Document Type: Policy	**Code:** DHA/HRS/HPSD/HP-26	**Version Number:** 1
Document Title: Sentinel Events Notification and Management	**Issue Date:** 08/06/2022	**Effective Date:** 08/08/2022
Ownership: Clinical Audit & Control Department - Health Regulation Sector		
Applicability: All Health Facilities licensed under the jurisdiction of Dubai Health Authority		

1. Purpose:

1.1. Align with the Dubai Health Authority (DHA) vision, mission and strategic objective, to direct resources to ensure healthy and safe environment for Dubai population and making Dubai a model for value-based healthcare.

1.2. Pioneer a human-centred system that promotes trust, safety and quality of care for patients and their families and promote the healthiest lifestyle for the people of Dubai.

1.3. Define the process for identifying and reporting a sentinel event (SE) to DHA and to minimize reoccurrence when sentinel events occur in any health facility within DHA.

2. Scope:

2.1. Identification, management, notification and reporting of sentinel events in DHA licensed health facilities.

3. Definitions:

A Patient Safety event: is an event, incident, or condition that could have resulted or did result in harm to a patient. A patient safety event can be, but is not necessarily, the result of a defective system or process design, a system breakdown, equipment failure, or human error. Patient safety events also

include adverse events, no-harm events, near misses, hazardous conditions and sentinel event which are defined as follows:

- An adverse event: is a patient safety event that resulted in harm to a patient.
- A no-harm event: is a patient safety event that reaches the patient but does not cause harm.
- A near miss (or close call): is a patient safety event that did not reach the patient.
- A hazardous (or "unsafe") condition(s): is a circumstance (other than a patient's own disease process or condition) that increases the probability of an adverse event.
- A sentinel event (SE): is a patient safety event (not primarily related to the natural course of the patient's illness or underlying condition) that reaches a patient and results in any of the following:
    a. Death.
    b. Permanent harm.
    c. Severe temporary harm.

Severe temporary harm: is a critical, potentially life-threatening harm lasting for a limited time with no permanent residual but requires transfer to a higher level of care/monitoring for a prolonged period of time, transfer to a higher level of care for a life-threatening condition, or additional major surgery, procedure, or treatment to resolve the condition.

Severe maternal morbidity: is defined as a patient safety event that occurs intrapartum through the immediate postpartum period (24hours), that requires the transfusion of 4 or more units of packed red blood cells and/or admission to the intensive care unit (ICU).

Root Cause Analysis (RCA): a systematic and comprehensive reactive methodology for identifying the gaps in hospital systems and processes of care that may not be immediately apparent and which may have contributed to a SE or near miss of a serious incident. The goal of performing a RCA is for

the hospital to better understand the origins of the event. When the RCA reveals that systems improvements or other actions can prevent or reduce the risk of such SE reoccurrence, the hospital redesigns the processes and takes whatever other actions are appropriate to do so. DHA shall use the attached form for RCA.

Action Plan: is a detailed list of all actions which are required to be taken in order to reduce the risk to the lowest level reasonably practicable. Actions are developed to prevent or minimize future SE occurrence.

Open disclosure: An open discussion with a patient about an incident(s) that resulted in harm to that patient while they were receiving health care. The elements of open disclosure are an apology or expression of regret (including the word 'sorry'), a factual explanation of what happened, an opportunity for the patient to relate their experience, and an explanation of the steps being taken to manage the event and prevent recurrence. Open disclosure is a discussion and an exchange of information that may take place over several meetings.

CACD : Clinical Audit & Control Department

CEO : Chief Executive Officer

DAHC : Dubai Academic Health Corporation

DHA : Dubai Health Authority

HF : Health Facility

HRS : Health Regulation Sector

MCS : Medical Complaint Section

RCA : Root- Cause Analysis

SE : Sentinel Event

4. Policy Statement

4.1. All DHA Licensed Health Facilities (HF) are responsible to implement and follow the requirements listed in this policy.

4.2. HF should have a process in place to identify, investigate, notify and report sentinel events (SE).

4.3. All confirmed sentinel events (SE) shall be investigated using a comprehensive systematic analysis using root cause analysis method.

4.4. The HFs definition of a SE shall include the list events in **Appendix 1** and may include other events as required by laws or regulations or viewed by the HF as appropriate.

4.5. HFs should follow the below process to notify and report SE to CACD through the email address: HRS_MC@dha.gov.ae :

4.5.1. Notify within 48 hrs from the date of confirmation of SE.

4.5.2. Report within 72 hrs from the date of notification of SE, using the SE Preliminary Report **(Appendix 2).**

4.5.3. All HF under Dubai Academic Health Corporation (DAHC) should use the Internal Electronic Incident Reporting System (AMAN).

4.6. HFs are responsible for initiating the Root Cause Analysis (RCA) within 48 hours of SE identification and confirmation.

4.7. HFs should conduct a comprehensive investigation using RCA method and issue the final report within 45 calendar days of the date of SE Notification (**Appendix 3**).

4.8. The conducted RCA should reveal the system's improvements or other actions that can prevent or reduce the risk of such sentinel events reoccurrence. (**Appendix 4**)

4.8.1. CACD can provide recommendations (if applicable) and take other appropriate actions.

4.8.2. CACD will conduct on-site visits to the HF to verify the implementation of the action plan.

4.9. All Suspected SE which are detected in a different HF must be confirmed in writing with the relevant HF. After confirmation, the concerned HF (where event occurred) shall notify the Clinical Audit and Control Department (CACD) in the Health Regulation Sector (HRS) through the email address: HRS_MC@dha.gov.ae.

4.10. In the incident of a SE involving two (or more) HFs, then the identifying HF should notify and report the SE to CACD – HRS.

4.10.1. All involved HF need to be consulted and represented during the investigation.

4.11. HFs should report all SE in their incident reporting system and inform the Quality Department in the HF.

4.11.1. All medical records and other evidences should be kept secured till the RCA investigation concludes.

4.12. The Medical Director is responsible for conducting an ongoing Biannual Quality Reports for CACD by reviewing, discussing and following the implementation of the action plan which includes the following :

a. The number and type of SE and associated root causes.
b. Whether the patients and families were informed about the event.
c. Actions taken to improve safety in response to events.
d. If the improvements were sustained.

4.13. HF should develop an open disclosure policies and procedures that are tailored to local needs, resources, relevant legal, regulatory, institutional and cultural context.

4.14. The Medical Director, involved stakeholder and Quality Manager shall be responsible for overseeing the delegation and empowerment of staff to implement priorities for proactive reduction in patient risk.

4.15. The health facility Quality & Risk Management Department shall coordinate in monitoring the effectiveness of the implemented improvements and report the progress to the health facility's Quality Council Committee.

5. References

5.1. Australian Commission on Safety and Quality in Health Care (2021). Incident Management Guide.

5.2. Australian Commission on Safety and Quality in Health Care (2020). Australian Sentinel Events List (version 2).

5.3. Australian Commission on Safety and Quality in Health Care (2013). Australian Open Disclosure Framework.

5.4. Cabinet Decision no. (47) of 2018 adopting the unified national standards for hospitals.

5.5. Canadian Patient Safety Institute (2015) .Never Events for Hospital Care in Canada- Safer Care for Patients.

5.6. Department of Health Abu Dhabi (2021). Healthcare Regulator Manual.

5.7. Dubai Healthcare City Authority (2019). Quality Improvement Department. Sentinel Event Policy.

5.8. Joint Commission International (JCI) (2021)."Joint Commission International Accreditation. Standards for Hospitals" 7th Edition.

5.9. Joint Commission International (JCI) (2021). Facts about the Sentinel Event Policy.

5.10. MOHAP Sentinel and Serious Adverse Event Management Policy, USO/Admin/013.

5.11. National Health Services (NHS) (2018). Recommendations from National Patient Safety Agency alerts that remain relevant to the Never Events List.

5.12. National Health Services (NHS) (2018).Never Events policy and framework.

5.13. National Quality Forum (NQF) (2011). Serious Reportable Events.

5.14. Saudi Patient Safety Center (2021). Saudi Healthcare Sentinel Event Manual.

5.15. Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) (2015). "Hospital Accreditation Program (3rd Version).

5.16. The American College of Obstetricians and Gynaecologists (2016). Severe Maternal Morbidity screening and review.

5.17. World Health Organization (WHO) (2017).Maternal Health Guidelines Approved By The Who Guidelines Review Committee.

6. Appendix

Appendix 1 - List of the Events that Reported as Sentinel Event

The Health Facility's definition of a sentinel event includes the below list and may include other events as required by laws or regulations or viewed by the Health Facility as appropriate to add to its list of sentinel events. All events that meet the definition of sentinel event must be notified and reported.

S.N.	The event	Tick (√)
1.	Events resulting in patient death, paralysis, coma, major permanent loss of function, or injury:	
	Medication error	☐
	Anesthesia-related event	☐
	The use of incorrectly positioned Oro – or Nasogastric tube	☐
	Infection-related event	☐
	Delay in treatment	☐
	Use of restraints	☐
	Medical equipment / ventilator-related malfunction or misuse	☐
	Op/post-op complication	☐
	Intravascular air embolism	☐
	Utility systems (electricity, water, gas) related event	☐
	Patient fall that results in patient death, paralysis, coma or other major permanent loss of function as a direct result of the injuries sustained in the fall	☐
2.	An event not primarily related to the natural course of the patient's illness or underlying condition and result in :	
	Death	☐
	Permanent harm	☐
	Severe temporary harm	☐
3.	Any elopement (that is, unauthorized departure) of a patient from a staffed around-the-clock care setting (including the ED), leading to:	
	Death	☐
	Permanent harm	☐
	Severe temporary harm	☐
4.	Sexual abuse/assault including rape, of any patient, a staff member, licensed independent practitioner, visitor, or vendor in HF leading to;	
	Death	☐
	Permanent harm	☐
	Severe temporary harm	☐
5.	Severe maternal morbidity (not primarily related to the natural course of the patient's illness or underlying condition) when it reaches a patient and results in:	
	Permanent harm	☐
	Severe temporary harm	☐
6.	Any intrapartum (related to the birth process) maternal death	☐
7.	An unanticipated death not related to the natural course of the patient's illness or underlying condition	
	Unanticipated death of a full-term infant	☐
	Death from post-operative infection or a hospital acquired pulmonary embolism	☐
	Maternal death associated with labor or delivery	☐
8.	Discharge of an infant to the wrong family	☐
9.	Discharge of a Minor or Incapacitated Patient to an unauthorized person	☐
10.	All stage 3, 4, or unstageable pressure injury cases acquired after patients' admission.	☐
11.	Severe neonatal hyperbilirubinemia (bilirubin > 30 milligrams/deciliter	☐

12.	Homicide of any patient receiving care, treatment, and services while on site at the hospital	☐
13.	Homicide of a staff member, licensed independent practitioner, visitor, or vendor while on site at the hospital	☐
14.	Suicide of any patient receiving care, treatment, and services in a staffed around-the-clock care setting or within 72 hours of discharge, including from the hospital's emergency department (ED)	☐
15.	Major Service failure events occurring during an episode of patient care that include: Fire, flame, or unanticipated smoke, heat, or flashes Gas leakage, Chemical spillage, electrical shutdown, etc , causing structural damage , potential or actual harm to patients/ staff and or compromising organization reputation	☐
16.	Invasive procedure, including surgery, on the wrong patient, at the wrong site, or that is the wrong (unintended) procedure	☐
17.	Unintended retention of a foreign object in a patient after an invasive procedure, including surgery	☐
18.	Wrong implant/prosthesis; Placement of an implant/prosthesis different from that specified in the procedural plan, either before or during the procedure. Eg; implantation of an intrauterine contraceptive device different from the one in the procedural plan.	☐
19.	Prolonged fluoroscopy with cumulative dose > 1,500 rads to a single field or any delivery of radiotherapy to the wrong body region or > 25% above the planned radiotherapy dose	☐
20.	Inpatient and ambulatory care accidental burn due to, but not limited to, heat, electrical discharge, friction, chemicals, and radiation	☐
21	Hemolytic transfusion reaction involving administration of blood or blood products having major blood group incompatibilities (ABO, Rh, other blood groups)	☐
22	Transfusion or transplantation of ABO-incompatible blood components or organs	☐
23	Transmission of a chronic or fatal disease or illness as a result of infusing blood or blood products or transplanting contaminated organs or tissues;	☐
24	Transmission of disease as a result of using contaminated instruments or equipment provided by the health facility	☐
25	Overdose of insulin due to abbreviations or incorrect device	☐
	Overdose refers to when:	
	A patient is given a 10-fold or greater overdose of insulin because the words 'unit' or 'international units' are abbreviated; such an overdose was given in a care setting with an electronic prescribing system	☐
	A healthcare professional fails to use a specific insulin administration device – that is, an insulin syringe or pen is not used to measure the insulin	☐
	A healthcare professional withdraws insulin from an insulin pen or pen refill and then administers this using a syringe and needle.	☐
26	Overdose of methotrexate for non-cancer treatment	☐
	Overdose refers to when: patient is given a dose of methotrexate, by any route, for non-cancer treatment that is more than the intended weekly dose; such an overdose was given in a care setting with an electronic prescribing system	☐
27	Miss-selection of high strength midazolam during conscious sedation	☐
28	Miss-selection refers to when: patient is given an overdose of midazolam due to the selection of a high strength preparation (5 mg/mL or 2 mg/mL) instead of the 1 mg/mL preparation, in a clinical area performing conscious sedation	☐
29	Administration of medication by the wrong route: The patient is given one of the following:	
	Intravenous chemotherapy by the intrathecal route	☐
	Oral/enteral medication or feed/flush by any parenteral route	☐
	Intravenous administration of an epidural medication that was not intended to be administered by the intravenous route.	☐
30	Abduction cases for any patients, whether under care or receiving care of any age group and health conditions (i.e., regardless of a patient's health condition) within a healthcare facility's premises/campus	☐
31	The unexpected collapse of any building within a health facility	☐
32	Other events as required by laws or regulations or viewed by the health facility: Please specify in SE Preliminary Report	☐

Appendix 2 - Sentinel Event Preliminary Report

Health Facility Details	
Health Facility	☐ Hospitals ☐ Primary Healthcare Centres ☐ Specialized Centres ☐ Others (Please Specify):
Health Facility Name	
Reporting Details	
Location of event	
Event Date & Time	
Event Discovery Date & Time	
Date of Confirmation of Sentinel Event:	
Date of Notification to HRS	
Type of the event :	
How was the event reported? What is the adverse outcome which the patient had?	*(describe down the specific end result of what happened to the patient)*
Basic Information	
Person affected' s Initials	
Person affected' s ID/Passport	
Age	
Gender	
Medical Record Number if applicable	
Person affected' s Encounter	☐ Outpatient ☐ Intpatient ☐ Employee ☐Visitor ☐Vender ☐Licensed independent practitioner
Working Diagnosis/ Final Diagnosis if applicable	
Concerned Dept. & Specialty if applicable	
Event Description	
Event Summary: the event from the time of patient arrival or date of admission to the hospital till the time the event happened as appropriate. Describe the event: (what happened, when, where and how it happened. Do not include the name(s) of staff, patient(s), or other individual(s) involved in the event):	
Comment on RCA: Satisfactory? ☐ Yes ☐ No Unsatisfactory? ☐ Yes ☐ No	
If HF unsatisfactory?	Comment:
If HF satisfactory?	Progress report after 45 calendar days.
Immediate action taken?	☐ Yes ☐ No **Mention the immediate actions taken :**
Recommendations:	☐ Suspend ☐ Revoke ☐ Others: specify below;
Reporters Details	
Reporter name	
Reporter title	
Facility name	
Contact details/Email & & Phone number	
Signature	
Date	
CEO/Medical Director Details	
CEO Name	
Contact details/Email & Phone number	
Signature: Date:	
Medical Director Name	
Contact details/Email & Phone number	
Signature Date:	

Appendix 3 - Root Cause Analysis and Action Plan Framework Template

Formal Root Cause Analysis			
Date Analysis Initiated:		**Date Completed:**	
Principal Investigator name:			
Team Member Name	**Signature**	**Team Member Name**	**Signature**

#	Analysis Question	Prompts	Analysis Findings	Root cause	Contributing factor	Plan of Action
1.	What was the intended process flow?	List the relevant process steps as defined by the policy, procedure, protocol, or guidelines in effect at the time of the event. You may need to include multiple processes. ***Note:*** The process steps *as they occurred in the event* will be entered in the next question. Examples of defined process steps may include, but are not limited to: • Site verification protocol • Instrument, sponge, sharps count procedures • Patient identification protocol • Assessment (pain, suicide risk, physical, and psychological) procedures • Fall risk/fall prevention guidelines				

2.	Were there any steps in the process that did not occur as intended?	Explain in detail any deviation from the intended processes listed in Analysis Item #1 above.				
3.	What **Human Factors** were relevant to the outcome?	Discuss staff-related human performance factors that contributed to the event. Examples may include, but are not limited to: • Failure to follow established policies/procedures • Fatigue and Inability to focus on task • Intentional blindness/ confirmation bias • Lack of complex critical thinking skills • Rushing to complete task • the unintended deviation from an appropriate plan i.e. a slip or lapse in concentration, • the incorrect solution to a known problem • lack of knowledge to deal with the problem results in the decision being made based on experience • shortcutting the process, • reasoned deviation from required process, • malicious deviation from the required process				
4.	How did the Equipment Performance affect the outcome?	Consider all medical equipment and devices used in the course of patient care, including AED devices, crash carts, suction, oxygen, instruments, monitors, infusion equipment, etc. In your discussion, provide information on the following, as applicable: • Descriptions of biomedical checks • Availability and condition of equipment • Descriptions of equipment with multiple or removable pieces • Location of equipment and its accessibility to staff and patients • Staff knowledge of or education on equipment, including applicable competencies • Correct calibration, setting, operation of alarms, displays, and controls				

5.	What controllable **Environmental Factors** directly affected this outcome?	What environmental factors within the organization's control affected the outcome? Examples may include, but are not limited to: • Overhead paging that cannot be heard • Safety or security risks • Risks involving activities of visitors • Lighting or space issues The response to this question may be addressed more globally in Question #17. This response should be specific to this event. Was the physical environment fit for purpose? Was there environmental damage				
6.	What **Uncontrollable External Factors** influenced this outcome?	Identify any factors the organization cannot change that contributed to a breakdown in the internal process, for example natural disasters.				
7.	Were there any **other factors** that directly influenced this outcome?	List any other factors not yet discussed.				
8.	What are the other areas in the organization where this could happen?	List all other areas in which the potential exists for similar circumstances. For example: • Inpatient surgery/ outpatient surgery • Inpatient psychiatric care/ outpatient psychiatric care Identification of other areas within the organization that have the potential to impact patient safety in a similar manner. *This information will help drive the scope of your action plan.*				

9.	**Human Resource Issues**- Was the staff properly qualified and currently competent for their responsibilities at the time of the event?	Include information on the following for all staff and providers involved in the event. Comment on the processes in place to ensure staff is competent and qualified. Examples may include but are not limited to: • Orientation/training • Competency assessment (What competencies do the staff have and how do you evaluate them?) • Provider and/or staff scope of practice concerns • Whether the provider was credentialed and privileged for the care and services he or she rendered • The credentialing and privileging policy and procedures • Provider and/or staff performance issues				
10.	How did actual staffing compare with ideal levels?	Include ideal staffing ratios and actual staffing ratios along with unit census at the time of the event. Note any unusual circumstance that occurred at this time. What process is used to determine the care area's staffing ratio, experience level and skill mix? • To what degree is staff properly qualified and currently competent for their responsibilities? • How did actual staffing compare with ideal levels?				
11.	What is the plan for dealing with **staffing contingencies**?	Include information on what the organization does during a staffing crisis, such as call-ins, bad weather or increased patient acuity. Describe the organization's use of alternative staffing. Examples may include, but are not limited to: • Agency nurses • Cross training • Float pool • Mandatory overtime • PRN pool				
12.	Were such contingencies a factor in this event?	If alternative staff were used, describe their orientation to the area, verification of competency and environmental familiarity.				

13.	Did **staff performance** during the event meet expectations?	Describe whether staff performed as expected within or outside of the processes. To what extent was leadership aware of any performance deviations at the time? What proactive surveillance processes are in place for leadership to identify deviations from expected processes? Include omissions in critical thinking and/or performance variance(s) from defined policy, procedure, protocol and guidelines in effect at the time.				
14.	**Communication Issues**- To what degree was all the necessary information available when needed? Accurate? Complete? Unambiguous?	Discuss whether patient assessments were completed, shared and accessed by members of the treatment team, to include providers, according to the organizational processes. Identify the information systems used during patient care. Discuss to what extent the available patient information (e.g. radiology studies, lab results or medical record) was clear and sufficient to provide an adequate summary of the patient's condition, treatment and response to treatment. Describe staff utilization and adequacy of policy, procedure, protocol and guidelines specific to the patient care provided.				
15.	To what degree was the communication among participants adequate for this situation?	Analysis of factors related to communication should include evaluation of verbal, written, electronic communication or the lack thereof. Consider the following in your response, as appropriate: • The timing of communication of key information • Misunderstandings related to language/cultural barriers, abbreviations, terminology, etc. • Proper completion of internal and external hand-off communication • Involvement of patient, family and/or significant other				
16.	What are the **barriers to communication of potential risk factors**?	Describe specific barriers to effective communication among caregivers that have been identified by the organization. For example, residual intimidation or reluctance to report co-worker activity. Identify the measures being taken to break down barriers (e.g. use of SBAR). If there are no barriers to communication discuss how this is known.				

17.	What systems are in place to identify **environmental risks**?	Identify environmental risk assessments. • Does the current environment meet codes, specifications, regulations? • Does staff know how to report environmental risks? • Was there an environmental risk involved in the event that was not previously identified?				
18.	What **emergency and failure-mode responses** have been planned and tested?	Describe variances in expected process due to an actual emergency or failure mode response in connection to the event. Related to this event, what safety evaluations and drills have been conducted and at what frequency (e.g. mock code blue, rapid response, Behavioral emergencies, patient abduction or patient elopement)? Emergency responses may include, but are not limited to: • Fire • External disaster • Mass casualty • Medical emergency Failure mode responses may include, but are not limited to: • Computer down time • Diversion planning • Facility construction • Power loss • Utility issues				
19.	**System Factors**	Are the policies, procedures, guidelines relating to the system appropriate? Does the design of the system meet the organizational requirements?				

20.	**Equipment Factors**	1. Has all equipment relating to the event been tested according to policy? 2. Is the testing up to date? 3. Is the equipment obsolete? 4. Have all staff been trained to use the equipment? 5. Is the equipment appropriate for use?				
21.	Was available **technology** used as intended?	Examples may include, but are not limited to: • CT scanning equipment • Electronic charting • Medication delivery system				
22.	How might technology be introduced or redesigned to reduce risk in the future?	Describe any future plans for implementation or redesign. Describe the ideal technology system that can help mitigate potential adverse events in the future.				
23.	How can **orientation and in-service training** be revised to reduce the risk of such events in the future?	Describe how orientation and ongoing education needs of the staff are evaluated and discuss its relevance to event. (e.g. competencies, critical thinking skills, use of simulation labs, evidence based practice, etc.)				

24.	**Leadership issues:** How does the **organization's culture** support risk reduction?	How does the overall culture encourage change, suggestions and warnings from staff regarding risky situations or problematic areas? • How does leadership demonstrate the organization's culture and safety values? • How does the organization measure culture and safety? • How does leadership establish methods to identify areas of risk or access employee suggestions for change? • How are changes implemented?				
25.	**Encouragement of communication and Clear communication of priorities**- How is the prevention of adverse outcomes communicated as a high priority?	To what degree is the culture conducive to risk identification and reduction? Describe the organization's adverse outcome procedures and how leadership plays a role within those procedures.				

Appendix (4) : Action Plan & Recommendations Template

Action Plan & Recommendations: Required	Responsible Person	Action Plan Due Date	Source of evidence to support action (e.g. policy, Staff Meetings, training. announcements).	Sign off - action Plan completed date:	Monitoring & Evaluation Arrangements

Prepared by: **Date:** **Signature**

Approved by Chairperson: **Date:** **Signature**