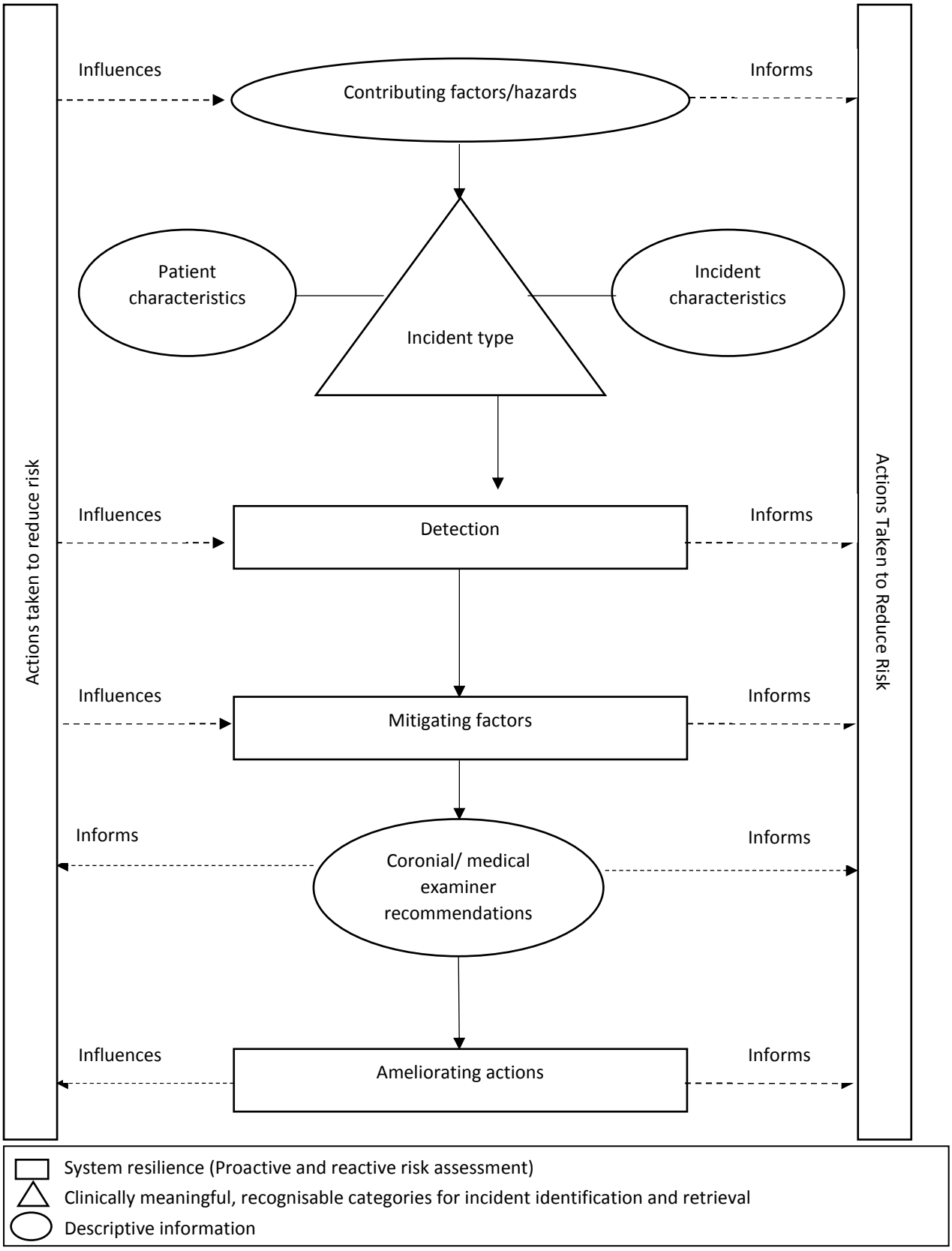
The original Conceptual Framework contained ten high-level categories and associated sub-categories that have been modified to collection information on healthcare-related patient deaths. Figure 1 outlines the nine high-level categories in the Conceptual Framework. Each concept and item for patient characteristics, incident types, contributing factors, ameliorating actions and coronial recommendations has been defined. For incident types and contributing factors, the sub-categories have been reviewed to develop a hierarchical ordering of concepts and to try to ensure mutual exclusivity (Appendix 1).

Cite as: Mitchell R. Faris M. Operationalising the World Health Organization's International Classification for Patient Safety. Data Dictionary Version 1. Australian-modification. Australian Institute of Health Innovation, Macquarie University, Sydney, 2018.

Version history:

Version	Description of Change	Author	Date Changed	Status
1.0	Development	Rebecca Mitchell	August 2018	DRAFT
2.0	Additional classifications	Rebecca Mitchell	November 2018	FINAL

Figure 1: Modified conceptual framework for the International Classification for Patient Safety for healthcare-related deaths



Adapted from: WHO. The Conceptual Framework for the International Classification for Patient Safety. Geneva: WHO, 2009.

Contents

Section 1: Unique identifiers

Section 1 on unique identifiers records information to identify the coronial file, the person who classified the record, and the state or territory where the inquest was held.

Variable: Unique identifier

Variable name: Z_ID

Definition: A consecutive number allocated to each clinical incident record.

Justification: To allow the identification of each individual record.

Format: 6 digit numeric

Coding source: Number

Coding frame: 1 onwards

Comments:

This is the unique record created and used by the study team to identify each record. The unique identifier can be used to identify the same records to conduct reliability assessments.

Variable: Coronial id

Variable name: Z_coronialID

Definition: A coronial/medical examiner record number allocated to each death.

Justification: To allow for the identification of coronial/ medical examiner file numbers.

Format: 9 character alphanumeric

Coding source: Coronial court/ medical examiner

Coding frame:

Comments:

In Australia, this is the National Coroners Information System (NCIS) unique identifier allocated by each coronial court.

Variable: Coder identifier

Variable name: Z_coderID

Definition: A number allocated to identify each coder.

Justification: To allow for the identification of the person who performed the classification of the record.

Format: 1 digit numeric

Coding source:

Coding frame:

1	Coder 1
2	Coder 2
3	Coder 3
4	Coder 4

Comments:

Each coder has a unique identification number that can be used for reliability assessments.

Variable: State inquest held

Variable name: z_inquest_state

Definition: What was the Australian jurisdiction where inquest was held?

Justification: Demographic details of the state or territory where the inquest was held.

Format: 1 digit numeric

Coding source: National Health Data Dictionary, Version 15 (METeOR identifier:

Coding frame:

1	New South Wales
2	Victoria
3	Queensland
4	South Australia
5	Western Australia
6	Tasmania
7	Northern Territory
8	Australian Capital Territory
9	Other Territories (Cocos Keeling Islands, Christmas Island and Jervis Bay)
99	Not recorded

Comments:

Section 2: Patient Characteristics

Section 2 on patient characteristics records demographic information regarding the patient and the cause of death. Patient characteristics can also record information on diagnoses classification and procedures being conducted, as required.

Variable: Age

Variable name: z_Age

Definition: The age of the person in years to whom the incident occurred.

Justification: Basic patient demographic details to determine if certain age groups are more likely to be involved in adverse clinical incidents than other age groups.

Format: 3 digit numeric

Coding source: Number

Coding frame:

0	child aged less than 1 year
1	year onwards
999	not known

Comments:

If the incident occurred to a child that is aged less than 1 year of age code '0' and enter age in weeks in 'age in weeks' variable.

Variable: Age in weeks

Variable name: z_age_wk

Definition: The age of the child in weeks to whom the incident occurred.

Justification: Basic patient demographic details to determine if certain age groups are more likely to be involved in adverse clinical incidents than other age groups.

Format: 2 digit numeric

Coding source:

Coding frame:

0.1	1 day
0.2	2 days
0.3	3 days
0.4	4 days

0.5 onwards	5 days
0.6	6 days
998	not relevant
999	not known

Comments:

Default setting is 998.

If the child is aged less than 1 week code 0.1 for 1 day; 0.2 for 2 days; 0.3 for 3 days etc.

Variable: Patient gender

Variable name: z_Sex

Definition: What was the sex of the person to whom the incident occurred?

Justification: Basic patient demographic details to determine if one sex may be involved in a greater number of adverse clinical incidents.

Format: 1 digit numeric

Coding source: National Health Data Dictionary, Version 15 (METeOR identifier 287316).

Coding frame:

1	Male
2	Female
3	Intersex or indeterminate
9	Not stated/ inadequately described

Comments:

Variable: Cause of death - underlying

Variable name: z_COD1

Definition: What was the underlying cause of death of the patient?

Justification: To identify the patients' underlying cause of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent1

Variable name: z_COD2

Definition: What was the first antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent2

Variable name: z_COD2

Definition: What was the second antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent3

Variable name: z_COD3

Definition: What was the third antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent4

Variable name: z_COD4

Definition: What was the fourth antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent5

Variable name: z_COD5

Definition: What was the fifth antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent6

Variable name: z_COD6

Definition: What was the sixth antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Cause of death – antecedent7

Variable name: z_COD7

Definition: What was the seventh antecedent cause of death of the patient?

Justification: To identify the patients' antecedent causes of death following the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10 (ICD-10)

Coding frame: ICD-10classifications

Comments:

Variable: Principal diagnosis

Variable name: z_pdiag

Definition: What was the original principal diagnosis of the patient?

Justification: To identify the patients' original diagnosis at time of the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10, Australian-modification (ICD-10-AM)

Coding frame: ICD-10-AM classifications

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Variable: Other diagnosis1

Variable name: z_pdiag1

Definition: What were the other diagnoses and/or comorbidities of the patient?

Justification: To identify the patients' other diagnoses and/or comorbidities at time of the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10, Australian-modification (ICD-10-AM)

Coding frame: ICD-10-AM classifications

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Variable: Other diagnosis2

Variable name: z_pdiag2

Definition: What were the other diagnoses and/or comorbidities of the patient?

Justification: To identify the patients' other diagnoses and/or comorbidities at time of the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10, Australian-modification (ICD-10-AM)

Coding frame: ICD-10-AM classifications

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Variable: Other diagnosis3

Variable name: z_pdiag3

Definition: What were the other diagnoses and/or comorbidities of the patient?

Justification: To identify the patients' other diagnoses and/or comorbidities at time of the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10, Australian-modification (ICD-10-AM)

Coding frame: ICD-10-AM classifications

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Variable: Other diagnosis4

Variable name: z_pdiag4

Definition: What were the other diagnoses and/or comorbidities of the patient?

Justification: To identify the patients' other diagnoses and/or comorbidities at time of the clinical incident.

Format: 6 character alphanumeric

Coding source: International Classification of Diseases, Version 10, Australian-modification (ICD-10-AM)

Coding frame: ICD-10-AM classifications

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Variable: Procedure performed at time of adverse clinical incident

Variable name: z_treat

Definition: What was the medical procedure performed at the time of the adverse clinical incident?

Justification: To identify the medical procedure performed at the time of the adverse clinical incident.

Format: 8 character alphanumeric

Coding source: The Australian Classification of Health Interventions

Coding frame:

Comments:

If the record coders are familiar with ICD-10-AM, then classifications can be made directly or could be obtained from electronic medical records. This variable could also be recorded as text, as required, and later classified by clinical coders.

Section 3: Incident characteristics

Section 3 records information regarding the circumstances surrounding the incident such as where and when in the patient's journey through the healthcare system, the incident occurred, and who was involved. This includes a short text description of the incident and the date of death.

Variable: Text description of the circumstances of the incident

Variable name: z_descrip_text

Definition: Describe the circumstances surrounding the adverse clinical incident involving the patient.

Justification: To record the circumstances surrounding the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short narrative description of what occurred during the adverse clinical incident, including the preventive actions and/or coronial recommendations. Ensure you record any pre-existing diseases or disabilities of the patient.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Care phase

Variable name: z_carephase

Definition: During what phase of care did the adverse clinical incident occur?

Justification: To identify the phase of care at time of the clinical incident.

Format: 2 digit numeric

Coding source: Adapted from the Conceptual Framework for the International Classification of Patient Safety (ICPS) (WHO, 2009)

Coding frame:

1	Pre-admission

2	Care on admission
3	Assessment
4	Treatment
5	Discharge
6	Post-discharge
7	Transfer of care
8	In-patient resident
9	Wait list for surgery
10	Prison
97	Other (specify in descriptive text)
98	Not relevant
99	Not known

Comments:

For patient deaths, this is where the adverse clinical incident occurred. For example, if a patient is misdiagnosed and send home from the ED, the incident occurred during 'pre-admission'. If a patient had an operation and was discharged and then post-operative complications developed, then 'post-discharge' would be selected as the type of incident. If a patient underwent surgery and an object was retained within the patient during surgery, 'treatment' would be selected as the incident location.

Variable: Incident location

Variable name: z_inc_location

Definition: What was the location where the adverse clinical incident occurred?

Justification: To identify the location where the adverse clinical incident occurred.

Format: 2 digit numeric

Coding source: Adapted from: Chang et al The JCAHO patient safety event taxonomy: a standardized terminology and classification schema for near misses and clinical incidents. International Journal for Quality in Health Care. 2005; 17 (2): 95-105 and Webb et al. The Australian Incident Monitoring Study: an analysis of 2000 incident reports. Anaesth Intens Care 1993, 21: 520-528.

Coding frame:

1	Emergency department
2	General ward/ patient's room
3	Operating theatre
4	Diagnostic procedures (Eg. CT or MRI scan, X-ray, imaging)
5	Intensive Care Unit (ICU)
6	Neonatal ICU

7	Paediatric ICU
8	High Dependence Unit (HDU)
9	Coronary care unit
10	Nursery
11	Oncology, radiotherapy
12	Day procedure, treatment room
13	Rehabilitation centre
14	Outpatient clinic
15	Birthing suite, labour room
16	Mental health, psychiatric unit
17	Drug and alcohol unit
18	Correctional facility
19	Long-term acute care, hospice
20	Transfer between units, wards
21	Transfer between hospitals
22	Dental room
23	Acute care unit
24	Other (specify in descriptive text)
25	Multiple (specify in descriptive text)
98	Not relevant
99	Not known

Comments:

Multiple incident locations may be involved if several adverse incidents occur to the patient.

Variable: Date of incident

Variable name: z_DOI

Definition: On what date did the adverse clinical incident occur?

Justification: To identify the date of the adverse clinical incident.

Format: 8 digit

Coding source:

Coding frame: DD/MM/YYYY

Comments:

Date not known is recorded as: 99999999

Variable: Time of incident

Variable name: z_TOI

Definition: What time did the adverse clinical incident occur?

Justification: To identify the time of the adverse clinical incident.

Format: 4digit

Coding source:

Coding frame: HH:MM

Comments:

Time not known is recorded as: 9999

Variable: Date of death

Variable name: z_DOD

Definition: What was the date of death of the patient?

Justification: To identify the date of death of the patient.

Format: 8 digit

Coding source:

Coding frame: DD/MM/YYYY

Comments:

Date not known is recorded as: 99999999

Variable: Time of death

Variable name: z_TOD

Definition: At what time did the patient die?

Justification: To identify the time that the patient died.

Format: 4digit

Coding source:

Coding frame: HH:MM

Comments:

Time not known is recorded as: 9999

Section 4: Incident type

Section 4 records information on the type of incident. Up to four incident types can be recorded. An incident factor is considered to be "an event or circumstance which…led to unintended and/or unnecessary harm to a person…"[1]. Each incident factor must have played a role in causing the incident to occur and will be recorded sequentially as they occurred. For example, incident type 1 occurred closest to the death preceded by incident type 2, preceded by incident types 3 and 4. The temporal sequence of incident types is based on Reason's Swiss Cheese Model of causation[2] and the Human Factors Classification Framework for Patient Safety[3].

The incident type factors section of the ICPS have been re-configured into a 3-level hierarchical classification framework. Each main incident type category represents Level 1 of the hierarchy, the process categories for each incident type indicate Level 2, and the problem categories of each incident type indicate Level 3. Likewise, the contributing factors section of the ICPS has been re-configured into a 3-level hierarchical framework, with each main category representing Level 1, the sub-categories indicating Level 2, and the sub-sub categories indicating Level 3. Each incident type factor and contributing factor in the ICPS have been defined and, where relevant, an example added. Additional Level 3 categories have been incorporated for some incident type factors and contributing factors based on a pilot test of the re-configured ICPS. Where the incident type or contributing factors were not mutually exclusive, one of the factors was either revised or removed.

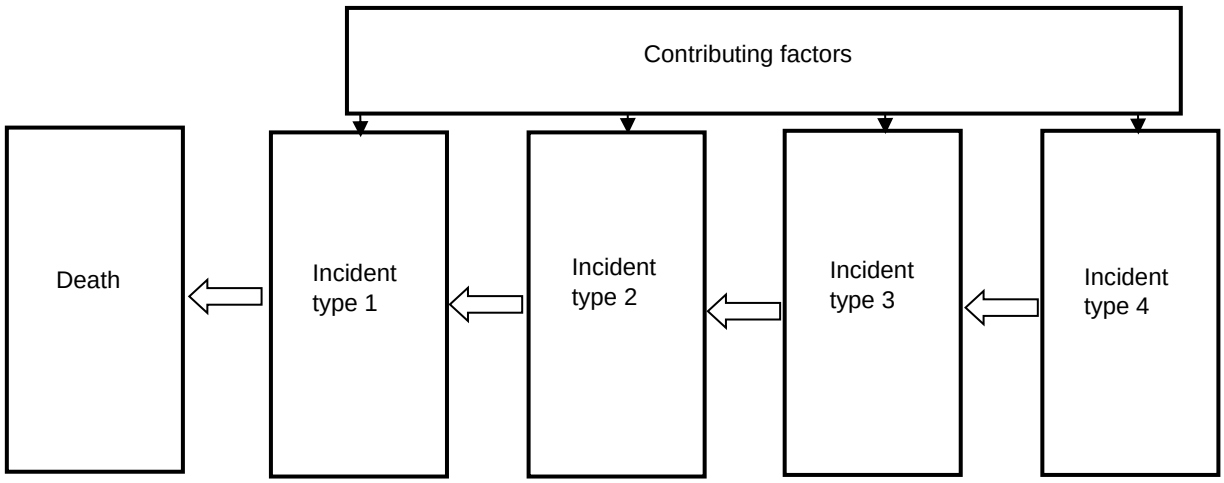
Each incident type will be classified leading up to the patient death in a temporal sequential order. Contributing factors could have occurred at any stage in the temporal sequence and will also be recorded (Figure 1).

[1] Committee of Experts on Management of Safety and Quality in Health Care, *Glossary of terms related to patient and medication safety - approved terms*. 2005.

[2] Reason, J., *Hazards, defences and losses - the 'Swiss cheese' model of defences*, in *Managing the risks of organizational accidents*, Reason, J., Editor. 1997, Ashgate Publishing Ltd: Aldershot. p. 1-20.

[3] Mitchell, R., Williamson, A., and Molesworth, B., *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195.

Figure 1: Conceptual model of the classification of ICPS incident types and contributing factors



Source: Modified from Mitchell, R., Williamson, A., and Molesworth, B., *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195.

Variable: Text description of First incident

Variable name: z_inc_type1_txt

Definition: Describe the adverse clinical incident.

Justification: To record the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the adverse clinical incident.

Any 'Other' incident types or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: First incident, Level 1

Variable name: z_inc_type1a

Definition: What was the type of level 1 incident performed at the time of the adverse clinical incident?

Justification: To identify the type of level 1 incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil
1	Clinical administration
2	Clinical process/procedure
3	Documentation
4	Healthcare-associated infection or complication
5	Medication/IV fluids (specify in text)
6	Blood/blood products (specify in text)
7	Nutrition
8	Oxygen/gas/vapour (specify in text)

9	Medical device/equipment
10	Patient incidents
11	Infrastructure/building/fixtures
97	Other
98	Not relevant
99	Not known

Comments:

Level 1 incident types are defined in Appendix 1.

Any ‘Other’ incident types can be indicated in descriptive text box.

Variable: First incident type, Level 2

Variable name: z_inc_type1b

Definition: What was the type of level 2 incident performed at the time of the adverse clinical incident?

Justification: To identify the type of level 2 incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil

1. Clinical administration:

1.1	Clinical handover
1.2	Appointment
1.3	Waiting list
1.4	Referral/consultation
1.5	Admission
1.6	Discharge
1.7	Transfer of care
1.8	Patient identification
1.9	Consent
1.10	Task allocation
1.11	Response to emergency

2. Clinical process/ procedure:

2.1	Screening/prevention/routine check-up
2.2	Diagnosis/assessment
2.3	Procedure/treatment/intervention
2.4	Day-to-day general patient healthcare and observations
2.5	Specimens/results
2.6	Detention/restraint

3. Documentation:

3.1	Orders/requests
3.2	Charts/medical records/assessments/consultations
3.3	Check lists
3.4	Forms/certificates
3.5	Labels/stickers/identification bands/cards
3.6	Letters/e-mails/records of communication
3.7	Reports/results/images

4. Healthcare associated infection or complication:

- 4.1 Pneumonia
- 4.2 Sepsis
- 4.3 Bacterial IV line infection
- 4.4 Embolism
- 4.5 Pressure injury/ulcer
- 4.6 Surgical site infection
- 4.7 Other healthcare associated infection
- 4.8 Other complication

5. Medication/IV fluids (specify in text):

- 5.1 Prescription
- 5.2 Preparation/dispensing
- 5.3 Presentation/packaging
- 5.4 Delivery
- 5.5 Administration
- 5.6 Supply/ordering
- 5.7 Storage
- 5.8 Monitoring

6. Blood/Blood products (specify in text):

- 6.1 Pre-transfusion testing
- 6.2 Prescribing
- 6.3 Preparation/dispensing
- 6.4 Delivery
- 6.5 Administration
- 6.6 Storage
- 6.7 Monitoring
- 6.8 Presentation/packaging
- 6.9 Supply/ordering

7. Nutrition:

- 7.1 Prescribing/requesting
- 7.2 Preparation/manufacturing/cooking
- 7.3 Supply/ordering
- 7.4 Presentation
- 7.5 Dispensing/allocation
- 7.6 Delivery
- 7.7 Administration
- 7.8 Storage

8. Oxygen/gas/vapour (specify in text):

- 8.1 Cylinder labelling/colour coding/pin indexing
- 8.2 Prescription
- 8.3 Administration

8.4 Delivery
8.5 Supply/ordering
8.6 Storage

9. Medical device/equipment:

9.1 Device/equipment (specify in text)

10. Patient incidents:

10.1 Blunt force
10.2 Piercing/penetrating force
10.3 Other mechanical force
10.4 Thermal mechanism
10.5 Threat to breathing
10.6 Exposure to chemical or other substance
10.7 Other specified mechanism of injury
10.8 Exposure to (effect of) weather or other force of nature
10.9 Falls

11. Infrastructure/building/fixtures:

11.1 Structure type (specify in text)
11.2 Building type (specify in text)
11.3 Fixture type (specify in text)

998 Not relevant
999 Not known

Comments:

Level 2 incident types are defined in Appendix 2.

Any 'Other' incident types can be indicated in descriptive text box.

Indicate any specific types of medication, IV fluid, blood, blood products, oxygen, gas, vapour, medical devices or equipment, structures, buildings or fixtures in descriptive text box.

Variable: First incident type, Level 3

Variable name: z_inc_type1c

Definition: What was the type of level 3 incident performed at the time of the adverse clinical incident?

Justification: To identify the type of level 3 incident performed at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil

1.1 Clinical administration - clinical handover:

1.1.1	Not performed
1.1.2	Incomplete/inadequate/not requested
1.1.3	Unavailable
1.1.4	Wrong patient
1.1.5	Wrong process/service
1.1.6	Delayed/failure to respond

1.2 Clinical administration - appointment:

1.2.1	Not performed
1.2.2	Incomplete/inadequate/not requested
1.2.3	Unavailable
1.2.4	Wrong patient
1.2.5	Wrong process/service
1.2.6	Delayed/failure to respond

1.3 Clinical administration – waiting list:

1.3.1	Not performed
1.3.2	Incomplete/inadequate/not requested
1.3.3	Unavailable
1.3.4	Wrong patient
1.3.5	Wrong process/service
1.3.6	Delayed/failure to respond

1.4 Clinical administration – referral/consultation:

1.4.1	Not performed
1.4.2	Incomplete/inadequate/not requested
1.4.3	Unavailable
1.4.4	Wrong patient

1.4.5 Wrong process/service
1.4.6 Delayed/failure to respond

1.5 Clinical administration – admission:

1.5.1 Not performed
1.5.2 Incomplete/inadequate/not requested
1.5.3 Unavailable
1.5.4 Wrong patient
1.5.5 Wrong process/service
1.5.6 Delayed/failure to respond

1.6 Clinical administration – discharge:

1.6.1 Not performed
1.6.2 Incomplete/inadequate/not requested
1.6.3 Unavailable
1.6.4 Wrong patient
1.6.5 Wrong process/service
1.6.6 Delayed/failure to respond

1.7 Clinical administration – transfer of care:

1.7.1 Not performed
1.7.2 Incomplete/inadequate/not requested
1.7.3 Unavailable
1.7.4 Wrong patient
1.7.5 Wrong process/service
1.7.6 Delayed/failure to respond

1.8 Clinical administration – patient identification:

1.8.1 Not performed
1.8.2 Incomplete/inadequate/not requested
1.8.3 Unavailable
1.8.4 Wrong patient
1.8.5 Wrong process/service
1.8.6 Delayed/failure to respond

1.9 Clinical administration – consent:

1.9.1 Not performed
1.9.2 Incomplete/inadequate/not requested
1.9.3 Unavailable
1.9.4 Wrong patient
1.9.5 Wrong process/service
1.9.6 Delayed/failure to respond

1.10 Clinical administration- task allocation:

1.10.1 Not performed

1.10.2 Incomplete/inadequate/not requested
1.10.3 Unavailable
1.10.4 Wrong patient
1.10.5 Wrong process/service
1.10.6 Delayed/failure to respond

1.11 Clinical administration – response to emergency:

1.11.1 Not performed
1.11.2 Incomplete/inadequate/not requested
1.11.3 Unavailable
1.11.4 Wrong patient
1.11.5 Wrong process/service
1.11.6 Delayed/failure to respond

2.1 Clinical process/procedure – screening/prevention/routine check-up:

2.1.1 Not performed
2.1.2 Incomplete/inadequate/not requested
2.1.3 Unavailable
2.1.4 Wrong patient
2.1.5 Wrong process/service/treatment/procedure
2.1.6 Retained instrument/material
2.1.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.1.8 Wrong body part/side/site
2.1.9 Complication during a procedure

2.2 Clinical process/procedure – diagnosis/assessment:

2.2.1 Not performed
2.2.2 Incomplete/inadequate/not requested
2.2.3 Unavailable
2.2.4 Wrong patient
2.2.5 Wrong process/service/treatment/procedure
2.2.6 Retained instrument/material
2.2.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.2.8 Wrong body part/side/site
2.2.9 Complication during a procedure

2.3 Clinical process/procedure – procedure/treatment/intervention:

2.3.1 Not performed
2.3.2 Incomplete/inadequate/not requested
2.3.3 Unavailable
2.3.4 Wrong patient
2.3.5 Wrong process/service/treatment/procedure
2.3.6 Retained instrument/material
2.3.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.3.8 Wrong body part/side/site

2.3.9 Complication during a procedure

2.4 Clinical process/procedure – day-to-day general patient healthcare and observations:

2.4.1 Not performed
2.4.2 Incomplete/inadequate/not requested
2.4.3 Unavailable
2.4.4 Wrong patient
2.4.5 Wrong process/service/treatment/procedure
2.4.6 Retained instrument/material
2.4.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.4.8 Wrong body part/side/site
2.4.9 Complication during a procedure

2.5 Clinical process/procedure – specimens/results:

2.5.1 Not performed
2.5.2 Incomplete/inadequate/not requested
2.5.3 Unavailable
2.5.4 Wrong patient
2.5.5 Wrong process/service/treatment/procedure
2.5.6 Retained instrument/material
2.5.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.5.8 Wrong body part/side/site
2.5.9 Complication during a procedure

2.6 Clinical process/procedure – detention/restraint:

2.6.1 Not performed
2.6.2 Incomplete/inadequate/not requested
2.6.3 Unavailable
2.6.4 Wrong patient
2.6.5 Wrong process/service/treatment/procedure
2.6.6 Retained instrument/material
2.6.7 Delayed/failure to respond/failure to recognise deteriorating patient
2.6.8 Wrong body part/side/site
2.6.9 Complication during a procedure

3.1 Documentation – orders/requests:

3.1.1 Document not available, missing or no documentation was made
3.1.2 Delay in accessing document
3.1.3 Document for wrong patient or wrong document
3.1.4 Unclear/ambiguous/illegible/incomplete information in document
3.1.5 Incorrect selection

3.2 Documentation – charts/medical records/assessments/consultations:

3.2.1 Document not available, missing or no documentation was made
3.2.2 Delay in accessing document

3.2.3 Document for wrong patient or wrong document
3.2.4 Unclear/ambiguous/illegible/incomplete information in document
3.2.5 Incorrect selection

3.3 Documentation – check lists:

3.3.1 Document not available, missing or no documentation was made
3.3.2 Delay in accessing document
3.3.3 Document for wrong patient or wrong document
3.3.4 Unclear/ambiguous/illegible/incomplete information in document
3.3.5 Incorrect selection

3.4 Documentation – forms/certificates:

3.4.1 Document not available, missing or no documentation was made
3.4.2 Delay in accessing document
3.4.3 Document for wrong patient or wrong document
3.4.4 Unclear/ambiguous/illegible/incomplete information in document
3.4.5 Incorrect selection

3.5 Documentation – labels/stickers/identification bands/cards:

3.5.1 Document not available, missing or no documentation was made
3.5.2 Delay in accessing document
3.5.3 Document for wrong patient or wrong document
3.5.4 Unclear/ambiguous/illegible/incomplete information in document
3.5.5 Incorrect selection

3.6 Documentation – letters/e-mails/records of communication:

3.6.1 Document not available, missing or no documentation was made
3.6.2 Delay in accessing document
3.6.3 Document for wrong patient or wrong document
3.6.4 Unclear/ambiguous/illegible/incomplete information in document
3.6.5 Incorrect selection

3.7 Documentation – reports/results/images:

3.7.1 Document not available, missing or no documentation was made
3.7.2 Delay in accessing document
3.7.3 Document for wrong patient or wrong document
3.7.4 Unclear/ambiguous/illegible/incomplete information in document
3.7.5 Incorrect selection

5.1 Medication/IV fluid (specify in text) – prescription:

5.1.1 Wrong patient
5.1.2 Wrong drug
5.1.3 Wrong dose/strength of frequency
5.1.4 Wrong formulation or presentation
5.1.5 Wrong route

5.1.6 Wrong quantity
5.1.7 Wrong dispensing label/instruction
5.1.8 Contraindication
5.1.9 Wrong storage
5.1.10 Omitted medicine or dose
5.1.11 Expired medicine
5.1.12 Appropriateness of medication
5.1.13 Adverse drug reaction not elsewhere classified

5.2 Medication/IV fluid (specify in text) – preparation/dispensing:

5.2.1 Wrong patient
5.2.2 Wrong drug
5.2.3 Wrong dose/strength of frequency
5.2.4 Wrong formulation or presentation
5.2.5 Wrong route
5.2.6 Wrong quantity
5.2.7 Wrong dispensing label/instruction
5.2.8 Contraindication
5.2.9 Wrong storage
5.2.10 Omitted medicine or dose
5.2.11 Expired medicine
5.2.12 Appropriateness of medication
5.2.13 Adverse drug reaction not elsewhere classified

5.3 Medication/IV fluid (specify in text) – presentation/packaging:

5.3.1 Wrong patient
5.3.2 Wrong drug
5.3.3 Wrong dose/strength of frequency
5.3.4 Wrong formulation or presentation
5.3.5 Wrong route
5.3.6 Wrong quantity
5.3.7 Wrong dispensing label/instruction
5.3.8 Contraindication
5.3.9 Wrong storage
5.3.10 Omitted medicine or dose
5.3.11 Expired medicine
5.3.12 Appropriateness of medication
5.3.13 Adverse drug reaction not elsewhere classified

5.4 Medication/IV fluid (specify in text) – delivery:

5.4.1 Wrong patient
5.4.2 Wrong drug
5.4.3 Wrong dose/strength of frequency
5.4.4 Wrong formulation or presentation
5.4.5 Wrong route

5.4.6 Wrong quantity
5.4.7 Wrong dispensing label/instruction
5.4.8 Contraindication
5.4.9 Wrong storage
5.4.10 Omitted medicine or dose
5.4.11 Expired medicine
5.4.12 Appropriateness of medication
5.4.13 Adverse drug reaction not elsewhere classified

5.5 Medication/IV fluid (specify in text) – administration:

5.5.1 Wrong patient
5.5.2 Wrong drug
5.5.3 Wrong dose/strength of frequency
5.5.4 Wrong formulation or presentation
5.5.5 Wrong route
5.5.6 Wrong quantity
5.5.7 Wrong dispensing label/instruction
5.5.8 Contraindication
5.5.9 Wrong storage
5.5.10 Omitted medicine or dose
5.5.11 Expired medicine
5.5.12 Appropriateness of medication
5.5.13 Adverse drug reaction not elsewhere classified

5.6 Medication/IV fluid (specify in text) – supply/ordering:

5.6.1 Wrong patient
5.6.2 Wrong drug
5.6.3 Wrong dose/strength of frequency
5.6.4 Wrong formulation or presentation
5.6.5 Wrong route
5.6.6 Wrong quantity
5.6.7 Wrong dispensing label/instruction
5.6.8 Contraindication
5.6.9 Wrong storage
5.6.10 Omitted medicine or dose
5.6.11 Expired medicine
5.6.12 Appropriateness of medication
5.6.13 Adverse drug reaction not elsewhere classified

5.7 Medication/IV fluid (specify in text) – storage:

5.7.1 Wrong patient
5.7.2 Wrong drug
5.7.3 Wrong dose/strength of frequency
5.7.4 Wrong formulation or presentation
5.7.5 Wrong route

5.7.6 Wrong quantity
5.7.7 Wrong dispensing label/instruction
5.8.8 Contraindication
5.7.9 Wrong storage
5.7.10 Omitted medicine or dose
5.7.11 Expired medicine
5.7.12 Appropriateness of medication
5.7.13 Adverse drug reaction not elsewhere classified

5.8 Medication/IV fluid (specify in text) – monitoring:

5.8.1 Wrong patient
5.8.2 Wrong drug
5.8.3 Wrong dose/strength of frequency
5.8.4 Wrong formulation or presentation
5.8.5 Wrong route
5.8.6 Wrong quantity
5.8.7 Wrong dispensing label/instruction
5.8.8 Contraindication
5.8.9 Wrong storage
5.8.10 Omitted medicine or dose
5.8.11 Expired medicine
5.8.12 Appropriateness of medication
5.8.13 Adverse drug reaction not elsewhere classified

6.1 Blood/blood product (specify in text) – pre-transfusion testing:

6.1.1 Wrong patient
6.1.2 Wrong blood/blood product
6.1.3 Wrong dose/strength of frequency
6.1.4 Wrong quantity
6.1.5 Wrong dispensing label/instruction
6.1.6 Contraindication
6.1.7 Wrong storage
6.1.8 Omitted product or dose
6.1.9 Expired blood/blood product
6.1.10 Adverse effect involving blood or blood products not elsewhere classified

6.2 Blood/blood product (specify in text) – prescribing:

6.2.1 Wrong patient
6.2.2 Wrong blood/blood product
6.2.3 Wrong dose/strength of frequency
6.2.4 Wrong quantity
6.2.5 Wrong dispensing label/instruction
6.2.6 Contraindication
6.2.7 Wrong storage

6.2.8 Omitted product or dose
6.2.9 Expired blood/blood product
6.2.10 Adverse effect involving blood or blood products not elsewhere classified

6.3 Blood/blood product (specify in text) – preparation/dispensing:

6.3.1 Wrong patient
6.3.2 Wrong blood/blood product
6.3.3 Wrong dose/strength of frequency
6.3.4 Wrong quantity
6.3.5 Wrong dispensing label/instruction
6.3.6 Contraindication
6.3.7 Wrong storage
6.3.8 Omitted product or dose
6.3.9 Expired blood/blood product
6.3.10 Adverse effect involving blood or blood products not elsewhere classified

6.4 Blood/blood product (specify in text) – delivery:

6.4.1 Wrong patient
6.4.2 Wrong blood/blood product
6.4.3 Wrong dose/strength of frequency
6.4.4 Wrong quantity
6.4.5 Wrong dispensing label/instruction
6.4.6 Contraindication
6.4.7 Wrong storage
6.4.8 Omitted product or dose
6.4.9 Expired blood/blood product
6.4.10 Adverse effect involving blood or blood products not elsewhere classified

6.5 Blood/blood product (specify in text) – administration:

6.5.1 Wrong patient
6.5.2 Wrong blood/blood product
6.5.3 Wrong dose/strength of frequency
6.5.4 Wrong quantity
6.5.5 Wrong dispensing label/instruction
6.5.6 Contraindication
6.5.7 Wrong storage
6.5.8 Omitted product or dose
6.5.9 Expired blood/blood product
6.5.10 Adverse effect involving blood or blood products not elsewhere classified

6.6 Blood/blood product (specify in text) – storage:

6.6.1 Wrong patient
6.6.2 Wrong blood/blood product
6.6.3 Wrong dose/strength of frequency
6.6.4 Wrong quantity
6.6.5 Wrong dispensing label/instruction
6.6.6 Contraindication
6.6.7 Wrong storage
6.6.8 Omitted product or dose
6.6.9 Expired blood/blood product
6.6.10 Adverse effect involving blood or blood products not elsewhere classified

6.7 Blood/blood product (specify in text) – monitoring:

6.7.1 Wrong patient
6.7.2 Wrong blood/blood product
6.7.3 Wrong dose/strength of frequency
6.7.4 Wrong quantity
6.7.5 Wrong dispensing label/instruction
6.7.6 Contraindication
6.7.7 Wrong storage
6.7.8 Omitted product or dose
6.7.9 Expired blood/blood product
6.7.10 Adverse effect involving blood or blood products not elsewhere classified

6.8 Blood/blood product (specify in text) – presentation/packaging:

6.8.1 Wrong patient
6.8.2 Wrong blood/blood product
6.8.3 Wrong dose/strength of frequency
6.8.4 Wrong quantity
6.8.5 Wrong dispensing label/instruction
6.8.6 Contraindication
6.8.7 Wrong storage
6.8.8 Omitted product or dose
6.8.9 Expired blood/blood product
6.8.10 Adverse effect involving blood or blood products not elsewhere classified

6.9 Blood/blood product (specify in text) – supply/ordering:

6.9.1 Wrong patient
6.9.2 Wrong blood/blood product
6.9.3 Wrong dose/strength of frequency
6.9.4 Wrong quantity
6.9.5 Wrong dispensing label/instruction
6.9.6 Contraindication

6.9.7 Wrong storage
6.9.8 Omitted product or dose
6.9.9 Expired blood/blood product
6.9.10 Adverse effect involving blood or blood products not elsewhere classified

7.1 Nutrition – prescribing/requesting:

7.1.1 Wrong patient
7.1.2 Wrong diet
7.1.3 Wrong quantity
7.1.4 Wrong frequency
7.1.5 Wrong consistency
7.1.6 Wrong storage

7.2 Nutrition – preparation/manufacturing/cooking:

7.2.1 Wrong patient
7.2.2 Wrong diet
7.2.3 Wrong quantity
7.2.4 Wrong frequency
7.2.5 Wrong consistency
7.2.6 Wrong storage

7.3 Nutrition – supply/ordering:

7.3.1 Wrong patient
7.3.2 Wrong diet
7.3.3 Wrong quantity
7.3.4 Wrong frequency
7.3.5 Wrong consistency
7.3.6 Wrong storage

7.4 Nutrition – presentation:

7.4.1 Wrong patient
7.4.2 Wrong diet
7.4.3 Wrong quantity
7.4.4 Wrong frequency
7.4.5 Wrong consistency
7.4.6 Wrong storage

7.5 Nutrition – dispensing/allocation:

7.5.1 Wrong patient
7.5.2 Wrong diet
7.5.3 Wrong quantity
7.5.4 Wrong frequency
7.5.5 Wrong consistency
7.5.6 Wrong storage

7.6 Nutrition – delivery:

- 7.6.1 Wrong patient
- 7.6.2 Wrong diet
- 7.6.3 Wrong quantity
- 7.6.4 Wrong frequency
- 7.6.5 Wrong consistency
- 7.6.6 Wrong storage

7.7 Nutrition – administration:

- 7.7.1 Wrong patient
- 7.7.2 Wrong diet
- 7.7.3 Wrong quantity
- 7.7.4 Wrong frequency
- 7.7.5 Wrong consistency
- 7.7.6 Wrong storage

7.8 Nutrition – storage:

- 7.8.1 Wrong patient
- 7.8.2 Wrong diet
- 7.8.3 Wrong quantity
- 7.8.4 Wrong frequency
- 7.8.5 Wrong consistency
- 7.8.6 Wrong storage

8.1 Oxygen/gas/vapour (specify in text) – cylinder labelling/colour coding/pin indexing:

- 8.1.1 Wrong patient
- 8.1.2 Wrong gas/vapour
- 8.1.3 Wrong rate/flow/concentration
- 8.1.4 Wrong delivery mode
- 8.1.5 Contraindication
- 8.1.6 Wrong storage
- 8.1.7 Failure to administer
- 8.1.8 Contamination

8.2 Oxygen/gas/vapour (specify in text) – prescription:

- 8.2.1 Wrong patient
- 8.2.2 Wrong gas/vapour
- 8.2.3 Wrong rate/flow/concentration
- 8.2.4 Wrong delivery mode
- 8.2.5 Contraindication
- 8.2.6 Wrong storage
- 8.2.7 Failure to administer
- 8.2.8 Contamination

8.3 Oxygen/gas/vapour (specify in text) – administration:

8.3.1 Wrong patient
8.3.2 Wrong gas/vapour
8.3.3 Wrong rate/flow/concentration
8.3.4 Wrong delivery mode
8.3.5 Contraindication
8.3.6 Wrong storage
8.3.7 Failure to administer
8.3.8 Contamination

8.4 Oxygen/gas/vapour (specify in text) – delivery:

8.4.1 Wrong patient
8.4.2 Wrong gas/vapour
8.4.3 Wrong rate/flow/concentration
8.4.4 Wrong delivery mode
8.4.5 Contraindication
8.4.6 Wrong storage
8.4.7 Failure to administer
8.4.8 Contamination

8.5 Oxygen/gas/vapour (specify in text) – supply/ordering:

8.5.1 Wrong patient
8.5.2 Wrong gas/vapour
8.5.3 Wrong rate/flow/concentration
8.5.4 Wrong delivery mode
8.5.5 Contraindication
8.5.6 Wrong storage
8.5.7 Failure to administer
8.5.8 Contamination

8.6 Oxygen/gas/vapour (specify in text) – storage:

8.6.1 Wrong patient
8.6.2 Wrong gas/vapour
8.6.3 Wrong rate/flow/concentration
8.6.4 Wrong delivery mode
8.6.5 Contraindication
8.6.6 Wrong storage
8.6.7 Failure to administer
8.6.8 Contamination

9.1 Medical device/equipment:

9.1.1 Poor presentation/packaging
9.1.2 Lack of availability
9.1.3 Inappropriate for task
9.1.4 Unclean/unsterile
9.1.5 Failure/malfunction

9.1.6 Dislodgement/misconnection/removal
9.1.7 Medical equipment/device failure – design
9.1.8 Medical equipment/device not elsewhere classified

10.1 Patient incident - blunt force:

10.1.1 Contact with blunt object or animal
10.1.2 Contact with person
10.1.3 Crushing
10.1.4 Abrading/rubbing

10.2 Patient incident - piercing/penetrating force:

10.2.1 Scratching/cutting/tearing/severing
10.2.2 Puncturing/stabbing
10.2.3 Biting/stinging/envenomating
10.2.4 Other specified piercing/penetrating force

10.3 Patient incident - other mechanical force:

10.3.1 Struck by explosive blast

10.3.2 Contact with machinery

10.4 Patient incident - thermal mechanism:

10.4.1 Excessive heat/fire
10.4.2 Excessive cooling/freezing

10.5 Patient incident - threat to breathing:

10.5.1 Mechanical threat to breathing
10.5.2 Drowning/near drowning
10.5.3 Confinement to oxygen-deficient place

10.6 Patient incident - exposure to chemical or other substance:

10.6.1 Poisoning by chemical or other substance
10.6.2 Corrosion by chemical or other substance

10.7 Patient incident - other specified mechanism of injury

10.7.1 Exposure to electricity/radiation
10.7.2 Exposure to sound/vibration
10.7.3 Exposure to air pressure
10.7.4 Exposure to low gravity

10.8 Patient incident – exposure to (effect of) weather or other force of nature:

10.8.1 Exposure to environmental elements

10.9 Patient incident - fall type:

10.9.1 Fall involving cot
10.9.2 Fall involving bed

10.9.3 Fall involving chair or wheelchair
10.9.4 Fall involving stretcher
10.9.5 Fall involving toilet
10.9.6 Fall involving therapeutic equipment
10.9.7 Fall involving stairs/steps
10.9.8 Fall while being carried/supported by another individual

10.9.9 Fall, unspecified

11.1 Infrastructure/building/fixtures – Structure type (specify in text):

11.1.1 Non-existent/inadequate
11.1.2 Structure, building or fixture is faulty or is damaged or worn
11.1.3 Structure, building or fixture issue not elsewhere classified

11.2 Infrastructure/building/fixtures – Building type (specify in text):

11.2.1 Non-existent/inadequate
11.2.2 Structure, building or fixture is faulty or is damaged or worn
11.2.3 Structure, building or fixture issue not elsewhere classified

11.3 Infrastructure/building/fixtures – Fixture type (specify in text):

11.3.1 Non-existent/inadequate

11.3.2 Structure, building or fixture is faulty or is damaged or worn

11.3.3 Structure, building or fixture issue not elsewhere classified

9998 Not relevant
9999 Not known

Comments:

Level 3 incident types are defined in Appendix 3.

Variable: Text description of Second incident

Variable name: z_inc_type2_txt

Definition: Describe the adverse clinical incident.

Justification: To record the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the adverse clinical incident.

Any 'Other' incident types or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Second incident, Level 1

Variable name: z_inc_type2a

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil
1	Clinical administration
2	Clinical process/procedure
3	Documentation
4	Healthcare-associated infection or complication
5	Medication/IV fluids (specify in text)
6	Blood/blood products (specify in text)
7	Nutrition
8	Oxygen/gas/vapour (specify in text)

9	Medical device/equipment
10	Patient incidents
11	Infrastructure/building/fixtures
97	Other
98	Not relevant
99	Not known

Comments:

Level 1 incident types are defined in Appendix 1.

Variable: Second incident type, Level 2

Variable name: z_inc_type2b

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 2 for coding frame.

Comments:

Level 2 incident types are defined in Appendix 2.

Any 'Other' incident types can be indicated in descriptive text box.

Indicate any specific types of medication, IV fluid, blood, blood products, oxygen, gas, vapour, medical devices or equipment, structures, buildings or fixtures in descriptive text box.

Variable: Second incident type, Level 3

Variable name: z_inc_type2c

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 3 for coding frame.

Comments:

Level 3 incident types are defined in Appendix 3.

Variable: Text description of Third incident

Variable name: z_inc_type3_txt

Definition: Describe the adverse clinical incident.

Justification: To record the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the adverse clinical incident.

Any 'Other' incident types or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Third incident, Level 1

Variable name: z_inc_type3a

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil
1	Clinical administration
2	Clinical process/procedure
3	Documentation
4	Healthcare-associated infection or complication
5	Medication/IV fluids (specify in text)
6	Blood/blood products (specify in text)
7	Nutrition
8	Oxygen/gas/vapour (specify in text)
9	Medical device/equipment
10	Patient incidents
11	Infrastructure/building/fixtures
97	Other
98	Not relevant
99	Not known

Comments:

Level 1 incident types are defined in Appendix 1.

Variable: Third incident type, Level 2

Variable name: z_inc_type3b

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 2 for coding frame.

Comments:

Level 2 incident types are defined in Appendix 2.

Any 'Other' incident types can be indicated in descriptive text box.

Indicate any specific types of medication, IV fluid, blood, blood products, oxygen, gas, vapour, medical devices or equipment, structures, buildings or fixtures in descriptive text box.

Variable: Third incident type, Level 3

Variable name: z_inc_type3c

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 3 for coding frame.

Comments:

Level 3 incident types are defined in Appendix 3.

Variable: Text description of Fourth incident

Variable name: z_inc_type4_txt

Definition: Describe the adverse clinical incident.

Justification: To record the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the adverse clinical incident.

Any 'Other' incident types or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'.

Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Fourth incident, Level 1

Variable name: z_inc_type4a

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	Nil
1	Clinical administration
2	Clinical process/procedure
3	Documentation
4	Healthcare-associated infection or complication
5	Medication/IV fluids (specify in text)
6	Blood/blood products (specify in text)
7	Nutrition
8	Oxygen/gas/vapour (specify in text)
9	Medical device/equipment
10	Patient incidents
11	Infrastructure/building/fixtures
97	Other
98	Not relevant
99	Not known

Comments:

Level 1 incident types are defined in Appendix 1.

Variable: Fourth incident type, Level 2

Variable name: z_inc_type4b

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 2 for coding frame.

Comments:

Level 2 incident types are defined in Appendix 2.

Any 'Other' incident types can be indicated in descriptive text box.

Indicate any specific types of medication, IV fluid, blood, blood products, oxygen, gas, vapour, medical devices or equipment, structures, buildings or fixtures in descriptive text box.

Variable: Fourth incident type, Level 3

Variable name: z_inc_type4c

Definition: What was the type of incident performed at the time of the adverse clinical incident?

Justification: To identify the type of incident performed at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

See First incident type, Level 3 for coding frame.

Comments:

Level 3 incident types are defined in Appendix 3.

Section 5: Contributing factors

Section 5 records information on the contributing factors. Up to four contributing factors can be recorded. A contributing factor is considered to be "a circumstance, action or influence which is thought to have played a part in the origin or development of an incident or to increase the risk of an incident"[4]. Contributing factors could involve a staff member's behaviour or actions, the patient, the organisation (such as policies or guidelines, supervision), or the work environment (such as noise, remoteness). The contributing factors are factors that pre-existed before the sequence of incident type factors began.[5]

Variable: Text description of First contributing factor

Variable name: z_CF1_txt

Definition: Describe the contributing factor at the time of the adverse clinical incident.

Justification: To record the contributing factor at the time of the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the contributing factor.

Any 'Other' contributing factors or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

[4] World Health Organization, *Report on the web-based modified-Delphi survey of the International Classification for Patient Safety*. 2007, World Health Organization: Geneva.

[5] Mitchell, R., Williamson, A., and Molesworth, B., *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195.

Variable: First contributing factor, Level 1

Variable name: z_CF1a

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 1 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

0	Nil
1	Staff factors – behavioural/human action/ individual
2	Patients factors
3	Organisational/service factors
4	Work environment factors
5	Other factors
8	Not relevant
9	Not known

Comments:

Level 1 contributing factors are defined in Appendix 4.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: First contributing Factor, Level 2

Variable name: z_CF1b

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

0 Nil

1. Staff factors – behavioural/human action/ individual

    1.1 Clinical process or procedure – error or violation
    1.2 Communication/miscommunication
    1.3 Physical and psychological health
    1.4 Training
    1.5 Experience
    1.6 Fatigue/ exhaustion
    1.7 Stress
    1.9 Individual factors not elsewhere classified

2. Patients factors

    2.1 Physical and psychological health or impairment (pre-existing)
    2.2 Communication issues
    2.3 Patient not elsewhere classified

3. Organisational service factors

    3.1 Work practices, protocols, policies or guidelines
    3.2 Supervision
    3.3 Organisational decisions/ culture
    3.4 Workforce and teamwork
    3.5 Workload, work pressure or workflow
    3.6 Organisational factors not elsewhere classified

4. Work environment factors

    4.1 Light
    4.2 Temperature
    4.3 Noise
    4.4 Physical layout
    4.5 Security
    4.6 Remote/long distance

4.7 Work environment not elsewhere classified

5. Other factors

98 Not relevant
99 Not known

Comments:

Level 2 contributing factors are defined in Appendix 5.

Any ‘Other’ contributing factors can be indicated in descriptive text box.

Variable: First contributing factor, Level 3

Variable name: z_CF1c

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

0 Nil

1.1 Staff factors – Clinical process or procedure – error or violation
- 1.1.1 Error – skill based
- 1.1.2 Error – rule-based
- 1.1.3 Error – knowledge-based
- 1.1.4 Violation
- 1.1.5 Bias or anchoring
- 1.1.6 Error, violation or bias – type not able to be determined

1.2 Staff factors – communication/ miscommunication
- 1.2.1 Inadequate between care providers – not handover
- 1.2.2 Inadequate to patient/family/carer

1.3 Staff factors – physical and psychological health
- 1.3.1 Physical disease or impairment
- 1.3.2 Psychological health or addition

2.1 Patients factors – physical and psychological heath or impairment
- 2.1.1 Physical disease or impairment
- 2.1.2 Physical characteristic
- 2.1.3 Intellectual disability
- 2.1.4 Psychological health
- 2.1.5 Physical health not elsewhere classified

2.2 Patients factors – communication issues
- 2.2.1 Language barrier
- 2.2.2 Not disclosing information - unintentional
- 2.2.3 Not disclosing information - intentional

3.1 Organisational service factors – work practices, protocols, polices or guidelines
- 3.1.1 Work practices, but no policy/guidelines/protocol
- 3.1.2 Policy/guidelines exist, but are unclear/ inconsistent/ inadequate
- 3.1.3 Policy/guidelines exist, but are not followed

3.1.4 Policy/guidelines not elsewhere classified

3.4 Organisational service factors – workforce and teamwork

3.4.1 Availability of senior staff
3.4.2 Staff rostering/ staff numbers/ staff skill mix
3.4.3 No identified lead clinician
3.4.4 Team roles unclear or inappropriate

3.5 Organisational service factors – workload, work pressure or workflow

3.5.1 Workload or work pressure
3.5.2 Disruption in workflow
3.5.3 Bed availability

4.1 Work environment factors - light

4.1.1 No or too little light
4.1.2 Too much light/glare
4.1.3 Light not elsewhere classified

4.2 Work environment factors - temperature

4.2.1 Too hot
4.2.2 Too cold
4.2.3 Temperature not elsewhere classified

4.3 Work environment factors - noise

4.3.1 Too noisy
4.3.2 Too quite
4.3.3 Noise not elsewhere classified

4.4 Work environment factors – physical layout

4.4.1 Isolation
4.4.2 Poor access
4.4.3 Physical layout not elsewhere classified

5. Other factors

998 Not relevant
999 Not known

Comments:

Level 3 contributing factors are defined in Appendix 6.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Text description of Second contributing factor

Variable name: z_CF2_txt

Definition: Describe the contributing factor at the time of the adverse clinical incident.

Justification: To record the contributing factor at the time of the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the contributing factor.

Any 'Other' contributing factors or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Second contributing factor, Level 1

Variable name: z_CF2a

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 1 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

0	Nil
1	Staff factors – behavioural/human action/ individual
2	Patients factors
3	Organisational service factors
4	Work environment factors
5	Other factors
8	Not relevant
9	Not known

Comments:

Level 1 contributing factors are defined in Appendix 4.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Second contributing factor, Level 2

Variable name: z_CF2b

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 2 for coding frame.

Comments:

Level 2 contributing factors are defined in Appendix 5.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Second contributing factor, Level 3

Variable name: z_CF2c

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 3 for coding frame.

Comments:

Level 3 contributing factors are defined in Appendix 6.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Text description of Third contributing factor

Variable name: z_CF3_txt

Definition: Describe the contributing factor at the time of the adverse clinical incident.

Justification: To record the contributing factor at the time of the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the contributing factor.

Any 'Other' contributing factors or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Third contributing factor, Level 1

Variable name: z_CF3a

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 1 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding Frame:

0	Nil
1	Staff factors – behavioural/human action/ individual
2	Patients factors
3	Organisational service factors
4	Work environment factors
5	Other factors
8	Not relevant
9	Not known

Comments:

Level 1 contributing factors are defined in Appendix 4.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Third contributing factor, Level 2

Variable name: z_CF3b

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 2 for coding frame.

Comments:

Level 2 contributing factors are defined in Appendix 5.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Third contributing factor, Level 3

Variable name: z_CF3c

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 3 for coding frame.

Comments:

Level 3 contributing factors are defined in Appendix 6.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Text description of Fourth contributing factor

Variable name: z_CF4_txt

Definition: Describe the contributing factor at the time of the adverse clinical incident.

Justification: To record the contributing factor at the time of the adverse clinical incident.

Format: Text

Coding source:

Coding frame:

Comments:

Provide a short description of the contributing factor.

Any 'Other' contributing factors or those with 'specify in text' can be indicated in this descriptive text box.

Note: The text description should not include any identifying information regarding individuals. Refer to the individual to whom the clinical incident occurs as 'the patient' or 'the deceased'. Refer to health professionals by their position not by their name e.g. registrar, intern, midwife. Dr X, Dr Y, etc Refer to hospitals by hospital A, hospital B.

Variable: Fourth contributing factor, Level 1

Variable name: z_CF4a

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 1 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

0	Nil
1	Staff factors – behavioural/human action/ individual
2	Patients factors
3	Organisational service factors
4	Work environment factors
5	Other factors
8	Not relevant
9	Not known

Comments:

Level 1 contributing factors are defined in Appendix 4.

Any 'Other' contributing factors can be indicated in descriptive text box.

Variable: Fourth contributing Factor, Level 2

Variable name: z_CF4b

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 2 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 2 for coding frame.

Comments:

Level 2 contributing factors are defined in Appendix 5.

Any ‘Other’ contributing factors can be indicated in descriptive text box.

Variable: Fourth contributing factor, Level 3

Variable name: z_CF4c

Definition: What were the contributing factors at the time of the adverse clinical incident?

Justification: To identify the contributing factors at the time of the adverse clinical incident.

Format: 3 digit numeric

Coding source: Adapted from WHO IPCS 2009 and Mitchell, R. et al *Application of a human factors classification framework for patient safety to identify precursor and contributing factors to adverse clinical incidents in hospital.* Applied Ergonomics, 2016. 52: p. 185-195

Coding frame:

See First contributing factor, Level 3 for coding frame.

Comments:

Level 3 contributing factors are defined in Appendix 6.

Any ‘Other’ contributing factors can be indicated in descriptive text box.

Section 6: Organisation preventive actions

Section 6 records information on actions taken and/or changes made by the organisation to prevent future adverse clinical incidents occurring. The preventive actions may apply to healthcare professionals (e.g. awareness raising), to professions (e.g. professional development, mentoring), and/or to the organisation (policies/ procedures, equipment, record keeping, culture). Up to five preventive actions can be indicated.

Variable: Organisation preventive actions1

Variable name: z_org_action1

Definition: What type of preventive actions were conducted by the health organisation that were reported in the coronial findings?

Justification: To identify the type of preventive actions that were conducted by the health organisation that were reported in the coronial findings.

Format: 2-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

1	No preventive actions reported in the coronial findings
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Preventive actions not elsewhere classified (nec)
99	Preventive actions not specified

Comments:

Up to five organisation preventive actions can be classified.

Variable: Organisation preventive actions2

Variable name: z_org_action2

Definition: What type of preventive actions were conducted by the health organisation that were reported in the coronial findings?

Justification: To identify the type of preventive actions that were conducted by the health organisation that were reported in the coronial findings.

Format: 2-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

1	No preventive actions reported in the coronial findings
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Preventive actions nec
99	Preventive actions not specified

Comments:

Up to five organisation preventive actions can be classified.

Variable: Organisation preventive actions3

Variable name: z_org_action3

Definition: What type of preventive actions were conducted by the health organisation that were reported in the coronial findings?

Justification: To identify the type of preventive actions that were conducted by the health organisation that were reported in the coronial findings.

Format: 2-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

1	No preventive actions reported in the coronial findings
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records

5 Organisational culture
6 Organisational supervision
7 Equipment changes and/or design
8 Staff training or education
9 Preventive actions nec

99 Preventive actions not specified

Comments:

Up to five organisation preventive actions can be classified.

Variable: Organisation preventive actions4

Variable name: z_org_action4

Definition: What type of preventive actions were conducted by the health organisation that were reported in the coronial findings?

Justification: To identify the type of preventive actions that were conducted by the health organisation that were reported in the coronial findings.

Format: 2-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

1 No preventive actions reported in the coronial findings
2 Organisational policies/ protocols/ guidelines
3 Organisational checklists
4 Organisational record keeping, medical or electronic records
5 Organisational culture
6 Organisational supervision
7 Equipment changes and/or design
8 Staff training or education
9 Preventive actions nec

99 Preventive actions not specified

Comments:

Up to five organisation preventive actions can be classified.

Variable: Organisation preventive actions5

Variable name: z_org_action5

Definition: What type of preventive actions were conducted by the health organisation that were reported in the coronial findings?

Justification: To identify the type of preventive actions that were conducted by the health organisation that were reported in the coronial findings.

Format: 2-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

1	No preventive actions reported in the coronial findings
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Preventive actions nec
99	Preventive actions not specified

Comments:

Up to five organisation preventive actions can be classified.

Section 7: Coronial recommendations

Section 7 records information on recommendations made by the Coroner to prevent future adverse clinical incidents occurring. The Coronial recommendations may apply to healthcare professionals (e.g. awareness raising), to professions (e.g. professional development, mentoring), and/or to the organisation (policies/ procedures, equipment, record keeping, culture). Up to five recommendations can be indicated.

Variable: Coronial recommendations1

Variable name: z_coroner_recom1

Definition: What type of recommendations did the Coroner make that were reported in the coronial findings?

Justification: To identify the type of coronial recommendations that were reported in the coronial findings.

Format: 1-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	No recommendations
1	No recommendations as hospital already made changes
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Recommendations nec

Comments:

Up to five organisation preventive actions can be classified.

Variable: Coronial recommendations2

Variable name: z_coroner_recom2

Definition: What type of recommendations did the Coroner make that were reported in the coronial findings?

Justification: To identify the type of coronial recommendations that were reported in the coronial findings.

Format: 1-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	No recommendations
1	No recommendations as hospital already made changes
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Recommendations nec

Comments:

Up to five organisation preventive actions can be classified.

Variable: Coronial recommendations3

Variable name: z_coroner_recom3

Definition: What type of recommendations did the Coroner make that were reported in the coronial findings?

Justification: To identify the type of coronial recommendations that were reported in the coronial findings.

Format: 1-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	No recommendations
1	No recommendations as hospital already made changes
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design

8 Staff training or education
9 Recommendations nec

Comments:

Up to five organisation preventive actions can be classified.

Variable: Coronial recommendations4

Variable name: z_coroner_recom4

Definition: What type of recommendations did the Coroner make that were reported in the coronial findings?

Justification: To identify the type of coronial recommendations that were reported in the coronial findings.

Format: 1-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0 No recommendations
1 No recommendations as hospital already made changes
2 Organisational policies/ protocols/ guidelines
3 Organisational checklists
4 Organisational record keeping, medical or electronic records
5 Organisational culture
6 Organisational supervision
7 Equipment changes and/or design
8 Staff training or education
9 Recommendations nec

Comments:

Up to five organisation preventive actions can be classified.

Variable: Coronial recommendations5

Variable name: z_coroner_recom5

Definition: What type of recommendations did the Coroner make that were reported in the coronial findings?

Justification: To identify the type of coronial recommendations that were reported in the coronial findings.

Format: 1-digit numeric

Coding source: Adapted from WHO IPCS 2009

Coding frame:

0	No recommendations
1	No recommendations as hospital already made changes
2	Organisational policies/ protocols/ guidelines
3	Organisational checklists
4	Organisational record keeping, medical or electronic records
5	Organisational culture
6	Organisational supervision
7	Equipment changes and/or design
8	Staff training or education
9	Recommendations nec

Comments:

Up to five organisation preventive actions can be classified.

Appendix 1 – Incident type – Level 1

Term	Definition
1. Clinical administration	Actions associated with processing patient information through the healthcare system. Examples of this involve factors associated with appointments, allocation of tasks, patient admission and discharge.
2. Clinical process/procedure	Procedures and processes relevant to clinical care. This also includes types of observations and diagnostic tests used to evaluate a patient's condition.
3. Documentation	Administrative documents or files that are used to communicate relevant patient information. This includes instructions, medical records, pathology results or checklists, including electronic medical records.
4. Healthcare associated infection or complication	Infections that occur due to any microorganisms that are contracted or developed by patients or healthcare providers leading to illness or death. These include viruses, fungi, parasites. Complications refer to complications that occurred during a patient's episode of care, excluding complications that occurred during a procedure - these should be coded in Section 2.
5. Medication/IV fluids (specify in text)	Any processes and action involved regarding the administration of patient medication(s) or fluids. This information is only to be classified if the incident involved medication or IV fluid being given to the wrong patient, the wrong medication was used, wrong dose, formulation, route, quantity, dispensing etc. Specify in text type of medication(s) involved in the incident e.g. Antidepressant or could state the brand name of the drug.
6. Blood/blood products (specify in text)	Components found within blood and procedures involved in the handling of blood or blood products. This includes transfusions, storage and preparation. List blood/ blood product involved.
7. Nutrition	Processes involved in nutritional care such as general or specialised dietary requirements. This also includes any procedures involved in the handling, transport and storage of food and drink.
8. Oxygen/gas/vapour (specify in text)	Incidents associated in the administration, prescription of any oxygen or specific gas or vapours. Other logistical errors including delivery, supply and storage are also included. Specify in text type of oxygen/gas/vapour that was involved in the incident.
9. Medical device/equipment	Any problems pertaining to medical devices or equipment in patient care or medical procedures. Examples are equipment malfunction, appropriateness for task and unsanitary equipment. These include events that involved equipment or device failures, breakages, malfunctions at the time of the incident. This also includes a lack of medical equipment and medical supplies.
10. Patient incidents	Injuries sustained from physical trauma, falls, the environment or adverse effects while in the health care system. These classifications are consistent with the National Coronial Information System Data Dictionary.
11. Infrastructure/building/fixtures	Incidents involving healthcare infrastructure.
97. Other	Any incident not otherwise specified. Specify the incident type in text.
98. Not relevant	Any incident where the incident type is not relevant.
99. Not known	Any incident where the incident type is not known.

Appendix 2 – Incident type – Level 2

Term	Definition
1. Clinical administration	
1.1. Clinical handover	A clinical handover refers to the 'transfer of professional responsibility and accountability for some or all aspects of a patient's or a group of patients' care to another person or professional group on a temporary or permanent basis'. (RCGP)
1.2. Appointment	An appointment refers to a consultation appointment with a clinical or administrative staff member.
1.3. Waiting list	Waiting list refers to a patient either on a waiting list for a consultation with a physician and/ or specialist or a patient on a waiting list for surgery.
1.4. Referral/consultation	Referral/consultation refers to a referral from a general practitioner (or similar) for a consultation with a specialist.
1.5. Admission	Admission refers to hospital admission and/or presentation to an emergency department.
1.6. Discharge	Discharge refers to discharge from hospital and/or the emergency department.
1.7. Transfer of care	A transfer of care either refers to the transfer of a patient between hospitals or the transfer of care of a patient between wards (e.g. general ward to intensive care) in the same hospital.
1.8. Patient identification	Refers to the correct identification of a patient at the time that the patient is to undergo a procedure or to take medications. Items of information for identifying a patient including: name (first/last names), date of birth, gender (identified by patient), address, patient medical record, patient identification band where exists. This does not include errors on, or an absence of, a patient identification band, which would be classified as 3. Documentation and 3.6 Labels/stickers/identification bands/ cards.
1.9. Consent	Patient consent refers to where the patient (or their family members/carer) agree to a course of treatment. Consent is obtained after a process where patient and healthcare practitioner engage in a discussion surrounding a proposed medical treatment: including the consequences, harms, benefits, risks and alternatives.
1.10 Task allocation	Tasks allocation refers to the distributed to healthcare professionals of tasks to be completed.
1.11. Response to emergency	Response to an emergency refers to an individual's response to a situation that is life-threatening and/or time-critical, such as performing CPR on a patient.
2. Clinical process/procedure	
2.1. Screening/prevention/routine check-up	Any screening tests or check-up on a patient that are used to prevent or manage a particular health condition or disease. e.g. fall injury prevention, check blood pressure, cancer screening, eye sight check. This does not include invasive procedures that are conducted as part of diagnostic testing (e.g. colonoscopy - these are identified as 2.3 procedures).
2.2. Diagnosis/assessment	Process of determining which disease or condition explains a patient's symptom or signs. This excludes invasive procedures that are conducted as part of diagnostic testing.
2.3. Procedure/treatment/intervention	Any treatments, procedures or interventions administered to the patient that are not part of screening or a routine check-up, such as chemotherapy, a surgical procedure. This includes

Term	Definition
	procedures that are conducted as part of diagnostic testing (e.g. colonoscopy - these are identified as 2.3 procedures).
2.4. Day-to-day general patient healthcare and observations	Day-to-day healthcare provided to a patient by a healthcare provider, including monitoring of vital signs and observations.
2.5. Specimens/results	Patient specimen or results from a particular clinical procedure or process.
2.6. Detention/restraint	Patient detention or restraint that involves either physical restraint, seclusion measures or sedation.
3. Documentation	
3.1. Orders/requests	Any orders or requests placed by internal or external healthcare providers relating to the patient and/or their treatment.
3.2. Charts/medical records/assessments/consultations	Any existing or new medical records, charts, x-rays or consultation reports.
3.3. Check lists	Checklists for particular procedures, such as 'Five rights of medication use' e.g. Right patient, right drug, right dose, right route, right time; or surgical checklists.
3.4. Forms/certificates	Any forms or certificates outlining patient information.
3.5. Labels/stickers/identification bands/cards	Identification label, stickers, or cards including labels that identify a heightened patient risk, such as 'high falls risk patient' or patient allergy. This does not include the incorrect identification of a patient at the time that the patient is to undergo a procedure or to take medications as this should be coded as 1. Clinical Administration and 1.8 Patient Identification.
3.6. Letters/e-mails/records of communication	Any practitioner letters, letters of referral, emails, documents for communicating regarding the patient and/or their treatment.
3.7. Reports/results/images	Medical reports, results of imaging, including x-ray, MRI, ECG.
4. Healthcare associated infection or complication	
4.1 Pneumonia	Lung inflammation caused by bacterial or viral infection.
4.2 Sepsis	Bacteria and their toxins in tissue.
4.3 Bacterial IV line infection	Bacterial intravenous line infection e.g. catheter.
4.4 Embolism	Obstruction of an artery by clot of blood, fat or an air bubble.
4.5 Pressure injury/ulcer	Localised damage to the skin and underlying soft tissue often over a bony prominence or it could be related to a medical or other health care device.
4.6 Surgical site infection	Post-surgery surgical site infection, excluding sepsis.
4.7 Other healthcare associated infection	Other healthcare infections not specified in 4.1 to 4.7 e.g. urinary tract infection, blood stream infections.
4.8 Other complication	Any other type of complication not identified in 4.1 to 4.7. This excludes complications that occurred during a procedure - these should be coded in Section 2.
5. Medication/IV fluids (specify in text)	
5.1. Prescription	Any medication or IV fluid that is prescribed by a healthcare practitioner.
5.2. Preparation/dispensing	Medication preparation or dispensing by a healthcare provider
5.3. Presentation/packaging	Presentation or packaging of medication (e.g. similarities in the name/packaging of different medications or same medication of different dose strength).
5.4. Delivery	Delivery of medication/IV Fluid within the care setting or out of the care setting during transit.

Term	Definition
5.5. Administration	Medication or IV fluid administered to a patient by a healthcare provider.
5.6. Supply/ordering	The supply or ordering of any medications or IV fluids.
5.7. Storage	Any means of storing medication or IV fluid within or outside the healthcare setting e.g. during transit.
5.8. Monitoring	Observation of patients requiring medication or IV fluids for acute and delayed adverse reactions related to mediation/IV fluids. This does not include taking patient observations which are classified in Section 2 as 2.4 Day-to-day general inpatient healthcare and observations.
6. Blood/blood products (specify in text)	
6.1. Pre-transfusion testing	Compatibility testing prior to blood or blood product transfusion to prevent transfusion of incompatible material that might result in an adverse transfusion reaction.
6.2. Prescribing	Prescription of blood or blood products.
6.3. Preparation/dispensing	Blood/ blood product preparation or dispensing by healthcare staff.
6.4. Delivery	Any parties involved in the delivery of blood products either to a healthcare setting during transit or directly to a patient.
6.5. Administration	Blood products administered to a patient by a healthcare provider.
6.6. Storage	The way in which blood products are stored at, or outside of, a healthcare facility or during transit.
6.7. Monitoring	Observation of patients requiring blood or blood products for acute and delayed adverse reactions related to blood or blood products. This does not include taking patient observations which are classified in Section 2 as 2.4 Day-to-day general inpatient healthcare and observations.
6.8. Presentation/packaging	Packing and presentation of blood or blood-related products for storage or transport between participating health providers.
6.9 Supply/ordering	Existing or future supply of blood or blood products and any issues related to ordering of blood or blood products.
7. Nutrition	
7.1 Prescribing/requesting	Prescription or request for specific food or fluids.
7.2 Preparation/manufacturing/cooking	The process in which food was prepared, manufactured or cooked within or outside the healthcare setting.
7.3 Supply/ordering	Existing or future supply of nutrition within the healthcare setting.
7.4 Presentation	Refers to the presentation of food or fluid to the patient in the healthcare setting.
7.5 Dispensing/allocation	The provision or allocation of food/fluid to patients in the healthcare setting.
7.6 Delivery	Delivery of food to/from/within the healthcare setting or delivery of food directly to the patient.
7.7 Administration	The process by which food or fluids are fed/provided to patients who are unable to feed themselves.
7.8 Storage	Storage of food supply within or outside the healthcare setting or during transit.
8. Oxygen/gas/vapour (specify in text)	
8.1. Cylinder labelling/colour coding/pin indexing	Labelling, colour coding or pin indexing system on oxygen/vapour gas systems to ensure connection between oxygen, pressurised gas or vapour is not connected to the wrong outlet.
8.2. Prescription	Prescription of oxygen, gas or vapour to patient(s).

Term	Definition
8.3. Administration	Administration of oxygen, gas or vapour to patient(s).
8.4. Delivery	Internal or external delivery of oxygen, gas or vapour to the healthcare facility or directly to the patient(s).
8.5. Supply/ordering	The existing or future supply or ordering of oxygen, gas or vapour at the healthcare facility.
8.6. Storage	Internal or external storage of oxygen, gas or vapour at the healthcare facility or during transit.
9. Medical device/equipment	
9.1. Device/equipment (specify in text)	Type of medical devices or equipment involved in the incident.
10. Patient incidents	
10.1. Blunt force	Physical trauma from the transfer of energy in one form or another to the tissues that are damaged (NCIS. Data Dictionary for the National Coronial Information System. V3. Melbourne, NCIS 2010). Blunt force includes transport injuries, contact with objects or animals, contact with person, crushing, abrasion, rubbing.
10.2. Piercing/penetrating force	Includes scratching, cutting, tearing, severing, puncturing, stabbing, biting, stinging, invenomating.
10.3. Other mechanical force	Includes struck by explosive blast, contact with machinery, other mechanical forces.
10.4. Thermal mechanism	Includes heating or cooling, other thermal mechanisms.
10.5. Threat to breathing	Includes mechanical threat to breathing, drowning/near drowning, confinement in oxygen-deficient place, anaphylaxis, physical restraint.
10.6. Exposure to chemical or other substance	Includes poisoning or corrosion by solid, liquid or gaseous substance(s).
10.7. Other specified mechanism of injury	Includes other injury mechanisms, including contact with foreign bodies, electricity, radiation, sound, vibration, air pressure..
10.8. Exposure to (effect of) weather or other force of nature	Includes exposure to (effect of) precipitation, wind, earth or ocean movement, eruption, weather, natural disaster, or other forces of nature.
10.9. Falls	A fall refers to an event which results in a person coming to rest inadvertently on the ground or floor or other lower level (World Health Organization. WHO Global report on falls prevention in older age. Geneva: WHO, 2016).
11. Infrastructure/ building/ fixtures	
11.1. Structure type (specify in text)	Type of structure where the incident occurred.
11.2. Building type (specify in text)	Building where the incident occurred.
11.3. Fixture type (specify in text)	Type of building fixture involved in the incident.

Appendix 3 – Incident type – Level 3

Term	Definition
1. Clinical administration	
Not performed	Treatment, process or procedure not performed (e.g. clinical handover not conducted).
Incomplete/inadequate/not requested	Treatment, process or procedure was incomplete or inadequate or not requested (e.g. clinical handover was incomplete and/or information regarding the patient and/or their care was not adequately communicated to staff).
Unavailable	Treatment, process or procedure was unavailable (e.g. the consultant was not available to treat the patient).
Wrong patient	Treatment, process or procedure was administered to the incorrect patient (e.g. clinical handover was conducted with staff about the incorrect patient).
Wrong process/service	Treatment, process or procedure was incorrect or was not in accordance with procedures (e.g. clinical handover involved incorrect information being communicated about the patient).
Delayed/failure to respond	Clinical administrative task was not performed in a timely manner. e.g. there were delays in patient transfer from one facility to another.
2. Clinical process/procedure	
Not performed	Treatment, process or procedure not performed and/or no record of clinical observations being completed (e.g. no medical test was conducted). The procedure could have been requested, but it was not performed
Incomplete/inadequate/not requested	Treatment, process or procedure was incomplete, inadequate or not requested to ensure the best possible outcome for the patient (e.g. medical test was not requested, not administered correctly or was incomplete; during general care patient care was inadequate e.g. patient developed pressure ulcers). The test results were not reviewed or not adequately reviewed.
Unavailable	Treatment, process or procedure was unavailable (e.g. no equipment was available to conduct the medical test e.g. no MRI).
Wrong patient	Treatment, process or procedure was administered to the incorrect patient (e.g. the medical test was performed on the incorrect patient).
Wrong process/service/treatment/procedure	Treatment, process or procedure was incorrect or was contra-indicated or was not in accordance with clinical guidelines or procedures (e.g. the incorrect medical test was performed on the patient or the correct medical test was performed, but on the wrong body part e.g. x-ray of incorrect wrist).
Retained instrument/material	A surgical instrument or material used in a surgical procedure not intending to be retained, remained in the patient at the completion of the procedure.
Delay/failure too respond/failure to recognise deteriorating patient	Diagnosis, treatment, procedure, or intervention was not made in a timely manner and/or within a timeframe specified in clinical guidelines or procedures or within a timeframe that would be considered 'best practice'. Changes in the patient's condition were not recognised

Term	Definition
	and/or escalated. Results of treatment, process or procedure were not reviewed.
Wrong body part/side/site	Treatment, process or procedure was administered to the correct patient, but was conducted on the wrong body part, side or site (e.g. the x-ray was taken of the left instead of the right tibia)
Complication during a procedure	A complication occurring during a clinical procedure. e.g. the laser cut into the patient's heart wall. This is different to a person's skill-based errors in the contributing factors section. Skill-based errors are failures of action or unintended actions for well-rehearsed actions.
3. Documentation	
Document missing or unavailable or no document was made	Missing or unavailable document (e.g. the x-ray was missing; the electronic patient record could not be accessed).
Delay in accessing document	Delay in accessing document (i.e. paper, electronic or from another health professional or patient) (e.g. a patient was transferred for a specific medical test there was a delay in the test result being provided).
Document for wrong patient or wrong document	Document that is associated with the incorrect patient or incorrect document is used or consulted (e.g. documentation was an x-ray for the wrong patient or documentation was for an x-ray of the incorrect body part).
Unclear/ambiguous/illegible/incomplete information in document	Information is unclear or ambiguous or not easy to understand (e.g. a patient's test result is not clear, due to absent or ambiguous documentation).
Incorrect selection	Incorrect selection of an order/request/report from an electronic medical record (e.g. a dropdown list provided various options and the incorrect option was selected by mistake).
5. Medication/IV fluid (specify in text)	
Wrong patient	Process or procedure involving the incorrect patient (e.g. the incorrect patient was given the medication).
Wrong drug	Process or procedure involving the incorrect drug (e.g. the patient was given the wrong medication).
Wrong dose/strength of frequency	Process or procedure where the wrong dose/strength of drug was used or administered (too much/little) (e.g. the patient was given the wrong dose or strength of medication as per what was originally prescribed e.g. 5 mg/ml instead of 0.5mg/ml).
Wrong formulation or presentation	Process or procedure involving the correct medication and dose, but the wrong drug formulation or presentation (e.g. the patient was given 50 mg of short-acting metoprolol, but 50mg of long-acting metoprolol was actually prescribed).
Wrong route	Process or procedure involving the incorrect route of administration (e.g. oral medications given intravenously; intravenous administration of enteral formulas).
Wrong quantity	Process or procedure where the incorrect quantity of medication was administered (e.g. the amount of medication dispensed to a patient differs from the amount of medication prescribed).
Wrong dispensing label/instruction	Process or procedure where the medication packaging and/or the medical record had the incorrect dispensing

Term	Definition
	information or instruction, such as the incorrect dose or timing of medication administration.
Contraindication	Situation where a particular medication should not be used as it is harmful to the patient (e.g. the patient is allergic to penicillin, but penicillin is administered; certain medications should not be taken during pregnancy).
Wrong storage	Incorrect storage of medication at an internal or external site (e.g. medication that required refrigeration is not stored in a fridge).
Omitted medicine or dose	Failure to completely administer the appropriate medical dose (e.g. a patient does not receive one or more doses of their medication).
Expired medicine	Medication administered or used past the used by date (e.g. a patient is administered medication that is past its used by date).
Appropriateness of medication	The lack of appropriateness of the medication prescribed was not questioned. e.g. Strong analgesic medication was prescribed following very minor surgery that resulted in a patient overdose.
Adverse drug reaction not elsewhere classified	A patient adverse reaction resulting from a medication, either because of a pharmacological reaction to a normal dose, or because of a preventable adverse reaction to a drug resulting from an error (Joint Commission Resources Inc 2011), that is not indicated in 5.1.1 to 5.1.12.
6. Blood/blood product (specify in text)	
Wrong patient	Process or procedure involving the incorrect patient (e.g. the incorrect patient was given the blood/blood product).
Wrong blood/blood product	Process or procedure involving the incorrect blood or blood product (e.g. the patient was given the wrong blood or blood product).
Wrong dose/strength of frequency	Process or procedure where the wrong dose/strength of blood/blood product is used or administered (too much/little) (e.g. dose of platelets transfused over the incorrect time period).
Wrong quantity	Process or procedure where the incorrect quantity of blood/blood product is administered (e.g. the amount of blood/blood product given to a patient differs from the amount of blood/blood product prescribed).
Wrong dispensing label/instruction	Process or procedure where the blood/blood product packaging and/or the medical record has the incorrect dispensing information or instruction, such as dose or timing of blood/blood product administration.
Contraindication	Situation where a particular blood/blood product should not be used as it is harmful to the patient.
Wrong storage	Incorrect storage of blood product/blood at an internal or external site (e.g. blood/blood product that required refrigeration is not stored in a fridge).
Omitted product or dose	Blood or blood product that is omitted from a procedure (e.g. a patient does not receive one or more transfusions of blood/ blood products).
Expired blood/blood product	Blood or blood product that is administered after its use by date (e.g. a patient is administered blood/blood product that is past its used by date).
Adverse effect involving blood or blood products not elsewhere classified	An undesired patient outcome that occurred during administration of blood or blood products that caused

Term	Definition
	physical or psychological injury to the patient. This may include an injury that was caused by medical management or complication instead of the underlying disease and that resulted in prolonged hospitalisation or disability at the time of discharge from medical care, or both (Brennan et al. Incidence of adverse events and negligence in hospitalised patients. NEJM 1991, 324 (6) 370-376), that is not indicated in 6.1.1 to 6.1.9.
7. Nutrition	
Wrong patient	Process or procedure involving the incorrect patient (e.g. the correct food/fluid was provided to the incorrect patient).
Wrong diet	Incorrect food/fluid was provided to the patient (e.g. food with gluten was provided to a patient who was gluten intolerant).
Wrong quantity	Incorrect quantity (too little or too much) of food/fluid was provided to a patient.
Wrong frequency	Process or procedure involving the incorrect frequency of food/fluid being provided to a patient.
Wrong consistency	Incorrect consistency of food/fluids provided to a patient (e.g. a patient that was not able to eat solid food was provided with solid food).
Wrong storage	Inappropriate or incorrect storage of food /fluids provided to a patient. (e.g. food/fluid that required refrigeration is not stored in a fridge).
8. Oxygen/gas/vapour (specify in text)	
Wrong patient	Process or procedure involving the incorrect patient (e.g. the correct oxygen/gas/vapour was provided to the incorrect patient).
Wrong gas/vapour	Process or procedure involving the incorrect gas or vapour (e.g. the incorrect gas/vapour was provided to the patient).
Wrong rate/flow/concentration	Process or procedure where the rate, flow or concentration of oxygen, gas or vapour to the patient was incorrect.
Wrong delivery mode	Incorrect mode of delivering oxygen, gas or vapour to the patient.
Contraindication	Situation where a particular gas/vapour should not be used as it is harmful to the patient.
Wrong storage	The incorrect storage of any gas, vapour or oxygen at the healthcare facility.
Failure to administer	The failure to administer the gas, oxygen or vapour to the patient at the healthcare facility (e.g. oxygen thought to be administered to the patient but the oxygen tank was empty).
Contamination	Contamination of oxygen, gas or vapour either at the source of manufacturer or at the healthcare facility.
9. Medical device/equipment	
Poor presentation/packaging	Incorrect packaging or presentation of medical device/equipment (e.g. a device was stored in the wrong packaging).
Lack of availability	Medical equipment or devices that were needed were not available and/or present (e.g. a particular piece of equipment was not available for a surgery where it was needed).

Term	Definition
Inappropriate for task	Medical equipment or device was not suitable for the procedure or task and/or has been superseded. The medical equipment or device was used inappropriately (e.g. the incorrectly sized surgical blade was used for the incision on the patient).
Unclean/unsterile	Unsanitary or unsterile medical devices, equipment or property were used. (e.g. the surgical blade was not sterilised before it was used on the patient).
Failure/malfunction	Medical equipment or devices broke, failed or was not working properly. Medical device/equipment failed to correctly perform a task or that malfunctioned while performing a task (e.g. a faulty pace-maker).
Dislodgement/misconnection/removal	Any medical device of equipment that becomes dislodged, misconnected or removed during a process or procedure involving a patient (e.g. a PICC line that became dislodged in the patient).
Medical equipment/device failure – design	Medical equipment or devices broke or failed due to poor design for the task being performed. Includes human equipment/ interface, automation, controls/ barriers not designed, fitted, removed or rendered inoperative. Inadequate design of controls/barriers.
Medical equipment/device not elsewhere classified	Other factors relating to medical equipment or devices not elsewhere classified.
10. Patient incident	
Contact with blunt object or animal	Incidents where a patient sustains physical trauma related to blunt object and/or animal.
Contact with person	Incidents where a patient sustains physical trauma related to contact with a staff, patient or visitor.
Crushing	Incidents where a patient sustains physical trauma that involves crushing of a staff, patient or visitor.
Abrading/rubbing	Incidents where a patient sustains physical trauma that involve scraping or wear by friction (rubbing) or skin tears.
Scratching/cutting/tearing/severing	Incidents where a patient sustains physical trauma that involve any forces that cause scratching, cutting, tearing, severing incidents of patient, staff or visitor.
Puncturing/stabbing	Incidents where a patient sustains physical trauma that involve puncturing or stabbing by inanimate object or person.
Biting/stinging/envenomating	Incidents where a patient sustains physical trauma that involve biting, stinging or envenomating by animal or person.
Other specified piercing/penetrating force	Incidents where a patient sustains physical trauma that involve piercing or penetration from specified force.
Struck by explosive blast	Incidents where a patient sustains physical trauma involving an explosion.
Contact with machinery	Incidents where a patient sustains physical trauma that involve contact with machinery e.g. hoist.
Excessive heat/fire	Incidents where a patient sustains physical trauma due to excessive heat or contact with fire.
Excessive cooling/freezing	Incidents where a patient sustains physical trauma due to excessive cooling or freezing from low temperatures.
Mechanical threat to breathing	Incidents where a patient sustains physical trauma that involve asphyxiation due to mechanical threats to breathing.

Term	Definition
Drowning/near drowning	Incidents where a patient drowns or has a near-drowning experience.
Confinement to oxygen-deficient place	Incidents where a patient is confined to an oxygen-deficient location.
Poisoning by chemical or other substance	Incidents where a patient is poisoned from chemical or other substance(s).
Corrosion by chemical or other substance	Incidents where a patient has been exposed to corrosive materials.
Exposure to electricity/radiation	Incidents where a patient sustains physical trauma involving exposure to electrical currents or radiation.
Exposure to sound/vibration	Incidents where a patient sustains physical trauma involving exposure to sound vibration.
Exposure to air pressure	Incidents where a patient sustains physical trauma involving exposure to air pressure.
Exposure to low gravity	Incidents where a patient sustains physical trauma involving exposure to low gravity.
Exposure to environmental elements	Incidents where a patient sustains physical trauma involving exposure to environmental elements.
Fall involving cot	Any patient falls from/or involving a cot.
Fall involving bed	Any patient falls from/or involving a bed.
Fall involving chair or wheelchair	Any patient falls from/or involving a chair or wheelchair.
Fall involving stretcher	Any patient falls involving a stretcher, including a patient transport trolley.
Fall involving toilet	Any patient falls on/off a toilet.
Fall involving therapeutic equipment	Any patient falls involving therapeutic equipment, including patient hoists or slings.
Fall involving stairs/steps	Any patient falls up or down stairs/steps.
Fall while being carried/supported by another individual	Any patient falls that occur while the patient is being supported by another personnel (excluding the use of therapeutic equipment).
Fall unspecified	Any patient falls, unspecified type
11. Infrastructure/ building/ fixtures	
Non-existent/Inadequate	Structure, building or fixture does not exist or is inadequate.
Damaged/Faulty/Worn	Structure, building or fixture is faulty or is damaged or worn.
Structure or building issue not elsewhere classified	Structure, building or fixture issue not elsewhere classified.

Appendix 4 – Contributing factors – Level 1

Term	Definition
1. Staff factors – behavioural, human action, individual	Events resulting from direct human involvement by a staff member. This involvement can include communication failures. It also includes action (or inaction) while performing a medical task, monitoring a patient's status, any delays in patient treatment or a misdiagnosis of a patient's health condition, including the severity of their condition and any medication-related errors.
2. Patient factors	Events that were affected by factors associated with the patient, including their pre-existing physical health, physical characteristics, ability to communicate or other patient-related factors.
3. Organisational/service factors	Organisational aspects that directly or indirectly influenced safety and quality of medical and nursing activities and their management (Itoh et al A human error taxonomy for analysing healthcare incident reports: assessing reporting culture and its effects on safety performance. Journal of Risk Research 2009, 12 (3-4), 485-511). These organisational aspects may include work practices, policies or guidelines, supervision, organisational culture, workforce and teamwork, workload and work pressure and other organisational factors.
4. Work environment factors	Events resulting from the location of the incident that could not have been changed by personnel at the time.
5. Other factors	Any other factor, not elsewhere identified.
8. Not relevant	Any incident where the contributing factors are not relevant.
9. Not known	Any incident where the contributing factors are not known.

Appendix 5 – Contributing factors – Level 2

Term	Definition
1. Staff factors – behavioural, human action, individual	
1.1 Clinical process or procedure – error or violation	Procedures and processes relevant to clinical care. This includes types of measurements and tests used to evaluate a patient's condition.
1.2 Communication/ miscommunication	Poor or inadequate communication or miscommunication by care providers contributed to the incident. This does not include clinical handovers (code to incident type 1.1). Inadequate communication could have been between care providers or between care provider(s) and the patient, family or carer.
1.3 Physical and psychological health	A pre-existing disease, disability, physical characteristic, or impairment, including psychological health.
1.4 Training	Events resulting from poor, inadequate or a lack of training of a member of the medical team. Training to include courses, workshops, seminars. For example, the person had not received training in mechanical ventilation of neonates.
1.5 Experience	Events that arose because of a lack of skill or competence to perform the task (e.g. training received, but no experience in performing the task or not skilled in performing the task). This includes experience at the location – e.g. the person might be new to the hospital/ ward. For example, the person had received training in the mechanical ventilation of neonates, but had never performed the mechanical ventilation on a neonate.
1.6 Fatigue/ exhaustion	Events resulting from fatigue or exhaustion of the staff member.
1.7 Stress	Events resulting from the staff member experiencing stress.
1.8 Individual factors not elsewhere classified	Other individual factors not elsewhere classified.
2. Patient factors	
2.1 Physical and psychological health or impairment (pre-existing)	A pre-existing disease, disability, physical characteristic, or impairment, including psychological health.
2.2 Communication issues	Poor communication by the patient contributed to the incident. This includes language barriers, where the patient does not speak English, or when the patient either unintentionally or intentionally does not disclose information to medical staff.
2.3 Patient not elsewhere classified	Other characteristics of the patient contributed to the incident not elsewhere classified.
3. Organisational service factors	
3.1 Work practices, protocols, policies or guidelines	Events resulting from poor or inadequate work practices at facility, which may or may not be governed by directives, policies or guidelines. This excludes documentation issues, such as poor note taking in a medical record that should be classified as a documentation issue in incident type.
3.2 Supervision	Events resulting from poor, inadequate or an absence of supervision of a junior member of the medical team.
3.3 Organisational decisions/ culture	The way in which decisions are made in the organisation and the culture (e.g., leadership, organisational values, systems) that influences behaviour. e.g. the culture was not to disturb the senior consultant with concerns regarding the patient's condition.
3.4 Workforce and teamwork	Events resulting from the lack of availability of senior staff, or senior staff were not able to be contacted for advice, or staff resourcing was inadequate, or there was no identified lead clinician or the health care provider roles were not clear or were inappropriate.

Term	Definition
3.5 Workload, work pressure or workflow	The workload was excessive or the work was being performed under tight time pressure or there were disruptions/distractions in the workflow or there was a lack of bed availability.
3.6 Organisational factors not elsewhere classified	Other organisational factors not elsewhere classified.
4. Work environment factors	
4.1 Light	Refers to either no, too little or too much illumination in the work environment.
4.2 Temperature	Refers to temperature of the work environment either being too hot or too cold. This does not refer to temperature of the patient.
4.3 Noise	Refers to noise levels in the work environment - either too noisy or quiet.
4.4 Physical layout	Refers to the physical layout of the work environment. Including placement and access of furniture, patients, equipment.
4.5 Security	Refers to incidents where there was a lack of security personnel that could have prevented the incident or the consequences of the incident.
4.6 Remote/long distance	Refers to incidents where the remoteness of the location or where there was a long distance to be travelled.
4.7 Work environment not elsewhere classified	Other factors related to the work environment not elsewhere classified.

Appendix 6 – Contributing factors – Level 3

Term	Definition
1. Staff factors – behavioural, human action, individual	
1.1.1 Error – skill based	A failure in the execution of a well-rehearsed action or routine task that requires little conscious attention. e.g. Erroneously piercing organ during surgery.
1.1.2 Error – rule-based	A failure during activities conducted in familiar situations that are controlled by stored rules for coordination of sub-routines or sub-tasks. e.g. IF the symptoms are X THEN the problem is Y. IF the problem is Y THEN do Z (Rasmussen. Human errors: a taxonomy for describing human malfunction in industrial installations. Journal of Occupational Accidents. 1982 4, 311-333). This may involve the misapplication of a rule or application of the wrong rule. e.g. Did not provide pressure to stop bleeding; did not adequately perform a physical assessment.
1.1.3 Error – knowledge-based	A failure during a novel situation that requires conscious analytic processing and stored knowledge. No routines or rules were available for handling the situation. e.g. Infrequent or rare surgery or exploratory surgery.
1.1.4 Violation	An intentional failure to follow accepted work practices, guidelines or procedures in execution of a task. Intent must be specifically stated to indicate a violation. e.g. Intentional decision not to follow clinical guidelines; intentional decision to ignore medication alert.
1.1.5 Bias or anchoring	Being selective over the types of information that are used to diagnosis what might be wrong with a patient. For example, bias that kidney and liver disorders in certain populations are always due to excessive alcohol consumption, so other risk factors for the health condition are not considered. Anchoring on a particular viewpoint without considering all options. e.g. Anchoring on a diagnosis, without taking into account other diagnoses or only seeking information that confirms one's existing expectations. Information that contradicts these expectations may be ignored or considered unimportant.
1.1.6 Error, violation or bias – type not able to be determined	The type of error, violation or bias not able to be ascertained. The error is either a skill, rule or knowledge-based error or could be due to bias or a violation, but it is difficult to determine, due to the lack of information available.
1.2.1 Inadequate between care providers – not handover	Inadequate communication between care providers. This does not include clinical handovers. Clinical handovers to be classified as an 'Incident type'.
1.2.2 Inadequate to patient/family/carer	Inadequate communication between the care provider and the patient and/or the family/carer.
1.3.1 Physical disease or impairment	The staff member had a pre-existing disease, physical characteristic or impairment that played a part in the course of events that resulted in the adverse incident.
1.3.2 Psychological health or addition	The staff member had a psychological disturbance or addiction that played a part in the course of events that resulted in the adverse incident. e.g. substance use addiction.
2. Patient factors	
2.1.1 Physical disease or impairment	The patient had a pre-existing disease, physical characteristic or impairment that played a part in the course of events that resulted in the adverse incident. e.g. the patient had

Term	Definition
	pycnodysostosis and airway abnormalities that meant the patient needed close monitoring after general anaesthetic following surgery; the patient had motor-neurone disease that affected movement; amputation; cerebral palsy; cognitive impairment e.g. dementia; vision or hearing impairment
2.1.2 Physical characteristic	Physical characteristics of the patient contributed to the incident. e.g. height; weight; c-section (trial of scar)
2.1.3 Intellectual disability	The patient had an intellectual disability that played a part in the course of events that resulted in the adverse incident.
2.1.4 Psychological health	The patient had a psychological disturbance that played a part in the course of events that resulted in the adverse incident. e.g. Patient was depressed and attempted to commit suicide.
2.1.5 Physical health not elsewhere classified	The patient had another pre-existing physical health condition that played a part in the course of events that resulted in the adverse incident. e.g. Premature baby with no specified physical disability. If a specific disease or disability is mentioned this should be coded as 'Pre-existing disease or physical disability'.
2.2.1 Language barrier	The patient does not speak English and an interpreter was not used.
2.2.2 Not disclosing information - unintentional	The patient unintentionally did not disclose information to the medical staff.
2.2.3 Not disclosing information - intentional	The patient intentionally did not disclose information to the medical staff. e.g. amount of alcohol intake.
3. Organisational service factors	
3.1.1 Work practices, but no policy/guidelines/protocol	A practice of work exists, but no policy directive, protocol or guidelines exist.
3.1.2 Policy/guidelines exist, but are unclear/ inconsistent/ inadequate	Events resulting from individuals following policy directives, protocols or guidelines that were in place that were subsequently found to be inadequate, inconsistent or unclear.
3.1.3 Policy/guidelines exist, but are not followed	Policy directives, protocols or guidelines exist, but these are not followed by the individual. This could also indicate a possible violation, if the policy/guidelines were intentionally not followed.
3.1.4 Policy/guidelines not elsewhere classified	Other issues with policies or guidelines not elsewhere classified.
3.4.1 Availability of senior staff	Senior staff were not available or able to be contacted when staff needed to communicate or seek advice e.g. Consultant on-call not answering their phone/page; senior staff attending a meeting/ conference.
3.4.2 Staff rostering/ staff numbers/ staff skill mix	Staff resourcing was inadequate, either too few staff members on a shift or not enough experienced staff on a shift.
3.4.3 No identified lead clinician	There was no evidence of a senior lead clinician overseeing the patient's care.
3.4.4 Team roles unclear or inappropriate	Care responsibility tasks were not clearly defined, not coordinated and/or were inappropriate.
3.5.1 Workload or work pressure	Work that was being performed under unusual time pressure or haste (Hobbs & Williamson. Associations between errors and contributing factors in aircraft maintenance. Human Factors. 2003 45 (2), 186-201)
3.5.2 Disruption in workflow	Disruption, interruption or distractions in workflow or workload, where an individual is taken away from their primary task. e.g. health care worker interrupted while dispensing medications and this leads to a medication error.

Term	Definition
3.5.3 Bed availability	There was no hospital bed available in the location requested e.g. no bed available in the orthopaedic ward, so patient placed in a general ward.
4. Work environment factors	
4.1.1 No or too little light	There was no or too little light to be able to see properly to conduct the task. e.g. too little light in the operating room.
4.1.2 Too much light/glare	There was too much light/ glare to conduct the task.
4.1.3 Light not elsewhere classified	There was an issue with lighting not elsewhere able to be classified.
4.2.1 Too hot	The temperature of the work environment was too hot.
4.2.2 Too cold	The temperature of the work environment was too cold.
4.2.3 Temperature not elsewhere classified	There was an issue with the temperature of the work environment not elsewhere classified.
4.3.1 Too noisy	There was a high noise level in the work environment that contributed to the event.
4.3.2 Too quiet	There was little to no noise in the work environment that contributed to the event.
4.3.3 Noise not elsewhere classified	There was an issue with noise in the work environment not elsewhere classified.
4.4.1 Isolation	Isolation contributed to the incident occurring. e.g. the patient was in an isolation location away from the nurse's station.
4.4.2 Poor access	There was poor physical access that contributed to the incident occurring. e.g. there were accessibility issues for the patient to access the bathroom.
4.4.3 Physical layout not elsewhere classified	There was an issue with the physical layout not elsewhere classified.