

# KEMENTERIAN KESIHATAN MALAYSIA



## TECHNICAL SPECIFICATIONS HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) MEDICAL PROGRAMME

2023



**TECHNICAL SPECIFICATIONS OF  
HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023**

**LIST OF HOSPITAL PERFORMANCE INDICATORS  
FOR ACCOUNTABILITY (HPIA)**

	HPIA Element	Indicator
1	Internal Business Process	1 - 11
2	Customer Focus	12-14
3	Employee Satisfaction	15
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5	Financial and Office Management	17-19
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NO	INDICATOR	STANDARD	PAGE
<b>INTERNAL BUSINESS PROCESS</b>			
1.	ST Elevation Myocardial Infarction (STEMI) [Without Shock] Case Fatality Rate	≤ 10%	4
2.	Non ST Elevation Myocardial Infarction (NSTEMI) Case Fatality Rate	≤ 8%	5
3.	Percentage of paediatric patients with unplanned readmissions to the paediatric ward within 48 hours of discharge	≤ 0.5%	7
4.	Percentage of massive postpartum haemorrhage (PPH) incidence in cases delivered in the hospital	≤ 0.75%	9
5.	Percentage of inappropriate triaging (UNDER-TRIAGING): Category Green patients who should have been triaged as Category Red	≤ 0.5%	11
6.	Percentage of patients ventilated in Emergency and Trauma Department for more than 8 hours	≤ 50%	13
7.	Percentage of laboratory turnaround time (LTAT) for urgent Full blood count (FBC) within (≤) 45 minutes	≥ 90%	14
8.	Incidence of thrombophlebitis among inpatients with intravenous (IV) cannulation	≤ 0.5%	16
9.	Percentage of Morbidity and/ or Mortality meetings being conducted at the hospital level with documentation of the cases discussed State & Specialist Hospital: 12 times/ year Other Hospital: 6 times/ year	≥ 80%	19
10.	Cross-match Transfusion (CT) ratio	≤ 2.0	21
11.	Rate of Healthcare Associated Infections (HCAI)	≤ 5%	22
<b>CUSTOMER FOCUS</b>			
12.	Percentage of medication prescriptions dispensed within 30 minutes	≥ 95%	23



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NO	INDICATOR	STANDARD	PAGE
13.	Percentage of <i>Aduan Biasa</i> which were received through SisPAA ( <i>Sistem Pengurusan Aduan Awam</i> ) and settled within the stipulated period (working days)	≥ 85%	25
14.	Percentage of Medical Reports prepared within the stipulated period: State, Specialist Hospital & Institutions: ≤ 28 working days Other Hospital: ≤ 14 working days	≥ 85%	27
<b>EMPLOYEE SATISFACTION</b>			
15.	Percentage of new hospital staffs who attended the Orientation Programme within 3 months of their placement at the Unit or Department in the hospital	≥ 90%	29
<b>LEARNING AND GROWTH</b>			
16.	Percentage of paramedics in acute care areas who have a CURRENT trained status in Basic Life Support (BLS) in the corresponding year	≥ 70%	31
<b>FINANCIAL AND OFFICE MANAGEMENT</b>			
17.	Percentage of hospital vehicles that conformed to the Planned Preventive Maintenance (PPM) schedule.	≥ 80%	33
18.	Percentage of paid bills by discharged patients from the inpatient revenue	≥ 85%	35
19.	Percentage of assets in the hospital that were inspected and monitored at least once a year	100%	36
<b>ENVIRONMENTAL (TECHNICAL/ COMMUNITY) SUPPORT</b>			
20.	Percentage of Safety Audit findings identified whereby control measures had been taken in the corresponding year	≥ 70%	37
21.	Percentage of Fire Drill that has been carried out by the hospital in the corresponding year	100%	40

Sekretariat Induk Teknikal KPI KKM  
Unit Survelan Pencapaian Klinik (CPSU)  
Cawangan Kualiti Penjagaan Perubatan  
Bahagian Perkembangan Perubatan  
Kementerian Kesihatan Malaysia  
Tel: 03-88831180  
[cpsu.medicaldev@moh.gov.my](mailto:cpsu.medicaldev@moh.gov.my)



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Indicator 1	:	ST Elevation Myocardial Infarction (STEMI) [Without Shock] Case Fatality Rate
Element	:	Internal Business Process
Rationale	:	Acute Coronary Syndrome is a frequent cause of hospital death. It is important to measure the quality of care and adherence to practice guidelines.
Definition of Terms	:	<b>ST Elevation Myocardial Infarction (STEMI):</b> A clinical syndrome of acute myocardial death defined by a rise in cardiac biomarkers in the presence of ST elevation on the Electrocardiograph (ECG). The biomarkers used may include any of the following; Troponin T/I, Creatinine Kinase or its MB fraction (CK, CKMB).
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. Patients admitted under cardiology (for hospital with Cardiology Services).</li> <li>2. All deaths diagnosed with STEMI prior to hospital discharge, including in CCU or CRW.</li> <li>3. Patients admitted with STEMI as the primary diagnosis.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Patients not admitted under cardiology (for hospital with Cardiology Services).</li> <li>2. Patients “brought in dead” to Emergency but resuscitation still attempted.</li> <li>3. STEMI complicated with shock.</li> </ol>
Type of indicator	:	Rate-based outcome indicator
Numerator	:	Number of patients diagnosed and/ or admitted with STEMI and who died from STEMI
Denominator	:	Total number of patients diagnosed and/or admitted with STEMI
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≤ 10%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the respective department/ward that caters the above condition.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ Paramedic/Nurse in-charge (Indicator Coordinator) of the department/unit</li> <li>3. <b>How to collect:</b> Data is suggested to be collected from the record or log book/ patient’s file/ National Cardiovascular Disease for Acute Coronary Syndrome (NCVD-ACS) Registry.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	<ul style="list-style-type: none"> <li>• This indicator is also being monitored as National Indicator Approach (NIA) and Universal Health Coverage (UHC) indicator.</li> </ul>



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Indicator 2	:	Non ST Elevation Myocardial Infarction (NSTEMI) Case Fatality Rate
Element	:	<b>Internal Business Process</b>
Rationale	:	<ol style="list-style-type: none"> <li>1. Cardiovascular diseases accounted for the 25.6% of deaths in Ministry of Health (MOH) Hospitals in 2011. The majority of cardiovascular deaths are attributed to acute coronary syndrome (ACS). This is a spectrum of disease with 3 accepted classes:               <ol style="list-style-type: none"> <li>a. ST Elevation Myocardial Infarction (STEMI)</li> <li>b. Non-ST Elevation Myocardial Infarction (NSTEMI)</li> <li>c. Unstable Angina (UA).</li> </ol> </li> <li>2. Mortality rates quoted in the Malaysian Acute Coronary Syndrome (ACS) Registry maintained by the National Heart Association of Malaysia are 9% for NSTEMI and 3% for UA between 2006 and 2010.</li> <li>3. Survival is dependent on good monitoring with prompt and continued use of specific medication (anti-platelets, anti-thrombotics, hypolipidemic therapy, B-blockers and ACE-Inhibitors).</li> </ol>
Definition of Terms	:	<p><b>Non-ST Elevation Myocardial Infarction (NSTEMI):</b> A clinical syndrome of acute myocardial death defined by a rise in cardiac biomarkers in the absence of ST elevation on the Electrocardiograph (ECG).</p> <p>The biomarkers used may include any of the following; Troponin T/I, Creatinine Kinase or its MB fraction (CK, CKMB).</p> <p>It is the final main diagnosis written during discharge which is the cause of admission. It is not the admission diagnosis as it may change.</p> <p><b>Death due to NSTEMI:</b> It is the death directly related to ACS/ NSTEMI as well as complications of NSTEMI such as Heart Failure, arrhythmia, sudden death, Heart Block, Cerebrovascular Accident (CVA), Pulmonary Embolism and Hospital Acquired Infection.</p>
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. Patient with NSTEMI as a main diagnosis.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Patients with STEMI or Unstable Angina (UA) as a main diagnosis.</li> <li>2. Patients who are 'Brought In Dead' (BID) to Emergency Department with or without resuscitation attempted.</li> </ol>



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		<ol style="list-style-type: none"> <li>3. Patients who developed ACS/ NSTEMI during their stay in hospital who were admitted for other reasons than ACS/ NSTEMI.</li> <li>4. Patients with NSTEMI who pass away within the same admission before transfer to cardiac facility due to lack of beds.</li> </ol>
<b>Type of indicator</b>	:	Rate-based outcome indicator
<b>Numerator</b>	:	Number of patients with NSTEMI as a main diagnosis who died
<b>Denominator</b>	:	Total number of patients diagnosed with NSTEMI
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	≤ 8%
<b>Data collection</b>	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in Medical wards/ ICU/ CCU/ CRW/ NICU/ wards that cater for the above condition/ record office.</li> <li>2. <b>Who:</b> Data will be collected by Officer/ Paramedic/ Nurse in-charge (indicator coordinator) of the department/ unit.</li> <li>3. <b>How to collect:</b> Data is suggested to be collected from admission &amp; discharge record book/ Hospital Information System (HIS)</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
<b>Remarks</b>	:	<ul style="list-style-type: none"> <li>• This indicator is also being monitored as KPI Clinical Services, Outcome Based Budgeting (OBB) and Universal Health Coverage (UHC) indicator.</li> </ul>



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Indicator 3	:	Percentage of paediatric patients with unplanned readmissions to the paediatric ward within 48 hours of discharge
Element	:	Internal Business Process
Rationale	:	Unplanned readmission is often considered to be the result of suboptimal care in the previous admission leading to readmission.
Definition of Terms	:	<p><b>Unplanned readmission:</b> It includes the following criteria:</p> <ul style="list-style-type: none"> <li>• Patient being readmitted for the management of the <u>same clinical condition (main diagnosis)</u> he or she was discharged.</li> <li>• Readmission was not scheduled.</li> <li>• Readmission to the same hospital.</li> <li>• This does not include readmission requested by next-of-kin or other department.</li> <li>• This does not include patients were readmitted for different reason but have the same underlying conditions ('other diagnosis').</li> </ul> <p><b>Same condition:</b> Same diagnosis as refer to the ICD 10.</p>
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All paediatric inpatient discharges from Paediatric Ward.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Neonates of &lt; 28 days of life.</li> <li>2. Patients of &gt; 12 years of age.</li> <li>3. AOR (at own risk) discharged patients during the first admission.</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of paediatric patients with unplanned readmission to the paediatric ward within 48 hours of discharge
Denominator	:	Total number of paediatric patients discharged during the same period of time the numerator data was collected.
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≤ 0.5 %
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> For Hospitals with specialist, it is suggested that data to be collected in the Paediatric Medical Ward. For Hospitals without specialist, it is suggested that data to be collected in the ward/ department that cater for the above illness and patients.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ Paramedic/ Nurse in-charge/ Indicator Coordinator of the department/unit.</li> <li>3. <b>How to collect:</b> For numerator, data is suggested to be collected on the day of readmission. For denominator, data</li> </ol>



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		<p>is from admission &amp; discharge record book/ Hospital Information System (HIS).</p> <p>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</p> <p>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</p>
<b>Remarks</b>	:	<ul style="list-style-type: none"><li>This indicator is also being monitored as KPI Clinical Services, Outcome Based Budgeting (OBB) and Universal Health Coverage (UHC) indicator.</li></ul>





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Indicator 4	:	Percentage of massive postpartum haemorrhage (PPH) incidence in cases delivered in the hospital
Element	:	<b>Internal Business Process</b>
Rationale	:	<p>The incidence of massive obstetric haemorrhage is reflective of the effectiveness of the management of haemorrhage at delivery. Post-partum haemorrhage occurs in 3-5% of pregnant mothers and is still the leading cause of maternal death in Malaysia. The use of this indicator would be reflective of the prompt diagnosis and speed of instituting multidisciplinary care.</p> <p>References:</p> <ul style="list-style-type: none"> <li>a) Green-top Guideline No. 52, May 2009.</li> <li>b) CEMD Training Module for PPH.</li> <li>c) Hazra S et al. J Obstet Gynaecol 2004 Aug; 24 (5) 519-20.</li> </ul>
Definition of Terms	:	<b>Massive post-partum haemorrhage:</b> Total amount of blood loss of > 1.5 litres within ( $\leq$ ) 24 hours of delivery. Delivery includes both the vaginal and abdominal routes.
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All deliveries within the facility - Both vaginal and abdominal routes.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Adherent Placenta (e.g. Accreta/ Increta/ Percreta).</li> <li>2. Placenta Previa.</li> <li>3. Abruptio Placenta.</li> <li>4. Patients delivered outside of the facility.</li> </ol>
Type of indicator	:	Rate-based outcome indicator
Numerator	:	Number patients with massive Primary Post-Partum Haemorrhage in the hospital
Denominator	:	Total number of deliveries
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	$\leq 0.75\%$
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the Labour room/ward/HDW.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ Paramedic/ Nurse in-charge/ Indicator Coordinator of the department/unit.</li> <li>3. <b>How to collect:</b> Data is suggested to be collected from patient's case notes / delivery record book/ massive PPH census .</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>



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Remarks	:	<ul style="list-style-type: none"><li>This indicator is also being monitored as KPI Clinical Services, National Indicator Approach (NIA) and Outcome Based Budgeting (OBB) indicator.</li></ul>
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Indicator 5	:	Percentage of inappropriate triaging (under-triaging): Category Green patients who should have been triaged as Category Red
Element	:	Internal Business Process
Rationale	:	<ul style="list-style-type: none"> <li>• Triage is an essential function of Emergency Departments (EDs), whereby many patients may present simultaneously. Triage aims to ensure that patients are treated in the order of their clinical urgency and that treatment is appropriate. Triage also allows for the allocation of the patient to the most appropriate assessment and treatment area.</li> <li>• It is a scale for rating clinical urgency. The scale directly relates triage category with a range of outcome measures (inpatient length of stay, ICU admission, mortality rate) and resource consumption (staff time, cost).</li> <li>• Studies have shown that the “under triaging” of critically ill patients can increase their morbidity and mortality due to delay in their resuscitation and the provision of definitive care. Urgency refers to the need for time-critical intervention.</li> <li>• This indicator measures the accuracy and appropriateness of the Triage system in the Emergency Department (ED) to ensure that critically ill patients are not missed and categorized as “non-critical”.</li> </ul>
Definition of Terms	:	<b>Under-triaged:</b> Critically ill patient (MTC RED) who was triaged as “non-critical” patient (MTC GREEN).
Criteria	:	<b>Inclusion:</b> NA  <b>Exclusion:</b> Period of time when the hospital unable to function as usual because involved in mass casualty/ disaster/ crisis.
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of MTC GREEN patients who should have been triaged as MTC RED
Denominator	:	Total number of MTC GREEN patients
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≤ 0.5%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the Emergency Department</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ Paramedic/ Nurse in-charge/ Indicator Coordinator of the department/unit.</li> <li>3. <b>How to collect:</b> Data is suggested to be collected from the record book (refer to KPI MOH Guidelines).</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b></li> </ol>



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		PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	<ul style="list-style-type: none"><li>This indicator is also being monitored as Outcome Based Budgeting (OBB) indicator.</li></ul>



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Indicator 6	:	Percentage of patients ventilated in Emergency and Trauma Department for more than 8 hours
Element	:	Internal Business Process
Rationale	:	<ul style="list-style-type: none"> <li>• Studies showed quality decline after 8 hours due to lack of nurse: patient ratio, causing poor specific care such as oral hygiene, positioning, physiotherapy and feeding which leads to complications.</li> <li>• Efforts must be initiated to maximize resources in the affected hospitals to reduce morbidity and mortality.</li> </ul>
Definition of Terms	:	<p><b>Ventilation Time:</b> Time taken from the initiation of invasive airway until the patient transferred out from ED.</p> <p><b>Affected Hospital:</b> All specialist hospitals with ICU facility</p>
Criteria	:	<p><b>Inclusion:</b> All ventilated patients in ED</p> <p><b>Exclusion:</b> Referred cases because of time biased by various factors such as getting feedbacks from dedicated team in major hospital and logistic reason.</p>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of ventilated patients who stayed $\geq$ 8 hours in Emergency and Trauma Department
Denominator	:	The total number of ventilated patients in Emergency and Trauma Department
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	$\leq 50\%$
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the Emergency Department</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ Paramedic/ Nurse in-charge/ Indicator Coordinator of the department/unit.</li> <li>3. <b>How to collect:</b> Data collected from ventilated patients case note using prepared data spreadsheet.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	



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<b>Indicator 7</b>	:	<b>Percentage of laboratory turnaround time (LTAT) for urgent Full blood count (FBC) within (<math>\leq</math>) 45 minutes</b>
<b>Element</b>	:	<b>Internal Business Process</b>
<b>Rationale</b>	:	<ol style="list-style-type: none"> <li>1. One of the objectives of a haematology laboratory is to provide fast laboratory results for the management of medical emergency.</li> <li>2. Timelines of the services is the capability of the laboratory providing fast results.</li> <li>3. A fast laboratory turnaround time (LTAT) is desirable and is one of the indicators of efficient laboratory service.</li> <li>4. FBC is a basic and commonly requested test provided in all healthcare facilities.</li> </ol>
<b>Definition of Terms</b>	:	<p><b>Full Blood Count (FBC):</b> Automated measurement of blood cell parameters.</p> <p><b>Laboratory turnaround time (LTAT):</b> Measuring the time laboratory receives the specimen to the time the test results is validated.</p> <p><b>Urgent FBC:</b> FBC requested as urgent for immediate management of patient or emergency cases.</p>
<b>Criteria</b>	:	<p><b>Inclusion criteria:</b></p> <ol style="list-style-type: none"> <li>1. All requests sent for full blood counts that are labelled as urgent.</li> </ol> <p><b>Exclusion criteria:</b></p> <ol style="list-style-type: none"> <li>1. Requests for non-urgent FBC.</li> <li>2. Request short turnaround time (STAT) not for immediate management of patient or emergency cases.</li> <li>3. FBC done at POCT site.</li> </ol>
<b>Type of indicator</b>	:	Rate-based Process Indicator
<b>Numerator</b>	:	Number of urgent Full Blood Count (FBC) with LTAT within ( $\leq$ ) 45 minutes
<b>Denominator</b>	:	Total number of urgent Full Blood Count (FBC)
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	$\geq 90\%$
<b>Data collection</b>	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in all laboratories providing the tests.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ assigned laboratory personnel (indicator coordinator) of the department/ unit.</li> <li>3. <b>How to collect:</b> Data is suggested to be collected from record book/ registry system/ request form/ LIS (refer to KPI MOH Guidelines).</li> </ol>



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		<ol style="list-style-type: none"><li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li><li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li></ol>
Remarks	:	<ul style="list-style-type: none"><li>• This indicator is also being monitored as KPI Clinical Services and Outcome Based Budgeting (OBB) indicator.</li></ul>



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<b>Indicator 8</b>	:	<b>Incidence of thrombophlebitis among inpatients with intravenous (IV) cannulation</b>		
<b>Element</b>	:	<b>Internal Business Process</b>		
<b>Rationale</b>	:	Thrombophlebitis has a direct/ indirect impact on the patient health as it can cause discomfort, pain and prolong inpatient stays that may lead to the patient suffering from economic consequences.		
<b>Definition of Terms</b>	:	<b>Thrombophlebitis:</b> inflammation of the wall of a vein with associated thrombosis.		
		Assessment of Thrombophlebitis with <b>Visual Infusion Phlebitis (VIP) Scores</b>		
		<b>VISUAL INFUSION PHLEBITIS (VIP) SCORE</b>		
		<b>Site Observation</b>	<b>Score</b>	<b>Action</b>
		IV site appears healthy	<b>0</b>	No sign of phlebitis <b>OBSERVE CANNULA</b>
		<b>One</b> of the following signs evident: <ul style="list-style-type: none"> <li>• Pain near IV site (pain score of 1-3)</li> <li>• May not require analgesics</li> <li>• Slight redness near IV site</li> </ul>	<b>1</b>	Possibility first signs of phlebitis <b>OBSERVE CANNULA</b>
		<b>Two</b> of the following signs evident: <ul style="list-style-type: none"> <li>• Pain at IV site (pain score of 4-6)</li> <li>• Interfere with activities</li> <li>• Redness around site</li> <li>• Swelling</li> </ul>	<b>2</b>	Early stage of phlebitis <b>RESITE CANNULA</b>
		<b>All</b> of the following signs evident: <ul style="list-style-type: none"> <li>• Pain along path of cannula (pain score of 4-6)</li> <li>• Interferes with concentration</li> <li>• Redness around site</li> <li>• Swelling</li> </ul>	<b>3</b>	Medium stage of phlebitis <b>RESITE CANNULA CONSIDER TREATMENT</b>
<b>All</b> of the following signs evident and <b>extensive</b> : <ul style="list-style-type: none"> <li>• Pain along path of cannula (pain score of 7-9)</li> <li>• Interferes with basic needs</li> <li>• Redness around site</li> </ul>	<b>4</b>	Advanced stage of phlebitis Or the start of thrombophlebitis <b>RESITE CANNULA CONSIDER TREATMENT</b>		





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		<ul style="list-style-type: none"> <li>Swelling</li> <li>Palpable venous cord</li> </ul>		
		<p><b>All of the following signs evident and extensive:</b></p> <ul style="list-style-type: none"> <li>Pain along path of cannula (pain score of 10)</li> <li>Redness around site</li> <li>Swelling</li> <li>Palpable venous cord</li> <li>Pyrexia</li> </ul>	<b>5</b>	Advanced stage of thrombophlebitis <b>INITIATE TREATMENT RESITE CANNULA</b>
<b>Criteria</b>	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>All admitted patients with peripheral venous cannula</li> <li>Peripheral cannulas that were inserted during current admission.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>“Double counting” i.e. the complication that has been counted during previous admission.</li> <li>Psychiatry patient.</li> <li>Neonates patient.</li> <li>Paediatric patient.</li> <li>Unconscious patient.</li> </ol>		
<b>Type of indicator</b>	:	Rate-based outcome indicator		
<b>Numerator</b>	:	Total Number of thrombophlebitis incidences		
<b>Denominator</b>	:	Total Number of inserted peripheral venous cannulas		
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100 \%$		
<b>Standard</b>	:	≤ 0.5%		
<b>Data collection</b>	:	<ol style="list-style-type: none"> <li><b>Where:</b> Data will be collected from every ward of the hospital.</li> <li><b>Who:</b> Data will be collected by the ward manager/ staff nurse/personnel in charge of the ward.</li> <li><b>How to collect:</b> Data will be collected from the record book/ patient’s case notes.</li> <li><b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li><b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>		
<b>Remarks</b>	:	<ul style="list-style-type: none"> <li>Thrombophlebitis Chart (BKJ-BOR-PPK-10 Pin. 3/2020) will be used for thrombophlebitis monitoring.</li> <li>Report must be sent to State Matron (KPJN) for Nursing Division compilation.</li> <li>All peripheral venous cannula must be counted.</li> </ul>		



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

	<ul style="list-style-type: none"><li>• This indicator is also being monitored as Outcome Based Budgeting (OBB) indicator.</li></ul>
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## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 9	:	Percentage of Morbidity and/ or Mortality meetings being conducted at the hospital level with documentation of the cases discussed  State & Specialist Hospital: 12 times/ year Other Hospital: 6 times/ year
Element	:	<b>Internal Business Process</b>
Rationale	:	The main purpose of the meeting is to improve patient's management and quality of care. Regular morbidity and mortality meetings serve to look at the weakness and the shortfall in the overall management of patients, hence it will be learnt, and the same mistake could be prevented and would not be repeated in the future.
Definition of Terms	:	<p><b>Morbidity:</b> A diseased state or symptom.</p> <p><b>Mortality:</b> The quality or state of being mortal.</p> <p><b>Morbidity Meeting:</b> Discussion of case management in regards to patient morbidity, incidence reporting, issue of patient safety, clinical audit (at the hospital level).</p> <p><b>Mortality Meeting:</b> Discussions related to the management of the case and cause of death of the patient. (e.g.: Clinical audit, POMR, MMR, Dengue Mortality, TB Mortality, Mortality under 5 years of age (MDG5), Perinatal Mortality Reviews (MDG4), Inquiries) (at the hospital level).</p> <p><b>Hospital level:</b> A meeting chaired by the Hospital Director or a person appointed by the Hospital Director with multidisciplinary involvement (preferably). For district hospital/ institution, multidisciplinary involvement is not necessary.</p> <p><b>Conduct:</b> Meeting can be led by the Hospital Director/ Head of Department/ Appointed Specialist/ Medical Officer/ Paramedics.</p> <p><b>Documentation:</b> Official minutes or notes taken during the meeting with the attendance list (certified by the Hospital Director).</p> <p><b>Official Minutes:</b> The minutes must be certified by the chairperson of the Meeting or by the Hospital Director.</p>
Criteria	:	<p><b>Inclusion:</b> All Morbidity and/ or Mortality meetings being conducted at the hospital level</p> <p><b>Exclusion criteria:</b></p>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

		<ol style="list-style-type: none"> <li>1. Time period when the hospital was unable to function as usual due to mass casualty/ disaster/ crisis.</li> <li>2. Grand Ward Rounds or activities with no official documentation/ minutes.</li> </ol>
<b>Type of indicator</b>	:	Rate-based process indicator
<b>Numerator</b>	:	Number of documented morbidity and/ or mortality meetings that were conducted in a year.
<b>Denominator</b>	:	Total number of morbidity and/ or mortality meetings that were scheduled in a year.
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	≥ 80%
<b>Data collection</b>	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from the department involved and the Hospital Director's office.</li> <li>2. <b>Who:</b> Data will be collected by the hospital director's staff/ person in- charge in the department.</li> <li>3. <b>How to collect:</b> The meeting must be organized at the hospital level (i.e. it is open to hospital staff across disciplines/ departments to join the Meeting).</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
<b>Remarks</b>	:	It is suggested that the frequency of the meetings to be scheduled in early of the year and the meetings must be minuted for documentation and audit purposes.



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 10	:	Cross-match Transfusion (CT) ratio
Element	:	Internal Business Process
Rationale	:	<ul style="list-style-type: none"> <li>• Cross-match transfusion ratio is an indicator of appropriateness of blood ordering. A ratio of more than 2.5 reflects excessive ordering of blood cross matching tests, thus imposing inventory problems for blood banks, an increase in workload, cost and wastage.</li> <li>• This indicator is intended to assist in the enhancement of the cost efficiency of the cross-matching process, avoid unnecessary additional workload on laboratory personnel and results in better management of blood stocks.</li> </ul>
Definition of Terms	:	<p><b>Cross-match:</b> A compatibility test carried out on patient's serum with donor red blood cells before blood is transfused.</p> <p><b>Transfusion:</b> The infusion of cross-matched whole blood or red cell concentrates to the patient.</p> <p><b>Cross-match transfusion ratio:</b> A ratio of the number of red blood cell units cross-matched to the number of red blood cells units transfused.</p>
Criteria	:	<p><b>Inclusion:</b> All cross-matches done in blood bank.</p> <p><b>Exclusion:</b> Safe Group O blood given without cross-match in an emergency situation</p>
Type of indicator	:	Rate-based Process Indicator
Numerator	:	Number of red cell units cross-matched
Denominator	:	Number of red cell units transfused
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}}$
Standard	:	$\leq 2.0$
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from the Blood Bank of the hospital.</li> <li>2. <b>Who:</b> The Blood Bank staff/personnel will record and collect the data.</li> <li>3. <b>How to collect:</b> Data collected from the registration book/record books/information system in the Blood Bank of the hospital.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 11	:	Rate of Healthcare Associated Infections (HCAI)
Element	:	Internal Business Process
Rationale	:	Healthcare Associated Infections are preventable illnesses and the prevention of these infections continues to be the top priority. Therefore, periodic surveillance is essential to assess the effectiveness of the infection control programme in the hospital setting.
Definition of Terms	:	<b>Healthcare Associated Infection:</b> An infection occurring in a patient in a hospital or other healthcare facility in whom the infection was not present or incubating at the time of admission. This includes the infections acquired in the hospital, but appearing after discharge, and also occupational infections among staff of the facility.
Criteria	:	<p><b>Inclusion criteria:</b> All patients who were admitted to the ward before or at 8.00 am and were not yet discharged from the ward at the time of the survey.</p> <p><b>Exclusion criteria:</b> Patients in Psychiatric Ward, Emergency Department, Labour Room, Outpatient Department, Day care.</p>
Type of indicator	:	Rate-based Process Indicator
Numerator	:	Number of patients with HCAI in the hospital on the day of survey
Denominator	:	Number of hospitalised patients in the hospital on the day of survey (no. of hospital admissions)
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≤ 5%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from every ward of the hospital except the place in exclusion criteria.</li> <li>2. <b>Who:</b> Data will be collected by the infection control personnel/ team.</li> <li>3. <b>How to collect:</b> Data is collected through hospital wide cross sectional point prevalence survey, which is conducted once a year.</li> <li>4. <b>How frequent:</b> Yearly data collection. Data will be sent to JKN within 1 month after the survey.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	<ul style="list-style-type: none"> <li>• This indicator is also being monitored as Outcome Based Budgeting (OBB) indicator.</li> </ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 12	:	Percentage of medication prescriptions dispensed within 30 minutes
Element	:	Customer Focus
Rationale	:	Long waiting time can adversely affect patient satisfaction.
Definition of Terms	:	<p><b>Dispense:</b> Process of delivering medication to the patient.</p> <p><b>Dispensed within 30 minutes:</b> Time taken from the prescription received by the staff at the pharmacy counter to the time that the medication is delivered to the patient.</p>
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All prescriptions received including extemporaneous preparation and dangerous drug.</li> <li>2. Prescriptions received at hospital pharmacy counter.</li> <li>3. Prescriptions received during office hour.</li> </ol> <p><b>Exclusion:</b> NA</p>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of prescriptions dispensed within 30 minutes
Denominator	:	Total number of prescriptions dispensed
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 95%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from the Pharmacy Department/Unit.</li> <li>2. <b>Who:</b> Staff/personnel in the Pharmacy Department/ Unit will record and collect the data.</li> <li>3. <b>How to collect</b> <ol style="list-style-type: none"> <li>a. In hospitals without QMS (Queue Management System)/ HIS (Hospital Information System)/ other related system to monitor the performance, data collection is done for <b>five full consecutive working days</b>.</li> <li>b. In hospitals with QMS/ HIS/ other related system, it is suggested <b>ALL</b> dispensing time to be analysed.</li> </ol> </li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	<ul style="list-style-type: none"> <li>• Five consecutive working days for facility without QMS is to reflect the trend of patient's attendance from various clinics in the facility.</li> </ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

	<ul style="list-style-type: none"><li>• It is suggested that the CLOCK IN time (time of the prescription received) and CLOCK OUT time (time of the prescription dispensed to the patient, or the medication is ready to be dispensed and the patient was called) to be recorded at the Pharmacy Department/ Unit.</li><li>• In accordance to <i>Manual Petunjuk Prestasi Utama (Kpi) Program Perkhidmatan Farmasi</i></li><li>• This indicator is also being monitored as Outcome Based Budgeting (OBB) indicator.</li></ul>
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## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 13	:	Percentage of <i>Aduan Biasa</i> which were received through SisPAA ( <i>Sistem Pengurusan Aduan Awam</i> ) and settled within the stipulated period (working days)
Element	:	Customer Focus
Rationale	:	Any complaint received by the hospital needs to be taken seriously to improve quality of services to the patient.
Definition of Terms	:	<p>Complains received and recorded in SisPAA will be categorized as either <i>Aduan Biasa</i> or <i>Aduan Kompleks</i>. <i>Aduan Biasa</i> needs to be settled within 15 working days.</p> <p><b><i>Aduan Biasa:</i></b></p> <ul style="list-style-type: none"> <li>• <i>Aduan yang boleh diselesaikan di peringkat unit/ bahagian/ agensi sahaja.</i></li> <li>• <i>Memerlukan tindakan segera.</i></li> <li>• <i>Kelewatan boleh menjejaskan keselamatan, kepentingan awam serta mendatangkan mudarat; dan</i></li> <li>• <i>SOP pengurusan aduan adalah antara 1-15 hari bekerja</i></li> </ul> <p><b><i>Aduan Kompleks:</i></b></p> <ul style="list-style-type: none"> <li>• <i>Aduan melibatkan pertambahan peruntukan, pengurusan tanah, salah laku atau isu yang kompleks;</i></li> <li>• <i>Memerlukan siasatan lanjut/ lawatan lokasi;</i></li> <li>• <i>Penyelarasan dan ulasan lanjut diperlukan daripada agensi-agensi terlibat; dan</i></li> <li>• <i>SOP pengurusan aduan adalah melebihi 15 hari SEHINGGA 365 HARI.</i></li> </ul> <p><b>Settled:</b> Complaint resolved and closed.</p> <p><b>Official complaint:</b> Any complaint to the hospital in any form (letter/ facsimile/ email/ feedback in suggestion box/ print media/ social media/ phone conversation/ verbal/ through the official website of the hospital) and been documented/ recorded officially in SisPAA.</p>
Criteria	:	<p><b>Inclusion:</b> All complains received by hospital and categorized as <i>Aduan Biasa</i></p> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Complains not under the categories of <i>Aduan Biasa</i>.</li> <li>2. Not categorized as complain (query, suggestion, compliments)</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of <i>Aduan Biasa</i> settled within stipulated period
Denominator	:	Total number of <i>Aduan Biasa</i> received
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$



TECHNICAL SPECIFICATIONS OF  
HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

		Denominator
Standard	:	≥ 85%
Data collection	:	<ol style="list-style-type: none"><li>1. <b>Where:</b> Data will be collected from the Hospital Director Office / Administrative Office</li><li>2. <b>Who:</b> Data will be collected/ monitored by officer/ personnel in-charge for complaint.</li><li>3. <b>How to collect:</b> Data will be collected from the record/ registration book/ generated through <i>Sistem Pemantauan Aduan Agensi Awam (SiSPAA)</i>.</li><li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li><li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li></ol>
Remarks	:	<ul style="list-style-type: none"><li>• In accordance to :<ul style="list-style-type: none"><li>○ <i>Garis Panduan Pengurusan Aduan Versi 1/2020</i></li></ul></li></ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 14	:	Percentage of Medical Reports prepared within the stipulated period: <ul style="list-style-type: none"> <li>• State, Specialist Hospital &amp; Institutions: ≤ 28 working days</li> <li>• Other Hospital: ≤ 14 working days</li> </ul>
Element	:	Customer Focus
Rationale	:	Medical report is a written document of a patient record of his/her medical examination and treatment. The preparation of this document within the time period is essential in ensuring the efficiency of the hospital in managing patient record and request.
Definition of Terms	:	<p><b>Stipulated period:</b> The preparation of a medical report according to the given time period (non-inclusive of public holidays and weekends):</p> <ul style="list-style-type: none"> <li>• State, Specialist Hospital &amp; Institutions: ≤ 28 working days</li> <li>• Other hospitals: ≤ 14 working days</li> </ul> <p><b>Performance measurement:</b> The performance will be calculated at the end the month on how many medical reports were completed within the stipulated period compared to the number of actual completed requests (i.e. medical report requests).</p>
Criteria	:	<p><b>Inclusion criteria:</b> All medical reports included EXCEPT below:</p> <p><b>Exclusion criteria:</b></p> <ol style="list-style-type: none"> <li>1. Report with requests for clarification on the previously prepared report.</li> <li>2. Report requested by in-patients.</li> <li>3. Request multiple disciplines.</li> <li>4. Post Mortem report</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of medical reports prepared within the stipulated period
Denominator	:	Total number of requests that has fulfilled/completed all the requirement for the medical reports to be processed in the surveillance month.
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 85 %
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the medical record office/ unit/ department.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff in-charge in medical record office/ unit/ department</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/registration book/monitoring system.</li> </ol>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

	<ol style="list-style-type: none"><li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li><li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li></ol>
<b>Remarks</b>	<ul style="list-style-type: none"><li>• In order to streamline the data collection method, the performance of the present month will be calculated based on the numerator and denominator of the previous month (retrospective cohort). For example, the July performance will be based on the data in June.</li><li>• This indicator is also being monitored as Outcome Based Budgeting (OBB) indicator.</li></ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 15	:	Percentage of new hospital staffs who attended the Orientation Programme within 3 months of their placement at the Unit or Department in the hospital
Element	:	Employee Satisfaction
Rationale	:	Orientation Programme is a platform used to provide information in regards to the institution/ hospital to the newcomers (i.e. staffs). This Orientation Program will assist the new staffs to be familiarized with the institution/ hospital, hence, indirectly it will boost their productivity and their self confidence in the new environment.
Definition of Terms	:	<p><b>New staffs:</b> Newly reported personnel (transferred in/ newly appointed/ new placement) to the hospital/ institution.</p> <p><b>Orientation Program:</b> A structured program organized/ conducted by the Hospital/ Institution/ Department/ Unit comprises of introduction of the system, work process and environment.</p> <p><b>3 months:</b> The period (3 months) from the date of reporting.</p>
Criteria	:	<p><b>Inclusion:</b> Orientation Programme that was conducted by the Hospital/ Institution/ Department/ Unit</p> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Staffs whom transferred out from the hospital <math>\leq</math> 3 months after reporting for duty.</li> <li>2. Staffs whom postponed their transfer-in/ appointment/ placement to the hospital.</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of new staffs who attended the Orientation Program within 3 months of their placement in the hospital
Denominator	:	Total number of new staff reported to the hospital
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	$\geq 90\%$
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in every unit/department/wards.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff in-charge for the Orientation Program in each department/ unit/ ward (Administrative unit/ department responsible for the overall data collection)</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ human resource record.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Remarks	: <ul style="list-style-type: none"><li>• Staff whom reported after 31<sup>st</sup> March or after 30<sup>th</sup> September of the current year will be carried to the next term/ year of the denominator which means;<ul style="list-style-type: none"><li>- 1<sup>st</sup> Term Evaluation: 1<sup>st</sup> October of the previous year to the 31<sup>st</sup> March of the current year.</li><li>- 2<sup>nd</sup> Term Evaluation: 1<sup>st</sup> April of the current year to the 30<sup>th</sup> September of the current year.</li></ul></li></ul>
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## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 16	:	Percentage of paramedics in acute care areas who have a <b>CURRENT</b> trained status in Basic Life Support (BLS) in the corresponding year
Element	:	<b>Learning and Growth</b>
Rationale	:	Basic Life Support is an important skill for all healthcare personnel to possess and it is an important element of the Continuous Professional Development. Therefore, continuous update of the healthcare personnel will ensure the current/latest management of patient care is being practiced.
Definition of Terms	:	<p><b>Acute care area:</b> Emergency and Trauma Department, and Intensive Care Area (ICU, CCU, OT, HDW, Labour Room, Burn Unit, PICU, NICU, Neuro ICU and Haemodialysis Unit).</p> <p><b>CURRENT trained status:</b> The valid period of BLS certification (i.e. 5 years) according to the Policy on Resuscitation Training for Ministry of Health Hospitals.</p> <p><b>Paramedic:</b> Refer to medical assistant and staff nurse who is currently working at the Intensive Care Area.</p>
Criteria	:	<p><b>Inclusion:</b> Paramedic who is currently working in the acute care area for more than 6 months.</p> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Paramedic who was transferred-in to the acute care area for less than 6 months.</li> <li>2. Paramedic who is currently working in the acute care area for less than 6 months.</li> <li>3. Paramedic who has been on medical leave for more than 6 months.</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of paramedics in the acute care areas who have <b>CURRENT</b> trained status in Basic Life Support (BLS)
Denominator	:	Total number of paramedics in the acute care areas
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 70%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected at each acute care area.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff in-charge for the acute care area.</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ registration book from each unit/ department/ ward.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Remarks	<ul style="list-style-type: none"><li>• This is a recurring indicator; therefore some of the numerator for every corresponding year can be a duplicate numerator from the previous years (referring to the 5 years BLS certification period of validity).</li><li>• Personnel with a valid Advance Life Support (ALS) certification are considered to possess a valid BLS certification.</li><li>• <a href="#">Policy on Resuscitation Training for Ministry of Health Hospitals.</a></li></ul>
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## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 17	:	Percentage of hospital vehicles that conformed to the Planned Preventive Maintenance (PPM) schedule.
Element	:	<b>Financial and Office Management</b>
Rationale	:	PPM is a scheduled maintenance of an asset or item of equipment of the hospital including the hospital vehicles. PPM provides the renewal of any elements of the asset before they fail. Having a detailed and well-costed PPM in place provides a level of comfort, possible significant future savings and allows hospital to spread maintenance costs over a planned period of time. Moreover, good PPM and asset maintenance will ensure the hospital vehicles will always be in an optimum condition in order to ensure the safety of the users.
Definition of Terms	:	<p><b>Hospital vehicles:</b> All vehicles that belong to the hospital (hospital assets).</p> <p><b>PPM schedule:</b> Planned maintenance for each vehicle in a specific period of time.</p> <p><b>On schedule/ corresponding period:</b> ± 5 working days or ± 500km.</p>
Criteria	:	<p><b>Inclusion criteria:</b> All hospital vehicles, including ambulances.</p> <p><b>Exclusion criteria:</b></p> <ol style="list-style-type: none"> <li>1. Hospital vehicles which currently under beyond economic repair (BER).</li> <li>2. Hospital vehicles that were involved in an accident at the time of the PPM Schedule.</li> <li>3. Hospital vehicle which is still under warranty.</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of hospital vehicles that conformed to the PPM schedule
Denominator	:	Total number of hospital vehicles on the PPM schedule
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 80%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in the transport unit/ administrative unit/ departments or unit/ department assigned by the Hospital Director.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff/ unit in-charge for Planned Preventive Maintenance (PPM) schedule.</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ transport log book..</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b></li> </ol>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

		PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.
Remarks	:	<ul style="list-style-type: none"><li>• The denominator is calculated based on 3-monthly schedule.</li><li>• Each vehicle may have many PPM schedules based on the kilometres or the schedule date.</li></ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 18	:	Percentage of paid bills by discharged patients from the inpatient revenue
Element	:	Financial and Office Management
Rationale	:	Being the main health care provider in Malaysia, government hospitals are providing their services with low charges. By making sure the arrears at the minimum, this will reflect a good hospital revenue management and will lighten the financial burden of the government hospitals <i>per se</i> .
Definition of Terms	:	<p><b>Inpatient:</b> Patient who was admitted to the ward.</p> <p><b>Paid bill:</b> Full payment/ settlement of the bill (of any amount that have been charged/ decided by the hospital).</p> <p><b>Discharged patient:</b> Patients who were discharged from the ward.</p>
Criteria	:	<p><b>Inclusion:</b> All patients who were admitted to the ward and require to pay for the hospital bill upon discharge.</p> <p><b>Exclusion:</b> Patients who were exempted from hospital bill based on the <i>Akta Fi</i>.</p>
Type of indicator	:	Rate-based outcome indicator
Numerator	:	Number of paid bills by discharged patients (inpatient)
Denominator	:	Total number of discharged patients (inpatient)
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	≥ 85%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from <i>Unit Hasil</i>.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/staff in-charge.</li> <li>3. <b>How to collect:</b> Data will be collected from the registration book or computerized record system.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	<ul style="list-style-type: none"> <li>• <i>Pengecualian bayaran mengikut Perintah Fi (Perubatan 1982)</i></li> <li>• <i>Garis Panduan Pelaksanaan Perintah Fi (Perubatan) (Kos Perkhidmatan) 2014</i></li> <li>• <i>Surat Pekeliling Bahagian Kewangan Bil 2/2006</i></li> </ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 19	:	Percentage of assets in the hospital that were inspected and monitored at least once a year
Element	:	<b>Financial and Office Management</b>
Rationale	:	Keeping track of assets by utilizing an updated inventory is an essential task that facilitates hardware and software management, license compliance and regulatory compliance of the assets. A successful asset management solution (i.e. through organized inspection and monitoring system), indeed, could save a lot of hospital money and management hassle.
Definition of Terms	:	<p><b>Asset:</b> Hospital properties that are listed in the hospital inventory.</p> <p><b>Inventory:</b> A complete list of items such as property, goods in stock, or the contents of the hospital.</p> <p><b>Inspect and monitor:</b> Surveillance activity of the hospital assets (placement of the assets/ location of the assets/ function) with complete documentation.</p>
Criteria	:	<p><b>Inclusion:</b> All assets in the hospital inventory</p> <p><b>Exclusion:</b> Assets under beyond economic repair (BER)/ disposal/ investigation due to it being reported as lost.</p>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of assets that were inspected and monitored
Denominator	:	Total number of asset and inventory that were listed in the inventory
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	<b>100%</b>
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from the administration unit/ departments.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff of the Administration unit in-charge for assets and inventory.</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ registration book/ monitoring system in the administrative unit/ department.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital.</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	<ul style="list-style-type: none"> <li>• The standard for Jan-Jun is <math>\geq 50\%</math>.</li> <li>• It is suggested that the hospital assets inventory, should be generated early of the year.</li> <li>• It is suggested that the final performance to be measured not later than 15<sup>th</sup> December of the corresponding year.</li> </ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

<b>Indicator 20</b>	:	Percentage of Safety Audit findings identified whereby control measures had been taken in the corresponding year						
<b>Element</b>	:	<b>Environmental (Technical) Support</b>						
<b>Rationale</b>	:	To ensure safety of the patient and healthcare workers involved.						
<b>Definition of Terms</b>	:	<p><b>Safety Audit:</b> An audit that is conducted by the hospital Safety and Health Committee (JKKK) / Person in charge of safety to assess the compliance of the hospital to safety and health.</p> <p><b>Safety Audit finding:</b> Any item in the safety audit format OHU/ Audit/ BU (general) with score of 0 and 1.</p> <p>Scoring scale:</p> <table border="1" style="margin-left: 40px;"> <tr> <td style="text-align: center;">0</td> <td>Not comply</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Comply, but not complete</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Comply, and complete</td> </tr> </table> <p><b>Control measures:</b></p> <ul style="list-style-type: none"> <li>- Any effort to reduce the risk related to the hazard through various control measures such as elimination, substitution, engineering control (e.g. use automation or LEV), administrative control (e.g. SOP, policies or work rotation) and personal protective equipment (PPE).</li> <li>- Multiple control measure can be used.</li> </ul> <p><b>Taken:</b> Action has been carried out as mentioned above.</p>	0	Not comply	1	Comply, but not complete	2	Comply, and complete
0	Not comply							
1	Comply, but not complete							
2	Comply, and complete							
<b>Criteria</b>	:	<p><b>Inclusion:</b> Hazardous areas, e.g. CSSD, kitchen, laboratory, Radiology or Diagnostic Imaging Department/ Unit, Cytotoxic Drug Reconstitution, Engineering Department (workshop), mortuary, wards, hospital compound.</p> <p>Areas that must be included:</p> <ul style="list-style-type: none"> <li>- Critical Care Area (ICU/ CCU/ NICU/ HDW)</li> <li>- ED</li> <li>- Pathology Laboratory</li> <li>- Kitchen</li> <li>- Radiology/ Diagnostic Imaging Department</li> </ul> <p>Optional Areas:</p> <ul style="list-style-type: none"> <li>- Cytotoxic Drug Reconstitution</li> <li>- Engineering Department</li> <li>- Wards – compulsory for hospital without Critical Care Area</li> <li>- Mortuary</li> </ul>						



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

	<ul style="list-style-type: none"> <li>- Hospital compound</li> <li>- Other area</li> </ul> <p><b>Exclusion:</b> Areas under construction.</p>
<b>Type of indicator</b>	: Rate-based process indicator
<b>Numerator</b>	: Number of Safety Audit findings identified during the safety audit whereby control measures had been taken
<b>Denominator</b>	: Total number of Safety Audit findings that had been identified
<b>Formula</b>	: $\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	: $\geq 70\%$
<b>Data collection</b>	: <ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected from the hospital's Safety and Health Committee (JKKK) / OSH unit/ departments.</li> <li>2. <b>Who:</b> Data will be collected by the hospital's Safety and Health Committee (JKKK) / Person in charge of safety (Safety Officer).</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ audit finding report/ minutes regarding safety/ monitoring system by the hospital's Safety and Health Committee (JKKK).</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital. (If the indicator is SIQ for Jan-Jun, SIQ form does not need to be filled)</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
<b>Remarks</b>	: <ul style="list-style-type: none"> <li>• Based on the requirements in Occupational Safety and Health Act 1994 (Act 514), Safety and Health Committee must be established in the hospital.</li> <li>• Safety audit needs to be conducted in the hospital.</li> <li>• Based on the Safety Audit format given (OHU/ Audit/ BU form), the problem identified will be scored 0 or 1.</li> <li>• After the control measure, had been acted upon, the Safety and Health Committee will need to discuss the effectiveness of the control measure.</li> <li>• Any form of action taken to improve the safety audit finding, for example, a letter to the State Health Office, is accepted as a control measure had been taken.</li> <li>• All the findings should be identified and documented during the assessment/ audit.</li> <li>• Head of the OSH Unit needs to make sure that the Safety Audit Report is sent to the State <i>KPAS</i> officer.</li> <li>• Head of the OSH Unit needs to make sure that the HPIA report is sent to <i>Penyelaras OSH, Bahagian Perubatan, JKN</i>.</li> <li>• Safety Officer of the hospital must be appointed by Hospital Director.</li> </ul>



## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

	<ul style="list-style-type: none"><li>• The audit findings must be presented to the Hospital Director before submission to the State Health Office.</li><li>• The report of the audit can only be submitted to the State Health Office after validation by the Hospital Director.</li></ul>
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## TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

Indicator 21	:	Percentage of Fire Drill that has been carried out by the hospital in the corresponding year
Element	:	Environmental (Technical) Support
Rationale	:	Fire drills are essential in any workplace or public building for practicing what to do in the event of a fire (Terry Penney, 2016). Not only do they ensure that all staff, customers and visitors in the premise understand what they need to do in case of fire, but they also help to test how effective the fire evacuation plan is and to improve certain aspects of the fire provisions.
Definition of Terms	:	<b>Fire Drill:</b> A practice of the emergency procedures to be used in case of fire.  <b>Fire Drill with multiple Agencies:</b> Fire Drill that involves Fire & Rescue Department or/and other agencies (e.g. St John Ambulance/ Red Crescent) with the hospital staff/ personnel.
Criteria	:	<b>Inclusion:</b> All hospital building.  <b>Exclusion criteria:</b> Nil
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of Fire Drill that has been carried out in the corresponding year.
Denominator	:	Total number of Fire Drill that has been planned in the corresponding year.
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	100%
Data collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected by unit/ department assigned by the Hospital Director.</li> <li>2. <b>Who:</b> Data will be collected by the Officer/ staff in-charge of the unit/ department.</li> <li>3. <b>How to collect:</b> Data will be collected from the record book/ Action Report/ verified meeting minutes with the unit/ department.</li> <li>4. <b>How frequent:</b> PVF to be sent 6 monthly to Quality Unit of hospital. (If the indicator is SIO for Jan-Jun, SIO form does not need to be filled)</li> <li>5. <b>Who should verify:</b> PVF must be verified by Head of Department, Head of Quality Unit and Hospital Director.</li> </ol>
Remarks	:	This is a yearly data. However, PVF need to be sent 6 monthly for monitoring purposes. Therefore, SIO will not be issued based on 6 monthly data.

- Please refer to *Surat Arahan Pelaksanaan Pemantauan Petunjuk Prestasi Utama (KPI) Pengarah Hospital Melalui Hospital Performance Indicator for Accountability (HPIA) dan Pengukuhan KPI Perkhidmatan Klinikal Program Perubatan, ruj : KKM87/P3/12/6/3 Jld.12(35) bertarikh 05 Mei 2014* and *Garis panduan Pengukuhan*





# TECHNICAL SPECIFICATIONS OF HOSPITAL PERFORMANCE INDICATORS FOR ACCOUNTABILITY (HPIA) 2023

*Pelaksanaan dan Aplikasi Hospital Performance Indicator for Accountability (HPIA) dan  
Petunjuk Prestasi Utama (KPI) Perkhidmatan Klinikal Program Perubatan.*