

SERVICE STANDARD 13 : CRITICAL CARE SERVICES – ICU/CCU/CICU/CRW/HDU/BURNS CARE UNIT

PREAMBLE

Critical Care Services are provided in a specially staffed and equipped, separate and self-contained area of a hospital dedicated to the management of patients with life-threatening illnesses, injuries and complications, and monitoring of potentially life-threatening conditions. These services include Intensive Care Units (ICU), Coronary Care Units (CCU) and Burns Care Units.

An Intensive Care Unit provides comprehensive care for critically ill patients, e.g. those with multiple organ failure.

A Coronary Care Unit provides specialised care for critically ill patients with acute cardiac diseases.

A Burns Care Unit provides specialised care for critically ill patients with extensive and serious burn injuries.

Levels of Intensive Care Units

Each ICU should declare the level of intensive care it provides which should be consistent with the Facility's overall mission.

There are three levels of care described for Intensive Care Units (Reference: Marilyn T. Haupt et al. Guidelines on critical care services and personnel: Recommendations based on a system of categorisation of three levels of care. Critical Care Medicine 2003). These three levels of care are also applicable to Coronary Care Units and Burns Care Units.

Level 1 - This is equivalent to the 'High Dependency Unit (HDU)'. The unit shall be able to provide basic hemodynamic support, monitoring and oxygen therapy or non-invasive ventilation in a stable patient. The nurse to patient ratio shall be 1:2.

Level 2 - This unit shall be able to provide mechanical ventilation and invasive hemodynamic monitoring. An anesthetist/intensivist shall spend full time in the unit to manage all patients in the unit. The nurse to patient ratio shall be 1:1 for ventilated patients and 1:2 for non-ventilated patients

Level 3 - This unit shall be able to provide advanced mechanical ventilation, advanced hemodynamic monitoring and extracorporeal organ support, eg extracorporeal renal support, extracorporeal liver support, extracorporeal membrane oxygenation etc. Operating this unit as a "closed" unit is directed by an intensivist who shall spend full time in the unit to manage all patients in the unit. The nurse to patient ratio shall be 1:1 in every shift or more in highly complex cases.

TOPIC TOPIC 13.1

ORGANISATION AND MANAGEMENT

STANDARD STANDARD 13.1.1

The Critical Care Services (CCS) shall be organised to provide safe, efficient, and effective critical care services in accordance to the identified level of care.

Identification of the level of care is by the Facility. The level of care identified shall be in tandem with the actual level of care provided in terms of all aspects of care, i.e. organisation, human resource, policies, facilities and performance improvement activities.

	CRITERIA FOR COMPLIANCE		FACILITY COMMENTS	SURVEYOR FINDINGS
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CRITERION NO.		SELF RATING		AREAS FOR IMPROVEMENT / RECOMMENDATIONS	SURVEYOR RATING	RISK																		
13.1.1.1	<p>Vision, Mission and values statements of the Facility are accessible. Goals and objectives that suit the scope of the Critical Care Services are clearly documented and measurable that indicates safety, quality and patient centred care. These reflect the roles and aspirations of the service and the needs of the community. These statements are monitored, reviewed and revised as required accordingly and communicated to all staff.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Vision, Mission and values statements of the Facility are available, endorsed and dated by the Governing Body.</td><td>NA</td></tr><tr><td>2.</td><td>Goals and objectives of the Critical Care Services in line with the Facility statements are available, endorsed and dated.</td><td>NA</td></tr><tr><td>3.</td><td>Evidence of planned reviews of the above statements.</td><td>NA</td></tr><tr><td>4.</td><td>These statements are communicated to all staff (orientation programme, minutes of meeting, etc)</td><td>NA</td></tr><tr><td>5.</td><td>Achievement of goals and objectives are monitored, reviewed and revised accordingly.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Vision, Mission and values statements of the Facility are available, endorsed and dated by the Governing Body.	NA	2.	Goals and objectives of the Critical Care Services in line with the Facility statements are available, endorsed and dated.	NA	3.	Evidence of planned reviews of the above statements.	NA	4.	These statements are communicated to all staff (orientation programme, minutes of meeting, etc)	NA	5.	Achievement of goals and objectives are monitored, reviewed and revised accordingly.	NA	NA			NA	
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2.	Goals and objectives of the Critical Care Services in line with the Facility statements are available, endorsed and dated.	NA																						
3.	Evidence of planned reviews of the above statements.	NA																						
4.	These statements are communicated to all staff (orientation programme, minutes of meeting, etc)	NA																						
5.	Achievement of goals and objectives are monitored, reviewed and revised accordingly.	NA																						
13.1.1.2 CORE	<p>There is an organisation chart which:</p> <p>a) provides a clear representation of the structure, functions and reporting relationships between the Person In Charge (PIC), Head of Critical Care Unit, consultants, medical practitioners and staff of the Critical Care Unit;</p> <p>b) is accessible to all staff and clients;</p> <p>c) includes off-site services if applicable;</p> <p>d) is revised when there is a major change in any of the following:</p> <p>i) organisation;</p> <p>ii) functions;</p> <p>iii) reporting relationships;</p> <p>iv) staffing patterns.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Clearly delineated current organisation chart with line of functions and reporting relationships between the Person In Charge (PIC),</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Clearly delineated current organisation chart with line of functions and reporting relationships between the Person In Charge (PIC),	NA	NA			NA													
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1.	Clearly delineated current organisation chart with line of functions and reporting relationships between the Person In Charge (PIC),	NA																						

		Head of the Critical Care Unit, consultants, medical practitioners and staff of the Critical Care Unit.						
	2.	Organisation chart of the service is endorsed, dated and accessible	NA					
	3.	The organisation chart is revised when there is a major change in any of the items (d)(i) to (iv).	NA					
13.1.1.3	Regular staff meetings are held between the Head of Service and staff with sufficient regularity to discuss issues and matters pertaining to the operations of the Critical Care Services. Minutes are kept; decisions and resolutions made during meetings shall be accessible, communicated to all staff of the service and implemented.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Minutes are accessible, disseminated and acknowledged by the staff.	NA					
	2.	Attendance list of members with adequate representative of the services.	NA					
	3.	Frequency of meetings as scheduled.	NA					
	4.	Discussion and resolutions are implemented (Problems not solved to be brought forward in the next meeting until resolved).	NA					
13.1.1.4	The head of each Critical Care Service (CCS) is involved in the planning, justification and management of the budget and resource utilization of the services.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Minutes of Facility-wide management meeting.	NA					
	2.	Documented evidence on request for allocation of budget and resources (staffing, equipment, etc) for the service	NA					
	3.	Approved budget and resources.	NA					
13.1.1.5	The Head of each CCS is involved in the appointment and/OR assignment of the staff.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Records on staff interview (if applicable)	NA					
	2.	Appointment/assignment letter of Head of Service	NA					
	3.	Job description of Head of Service	NA					
	4.	Records on staff deployment	NA					

	5.	Duty roster	NA					
13.1.1.6	Appropriate statistics and records shall be maintained in relation to the provision of Critical Care Services and used for managing the services and patient care purposes. For Level 2 and 3 Care, participation in Malaysian Registry of Intensive Care or similar that allows calculation of the standardized mortality ratio (SMR) and bench marking with other units is desirables.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Data are available but not limited to the following:						
	a)	Number of cases, age, in-unit length of stay, in-unit mortality, bed occupancy rate, SMR;	NA					
	b)	Annual report;	NA					
	c)	Accident/incident reports;	NA					
	d)	Number of staff and staff profile;	NA					
	e)	Staff training and human resource records;	NA					
	f)	Data on performance improvement activities, including performance indicators.	NA					

TOPIC TOPIC 13.2

HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT

STANDARD STANDARD 13.2.1

The Critical Care Services (CCS) are appropriately and adequately staffed to achieve their goals and objectives.

CRITERION NO.	CRITERIA FOR COMPLIANCE	SELF RATING	FACILITY COMMENTS	SURVEYOR FINDINGS		
				AREAS FOR IMPROVEMENT / RECOMMENDATIONS	SURVEYOR RATING	RISK
13.2.1.1 CORE	<p>The Head and staff of the Critical Care Services (CCS) shall be individuals qualified by education, training, experience and certification to commensurate with the requirements of the various positions.</p> <p>For all levels of care of Critical Care Services, the Head of CCS is a clinician appointed to take overall responsibility for the operation of the unit.</p> <p>a) For Level 1 Care: A clinician shall be responsible for the management of the patient.</p> <p>b) For Level 2 Care: Anaesthetist/Intensivist shall spend full time in the unit and be responsible for the management of all patients in the unit.</p> <p>c) For Level 3 Care: Intensivist shall spend full time in the unit and be responsible for the management of all patients in the unit.</p>	NA			NA	
	EVIDENCE OF COMPLIANCE					
	1. The clinician, anaesthetist or intensivist has a valid professional Annual Practising Certificate (APC) and appropriate National Specialist Registration.	NA				
	2. For Level 1 Care, the Head is a clinician, appointed and responsible for the operation of the unit and management of all patients in the unit.	NA				
	3. For Level 2 Care, the Head is an anaesthetist/intensivist rostered full time in the unit and responsible for the operation of the unit and management of all patients in the unit.	NA				
	4. For Level 3 Care, the Head is an intensivist rostered full time in the unit and responsible for the operation of the unit and management of all patients in the unit.	NA				

13.2.1.2	<div>The authority, responsibilities and accountabilities of the Head of Critical Care Services are clearly delineated and documented.</div> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Appointment/assignment letter for Head of Service.</td><td>NA</td></tr><tr><td>2.</td><td>Description of duties and responsibilities</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Appointment/assignment letter for Head of Service.	NA	2.	Description of duties and responsibilities	NA	NA			NA	
EVIDENCE OF COMPLIANCE															
1.	Appointment/assignment letter for Head of Service.	NA													
2.	Description of duties and responsibilities	NA													
13.2.1.3 CORE	<div>Sufficient numbers of personnel and support staff with appropriate qualifications are employed to meet the need of the services as follows:</div> <div>a) a resident medical officer trained in anaesthesia/ICU is appointed to be predominantly present in the unit after office hours for Level 2 and 3 ICUs</div> <div>b) a nursing sister in-charge of the unit is appointed and has qualification in post basic nursing appropriate for the unit;</div> <div>c) a nursing staff with post basic appropriate for the unit is in-charge of the unit each shift;</div> <div>d) minimum percentage of nurses trained in intensive care nursing in the unit: 30% for Level 2 Care and 50% for Level 3 Care;</div> <div>e) nurse/patient ratio of 1:1 for ventilated patient;</div> <div>f) nurse/patient ratio of 1:2 for non-ventilated patient;</div> <div>g) a biomedical technician is available on 24 hour basis;</div> <div>h) cleaning personnel familiar with ICU environment and infection control/ environmental cleaning protocols (Ref: Consensus Statement on Infection Control Measures in ICU) are available on 24 hour basis;</div> <div>i) for Level 2 and 3 Care, physiotherapist and dietitian are available during working hours.</div> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Number of staff and qualification should commensurate with workload and includes items (a) to (g).</td><td>NA</td></tr><tr><td>2.</td><td>Staffing pattern</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Number of staff and qualification should commensurate with workload and includes items (a) to (g).	NA	2.	Staffing pattern	NA	NA			NA	
EVIDENCE OF COMPLIANCE															
1.	Number of staff and qualification should commensurate with workload and includes items (a) to (g).	NA													
2.	Staffing pattern	NA													

	3.	Duty roster of medical officer trained in anaesthesia/ICU and nursing staff	NA					
	4.	Duty roster of physiotherapist and dietitian in Level 2 and 3 Care	NA					
	5.	Census and statistics	NA					
13.2.1.4	<p>There are written and dated specific job descriptions for all categories of staff that include:</p> <p>a) qualifications, training, experience and certifications required for the position;</p> <p>b) lines of authority;</p> <p>c) accountability, functions and responsibilities;</p> <p>d) reviewed when required and when there is a major change in any of the following:</p> <p>i) nature and scope of work;</p> <p>ii) duties and responsibilities;</p> <p>iii) general and specific accountabilities;</p> <p>iv) qualifications required and privileges granted;</p> <p>v) staffing patterns;</p> <p>vi) Statutory Regulations.</p> <p>e) administrative and clinical functions.</p>			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Updated specific job description is available for each staff that includes but not limited to as listed in (a) to (g).	NA					
	2.	Job description includes specialisation skills	NA					
	3.	Relevant privileges granted where applicable	NA					
	4.	The job description is acknowledged by the staff and signed by the Head of Service and dated.	NA					
13.2.1.5	<p>Personnel records on training, staff development, leave and others are maintained for every staff.</p> <p>Note: Staff personal record may be kept in Human Resource Department as per Facility policy.</p>			NA			NA	

	EVIDENCE OF COMPLIANCE							
	1.	Staff personal records include:						
	a)	staff biodata;	NA					
	b)	qualification and experience;	NA					
	c)	evidence of current registration (Annual Practising Certificate, National Specialist Register, etc);	NA					
	d)	training record;	NA					
	e)	competency record and privileging;	NA					
	f)	leave record;	NA					
	g)	confidentiality agreement;	NA					
13.2.1.6	There is a structured orientation programme for all newly appointed staff to the Critical Care Services including medical practitioners and for those new to specific areas that include the following: a) explanation of the goals, objectives, policies and procedures of the Facility and those of the Critical Care Services; b) lines of authority and areas of responsibility; c) explanation of particular duties and functions; d) explanation of the methods of assigning clinical care and the standards of clinical practice; e) hand over communication; f) processes for resolving practice dilemmas; g) information about safety procedures; h) training in basic/advanced life support techniques; i) methods of obtaining appropriate resource materials; j) staff appraisal procedures for the Critical Care Services; k) education on Patient and Family Rights;			NA			NA	

	l) education on MSQH Standards requirements.				
	EVIDENCE OF COMPLIANCE				
	1. Policy requiring all new staff to attend a structured orientation programme	NA			
	2. There is Critical Care Services orientation programme with relevant topics not limited to topics covered from (a) to (l).	NA			
	3. Attendance list	NA			
13.2.1.7	There is evidence of training needs assessment and staff development plan which provides the knowledge and skills required for staff to maintain competency in their current positions and future advancement.	NA			NA
	EVIDENCE OF COMPLIANCE				
	1. Training needs assessment is carried out and gaps identified.	NA			
	2. A staff development plan based on training needs assessment is available.	NA			
	3. Training schedule/calendar is in place.	NA			
	4. Training module	NA			
13.2.1.8	There are continuing education activities for staff including medical practitioner to pursue professional interests and to prepare for current and future changes in practice.	NA			NA
	EVIDENCE OF COMPLIANCE				
	1. Training calendar includes in-house/external courses/workshop/conferences	NA			
	2. Contents of training programme	NA			
	3. Training records on continuing education activities are kept and maintained for each staff.	NA			
	4. Certificate of attendance/degree/post basic training.	NA			
13.2.1.9 CORE	Clinical staff including medical practitioners working in the Critical Care Services have: a) specific specialised skills such as Basic Life Support and Advanced Life Support,	NA			NA

	b) a system of ongoing re-certification.							
	EVIDENCE OF COMPLIANCE							
	1.	Staff training records and yearly training plan						NA
	2.	Certification in basic life support, advanced life support and recertification						NA
13.2.1.10	Staff including medical practitioners receive evaluation of their performance at the completion of the probationary period and annually thereafter, or as defined by the Facility.		NA			NA		
	EVIDENCE OF COMPLIANCE							
	1.	Performance appraisal for staff including medical practitioners is completed upon probationary period and as an annual exercise.						NA

TOPIC TOPIC 13.3
POLICIES AND PROCEDURES

STANDARD STANDARD 13.3.1

There are written and dated policies and procedures for all the activities of the Critical Care Services. These policies and procedures reflect current standards of Critical Care Services practices, relevant regulations, requirements of statutory authorities, and the goals and objectives of the services.

CRITERION NO.	CRITERIA FOR COMPLIANCE			SELF RATING	FACILITY COMMENTS	SURVEYOR FINDINGS		
						AREAS FOR IMPROVEMENT / RECOMMENDATIONS	SURVEYOR RATING	RISK
13.3.1.1 CORE	There are written policies and procedures for the Critical Care Services which are consistent with the overall policies of the Facility, regulatory requirements and current standard practices. These policies and procedures are signed, authorised and dated. There is a mechanism for and evidence of a periodic review at least once in every three years.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Documented policies and procedures for the service.	NA					
	2.	Policies and procedures are consistent with the regulatory requirements and current standard practices.	NA					
	3.	Evidence of periodic review of policies and procedures.	NA					
	4.	The policies and procedures are endorsed and dated.	NA					
13.3.1.2	Policies and procedures are developed by a committee in collaboration with staff, medical practitioners, Management and where required with other external service providers and with reference to relevant sources involved. Cross departmental collaboration is practised in developing relevant policies and procedures where applicable. These policies and procedures are consistent with current international standards for critical care services.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Minutes of committee meetings on development and revision on policies and procedures.	NA					
	2.	Minutes of meeting with evidence of cross reference with other departments	NA					
	3.	Documented cross departmental policies	NA					

13.3.1.3 CORE	<p>A policy and procedure manual is kept up to date and is readily accessible to all staff and medical practitioners. There is evidence of compliance with the policy and procedure manual. The manual shall include but not limited to the following:</p> <ul style="list-style-type: none"> a) operational policy; b) admission, discharge and referral policy; c) visitation policy; d) credentialing and privileging on special procedures, e.g. mechanical ventilation, renal replacement therapy; e) clinical management protocol, e.g. weaning from mechanical ventilation, thromboprophylaxis, etc; (Ref: ICU Management Protocols 2019, Ministry of Health, Malaysia) f) drug administration; g) procedural policy, e.g. central line catheterisation; h) antibiotic policy; i) infection control; j) needle stick injury; k) transport of patients; l) withholding and withdrawal of therapy; (Ref: Communication in intensive care manual available at the Academy of Medicine) m) organ donation; 	NA			NA	
	EVIDENCE OF COMPLIANCE					
1.	Presence of policy and procedure manual that include (a) to (m).	NA				
2.	Verification of staff practice on compliance with policies and procedures upon on-site observation.	NA				
3.	Review of patient notes on usage of antibiotics, thromboprophylaxis, stress ulcer prophylaxis, etc	NA				

13.3.1.4 CORE	There is evidence of implementation of written policies and procedures of each critical care unit.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Compliance with policies and procedures through: -						
	a)	interview of staff on practices;	NA					
	b)	verify with observation on practices;	NA					
	c)	results of audit on practices;	NA					
	d)	practices in line with established policies and procedures.	NA					
13.3.1.5	There is evidence of compliance with a minimum of two (2) evidence based guidelines, e.g. Clinical Practice Guidelines (CPG) on management of Dengue infection in adults, Surviving Sepsis Campaign international guidelines on the management of severe sepsis and septic shock, CPG on Unstable Angina/Non-ST Elevation Myocardial Infarction (UA/NSTEMI), etc.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Compliance with evidence based guidelines through:-						
	a)	interview of staff on practices;	NA					
	b)	verify with observation on practices;	NA					
	c)	results on audit on practices;	NA					
	d)	practices in line with evidence based guidelines	NA					
13.3.1.6	Current policies and procedures are communicated to all staff			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Training and briefing on the current policies and procedures/Minutes of meetings	NA					
	2.	Circulation list and acknowledgement	NA					
13.3.1.7	Copies of policies and procedures, protocols, guidelines, relevant Acts, Regulations, By-Laws and statutory requirements are accessible to staff.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Copies of policies and procedures, protocols, guidelines, relevant Acts, Regulations, By-Laws and statutory requirements are accessible on-site for staff reference.	NA					

TOPIC TOPIC 13.4
FACILITIES AND EQUIPMENT

STANDARD STANDARD 13.4.1

There are appropriate and adequate physical facilities and equipment for the efficient operations of the critical care services

CRITERION NO.	CRITERIA FOR COMPLIANCE			SELF RATING	FACILITY COMMENTS	SURVEYOR FINDINGS		
						AREAS FOR IMPROVEMENT / RECOMMENDATIONS	SURVEYOR RATING	RISK
13.4.1.1	The Critical Care Services shall be provided in a discrete area close to areas which have the greatest requirements for its services such as operating theatres, Emergency Department, Radiology/Diagnostic Imaging Services etc.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	The Critical Care Services shall be provided in a discrete area with easy access to operating theatres, Emergency Department, Radiology/Diagnostic Imaging Services etc	NA					
13.4.1.2 CORE	There are adequate and appropriate facilities and equipment with proper utilisation of space to enable staff to carry out their professional, teaching and administrative functions.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Adequate and proper utilisation of space as per regulatory requirements.	NA					
	2.	Appropriate type of equipment to match the complexity of services.	NA					
	3.	Adequate facilities and equipment at each patient care area for safe care (e.g. defibrillators, emergency cart, handwashing facilities, etc).	NA					
	4.	Easy access and clear exit routes	NA					
	5.	Absence of overcrowding	NA					
13.4.1.3	The immediate physical environment of the patient is as unobtrusive and as aesthetically pleasing as possible.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Physical environment of the patient is unobtrusive as observed on-site.	NA					
13.4.1.4 CORE	There shall be adequate facilities for infection control in the unit such as:			NA			NA	

	<p>a) sinks with elbow/foot operated faucets;</p> <p>b) hand-drying facility, e.g. disposable paper towels;</p> <p>c) alcohol-based hand rub per bed;</p> <p>d) separate clean and dirty utility rooms; e) endotracheal suctioning via a closed system or a single use disposable catheter.</p> <p>EVIDENCE OF COMPLIANCE</p> <p>1. Infection control facilities in each unit include (a) to (e) as observed on site. NA</p>					
13.4.1.5	<p>There shall be provision for isolation of different categories of patients, e.g. those with airborne infectious diseases. Reference:</p> <p>a) Isolation room with its own wash basin, en-suite, ante room of at least 2.5m² and control of airflow</p> <p>b) Level 2 Care: Negative pressure isolation room;</p> <p>c) Level 3 Care: Ratio of isolation room to number of beds 1:6 (one single negative pressure isolation room for every six beds in the unit).</p> <p>EVIDENCE OF COMPLIANCE</p> <p>1. Isolation rooms appropriate to the level of care provided are available. NA</p>	NA			NA	
13.4.1.6	<p>There are separate areas for the sanitation and storage of equipment.</p> <p>EVIDENCE OF COMPLIANCE</p> <p>1. Separate areas for sanitation and storage of equipment as observed upon site inspection. NA</p>	NA			NA	
13.4.1.7	<p>There are facilities for patients, relatives and staff which include:</p> <p>a) counselling room for relatives;</p> <p>b) rest room for staff;</p>	NA			NA	

	<p>c) room for distressed relatives;</p> <p>d) waiting area for relatives.</p>					
	EVIDENCE OF COMPLIANCE					
	<p>1. Presence of facilities for relatives and staff include (a) to (d) as observed on site.</p>	NA				
13.4.1.8 CORE	<p>The Critical Care Services shall have 24-hour access to on-site laboratory services such as:</p> <p>a) point of care testing, e.g. blood gas, glucose, etc.;</p> <p>b) laboratory test results i.e. full blood count, urinalysis, biochemistry (electrolytes, urea, creatinine, calcium), coagulation profile and lactate are available within 1 hour for review and action;</p> <p>c) laboratory test results i.e. osmolality, serum magnesium and phosphorus and toxicology screening are available within 3 hours for review and action</p> <p>d) culture and Gram-stain results are available 24 hours per day.</p>	NA			NA	
	EVIDENCE OF COMPLIANCE					
	<p>1. Blood gas machine is available and functional in the unit.</p>	NA				
	<p>2. Records on maintenance of blood gas machine</p>	NA				
	<p>3. Quality control of blood gas machine</p>	NA				
	<p>4. Laboratory results are available within the timeframe, reviewed, signed and plan of action written down</p>	NA				
	<p>5. Availability of culture results 24 hours per day</p>	NA				
13.4.1.9 CORE	<p>The Critical Care Services shall have 24-hour access to Radiology/Diagnostic Imaging Services and blood bank services.</p>	NA			NA	
	EVIDENCE OF COMPLIANCE					
	<p>1. Evidence from interview of staff/records on availability of 24- hour access to Radiology/Diagnostic Imaging Services and blood bank services</p>	NA				

13.4.1.10 CORE	<p>There are adequate numbers of vacuum outlets, oxygen and compressed air outlets, and suction facilities as well as properly grounded electrical outlets with duplicate or independent circuits available to every patient. Reference:</p> <p>a) Minimum 12 electrical outlets per bed for Level 1 Care</p> <p>b) Minimum 16 electrical outlets per bed for Level 2 and 3 Care</p> <p>c) Minimum 2 vacuum outlets per bed for Level 2 Care</p> <p>d) Minimum 3 vacuum outlets per bed for Level 3 Care</p> <p>e) Minimum 2 oxygen outlets per bed for Level 2 Care</p> <p>f) Minimum 3 oxygen outlets per bed for Level 3 Care</p> <p>g) Minimum 2 compressed air outlets per bed for Level 2 Care</p> <p>h) Minimum 3 compressed air outlets per bed for Level 3 Care</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>The number of vacuum outlets, oxygen, compressed air outlets and suction facilities commensurate with the complexities of services provided.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	The number of vacuum outlets, oxygen, compressed air outlets and suction facilities commensurate with the complexities of services provided.	NA	NA			NA	
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1.	The number of vacuum outlets, oxygen, compressed air outlets and suction facilities commensurate with the complexities of services provided.	NA										
13.4.11 CORE	<p>The beds are readily adjustable to various therapeutic positions, easily moved for transport and with locking mechanisms for a secure stationary position, side-rails, and removable headboard.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>All the beds are functional as per standard requirement.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	All the beds are functional as per standard requirement.	NA	NA			NA	
EVIDENCE OF COMPLIANCE												
1.	All the beds are functional as per standard requirement.	NA										
13.4.1.12 CORE	<p>The equipment for monitoring as well as intervention shall be appropriate to the Level of Care provided by the unit as follows:</p> <p>a) For Level 1 Care, monitoring equipment with trending capability and visible and audible alarms with simultaneous display of electrocardiography (ECG), noninvasive pressure, temperature and pulse oximetry;</p> <p>b) For Level 2 and 3 Care, monitoring equipment with modular systems, trending capability and visible and audible alarms with simultaneous display of 4 waveforms</p>	NA			NA							

	and selectable digital values for ECG, non-invasive pressure, temperature, pulse oximetry, arterial pressure, central venous pressure, intra- cranial pressure and capnography.					
	EVIDENCE OF COMPLIANCE					
	1. All the above listed facilities and equipment for the level of care provided are available as in (a) to (b) and functional.	NA				
13.4.1.13	<p>Facilities and equipment are appropriate to the Services and shall include the following:</p> <p>a) uninterrupted power supply system;</p> <p>b) central air conditioning system which allows control of temperature, humidity and air exchange according to relevant standards. Recirculated air shall pass through appropriate filters with 99% filtration efficiency;</p> <p>c) an alarm system for Critical Care Services personnel to summon additional staff in an emergency;</p> <p>d) variable lighting systems for day and night mode and high illumination and spot lighting for procedures;</p> <p>e) alternate emergency lighting, gas and power sources or other appropriate mechanisms available to operate all life support systems including suction apparatus;</p> <p>f) adequate supplies of medications and intravenous fluids available 24 hours a day in the unit;</p> <p>g) hand ventilating assemblies;</p> <p>h) suction apparatus;</p> <p>i) vascular access equipment including access to ultrasound for placement of intravascular catheters</p> <p>j) equipment to control patient temperature</p> <p>k) chest drainage equipment;</p>	NA			NA	

	<p>l) portable transport equipment;</p> <p>m) lifting/weighing equipment including apparatus for mobilizing patients early out of bed, e.g. hoist, rehabilitation chair, walking frame (Ref: ICU Management Protocols 2019, Ministry of Health, Malaysia);</p> <p>n) sufficient number of volumetric and syringe pumps appropriate to the Level of Care;</p> <p>o) for Level 2 and 3 Care, invasive and non-invasive ventilators appropriate to the Level of Care provided;</p> <p>a) for Level 3 Care, renal replacement therapy services are available 24 hours per day.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>All the above facilities and equipment are available and functional and include systems and facilities as listed in (a) to (n).</td><td>NA</td></tr><tr><td>2.</td><td>The minimum number of syringe pumps per bed are: Level 1 Care: 2 syringe pumps per bed Level 2 Care: 5 syringe pumps per bed Level 3 Care: 10 syringe pumps per bed</td><td>NA</td></tr><tr><td>3.</td><td colspan="2">The number of invasive ventilators:</td></tr><tr><td>a)</td><td>Level 2 Care: the invasive ventilators should have all the basic modes of mechanical ventilation</td><td>NA</td></tr><tr><td>b)</td><td>Level 3 Care: the invasive ventilators should have the advanced modes of mechanical ventilation, alarm systems and battery back-up</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	All the above facilities and equipment are available and functional and include systems and facilities as listed in (a) to (n).	NA	2.	The minimum number of syringe pumps per bed are: Level 1 Care: 2 syringe pumps per bed Level 2 Care: 5 syringe pumps per bed Level 3 Care: 10 syringe pumps per bed	NA	3.	The number of invasive ventilators:		a)	Level 2 Care: the invasive ventilators should have all the basic modes of mechanical ventilation	NA	b)	Level 3 Care: the invasive ventilators should have the advanced modes of mechanical ventilation, alarm systems and battery back-up	NA					
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13.4.1.14 CORE	<p>All other emergency and life support equipment are readily accessible and functional, including airway access equipment to assist with management of the difficult airway</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Emergency and life support equipment are available and functional as required.</td><td>NA</td></tr><tr><td>2.</td><td>Resuscitation trolley (1 per 8 beds), defibrillator and equipment to manage difficult airway.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Emergency and life support equipment are available and functional as required.	NA	2.	Resuscitation trolley (1 per 8 beds), defibrillator and equipment to manage difficult airway.	NA	NA			NA										
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1.	Emergency and life support equipment are available and functional as required.	NA																						
2.	Resuscitation trolley (1 per 8 beds), defibrillator and equipment to manage difficult airway.	NA																						
13.4.1.15	<p>There is documented evidence that equipment complies with relevant national/international standards and current statutory requirements.</p>	NA			NA																			

	EVIDENCE OF COMPLIANCE							
	1.	Testing, commissioning and calibration records (certificates or stickers)	NA					
	2.	Certification of equipment from certified bodies, e.g. Standards and Industrial Research Institute of Malaysia (SIRIM), etc as evidence of compliance to the relevant standards and Acts.	NA					
13.4.1.16	Expert advice concerning the safe use of and maintenance for all biomedical devices and electrical installations are readily available at all times. Documentation of safety testing is provided on a regular basis to the unit head.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Records on advisory service on safe use and maintenance of biomedical device and electrical installations.	NA					
	2.	User training records	NA					
13.4.1.17 CORE	There is evidence that the facility has a comprehensive maintenance programme such as predictive maintenance, planned preventive maintenance and calibration activities, to ensure the facilities and equipment are in good working order.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	Planned Preventive Maintenance records such as schedule, stickers, etc.	NA					
	2.	Planned Replacement Programme where applicable	NA					
	3.	Complaint records	NA					
	4.	Asset inventory	NA					
13.4.1.18 CORE	Where specialised equipment is used, there is evidence that only staff who are trained and authorised by the Facility operate such equipment.			NA			NA	
	EVIDENCE OF COMPLIANCE							
	1.	User training records	NA					
	2.	Competency assessment record	NA					
	3.	Letter of authorisation	NA					
	4.	List of staff trained and competent to operate specialised equipment	NA					

TOPIC TOPIC 13.5

SAFETY AND PERFORMANCE IMPROVEMENT ACTIVITIES

STANDARD STANDARD 13.5.1

The Head of Critical Care Services shall ensure the provision of quality performance with staff involvement in the continuous safety and performance improvement activities of the Critical Care Services.

CRITERION NO.	CRITERIA FOR COMPLIANCE	SELF RATING	FACILITY COMMENTS	SURVEYOR FINDINGS		
				AREAS FOR IMPROVEMENT / RECOMMENDATIONS	SURVEYOR RATING	RISK
13.5.1.1	<p>There are planned and systematic safety and performance improvement activities to monitor and evaluate the performance of the Critical Care Services. The process includes:</p> <p>a) Planned activities to include ABCDEF bundle, ventilator care bundle, central venous catheter care bundle, pressure sore care bundle (SSKIN bundle), early mobility, end of life care</p> <p>b) Data collection</p> <p>c) Monitoring and evaluation of the performance</p> <p>d) Action plan for improvement</p> <p>e) Implementation of action plan</p> <p>f) Re-evaluation for improvement</p> <p>Innovation is advocated.</p>	NA			NA	
EVIDENCE OF COMPLIANCE						
1.	Planned performance improvement activities include (a) to (f).	NA				
2.	Records on performance improvement activities.	NA				
3.	Minutes of performance improvement meetings.	NA				
4.	Performance improvement studies	NA				
5.	Mortality and morbidity audits with remedial actions.	NA				
6.	Records on innovation if available.	NA				

13.5.1.2	<p>The Head of Critical Care Services has assigned the responsibilities for planning, monitoring and managing safety and performance improvement to appropriate individual/personnel within the respective services.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Minutes of meetings</td><td>NA</td></tr><tr><td>2.</td><td>Letter of assignment of responsibilities</td><td>NA</td></tr><tr><td>3.</td><td>Job description</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Minutes of meetings	NA	2.	Letter of assignment of responsibilities	NA	3.	Job description	NA	NA			NA																												
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13.5.1.3 CORE	<p>The Head of the Critical Care Services shall ensure that the staff are trained and complete incident reports which are promptly reported, investigated, discussed by the staff with learning objectives and forwarded to the Person In Charge (PIC) of the Facility.</p> <p>Incidents reported have had Root Cause Analysis done and action taken within the agreed time frame to prevent recurrence.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td colspan="2">System for incident reporting is in place, which include:</td></tr><tr><td>a)</td><td>Training of staff</td><td>NA</td></tr><tr><td>b)</td><td>Policy on incident reporting</td><td>NA</td></tr><tr><td>c)</td><td>Methodology of incident reporting</td><td>NA</td></tr><tr><td>d)</td><td>Register/records of incidents</td><td>NA</td></tr><tr><td>2.</td><td>Completed incident reports</td><td>NA</td></tr><tr><td>3.</td><td>Root Cause Analysis</td><td>NA</td></tr><tr><td>4.</td><td>Corrective and preventive action plans</td><td>NA</td></tr><tr><td>5.</td><td>Remedial measure</td><td>NA</td></tr><tr><td>6.</td><td>Minutes of meetings</td><td>NA</td></tr><tr><td>7.</td><td>Acknowledgment by Head of Service and PIC/Hospital Director</td><td>NA</td></tr><tr><td>8.</td><td>Feedback given to staff regarding incident reporting.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	System for incident reporting is in place, which include:		a)	Training of staff	NA	b)	Policy on incident reporting	NA	c)	Methodology of incident reporting	NA	d)	Register/records of incidents	NA	2.	Completed incident reports	NA	3.	Root Cause Analysis	NA	4.	Corrective and preventive action plans	NA	5.	Remedial measure	NA	6.	Minutes of meetings	NA	7.	Acknowledgment by Head of Service and PIC/Hospital Director	NA	8.	Feedback given to staff regarding incident reporting.	NA	NA			NA	
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8.	Feedback given to staff regarding incident reporting.	NA																																											
13.5.1.4 CORE	<p>The Critical Care Services has Clinical Risk Management Programme that provides an appropriate peer group structure for performing the safety and performance improvement activities to accomplish clinical care evaluation.</p> <p>a) The medical practitioners undertake clinical reviews of all risk assessments, incident reports, audits, safety and performance improvement activities:</p>	NA			NA																																								

	<p>i) in multidisciplinary committees within the Services; ii) in a variety of purpose-specific committees, such as mortality and morbidity, blood transfusion and infection control.</p> <p>b) Whatever structure is utilised, provision is made for review and analysis of the clinical work of each individual clinical service, unit or function.</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Risk Management Programme</td><td>NA</td></tr><tr><td>2.</td><td>Minutes of meetings</td><td>NA</td></tr><tr><td>3.</td><td>Relevant reports and documents, e.g. clinical audit reports, incident reports, mortality and morbidity review reports, etc.</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Risk Management Programme	NA	2.	Minutes of meetings	NA	3.	Relevant reports and documents, e.g. clinical audit reports, incident reports, mortality and morbidity review reports, etc.	NA					
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3.	Relevant reports and documents, e.g. clinical audit reports, incident reports, mortality and morbidity review reports, etc.	NA																
13.5.1.5 CORE	<p>There is tracking and trending of specific performance indicators not limited to but at least 5 of the following:</p> <p>a) rate of pressure ulcers (Target: < 3%)</p> <p>b) rate of unplanned extubation (Target: <5%)</p> <p>c) rate of Ventilator Associated Pneumonia (VAP) (Target: < 10 per 1000 ventilator days)</p> <p>d) rate of catheter related blood stream infection (Target: < 5 per 1000 catheter days)</p> <p>e) compliance rate to hand hygiene (Target: > 75%)</p> <p>f) for Level 2 & 3 Care, standardized mortality ratio and benchmarking with other units</p> <table><tr><th colspan="3">EVIDENCE OF COMPLIANCE</th></tr><tr><td>1.</td><td>Specific performance indicators monitored.</td><td>NA</td></tr><tr><td>2.</td><td>Records on tracking and trending analysis</td><td>NA</td></tr><tr><td>3.</td><td>Remedial measures taken where appropriate</td><td>NA</td></tr></table>	EVIDENCE OF COMPLIANCE			1.	Specific performance indicators monitored.	NA	2.	Records on tracking and trending analysis	NA	3.	Remedial measures taken where appropriate	NA	NA			NA	
EVIDENCE OF COMPLIANCE																		
1.	Specific performance indicators monitored.	NA																
2.	Records on tracking and trending analysis	NA																
3.	Remedial measures taken where appropriate	NA																
13.5.1.6	Feedback on results of safety and performance improvement activities are regularly communicated to the staff.	NA			NA													

	EVIDENCE OF COMPLIANCE							
	1.	Results on safety and performance improvement activities are accessible to staff.	NA					
	2.	Evidence of feedback via communication on results of performance improvement activities through continuing medical education/meetings.	NA					
	3.	Minutes of service/unit/committee meetings	NA					
13.5.1.7	Appropriate documentation of safety and performance improvement activities is kept and confidentiality of medical practitioners, staff and patients is preserved.			NA			NA	
EVIDENCE OF COMPLIANCE								
1.	Documentation on performance improvement activities and performance indicators.	NA						
2.	Policy statement on anonymity on patients and providers involved in performance improvement activities.	NA						

SERVICE SUMMARY

-

OVERALL RATING : NA

OVERALL RISK : -