

**PERI-OPERATIVE MORTALITY REVIEW
MINISTRY OF HEALTH MALAYSIA
(SURGICAL FORM. V5.1)**

INTRODUCTION

This form is to be filled for all deaths occurring within total length of hospital stay following a surgical or gynecological procedure performed under general or regional anesthesia. Also included are death in operation theatre prior to the induction of anaesthesia.

CASE PROFILE

----- POMR COORDINATOR -----

Name of Hospital	Case Code		
Date of Birth	Date of Mortality		
Date of admission	Ethnicity		
Gender	Male		
	Female		
Age	Years	Months	Days
Date of form issued			
Co-ordinator's Initial			

----- PRIMARY DEPARTMENT -----

Primary Department

Department(s) involved in the patient management	General Surgery	Paediatric Surgery
	Cardiothoracic surgery	Urology
	ICU/ HDW/ CCU	Anesthesiology
	Plastic Surgery	Gynecology
	Obstetric	Orthopedic
	Ophthalmology	ENT
	Neurosurgical	Endocrine surgery
	Vascular surgery	Emergency & Trauma
	Medical	
	Others	

Pre-operative status

Co-morbid Factor	Diabetes Mellitus	Coronary Artery Disease
	Malignancy	Cerebrovascular accident (CVA)
	Hypertension	Left Ventricular dysfunction
	Heart Failure	Coma
	Severe Head Injury	Chronic Lung Disease
	Chronic Liver Disease	Chronic Kidney Disease
	AIDS	Valvular Heart Disease
	Uncontrolled Asthma	Anaemia
	Others	

Risk Factor	Prematurity	Smoking	Obstructive Sleep Apnoea
	Cachexia	IVDU	Cardiac Arrhythmia
	Obesity	Bed-ridden	
	Dehydration	Hypovolaemia	
	Congenital abnormalities	Severe Sepsis	
	Others		

Blood Pressure	Systole	mmHg	Diastole	mmHg	
Pulse Rate	bpm	Temp	'C	Respiration	Breath/min
Weight	Kg				
Birth weight*	Kg	Gestational Age (At Birth)	Full term	Pre term	weeks

Signs on admission

Jaundice	Pale	Dehydrated	Cachexic	Cyanosed
Intubated	Others			

GCS for Head Injury / Coma :

Eyes (/4)	Verbal (/5)	Motor (/6)
Total GCS (/15)	T	
	C	

For Trauma,
significant injury
sustained

Instruction : Click on the Calculate RTS button to get the proper RTS value

Revised Trauma Score (if applicable)	% Probability of Survival
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Investigations

FBC	On Admission				Pre-operative
Hb		g/dl	Hb		g/dl
TWC		$\times 10^3/\mu\text{L}$	TWC		$\times 10^3/\mu\text{L}$
Platelet		$\times 10^3/\mu\text{L}$	Platelet		$\times 10^3/\mu\text{L}$
Renal Profile	On Admission				Pre-operative
Na ⁺		mmol/L	Na ⁺		mmol/L
K ⁺		mmol/L	K ⁺		mmol/L
Urea		mmol/L	Urea		mmol/L
Se. Creatinine		$\mu\text{mol/L}$	Se. Creatinine		$\mu\text{mol/L}$
Blood Sugar	On Admission				Pre-operative
RBS		mmol/L	RBS		mmol/L
Coagulation Profile	On Admission				Pre-operative
INR		Ratio	INR		Ratio
PT		Sec	PT		Sec
APTT		Sec	APTT		Sec
	On Admission				Pre-operative
ABG			ABG		
Albumin		g/dL	Albumin		g/dL
Lactate		mmol/dL	Lactate		mmol/dL

	On Admission				Pre-operative
ECG	Normal				Normal
	Abnormal				Abnormal
Details			Details		

X-rays / imaging	On Admission				Pre-operative
Details (If applicable)			Details (If applicable)		

Other investigations

On Admission

Pre-operative

Details

Details

ASA Category

FIRST OPERATION

If more than 1 surgery performed, kindly indicate in the narrative report

Date of First Operation

Time started

Time ended

Operation category

Elective
Emergency

Type of anesthesia

LA
GA
Regional
Other

Pre-Operative diagnosis

Post-Operative diagnosis

Operative Procedure

Number of surgery during this admission before mortality

Surgeon Status

Consultant
MO

Specialist
HO

Clinical Specialist (Under Gazettement)

Supervisor Informed?

Yes No

Location of Supervisor

In OT
Not Available

In Hospital

At Home

Anaesthetist Status

Consultant	Specialist
Clinical Specialist (Under Gazetteement)	MO
HO	AMO

Intra-operative complications?

None	Excessive Bleeding	Contamination
Other organ injury	Hypotension	Anesthesia adverse event
Others		

POST OPERATIVE CARE

Managed in ICU/ HDW	Yes	No	Ventilated Post-Op?	Yes	No
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Post-Op Complication

None	Hypotension	Bleeding
Nausea/Vomiting	Reintubation	Atelectasis
Pneumonia	Hypothermia	Ileus
Anastomotic Leak	Sepsis	Surgical Site Infection
Wound Breakdown	Multi-organ Failure	Superficial thrombophlebitis
DIVC	Deep Vein Thrombosis	Pulmonary Embolism
CVA	Pressure Ulcer	Acute Urinary Retention
Renal Failure	Post Spinal Headache	Transfusion Reaction
Adverse Drug Reaction	Seizures	Others

FINAL OPERATION

Date of Final Operation

Time started

Time ended

Operation category
Elective
Emergency

Type of anesthesia
LA
GA
Regional
Other

Pre-Operative diagnosis

Post-Operative diagnosis

Operative Procedure

Surgeon Status

Consultant
MO

Specialist
HO

Clinical Specialist (Under Gazettement)

Supervisor
Informed?

Yes No

Location of
Supervisor

In OT
Not Available

In Hospital

At Home

Anaesthetist Status

Consultant

Specialist

Clinical Specialist (Under Gazettement)

MO

HO

AMO

Intra-operative complications?

None

Excessive Bleeding

Contamination

Other organ injury

Hypotension

Anesthesia adverse event

Others

POST OPERATIVE CARE

Managed in ICU/
HDW

Yes

No

Ventilated Post-Op?

Yes

No

Post-Op Complication

None

Hypotension

Bleeding

Nausea/Vomiting

Reintubation

Atelectasis

Pneumonia

Hypothermia

Ileus

Anastomotic Leak

Sepsis

Surgical Site Infection

Wound Breakdown

Multi-organ Failure

Superficial thrombophlebitis

DIVC

Deep Vein Thrombosis

Pulmonary Embolism

CVA

Pressure Ulcer

Acute Urinary Retention

Renal Failure

Post Spinal Headache

Transfusion Reaction

Adverse Drug Reaction

Seizures

Others

DEATH

Place of Death

Wad

ICU/HDW

OT/Recovery room

Post Mortem?

Done

Not Done

Summary of Post
Mortem findings (If
post-mortem done)

Cause of Death

Narrative Report

Give a summary of the sequence of events leading to and contributing to the death.

Highlight the following points:

- a) Presenting signs and symptoms
- b) Factors that led to the deterioration and death of the patient.

DO NOT WRITE NAMES OF PERSONS INVOLVED

Death Category :

1 2 3 4A 4B 5 6 7

Date

Place your attachments here :

Comments by Head of Department/Unit or Specialist In-charge

Highlight if there were any :

- i. Inappropriateness of treatment
- ii. Delays or problems during the management
- iii. Areas that could have been improved

Death Category :

1 2 3 4A 4B 5 6 7

If you were to manage a similar case in the future, suggest how would you do it differently for a better outcome?

No Different Don't Know

Possible changes in management that could have given a better outcome

Date

HOD's
Initial

Please tick under which category this case is most appropriately discussed (DRG)

Paeds	Neuro	Ortho	Trauma
Cardiothoracic	General Surgery	O&G	Others

Anaesthetist Form Yes No
Required?

TO BE FILLED IN BY POMR ASSESSORS ONLY

----- POMR MEETING -----

Comments by Assessor

Death Category :

1 2 3 4A 4B 5 6 7

Contributory Factors in POMR

Anaesthetic

Pre-operative

- Inadequate assessment
- Inadequate optimisation of pre-existing medical / surgical condition
- Lack of supervision / inappropriate grade anaesthetist
- Weakness of organising system
- Fatigue

Intra-operative

- Inappropriate technique
- Lack of skill
- Inadequate management of anaesthetic complications
- Inappropriate fluid management
- Inappropriate drug selection / administration
- Adverse drug reaction
- Equipment failure
- Poor reversal
- Inadequate facilities / assistance to cope with crisis

Post-operative

- Inadequate monitoring in recovery room
- Failure to recognise need to provide continued post-operative monitoring / intervention in HDU / ICU
- Failure to provide post-operative care due to shortage of ICU beds
- Inappropriate post-operative management in HDU / ICU

Surgical

Pre-operative

- Inadequate assessment
- Inadequate optimisation of pre-existing medical / surgical condition
- Lack of supervision
- Inadequate facilities
- Delay in surgery
- Inappropriate decision

Intra-operative

- Inappropriate procedure
- Lack of supervision
- Inadequate skill
- Inadequate facilities

Post-operative

- Inappropriate post-operative management
- Inadequate monitoring
- Failure to recognise complications early
- Inadequate facilities for management of critically-ill patients

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Committee Decision

Preventable Death

Non Preventable Death

Assessors comment

Date