For information
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Legislative Council Panel on Health Services

Mechanism for Handling Medical Incidents in Public and Private Hospitals

Purpose

This paper updates Members on the mechanism for handling medical incidents in public and private hospitals.

Mechanism for Handling Medical Incidents in Public Hospitals

Sentinel and Serious Untoward Event Policy

2. In October 2007, the Hospital Authority (HA) implemented a Sentinel Event Policy (the 2007 Policy) to standardise the practice and procedures for managing sentinel events in all public hospital clusters, thereby strengthening the reporting, management and monitoring of sentinel events in public hospitals. As a further improvement to the mechanism for the reporting and handling of medical incidents, HA has replaced the 2007 Policy with the Sentinel and Serious Untoward Event Policy (the Policy) since 1 January 2010. The Policy defines a sentinel event as an "unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof" and a serious untoward event as an "unexpected occurrence which could have led to death or permanent harm". The nine types of sentinel events and the two types of serious untoward events for reporting under the Policy are at **Annex A**.

3. Under the Policy, clusters or hospitals are required to report to HA Head Office through the Advance Incident Reporting System any medical incidents classified as sentinel events or serious untoward events within 24 hours of their identification. The clusters or hospitals concerned should at the same time manage the incident in accordance with established guidelines so as to minimise any harm to the patient concerned and provide support to the family and staff involved in the incident. For sentinel events, the HA Head Office will appoint a Root Cause Analysis Panel (RCA Panel), comprising members

who are from the hospital concerned and the respective Coordinating Committees, a HA Head Office coordinator, external senior clinicians and/or laypersons from the respective Hospital Governing Committee. RCA Panel is responsible for investigating the root causes of the events for risk identification and recommending improvement measures. As regards serious untoward events, the hospital concerned will form an RCA Panel. It is required to submit the final investigation report to the HA Head Office within eight weeks. The HA Head Office will follow up with each cluster six-monthly to jointly review the implementation of the recommended improvement actions.

4. Each year, the HA Head Office will submit to the HA Board a report on sentinel and serious untoward events. Internally, HA facilitates the healthcare professionals to share among themselves the experience of managing incidents through staff training and the quarterly “Risk Alert” newsletter. Both the above-mentioned annual report and newsletter will also be published in public to enhance transparency and accountability.

Statistics of sentinel and serious untoward events

5. The breakdown of the number of sentinel and serious untoward events reported to HA Head Office from October 2007 to September 2016 by category is at **Annex B**. In 2015-16, the top two categories of sentinel events were 13 cases from “retained instruments or other material after surgery/ interventional procedure” and 12 cases from “death of an inpatient from suicide (including home leave)”.

6. Of the 86 serious untoward events, 73 were “medication error which could have led to death or permanent harm” and 13 were “patient misidentification which could have led to death or permanent harm”. Also, the majority of the medication error was related to the prescription of known drug allergens to patients.

7. The HA Head Office also monitors the timeliness of reporting the sentinel events within 24 hours as mandated in the Policy. It was observed that 82% of the sentinel events were reported within 24 hours upon identification from October 2007 to March 2017. The cases that required more than 24 hours in identification were largely because of the complexity of the cases and

the time required for clarifying facts and deciding if the cases met the definition of sentinel event.

Other improvement measures

8. The HA will continue to promote the incident reporting culture for learning and sharing for building safer systems and processes in the daily care of the patients. Furthermore, the HA will strengthen the communication practices among clinical teams and with patients on their progress. The HA also set up a "Review Panel on Sentinel and Serious Untoward Event Policy" in May 2017 for reviewing the management of these events. The Panel will make recommendations for improvements. Its terms of reference and membership list are at **Annex C**. The review panel will submit its report to the HA Board in July 2017.

Mechanism for Handling Medical Incidents in Private Hospitals

Regulation of private hospitals

9. The Department of Health (DH) is responsible for registration of private hospitals in Hong Kong. The Hospitals, Nursing Homes and Maternity Homes Registration Ordinance (Cap. 165) empowers the Director of Health to register private hospitals subject to conditions relating to the accommodation, staffing or equipment. DH also promulgates the "Code of Practice for Private Hospitals, Nursing Homes and Maternity Homes" (the Code) which sets out the regulatory standards and the standards of good practice, covering standards on accommodation, equipment, human resources management, policies and procedures, as well as requirements on specific types of clinical and support services.

10. Under the Code, private hospitals should comply with the requirements on the management of serious incidents including sentinel events and serious untoward events, such as designation of a senior staff to co-ordinate the immediate response to the event, establishment of procedures to communicate to patients and their families, conducting investigation and implementing follow-up actions.

Reporting of sentinel events and serious untoward events

11. With effect from 1 February 2007, DH requires all private hospitals to report sentinel events within 24 hours. The list of reportable sentinel events was revised in 2010 and then in 2015. Starting from 1 January 2015, the reporting criteria for sentinel events and serious untoward events for private hospitals aligned with those of public hospitals.

12. The primary objective of reporting sentinel events and serious untoward events is to identify areas for improvement to ensure patient safety and quality of healthcare services. According to the Code, private hospitals are required to report to DH within 24 hours of detection of sentinel events and serious untoward events, conduct root cause analysis and implement risk reduction measures to prevent similar events from happening. The hospital is required to submit to DH a full investigation report within four weeks after reporting.

13. DH will monitor private hospitals' reporting of sentinel events and serious untoward events as well as implementation of risk reduction measures, and regularly publish the statistics on DH website.

Statistics on reportable events in private hospitals

14. There are currently 12 private hospitals registered under the Hospitals, Nursing Homes and Maternity Homes Registration Ordinance. Details of private hospitals' sentinel events and serious untoward events since 2015 are set out in **Annex D**.

Advice Sought

15. Members are invited to note the content of the paper.

Food and Health Bureau
Hospital Authority
Department of Health
June 2017

Annex A

Medical Events to be Reported under the Sentinel and Serious Untoward Event Policy

Sentinel Events

1. Surgery / interventional procedure involving the wrong patient or body part
2. Retained instruments or other material after surgery / interventional procedure
3. ABO incompatibility blood transfusion
4. Medication error resulting in major permanent loss of function or death
5. Intravascular gas embolism resulting in death or neurological damage
6. Death of an inpatient from suicide (including home leave)
7. Maternal death or serious morbidity associated with labour or delivery
8. Infant discharged to wrong family or infant abduction
9. Other adverse events resulting in permanent loss of function or death (excluding complications)

Serious Untoward Events

1. Medication error which could have led to death or permanent harm
2. Patient misidentification which could have led to death or permanent harm

Annex B

Number of Sentinel Events Reported by HA
(1 October 2007 to 30 September 2016)

Reported Sentinel Events	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Surgery / interventional procedure involving the wrong patient or body part	5	10	5	3	5	4	3	3	1
Retained instruments or other material after surgery / interventional procedure	10	13	12	18	14	10	20	19	13
ABO incompatibility blood transfusion	1	0	0	1	0	0	0	0	0
Medication error resulting in major permanent loss of function or death	0	0	1	1	0	0	5	0	0
Intravascular gas embolism resulting in death or neurological damage	0	0	1	0	0	0	0	0	2
Death of an inpatient from suicide (including home leave)	25	15	11	20	10	9	19	15	12
Maternal death or serious morbidity associated with labour or delivery	1	2	2	1	2	1	1	1	2
Infant discharged to wrong family or infant abduction	1	0	0	0	0	1	0	0	0
Other adverse events resulting in permanent loss of function or death (excluding complications)	1	0	1	0	3	1	1	1	2
Total	**44**	**40**	**33**	**44**	**34**	**26**	**49**	**39**	**32**
Number of sentinel events / episodes of patient attendances / discharges and death in million	2.7	2.4	2	2.5	1.9	1.4	2.5	1.9	1.5

Note: The years represented October to September next year.

Number of Serious Untoward Events Reported by HA
(1 January 2010 to 30 September 2016)

Reported Serious Untoward Events	Jan – Sep 2010	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Medication error which could have led to death or permanent harm	72	88	92	96	85	57	73
Patient misidentification which could have led to death or permanent harm	9	9	10	8	9	11	13
Total	**81**	**97**	**102**	**104**	**94**	**68**	**86**

Note: The years represented October to September next year.

Annex C

Review Panel on Sentinel and Serious Untoward Event Policy
Set up by the Hospital Authority on 10 May 2017

Terms of Reference

The panel will undertake the following tasks, with a view to submitting its report to the HA Board in eight weeks' time:

- To review the definition and scope of Sentinel and Serious Untoward Events in relation to clinical incidents with international benchmarking;
- To review the Sentinel and Serious Untoward Event reporting mechanism;
- To review the mechanism of open disclosure and public disclosure; and
- To make recommendations for follow-up actions as appropriate.

Membership List

<u>Chairman</u>

Professor Maurice Yap	Dean, Faculty of Health and Social Sciences, Hong Kong Polytechnic University HA Board Member since 2011

<u>Members</u>

Mr Ricky Fung	Member, Hospital Governing Committee, Grantham Hospital HA Board Member between 2010 and 2016
Dr Liu Shao-haei	Deputising Director (Quality & Safety), HA

Annex D

Number of Sentinel Events and Serious Untoward Events Reported by Private Hospitals (1 January 2015 to 30 April 2017)

Event Category		No. of case (No. of fatal case)		
		2015	**2016**	**2017**
I. Sentinel events				
SE1	Surgery / interventional procedure involving the wrong patient or body part	-	-	2(0)
SE2	Retained instruments or other materials after surgery / interventional procedure	-	6(0)	1(0)
SE3	ABO incompatibility blood transfusion	-	-	-
SE4	Medication error resulting in major permanent loss of function or death	-	-	-
SE5	Intravascular gas embolism resulting in death or neurological damage	-	-	-
SE6	Death of an in-patient from suicide (including home leave)	-	-	-
SE7	Maternal death or serious morbidity associated with labour or delivery	-	-	-
SE8	Infant discharged to wrong family or infant abduction	-	-	-
SE9	Other adverse events resulting in permanent loss of function or death (excluding complications)	-	1(0)	-
II. Serious untoward events				
SUE1	Medication error which could have led to death or permanent harm or carries a significant public health risk	-	-	-
SUE2	Patient misidentification which could have led to death or permanent harm	-	-	-
	Total	**0(0)**	**7(0)**	**3(0)**