



Sultanate of Oman  
Ministry of Health  
Quality Assurance Center

Department of Accreditation

Oman Healthcare Accreditation  
System (OHAS)



Hospital Standards  
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## Oman Healthcare System

The Oman Healthcare Accreditation System (OHAS) is a national governmental system whose main mission is to promote and sustain a culture of safe and satisfactory quality of care provided in the healthcare institutions (government and private) in the Sultanate. It is committed to providing continuous support to healthcare institutions to interpret, implement and adhere to the national standards, and adopt constructive approaches for continuous improvement. OHAS provides accreditation activities in several ways; develops and continuously updates the user manual of the national accreditation system, conducts awareness sessions on how to use the manual and how to conform to the national standards, facilitates self-assessment in healthcare institutions, and conducts an on-site assessment. OHAS is also committed to providing consultation and guidance, continuous education and the monitoring required to achieve OHAS accreditation, and possible publications that are separate from OHAS accreditation activities. Furthermore, OHAS is committed to update and improve its policies, guidelines, and references required to achieve its goals and objectives.

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*Oman Hospital Accreditation Standards*

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## **1- The Structure of the Oman Hospital Standards**

The accreditation standards in OHAS are divided into ten (10) chapters around the main key services and functions provided by secondary and tertiary care hospitals in Oman. These chapters encompass a series of 256 standards that have been developed in consultation with national and international experts and after series of pilot testing, evaluating, and implementing used to assess the quality of services, prioritized needs and settings in hospitals. These standards apply to public and private hospitals, governmental hospitals; Armed forces, Sultan Qaboos University hospital, and Royal Oman Police. The hospitals are required to be oriented and adhered to the measures of the standards as per their scope of service in order to be enrolled to the national accreditation. The following are the chapters included in the national standards manual:

- 1- Governance and Leadership (GAL).
- 2- Human Resources Management (HRM).
- 3- Compulsory Safety Standards (CSS).
- 4- Specialized Medical Care Services (SMCS).
- 5- Quality and Risk Management (QRM).
- 6- Infection Prevention and Control (IPC).
- 7- Medication Management and Use (MMS).
- 8- Patient Rights and Education (PRE).
- 9- Information Management System (IMS).
- 10- Facility Management System (FMS).

Each chapter has a brief introduction that explains its importance, guidance and impact on the safety and quality of patient care. The standard is composed of a stem represented by a brief statement, purpose, guidance, and measures needed to be met in order to achieve standard compliance.

### **Compulsory Safety Standards**

Adverse events and errors are becoming major hospital challenges that the healthcare system faces almost everywhere in the world. They can cause significant harm to patients including, poor outcomes, prolonged patient hospital stay and even death, and also lead to high cost. Different tools, strategies, and methods are suggested in this manual to improve and promote patient safety and reduce the risk of adverse events, including patient and staff safety program, incident reporting system, medication management, and other more as detailed in the following pages. A group of standards have been selected from different chapters and have been designated as Compulsory Safety



Standards as they are essential safety requirements, and they have a level of significant risks to patients and staff.

Compulsory Safety Standards encompass essential practices and structures indicated in this chapter by a selected group of standards that hospitals undergoing accreditation must have in place and must be in full compliance with. Full adherence to the compulsory standards by evidence and practice proves to reduce risk of harm to patients and staff and ensures safe care to both. CSS is distinguished by meeting them fully, which mandates the enrolled hospital for accreditation to meet all measures in the chapter to carry on with other standards. Compliance to the measures of the CSS is validated through important approaches via revising relevant documentation, staff, patient interview, observation of the hospital practice and hospital tour. Partial compliance with any of the CSS is not acceptable and accreditation will not be granted unless there is full compliance with all Measures of the chapter standards. **The compulsory standards rating score will be only done once within the main chapters, and will be automatically filled on CSS chapter.**

**There are (20) Compulsory Safety standards distributed in different chapters of this manual as follows:**

<b>GAL.13</b>	The hospital implements protocols and processes that ensure a healthy workplace environment.
<b>CSS.2</b>	The hospital has an effective process to ensure proper credentialing and privileging of staff licensed to provide patient care.
<b>SMCS.15</b>	The hospital implements a standardized process of patient identification through out the hospital
<b>MMU.24</b>	The hospital has a process to reduce the risk from the communication of verbal and telephonic orders.
<b>SMCS.16</b>	The hospital implements an effective process for timely reporting of urgent critical diagnostic results.
<b>GAL4</b>	Hospital leadership ensures effective internal and external communication and information exchange throughout the hospital.
<b>SMCS.14</b>	Hospital identifies and manages patients at risk of developing venous thromboembolism (VTE).
<b>SMCS.50</b>	The hospital implements a process for effective identification, and management of patients who are at falling risk.
<b>SMCS.51</b>	The hospital implements a process for effective identification and management of patients who are at risk for pressure ulcers.



<b>SMCS.60</b>	The hospital has a process to prevent Wrong-patient, Wrong surgery/ procedure, and Wrong-site.
<b>SMCS.32</b>	The radiology department has an established documented safety program in the diagnostic imaging services.
<b>QRM.3</b>	The hospital has an incident reporting and learning system
<b>QRM.11</b>	The hospital has a risk management system
<b>IPC.15</b>	The hospital implements an evidence-based hand hygiene practice.
<b>MMU.7</b>	The hospital implements a process for safe management of high alert medications (HAMs)
<b>MMU.8</b>	The hospital has a system for safe management of look-alike and sound-alike (LASA) medications
<b>MMU.39</b>	The hospital has a system for detecting, reporting, analyzing and monitoring significant medication errors, including near misses
<b>FMS.9</b>	The hospital has an alternative source of energy (emergency power system), to run all critical hospital facilities in case of main power interruption.
<b>FMS.10</b>	The hospital has fire emergency plans within the premise
<b>FMS.11</b>	The hospital has a medical gas system, vacuum, and compressed air with preventive and corrective proper maintenance

## *Chapter 1: Governance and Leadership (GAL)*

Leadership is a necessary element of strong health systems, and so it is vital that healthcare institution sustains leaders who can work strategically within their complex environments to develop a rights-based health system that promotes health equity. Most frequently, hospital leadership come from governing body its executive management consists of a hospital director representing the medical staff of the hospital, head of nursing representing all levels of nursing in the hospital, senior administrators, and any other individuals the hospital selects. In the healthcare settings, quality and patient safety depend on effective leadership. Therefore, it is essential all hospital to have a clear mission statement.

All leadership members must work collaboratively with effective communication in order to accomplish their mission. The most important accountability is to carry out all responsibilities in a way that supports the continual improvement in quality and patient safety. This can be achieved through proper planning with availability of adequate resources and monitored for progress. The governance structure approves or provides for all of the hospital's programs and policies and allocates resources to meet the hospital's mission. In this chapter, total of 13 important standards are defined to establish a robust and effective leadership system in the institution.



**GAL.1**

**The hospital has clearly defined governance and leadership structures and mechanisms that are accessible to all employees.**

**Guidance**

Governance and leadership are vital components of health care systems and have an extensive range of functions in improving organizational effectiveness and efficiency. Given the importance of hospitals as complex health care institutions, effective governance and leadership are needed to achieve high performance and enhance employees' capabilities to improve the quality of care and outcomes. Policies, decrees, bylaws, procedures, and documents related to the governance structure, leadership, and authority of the hospital need to be developed/ reviewed. Organization structure/ organogram is to be available which is dated and signed. The aim of the standard is to ensure the existence of effective governance and leadership structures and mechanisms that contribute to achieving the desired levels of care and outcomes. Annual evaluation of hospital leaders' roles and responsibilities is needed to ensure the effectiveness and efficiency of their roles.

**Measures:****GAL1.a**

The hospital has a standardized organizational chart accessible and visible to all staff that shows the title and reporting relationship of all departments.

**GAL1.b**

The hospital's leadership roles and authorities are described in a written document, which describes when and how governance and senior management authority can be delegated and approved by the Hospital Director.

**GAL1.c**

There is an annual evaluation conducted by the governing board, and recommendations are addressed and acted on.

**GAL.2**

**The hospital has a clearly defined vision, mission, and values.**

**Guidance**

Every hospital requires statements of vision, mission, and values. Vision entails what the hospital aspires to reach in the future. Those in the leadership and governance positions, decide the time frame of the term future in a vision statement. The mission states the fundamental purpose of the existence of a hospital in the first place. In other words, the mission is derived from the goals of the hospital. On the other hand, the values are the principles and beliefs that direct the hospitals' strategy at all levels of healthcare delivery. The standard aims to have well-defined strategies for achieving hospital goals.

**Measures****GAL2.a**

The hospital has clearly documented vision, mission and values.

**GAL2.b**

The vision, mission, and values are approved and reviewed according to the changing needs of healthcare services and to the best interests of those benefiting from the healthcare services.

**GAL2.c**

The vision, mission, and values are visible and available to all employees as well as to those benefiting from the services of the hospital

**GAL.3****The hospital has a documented strategic and operational plan.****Guidance**

The operational plan is the link between strategic objectives and the implementation of activities. It is about transforming the strategic plans and thoughts into actionable tasks. A clearly defined policy document on strategic and operational plans benefits the hospital employees in guidance, understanding, walking the talk, and adhering to it. It also expresses the hospital's management's desire to make consistent and actionable decisions. The aim of the hospital's written policy on strategic and operational plans is to create a road map step by step actions to be taken for the hospital management and staff.

**Measures****GAL3.a**

The hospital has an updated strategic plan that is in line with Oman vision 2040, which is accessible to all departments.

**GAL3.b**

The hospital leadership has an operational plan with identified service objectives that are required to achieve the strategic plan

**GAL3.c**

Each department in the hospital has a set of SMART objectives which are required to achieve the objectives of the hospital operational plan

**GAL3.d**

The hospital leadership reviews the hospital operational plan progress on a regular predefined-intervals.

**GAL.4****Hospital leadership ensures effective internal and external communication and information exchange throughout the hospital (CSS.6)****Guidance**

Effective communication is the foundation of modern organizations, and it is the responsibility of hospital leadership. Effective communication improves workflow among all hospital stakeholders including professional groups, units, departments, patients, families, and other organizations. It also minimizes the risk of miscommunication and hence improve care to people. This standard aims to ensure that the process of communication, and exchange of accurate information is effectively implemented within the hospital and with other external sectors.

**Measures****GAL4.a**

The hospital leadership ensures that the communication processes are in place throughout the hospital at regular predefined intervals.

**GAL4.b**

The hospital implements and adopts standardized communication tools and information exchange processes within and between all

		departments e.g SBAR tools for clinical handover.
	<b>GAL4.c</b>	Hospital ensures that all staff are oriented on all hospital communication processes and tools.
	<b>GAL4.d</b>	Hospital leaders form an executive management body (e.g., an executive committee, professional improvement committee, etc.), chaired by hospital director and includes main stakeholders such as medical director, nursing director, the quality director, selected heads of departments, and other senior staff as required, that meets in a regular predefined interval.
	<b>GAL4.e</b>	Discussions, decisions, and actions taken by the committee are documented in formal meeting minutes.
	<b>GAL4.f</b>	There is a process to communicate with stakeholders from other healthcare facilities.
	<b>GAL4.g</b>	The hospital monitors and reviews internal communication processes to enhance continuous improvement.
<b>GAL.5</b>	<b>The hospital has a financial and resources management process.</b>	
<b>Guidance</b>	Focusing on achievable objectives for the future of the finances of any organization is essential to securing the long-term benefits of the national and organizational strategic plans. From the financial side of running an organization, planning is a necessity to structural decisions within the hospital. A strategic hospital plan makes it possible to operate a practice more efficiently in all parts of the hospital. The Hospital leadership makes decisions related to the purchase or use of resources with an understanding of the quality and safety implications of those decisions. The aim of this standard is to improve the hospital's financial decision-making and better equipment resource allocation aligned with patient safety requirement that is defined strategically.	
<b>Measures</b>	<b>GAL5.a</b>	There is a designated qualified staff accountable for the hospital financial management plan.
	<b>GAL5.b</b>	There is an approved financial management plan that is incorporated within hospital operational plan.
	<b>GAL5.c</b>	Annual budgets are prepared in alignment with the hospital policies, vision, mission, and objectives.
	<b>GAL5.d</b>	The financial plan incorporates human resource management, training and development.
	<b>GAL5.e</b>	The financial plan incorporates all hospital resources including equipment, consumables, etc.

- GAL5.f** Hospital leadership utilizes quality and safety data and information to make decisions on purchasing medical equipment and consumables.
- GAL5.g** The hospital leadership monitors the results of its financial decisions and uses the data to evaluate and create improvement plans.
- GAL5.h** The financial process considers input and feedback from stakeholders to allocate resources to different patient care units based on the scope and level of care, in order to ensure a safe, efficient and effective utilization.

**GAL.6** **The hospital governance and structural mechanisms are resilient and adaptable to emerging situations as per Ministry of Health/National Disaster Management Guidelines.**

**Guidance** Disruption in health services due to crises, unanticipated situations or damage to hospitals, and inadequate preparedness plan to effectively respond to the crisis, are major factors that can hinder individuals and communities from receiving facility-based life-saving medical care and other essential health services. Therefore, strengthening the managerial capacities and structural mechanisms of hospitals to be able to manage crises and emerging situations, is essential to effectively continue delivering curative healthcare services to populations.

This standard aims to ensure the ability of the hospital to anticipate, manage, cope, and mitigate the consequences of crises and emerging situations.

- Measures:**
- GAL6.a** The hospital has a disaster recovery plan to respond to and cope with emerging situations that include both natural and man-made disasters.
- This plan includes processes to respond to public warnings about potential risks, roles, and responsibilities at local and national level disaster planning, evacuation plans, human resources allocation, managing visitors, movement control of people and vehicles, supporting staff during the disaster, dealing with the increased demands (manpower, consumables, equipment, and other resources, etc.), identified central location and collaboration with stakeholders (police, fire, ambulance, airport).
- GAL6.b** The disaster plan is evaluated and reviewed at least two times yearly and documented, and sent to the concerned authorities.



<b>GAL6.c</b>	All hospital departments are included in the disaster plan testing, participate with clear feedback, write an action plan to improve post exercises, and compare the results with national and international organizations.
<b>GAL6.d</b>	The hospital management has knowledge and capacity to collect, analyze and forecast unprecedented situations.
<b>GAL6.e</b>	The hospital has the management capacity to coordinate, develop processes and mitigation Measures to arrive at solutions in a timely manner.
<b>GAL6.f</b>	All department staff are oriented to respond to any type of disaster as per their unit plan and scope of service
<b>GAL6.g</b>	All hospital departments have a written response plan to any type of disasters, including visual action cards displayed in each department/area/unit.
<b>GAL6.h</b>	The hospital has the financial and human resources plan to cope with the emerging situations.
<b>GAL6.i</b>	A multidisciplinary Disaster Preparedness Committee is formulated to facilitate disaster preparedness activities with documented roles and responsibilities, and includes emergency department, surgery, medicine, infection control, and supportive services (e.g., laboratory, pharmacy, radiology, security, nutrition, and engineering
<b>GAL6.j</b>	The committee is led by a qualified professional who is certified or has completed training in emergency and disaster preparedness
<b>GAL6.k</b>	The hospital has a multidisciplinary Response Team to respond to emergencies and disasters with documented roles and responsibilities.
<b>GAL6.l</b>	Regular training programs are provided to the multidisciplinary response team.
<b>GAL6.m</b>	The hospital provides regular training for hospital employees and maintain records of the training program.
<b>GAL6.n:</b>	The hospital conducts annual risk assessment that analyzes the possible risks and prioritizing the risks identified.
<b>GAL6.o:</b>	The hospital has a process to alert employees during the disaster on time and trains their employees on the notification process/system using Standardized code.

**GAL.7**

**The hospital complies with all applicable national legal requirements, rules, and regulations.**

**Guidance**

Ministry of Health is the main agency responsible for health in Oman. Compliance of all hospitals in the country to its regulations and policies is a precondition for operating sustainable healthcare systems.

Every hospital needs to ensure that it is complying with the regulations and policies of MOH, as they are held accountable for their compliance and non-compliance actions. This standard aims to ensure that hospitals are aware of and take steps to comply with all Ministry of Health regulations, policies, and any other regulatory/ licensing requirements.

**Measures:****GAL7.a**

The hospital has defined and maintained a list of applicable national regulations and policies.

**GAL7.b**

All hospital departments maintain a manual for all relevant department's policies and procedures, which are accessible to all staff.

**GAL7.c**

The hospital leaders oversee the communication and implementation of policies and procedures.

**GAL7.d**

All hospital staff are aware about the policies and procedures.

**GAL7.e**

The hospital has a compliance framework for monitoring and evaluating compliance with these regulations and policies.

**GAL7.f**

The hospital ensures that all employees are aware of their rights and responsibilities, code of professional conduct, medical professional act law, medical bylaws, labor laws.

**GAL.8**

**The hospital has a system for recruitment and deployment of healthcare leaders.**

**Guidance**

Appointing new employees or dismissing them from managerial positions in hospitals is a complex process. It takes hospitals a series of procedures, multiple application revisions, and approvals for recruitment and deployment in leadership positions. It is important to have a structured and agreed-upon system in place for human resource management activities such as healthcare leader recruitment, deployment, and assessment. This standard aims for hospitals to have a well-defined strategy for recruitment and deployment of leaders for leadership positions.



<b>Measures:</b>	<b>GAL8.a</b>	The hospital has a system for recruiting and appointing professionals in leadership positions following the Ministry of Health system and regulations.
	<b>GAL8.b</b>	The hospital leadership positions have clear job descriptions and role distributions.
	<b>GAL8.c</b>	Those in leadership positions are qualified with appropriate education, experience, and competencies.
	<b>GAL8.d</b>	The Ministry of Health guidelines on recruitment and deployment for leadership positions are discussed in hospital's management meetings, and the hospital performance is measured against them.
	<b>GAL8.e</b>	The performance of those in leadership positions is measured against the strategies and objectives of the hospital, using agreed leadership competency tools.
	<b>GAL8.f</b>	The governing body sets key performance indicators to monitor the institution's leaders' progress towards achieving their goals yearly.

## **GAL.9 The hospital implements and maintains ethical standards in dealing with patients and their families.**

**Guidance** Ethical issues arise every day in health care; employees must be aware of these issues and must be able to deal with them. The hospitals' leaderships are accountable to ensure that systems are in place to minimize ethical challenges and ensure their employees are supported through the process of resolving dilemmas and conflicts that may arise. This standard aims to provide appropriate ethical guidance and minimize ethical dilemmas and conflicts that may arise

<b>Measures:</b>	<b>GAL9.a</b>	<p>The hospital management ensures that all hospital's policies and procedures concerning patient care are congruent with the National laws and regulations. This includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Guidelines related to medical waste management.</li> <li>• Management of narcotics drugs and psychotropic,</li> <li>• Blood bank requirements, and Transplantation of Human Organs and Tissues Rules,</li> <li>• Code of Medical Ethics,</li> <li>• Do Not Resuscitate.</li> <li>• Disclosure policy.</li> </ul>
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<b>GAL9.b</b>	The Hospital has clearly documented ethical framework that clarifies guidelines and procedures on addressing ethical dilemmas in a timely manner.
<b>GAL9.c</b>	The hospital follows national regulations and the Code of Ethics, concerning research conduction, informed consent, patients' rights, etc.
<b>GAL9.d</b>	The ethical framework has clearly stated the guidelines on decisions to withdraw, or discontinue treatment, and where treatment is given against the wishes of the patient.
<b>GAL9.e</b>	The Hospital involves patients and their families in their treatment process, choices, and services.
<b>GAL9.f</b>	The Hospital promptly provides emergent care for disadvantaged patients presenting with urgent conditions.
<b>GAL9.g</b>	The Hospital provides all important information about blood transfusion, organ donation, who can donate, procedures to follow for the donation process as per the national organ transplant centre.
<b>GAL9.h</b>	Hospital has a clear process in receiving and resolving ethical dilemmas.
<b>GAL9.i</b>	The Hospital employees are well oriented on hospital policies, rules, and regulations, and ethical standards.

**GAL.10**      **The hospital has an effective mechanism for clinical research activities.**

**Guidance**      The evolvement of healthcare worldwide, mandated research for continuous improvement of the healthcare sectors and achieving high-quality care. This standard aims to guide hospitals to perform research activities according to laws and regulations (national and international).

<b>Measures:</b>	<b>GAL10.a</b>	The hospital has clear policies and procedures on research activities, which are in alignment with national laws and regulations, codes of conduct, and legal professional standards.
	<b>GAL10.b</b>	Hospital has a research committee with clear roles and responsibilities that oversee and approve all hospital research activities and their appropriateness and safety.
	<b>GAL10.c</b>	When patients are involved in a research study, informed consent is obtained prior to entering the research, with a clear explanation of their rights during the whole process.

<b>GAL10.d</b>	Patients are well informed that they can participate or refuse to participate in the research studies, and they right to withdraw at any stage of the study without having treatment plan compromised, etc.
<b>GAL10.e</b>	The hospital trains employees to use scientific research tools to address quality and safety issues.
<b>GAL10.f</b>	The hospital researches in the patient safety area regularly. The hospital leaders encourage research activities and collaborate with employees to support conducting scientific research.

### **GAL.11 The Hospital/Medical Director is a qualified healthcare professional.**

In each healthcare institution, the director is responsible for medical supervision and overall regulation of all the institutional healthcare system.

#### **Guidance:**

#### **Measures:**

<b>GAL11.a</b>	The Hospital/Medical Director is qualified by education, and experienced in healthcare management.
<b>GAL11.b</b>	The Hospital/Medical Director monitors compliance of the hospital, policies, rules, and regulations.
<b>GAL11.c</b>	The Hospital/Medical Director monitors recruitment of competent and skilled employees.
<b>GAL11.d</b>	The hospital director is accountable for the services provided by the hospital.
<b>GAL11.e</b>	The Hospital/Medical Director is involved in supporting staff, patients, and visitors' safety.
<b>GAL11.f</b>	The Hospital/Medical Director maintains effective communication with hospital stakeholders including hospital leaders, accreditation bodies, governmental and private sector stakeholders.
<b>GAL11.g</b>	Efficiency of resources is closely monitored by the director of the hospital.
<b>GAL11.h</b>	The Hospital/Medical Director collaborates with hospital leaders to establish essential committees including but not limited to: medication management, morbidity and mortality, infection control, cardiopulmonary resuscitation (CPR), operating rooms, blood utilization, quality, and patient safety.

**GAL.12 The hospital departmental directors/heads are accountable for managing and monitoring their department performance.**

<b>Measures:</b>	<b>GAL11.a</b>	The Director/Head of the department is qualified professional in healthcare management.
	<b>GAL11.b</b>	The department's Director/Head ensures compliance to departmental objectives in alignment with of hospital vision, mission, and objectives.
	<b>GAL11.c</b>	The Director/Head of the department sustains regular employee communication through departmental and governance meetings.
	<b>GAL11.d</b>	The Director/Head of each department has a job description with clear roles and responsibilities.
	<b>GAL11.e</b>	Each department director/head is responsible for the continuous improvement through, close monitoring of departmental objectives and operations, KPIs, patient flow, employee education and development, lean management, departmental policies, and procedures.

**GAL.13 The hospital implements protocols and processes that ensure a healthy workplace environment. (CSS.1)**

**Guidance** The hospital setting is considered a highly stressful environment in which staff is more prone to work burnout and stress. Burnout among health care personnel could affect their physical, mental wellbeing and the quality of care provided to their patients. Therefore, employee empowerment and support are critical to motivating and engaging the team in their work. Hence, Staff recognition is a key concept to boost staff morals wellbeing and motivation. This standard aims to ensure providing a working environment that maintains staff physical and mental health.

<b>Measures:</b>	<b>GAL13.a</b>	The hospital ensures that working staff well-being is maintained as per national laws and regulations related to occupational health and safety.
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<b>GAL13.b</b>	The hospital implements a health safety program that covers:
<b>GAL.13.b.1</b>	Pre-recruitment medical check-up, staff immunization,
<b>GAL.13.b.2</b>	Annual medical check-up, as per workplace area,
<b>GAL.13.b.3</b>	Immediate response to staff health problems through providing treatment or referrals.
<b>GAL.13.b.4</b>	Implementing methods to reduce occupational hazard exposures, such as biohazards materials, radiations, chemicals, certain kinds of equipment's.
<b>GAL.13.b.5</b>	Implementing procedures on how to act in case of exposure to hazards.
<b>GAL.13.b.6</b>	Providing training on how to use medical devices, reporting incidents, address job specific hazards.
<b>GAL13.c</b>	The staff receives appropriate supervision and counseling whenever is required.
<b>GAL13.d</b>	The hospital defines a policy for working hours, break times during working hours, staff leaves, as per National laws and Regulations.
<b>GAL13.e</b>	The hospital has an employee retention plan.
<b>GAL13.f</b>	There is clear mechanism of staff recognition and awards.
<b>GAL13.g</b>	There is a mechanism to handle staff issues and concerns.
<b>GAL13.h</b>	The hospital promotes staff empowerment and motivates innovation,
<b>GAL13.i</b>	The hospital conducts regular staff satisfaction survey, the collected feedback from the survey is utilized for improvement.

## *Chapter 2: Human Resources Management (HRM)*

Considering the main driver of all operations and systems is human being, it is very important that hospitals give full attention to improve the human resources management, in order to provide good quality of care. Hospital management has to identify and recognize the human resources challenges and addresses the best strategies to follow for human resources management improvement.

This chapter emphasizes the importance of an effective human resources management in any hospital or healthcare organization for a better care. The total standards in this chapter are 11, highlight hospitals' staff recruitments, performance improvement and management in a manner that supports the provision of care with satisfactory quality and safe.



**HRM.1****The hospital has human resources unit/department.****Guidance**

The effective human resource practices and management of the hospital are essential for the provision of safe and quality care. Human resource management is an essential part of any hospital operation in the 21<sup>st</sup> century that to be managed by a qualified staff who knows the contemporary practices in managing people in a complex setting like hospitals. Hospital management has to be aware of the human resource challenges to determine which strategies to follow. This standard aims to create a standardized process for maintaining the scope of practice of human resource staff that is compatible with the rules and regulations of the Ministry of Health.

**Measures:****HRM1.a**

The head of the human resources unit/department is qualified in managing human resources by education, training, and experience.

**HRM1.b**

The unit/department has to have a Human Resource Manual which describes the department's mission, vision, values, and all policies and procedures related to human resources, the organization structure, and the Department's terms of reference.

**HRM1.c**

The manual is easily accessible and communicated to all staff members.

**HRM1.d**

The Human Resource Manual contains Policy and Procedures related to recruitment, hiring, resignation, termination, grievance, complaints, leaves, new employee orientation, on-the-job training, and performance appraisal.

**HRM1.e**

Implementation of the manual's Policies and procedures is monitored on regular basis.

**HRM.2****The hospital has clearly written job descriptions for all staff.****Guidance**

Job descriptions are crucial to the success and sustainability of any professional organization. An effective job description includes details such as the job title, expected roles, and responsibilities, and the required qualifications for the position. Furthermore, all hospital's positions must have job descriptions to facilitate the recruitment and selection of new staff, clarify the staff's roles and responsibilities, and implement an effective performance appraisal system based on the staff's job descriptions. There will be standardized recruitment, clear job roles and responsibilities, and effective performance appraisals. This standard aims to have a standardized process for creating and maintaining current job descriptions, which are consistent with hospital staff positions.

<b>Measures:</b>	<b>HRM2.a</b>	The hospital has a policy to describe a standardized format for job descriptions for all hospital staff.
	<b>HRM2.b</b>	A job description is used in hiring, performance evaluation, promotion, and transfer.
	<b>HRM2.c</b>	There are five main components of a job description job title, job summary, job duties, and responsibilities, requirement educational, and qualification.
	<b>HRM2.d</b>	The job descriptions are reviewed every five years or as necessary.
	<b>HRM2.e</b>	The staff is all informed about their job descriptions and sign off on any updates or changes.
	<b>HRM2.f</b>	Recruitment and performance appraisal initiatives (documents/ measurement tools) should be consistent with each position's job description.
	<b>HRM2.g</b>	The job description is given to new employees during their orientation period.

**HRM.3****The hospital maintains personnel files for all staff.**

**Guidance** Maintaining good quality staff personal files is an important indicator of the effectiveness of the hospital's human resource management system. Staff files are legal records that hospital management should maintain. Having a policy that standardizes the specific documents to include in staff files is important. Every staff file should include a standard set of documents that describe the staff, their work experience, and any privileges that they have accumulated during their time at the hospital. These documents can be used as evidence for another hospital process such as; organization development, staff privilege, work experience, and any legal matters that may arise. This standard aims to standardize the documents in the staff files to ensure the consistency and completeness of these important files.

<b>Measures:</b>	<b>HRM.3.a</b>	The hospital has a guiding policy that standardizes the type of documents to be included within staff files, management, content update, and disposal of personnel files.
	<b>HRM.3.b</b>	The human resource management department maintains a personnel file for each staff as per the policy .
	<b>HRM.3.c</b>	Personnel files are complete and updated.

<b>HRM.3.d</b>	Personnel files are reserved confidential, access is limited to those who are authorized.
<b>HRM.3.e</b>	Staff personnel file contains the following documents but are not limited to the following: <ul style="list-style-type: none"> <li>• Educational qualification including current licensure, registration, credentials, and certification</li> <li>• Job description</li> <li>• Appointment offer/ letter</li> <li>• Work experience</li> <li>• Orientation, continuing education, and training records</li> <li>• Records of leaves and sick leaves.</li> <li>• Performance evaluation</li> <li>• Reference</li> <li>• Disciplinary action, if available</li> </ul>
<b>HRM.3.f</b>	A clear process is in place to monitor, audit, and update the personnel files.

#### **HRM.4      The hospital has an effective process to ensure proper credentialing and privileging of staff licensed to provide patient care. (CSS.2)**

**Guidance**      Healthcare institutions are responsible for ensuring that members of medical and allied health providing patient care are credentialed, verified, and competent.

Credentialing and privileging must be completed before health care professionals can provide care to patients. Therefore, healthcare institutions must follow a thorough, and efficient process of pre-application, application, identification, and processing to verify the providers' credentials and grant licenses. There should be a process of examining, reviewing, and verifying that a candidate's professional licenses or certifications, educations, experience, and other variables are in order and all occupational and related criteria are met. Depending on the category of staff, the credentials and license are defined and a clear process is put in place for verification and kept current as per the rules and regulations.

<b>Measures:</b>	<b>HRM.4.a</b>	The hospital has a documented policy describing the process used for verification of credentials, i.e., identifying, collecting, and verifying staff's professional licensure.
	<b>HRM.4.b</b>	The hospital verifies and evaluates the credentials (license, education, training, certification, and experience) of all doctors, nurses, and other health professionals licensed to provide care to patients.
	<b>HRM.4.c</b>	The job responsibilities and clinical work privileges are determined by the qualifications that have been verified.

<b>HRM.4.d</b>  <b>HRM.4.e</b>	<p>A clinical staff member's license to practice is maintained at all times based on their profession.</p> <p>The verification process applies to all categories of clinical staff (full- and part-time; visitors and locums).</p>
<b>HRM.5</b>	<p><b>The hospital provides a structured general orientation program to all new staff members, before allowed to work independently.</b></p>
<b>Guidance</b>	<p>Hospitals continuously have new staff being recruited or/and shifted to new areas of patient care according to any emerging needs or expansions. This demands an effective and efficient orientation program that is need-based and comprehensive to address all the multispecialty and cultures in a hospital. Hospital orientation programs are crucial in introducing new staff to hospital rules and regulations, expectations, initial training needs, and a smooth transition to the physical areas of the hospital and the available resources and support. This standard aims to guide hospitals to have a structured, standardized orientation program for all new coming staff.</p>
<b>Measures:</b>	<p><b>HRM5.a</b> The hospital has a structured, standardized general orientation program that provides the relevant initial training and information to all staff including volunteers, temporary workers, students, and trainees. on the following:</p> <p>Mission, vision, values, and an organizational chart of the hospital</p> <p>Programs related to facility management and safety (e.g., fire safety, disaster plan, hazardous materials, utilities, and equipment failures).</p> <p>General information on infection control</p> <p>General information on the staff evaluation process.</p> <p>Definition of adverse and sentinel events along with the hospital reporting and learning system</p> <p>All Hospital's policies and how to access them.</p> <p>Code of conduct.</p> <p>Hospital policy on credentialing and privileging.</p> <ul style="list-style-type: none"> <li>General information about continuing professional development.</li> </ul> <p><b>HRM5.b</b> The staff assignments and expectations are explained consistently with their job descriptions.</p> <p><b>HRM5.c</b> Orientation should be provided to all new employees, volunteers, temporary workers, students, and trainees.</p>



- HRM5.d** Upon completion of all orientation programs, the hospital maintains a record of staff signatures.
- HRM5.e** Orientation program is documented in the personnel files.

**HRM.6**

**The hospital has a documented policy and procedure for staff annual performance appraisal that incorporates periodic regular performance evaluation.**

**Guidance**

A performance appraisal is a regular review of staff's job performance, which evaluates the employee's skills, achievements and identifies staff's strengths and areas for improvement. As part of the hospital performance management system, staff appraisal should be used as a developmental tool to improve staff performance and development. Feedback must be continuous and immediate, not saved up all year long, and dumped on staff during the annual review. Staff must be involved in the appraisal process and allowed to give their input and feedback. Hospital's human resources department should ensure that staff appraisals are maintained.

This standard aims to develop a policy that ensures a fair, transparent, and consistent appraisal process for all staff.

**Measures:**

- HRM6.a** An annual performance appraisal policy describes the process for assessing, and evaluating the staff's performance.
- HRM6.b** Performance appraisals are based on objective criteria linked to the job description and are conducted twice a year.
- HRM6.c** Performance evaluation is a two-way process, where the staff participates in the process and is aware of the results.
- HRM6.d** There regular planned monitoring, guidance and evaluation of staff performance before the time of annual appraisal.
- HRM6.e** The staff and supervisor sign the performance evaluation , records are kept in the personnel file and performance improvement plan is agreed on.

**HRM.7**

**The hospital has a clear process for evaluation of the competency of healthcare providers as per scope of practice.**

**Guidance** Hospital staff varies in terms of abilities and innovation initiatives. To determine staff competence and ensure quality care, health care staff must have an evidence-based privilege of clinical practice. Depending on their specialty, credentials, licensure, experience, and training, healthcare staff is authorized to admit, treat, and perform the necessary skills or procedures. Hospital management determines which departments or kinds of procedures belong to a given specialty. Healthcare professionals should be given authority based on their competency areas or specialties. Clinical professionals at the hospital will be recruited, assigned, evaluated, and compensated following this policy. This standard aims to determine and maintain staff competencies in different specialties.

<b>Measures:</b>	<b>HRM.7.a</b>	The hospital has a policy to determine staff competencies.
	<b>HRM.7.b</b>	Staff achievements and professional milestones are documented in staff personnel files.
	<b>HRM.7.c</b>	A staff member's privileges and authorities are determined by their demonstrated competency.
	<b>HRM.7.d</b>	The hospital ensures that only trained and competent personnel handle specialized procedures.
	<b>HRM.7.e</b>	Each department/ working team has sets of competencies to monitor staff as per department scope of practice.

## **HRM.8 The hospital has a standardized system for staff recruitment and retention.**

**Guidance** There is a common consensus that the purpose of finding and keeping the right, and talented staff is not critical to a healthcare institutions' day-to-day operations, but also in reaching long-term strategic goals and meeting skills requirements.

Managing workplace issues is important for the safety and productivity of staff. This standard aims to develop a standardized system for recruitment and retention of hospital staff according to a documented needs assessment.



<b>Measures:</b>	<b>HRM.8.a</b>	The Human Resources Department has a documented procedure for staff recruitment that includes the following: <ul style="list-style-type: none"> <li>• Educational qualification including current licensure, certification and transcripts.</li> <li>• Completed form of job application.</li> <li>• Copy of passport</li> <li>• Two passport size pictures</li> <li>• Two referees (referees should be from the area of practice)</li> <li>• Job description</li> <li>• Work experience</li> <li>• Orientation, continuing education, and training records</li> <li>• Appointment offer/ letter.</li> </ul>
	<b>HRM.8.b</b>	The hospital has a system in place for the assessment of staff leaving the hospital (exit interview information) and the results are used to ensure the retention of the skilled workforce.
	<b>HRM.8.c</b>	Hospital has clear process for the promotion of staff well-being and resolution of workplace issues.

## **HRM.9 The hospital implements a strategy to assess the adequacy of staff number, type of specialties, and level of qualifications (staff plan).**

**Guidance** Establishing an efficient system for assessing the adequacy of competent and qualified staff requires those in charge of human resources to work with professionals and clinicians to identify emerging needs and formulate plans to address them. An integral part of any hospital quality care system is the continuous assessment of clinical areas to ensure that they are staffed with sufficient and competent professionals and work with human resource professionals to address any arising needs with the needs of individuals. This standard aims to develop a strategy that assesses the adequacy of staff, level of qualifications, and type of specialties in the hospital.

<b>Measures:</b>	<b>HRM.9.a</b>	The human resource department has a written staffing plan, developed in collaboration with the concerned department to fulfil its part of the hospital's scope of practice.
	<b>HRM.9.b</b>	The human resources department defines the staffing plan for each department including the number of staff, type, and qualifications of staff required for each department and their job responsibilities.
	<b>HRM.9.c</b>	The staffing plans are reviewed and updated at least annually and as needed.

	<b>HRM.9.d</b>	The staffing plans are monitored to identify deficiencies and take improvement actions accordingly.
<b>HRM. 10</b>	<b>The hospital has a clear mechanism for continuing training and education for all staff members.</b>	
<b>Guidance</b>	Hospitals are mandated to promote and facilitate the competency of healthcare workers to ensure safe, and high-quality care services. Therefore, a continuous training needs assessment for all healthcare workers is required to develop structured training and educational programs. This standard aims to develop a clear mechanism to facilitate continuous healthcare workers' training and education.	
<b>Measures:</b>	<b>HRM10.a</b>	The hospital has a documented process for the identification and assessment of the educational and training needs of all staff, including New employees, contract workers, students, and volunteers, and independent practitioners.
	<b>HRM10.b</b>	Training needs are identified based on: HRM10.b.1 Hospital scope of services needs HRM10.b.2 Departmental needs HRM10.b.3 Individuals' staff career development needs. HRM10.b.4 Continuous quality improvement activities needs. HRM10.b.5 Hospital's safety enhancement activities needs. HRM10.b.6 Upcoming emerging issues.
	<b>HRM10.c</b>	There is a documented guide demonstrating the mechanism of all staff continuing education.
	<b>HRM10.d</b>	There is documented process to describing the structure and the assessment process used in the continuing education of all categories of staff.
	<b>HRM10.e</b>	There is documented process for describing the structure and the assessment process used in the continuing education of all categories of staff.
	<b>HRM10.f</b>	There is an allocated budget for staff training and continuing education.
	<b>HRM.10.g</b>	The hospital ensures times off for staff to attend training and educational activities.
	<b>HRM.10.h</b>	The educational and training activities are recommended and evaluated by sections/ department heads to sustain staff

		competencies to provide care.
	<b>HRM.10.i</b>	Education and training activities records are maintained in staff personal files.
	<b>HRM.10.j</b>	Hospital monitors all staff skills and competences.
<b>HRM.11</b>	<b>All medical and paramedical staff involved in direct patient care are required to have an updated certificate in cardiopulmonary resuscitation.</b>	
<b>Guidance</b>	<p>Hospital's medical and paramedical staff involved in direct patient care have to be equipped with skills and the necessary certifications to practice safely with patients. One of these is related to cardiopulmonary resuscitation.</p> <p>This standard aims to ensure that all professionals who provide direct patient care are competent to provide cardiopulmonary resuscitative support as per area of care.</p>	
<b>Measures:</b>	<b>HRM. 11. a</b>	Hospital staff providing direct patient care are certified in basic life support, and updated every two years.
	<b>HRM.11.b</b>	<p>Healthcare staff who provide direct patient care in specialized and critical care areas are trained and certified in advanced cardiac life support (ACLS), according to the specialty they work in; certificates are renewed every two years.</p> <p>Examples include, but are not limited to:</p> <p><b>HRM.11.b.1</b> Physicians and nurses working in critical care units are certified in ACLS, Pediatric advanced life support (PALS), and Neonatal resuscitation Program (NRP) as appropriate to the patients' age groups.</p> <p><b>HRM.11.b.2</b> Internal medicine physicians are certified in ACLS, obstetric and gynecological practitioners to have Advanced Life Support for Obstetric (ALSO).</p> <p><b>HRM.11.b.3</b> Emergency department physicians and nurses are certified in ACLS, PALS, and advanced trauma life support (ATLS) as per patients' age groups.</p> <p><b>HRM.11.b.4</b> Pediatricians are certified PALS and NRP.</p>
	<b>HRM11.c</b>	There is regular audit to ensure that all relevant staff are maintaining renewed certificate.

**HRM. 12** The hospital has a standardized process for monitoring quality of training programs.

**Guidance** Establishing a standardized process for maintaining the quality of training programs and activities will ensure continuity and address any skills gaps that may be identified and ensures professional development of healthcare employees. There should be clear documentation that reflects a standardized process in the training and development departments. These documents may reflect any national or international memberships and the curricula that are standardized by these associations. The documents may also include trainers' qualifications or certifications of such programs. The effectiveness of any training and development programs and activities depends on the evidence-based assessment of staff and organizational needs. This standard aims to have a standardized way to monitor the quality of training programs in any health care facility.

- Measures:**
- HRM.12.a** Training programs are designed and implemented according to each profession/specialty and based on the hospital's needs
  - HRM.12.b** The hospital has a mechanism to monitor and improve educational and training processes and results.
  - HRM.12.c** The department head recommends and evaluates the educational and training activities in terms of meeting the designed objectives for each activity.

### *Chapter 3: Compulsory Safety Standards (CSS)*

Preventable adverse events and errors are becoming major hospital challenges that healthcare system faces almost everywhere in the world. They can cause significant harm to patients including, poor outcomes, prolonged patient hospital stay, and even death, and lead to high costs. Healthcare institutions are required to promote and enhance patients' and staff safety on the premises.

This chapter along with other chapters provides different methods and strategies to promote patient and staff safety and reduce the risk of adverse events.

Therefore, a total number of 20 standards has been selected from different chapters and has been designated as Compulsory Safety Standards. Compulsory Safety Standards encompass essential practices and structures indicated in this chapter, that hospitals must be in full compliance with.

These standards are considered as a mandatory requirement for the hospitals to be enrolled in the accreditation. To be fully compliant with each standard in this chapter, all relevant measures must be fully met. Assessment of full compliance to each standard would be by assessing the following tracers; reviewing documents, interviewing patients and staff, and premises observation. Partial compliance to any of CSS is not acceptable, and accreditation will not be granted unless there is full compliance to all measures of the standard.

**CSS. 1      The hospital implements protocols and processes that ensure a healthy**

**workplace environment. (GAL 13)**

**Guidance** The hospital setting is considered a highly stressful environment in which staff is more prone to work burnout and stress. Burnout in health care personnel could affect physical, mental wellbeing and the quality of care provided to their patients. Therefore, employee empowerment and support are crucial to motivate and engage the team in their work. Hence, staff recognition is a key concept to boost staff morals and motivation. This standard aims to ensure providing a working environment that maintains staff physical and mental health.

<b>Measures:</b>	<b>GAL.13.a</b>	The hospital ensures that working staff well-being is maintained as per national laws and regulations related to occupational health and safety.
	<b>GAL.13.b</b>	The hospital implements a health safety program that covers: <b>GAL.13.b.1</b> Pre-recruitment medical check-up, staff immunization, <b>GAL.13.b.2</b> Annual medical check-up, as per workplace area, <b>GAL.13.b.3</b> Immediate response to staff health problems through providing treatment or referrals. <b>GAL.13.b.4</b> Implementing methods to reduce occupational hazard exposures, such as biohazards materials, radiations, chemicals, certain kinds of equipment's. <b>GAL.13.b.5</b> Implementing procedures on how to act in case of exposure to hazards. <b>GAL.13.b.6</b> Providing training on how to use medical devices, reporting incidents, address job specific hazards.
	<b>GAL.13.c</b>	The staff receives appropriate supervision and counseling whenever is required.
	<b>GAL.13.d</b>	The hospital defines a policy for working hours, break times during working hours, staff leaves, as per National laws and Regulations.
	<b>GAL.13.e</b>	The hospital has an employee retention plan.
	<b>GAL.13.f</b>	There is clear mechanism of staff recognition and awards.
	<b>GAL.13.g</b>	There is a mechanism to handle staff issues and concerns.
	<b>GAL.13.h</b>	The hospital promotes staff empowerment and motivates innovation,
	<b>GAL.13.i</b>	The hospital conducts regular staff satisfaction survey, the collected feedback from the survey is utilized for improvement.

**HRM4** The hospital has an effective process to ensure proper credentialing and privileging of staff licensed to provide patient care.



**Guidance** Healthcare institutions are responsible for ensuring that members of medical and allied health providing patient care are credentialed, verified, and competent.

Credentialing and privileging must be completed before health care professionals can provide care to patients. Therefore, healthcare institutions must follow a thorough, and efficient process of pre-application, application, identification, and processing to verify the providers' credentials and grant licenses. There should be a process of examining, reviewing, and verifying that a candidate's professional licenses or certifications, educations, experience, and other variables are in order and all occupational and related criteria are met. Depending on the category of staff, the credentials and license are defined and a clear process is put in place for verification and kept current as per the rules and regulations.

<b>Measures:</b>	<b>HRM.4.a</b>	The hospital has a documented policy describing the process used for verification of credentials, i.e., identifying, collecting, and verifying staff's professional licensure.
	<b>HRM.4.b</b>	The hospital verifies and evaluates the credentials (license, education, training, certification, and experience) of all doctors, nurses, and other health professionals licensed to provide care to patients.
	<b>HRM.4.c</b>	The job responsibilities and clinical work privileges are determined by the qualifications that have been verified.
	<b>HRM.4.d</b>	A clinical staff member's license to practice is maintained at all times based on their profession.
	<b>HRM.4.e</b>	The verification process applies to all categories of clinical staff (full- and part-time; visitors and locums).

**SMCS.15** The hospital implements a standardized process of patient identification through out the hospital.

**Guidance** Correct patient identification is an essential element in the care processes, as there could be significant consequences if an error occurs. It is a key element in reducing adverse events and enhancing patient safety. The success of all treatment activities within the hospital depends on ensuring that the correct patient identity has been confirmed. The confirmation process to be known and compliant to by all healthcare workers and to be implemented throughout the hospital. Patient identifiers be used throughout the patients' touch points during hospital stay, including emergency room, operation room, outpatient department, diagnostic department, etc. This standard aims to guide the implementation of a standardized process of patient identification to ensure safe care is provided to patients.



<b>Measures:</b>	<b>SMCS.15.a</b>	The hospital has a clear standardized policy of patient identification that covers main identifiers (full name, date of birth, unique hospital identification number), ID wrist band, patient photo identification.
	<b>SMCS.15.b</b>	All hospital staff oriented on the policy and its procedures.
	<b>SMCS.15.c</b>	Patient's identification used before performing any procedure.
	<b>SMCS.15.d</b>	Hospital staff actively involves patient in the confirmation process.
	<b>SMCS.15.e</b>	The hospital conducts regular audit to ensure compliance to the policy.

### **MMU.24      The hospital has a process to reduce the risk from the communication of verbal and telephonic orders**

**Guidance**      The most error-prone communications are patient care orders given verbally and those given over the telephone when permitted under local rules and protocols. Different dialects and pronunciations can make it difficult for the receiver to understand the order being given. Hospitals must develop and implement a process for verbal/ telephonic order to avoid errors that might occur and might affect directly patient safety. Verbal orders are more prone to error because of misinterpretation when compared to orders prescribed through electronic health records. Different accents, pronunciations, background noise, and interruptions can make it difficult for the receiver to understand the order being given and may lead to treatment errors causing harm to patients. Once received, a verbal order must be transcribed as a written order. Verbal order is documented and is read back with confirmation.

<b>Measures:</b>	<b>MMU.24.a</b>	Hospital has multidisciplinary policies and procedures to control telephonic and verbal orders limiting verbal communication of prescription , medication orders , interventions and procedures to urgent situations in which immediate written or electronic communication is not feasible.
	<b>MMU.24.b</b>	The policy addresses control, verification, authentication, and limiting the use of verbal and telephone orders, the policy lists of not allowed verbal orders.
	<b>MMU.24.c</b>	Time frame for Verbal order is as soon as emergency situations are over, for telephone order is within 24 hours.
	<b>MMU.24.d</b>	Hospital has policies and procedures on effective communication, guiding how to deal with telephonic or verbal orders by the receiver using the read- back method, which should be confirmed by the physician, who gives the order.
	<b>MMU.24.e</b>	Hospital has training records for all staff on the policy and procedure .
	<b>MMU.24.f</b>	Hospital defines the situations in which verbal orders are not allowed

**MMU.24.g**

Department's head/director conducts a regular audit measuring compliance with policies and procedures for effective communication'

**SMCS.16**

**The hospital implements an effective process for timely reporting of urgent critical diagnostic results.**

**Guidance**

Delay or failure to receive a laboratory or medical imaging test results poses patient-safety risks which threaten the effectiveness, quality, and safety of patient care.

These diagnostic tests can be a laboratory, radiology exam, ultrasound, magnetic resonance imaging, CT scan, nuclear medicine, cardiac exam, etc. Results that are significantly beyond the normal value are considered critical and life-threatening issues. Therefore, having a system that clearly describes how critical results are communicated to the treating team will reduce the risks to patients. This standard aims to have a standardized process of reporting critical to improve patient safety through immediate patient care management and eliminate harm to patient due to delayed or missed critical care and intervention.

**Measures:****SMCS.16.a**

The hospital implements a policy for reporting abnormal critical diagnostic test results

**SMCS.16.b**

The hospital describes the critical values for each diagnostic test.

**SMCS.16.c**

The hospital implements a standardized process to ensure immediate and accurate critical results reporting and receiving , describing precisely the first liners (the reporter and the receiver ) of the critical results and alternatives in case first liners are not available , aiming to immediate care management to given to the patients .

**SMCS.16.d**

All concerned staff are oriented on the policy.

**SMCS.16.e**

The hospital monitors the implementation of reporting process, ensuring information are documented in patients' medical records.

**GAL4**

**Hospital leadership ensures effective internal and external communication and information exchange throughout the hospital**

**Guidance**

Effective communication is the foundation of modern organizations, and it is the responsibility of hospital leadership. Effective communication improves workflow among all hospital stakeholders including professional groups, units, departments, patients, families, and other organizations. This standard aims to ensure that the process of communication, and exchange of accurate information is effectively implemented within the hospital and with other external other external sectors.

**Measures****GAL4.a**

The hospital leadership ensures that the communication processes are in place throughout the hospital at regular predefined intervals.

<b>GAL4.b</b>	The hospital implements and adopts standardized communication tools and information exchange processes within and between all departments e.g SBAR tools for clinical handover.
<b>GAL4.c</b>	Hospital ensures that all staff are oriented on all hospital communication processes and tools.
<b>GAL4.d</b>	Hospital leaders form an executive management body (e.g., an executive committee, professional improvement committee, etc.), chaired by hospital director and includes main stakeholders such as medical director, nursing director, the quality director, selected heads of departments, and other senior staff as required, that meets in a regular predefined interval.
<b>GAL4.e</b>	Discussions, decisions, and actions taken by the committee are documented in formal meeting minutes.
<b>GAL4.f</b>	There is a process to communicate with stakeholders from other healthcare facilities.
<b>GAL4.g</b>	The hospital monitors and reviews internal communication processes to enhance continuous improvement.

#### **SMCS.14 Hospital identifies and manages patients at risk of developing venous thromboembolism (VTE). SMCS.14**

**Guidance** Venous thrombosis (VTE) refers to the collective term of deep vein thrombosis (DVT), pulmonary embolism (PE), which is a very serious common complication that might occur in patients undergoing surgery, trauma, immobilization, malignancy. DVT and PE is a common complication on postsurgical patients that do not receive prophylactic treatment. It is important to take the appropriate preventive measures for all hospital's patients and to determine which of them warrant additional prophylaxis. The decision to initiate DVT prophylaxis should be based on the patient's risk of thromboembolism and bleeding, and the balance of benefits versus harms. This standard aims to reduce the risk of developing DVT and prevent its complications.

<b>Measures:</b>	Hospital has an updated written thrombo prophylaxis guideline or policy to screen patients for the risk of developing VTE.
<b>SMCS.14.a</b>	
<b>SMCS.14.b</b>	The guidelines are periodically updated as per evidence-based practice
<b>SMCS.14.c</b>	The guidelines are made available and easily accessible in all departments and staff are well oriented to the guidelines.
<b>SMCS.14.d</b>	The treating team follows the guideline to identify patients at risk to develop DVT, pulmonary embolism (PE), and implement applicable prophylaxis.

<b>SMCS.14.e</b>	The hospital establishes measures to audit implementations of appropriate thromboprophylaxis to ensure all at-risk patients, are identified and managed according to the current guidelines.
<b>SMCS.14.f</b>	The concerned healthcare worker provides health education to patients about the risk of VTE medication use measures to prevent it, and any relevant and needed information.
<b>SMCS.14.g</b>	The guidelines are made available and easily accessible in all departments and staff are well oriented to the guidelines.

### **SMCS.50 The hospital implements a process for effective identification, and management of patients who are at falling risk**

**Guidance** Patient's fall is the most commonly reported patient safety incident in healthcare institutions. Patient's fall is considered as one of the nursing-sensitive key performance indicators (KPI), reflecting the quality of care provided to patients. The human cost of patient falls includes injury, pain, distress, loss of confidence in performing activities of daily living, loss of independence, and high mortality rate. Hospitals should implement clear policies to guide the standardized practice of prevention and management of patients' falls in the hospital. Hospital staff should be oriented on the policy, to ensure safety of all patients. As a part of patient education, communicate fall risk to patients and family members on discharge to take precautions to prevent falls at home. This standard aims to guide the healthcare providers to accurately and systematically identify patients at risk of falls and direct the implementation of an individualized fall prevention, assessment and reassessment plan.

<b>Measures:</b>	<b>SMCS.50.a</b>	The hospital has a clear policy for effective identification, assessment, and management of patient at risk of fall, and management of patients after fall incidence.
	<b>SMCS.50.b</b>	All concerned staff are oriented on the fall prevention policy and the assessment tool.
	<b>SMCS50. c</b>	Hospital leaders ensure that resources are available for implementation of fall prevention policy.
	<b>SMCS.50. d</b>	Nursing team follow fall risk assessment for all patients at the point of access to determine their risk for falling across the hospital premises, when patient move from one unit to another, when patients' condition changes, using validated fall risk assessment tool.
	<b>SMCS.50. e</b>	Interventions for fall prevention are implemented based on assessment score.
	<b>SMCS.50.f</b>	Patient assessment and interventions, patient and family teaching are documented on patient electronic record and communicated among nursing team and other healthcare providers.

SMCS.50.g

Departments' heads conduct regular audits to assess compliance to the fall prevention policy and related scales.

**SMCS.51 The hospital implements a process for effective identification and management of patients who are at risk for pressure ulcers.**

**Guidance** Pressure ulcers have become a concern for healthcare providers throughout the world, due to their significant impact on patients' health conditions, the treatment process, and their burden on the health care system. Pressure ulcer rate is considered a key performance indicator that reflects the quality of nursing care. Proper skin assessment, early detection of skin damage, and implementation of adequate preventative strategies can prevent tissue damage or reduce the seriousness of the ulceration. Hospitals need to ensure there is a clear policy to guide health care staff on methods of prevention and management of pressure ulcers. All nursing staff should be trained on their roles and responsibilities toward the implementation of the policy and procedures of pressure ulcer prevention and management. This standard intends to guide implementation of a standardized practice of pressure ulcer prevention, identification, and management.

**Measures:**

SMCS.51.a

The hospital has written policies and procedures to guide proper identification, assessment, and management of patients at risk develop a pressure ulcer.

SMCS.51.b

Nurses are all oriented on the pressure ulcer prevention and management policy and the assessment tool.

SMCS.51.c

Hospital and nursing leaders ensure that resources are available for implementation of the pressure ulcer prevention policy.

SMCS.51.d

Nurses conduct an initial pressure ulcer risk assessment to all patients on admission using a validated, risk assessment tool, and then reassessment thereafter as per the policy.

SMCS.51.e

Nurses apply Interventions for pressure ulcer prevention based on risk assessment score. This includes positioning schedule with skin inspection, use of pressure relieving devices, nutritional requirement, pain management, continence management, etc.

SMCS.51.f

Patient assessment and interventions, patient and family teaching are documented on patient electronic record and communicated among nursing team and other healthcare providers.

SMCS.51.g

The is regular audit to assess compliance with the pressure ulcer prevention and management policy and related scales.

**SMCS.60 The hospital has a process to prevent Wrong-patient, Wrong surgery/ procedure, and Wrong-site.**

**Guidance** Wrong Surgery-Site, Wrong Surgery/ Procedure commonly occurs in hospitals. This could be an overwhelming experience for the patients and the surgical





team. These medical errors could be avoided with the implementation of effective communication among the surgical team, effective patient involvement in site marking, and effective verification of the operative site. Additionally, effective patient assessment, adequate medical record review, and avoidance of abbreviations are common factors that can contribute to avoiding these errors. Wrong-Site Surgery commonly occurs in orthopedic or podiatric procedures, general surgery, urological and neurosurgical procedures. According to the Joint Commission (JCI), the universal protocol of avoiding wrong surgery/ procedure, wrong site, and wrong patient covers marking the surgical site, preoperative verification process, and time-out that is performed before conducting the procedure/ surgery. Site marking, Verification, and Time out should be consistent throughout the hospital Site marking must be done in cases that involve laterality, multiple structures, or levels. The pre-operative checklist is developed and used to verify that all documents and patient information needed for surgery or invasive procedures are on hand and completed before the start of the surgical or invasive procedure. This standard aims to eliminate and prevent Wrong-Site, Wrong-Patient, and Wrong-Procedure surgery.

<b>Measures:</b>	<b>SMCS.60.a</b>	The hospital implements a clear standardized process to prevent wrong patients, wrong sites, and wrong surgery/ procedure for all invasive procedures performed in any operating/ procedure rooms. The process covers three phases: verification, site marking, and time out.
	<b>SMCS.60.b</b>	The verification of patient information as per the pre-operative checklist includes checking the identity of the patient, completing a consent form appropriate to the type of the procedure, description for the surgical procedure, laboratory or radiology image results.
	<b>SMCS.60.c</b>	The team use consistent marking process for all invasive and surgical procedure sites throughout the hospital.
	<b>SMCS.60.d</b>	The procedure/ surgical site is marked by the healthcare staff that will perform the procedure.
	<b>SMCS.60.e</b>	The patient is involved in the marking process.
	<b>SMCS.60.f</b>	The time-out process is implemented is just before the procedure/surgery is initiated, to ensure the correct site, correct procedure/ surgery, and correct patient surgery.
	<b>SMCS.60.g</b>	All the surgical/ procedure teams use active communication process during the time out, to agree on the correct patient identity, correct procedure/surgery to be performed, correct site.
	<b>SMCS.60.h</b>	All the process is documented in patient medical records.

**SMCS.32** The radiology department has an established documented safety program in the diagnostic imaging services. **SMCS.32**

**Guidance** The availability of radiation safety programs helps to prevent radiation risks to patients. The program includes the implementation of the "As Low as Reasonably Achievable" (ALARA) principle in all investigations, especially



those requiring periodic screening of patients. Modify exposure parameters to the lowest possible for each individual, and maintain the image quality appropriate for the clinical indication as the radiation parameters depend on the patient's weight. This standard aims to ensure patients and staff safety.

<b>Measures:</b>	<b>SMCS.32.a</b>	The department has documented radiation-safety program, which aligns with the hospital's safety program.
	<b>SMCS.32.b</b>	The program includes the management (Handling, usage and disposal, storing and transportation) of radioactive materials and hazardous materials used for therapeutic and diagnostic purposes.
	<b>SMCS.32.c</b>	The program includes checking/screening patients for safety risks before exposure to any imaging procedures, e.g., checking female patients for pregnancy.
	<b>SMCS.32.d</b>	The program includes guidelines and procedures that governs the use of contrast media.
	<b>SMCS.32.e</b>	The program includes guidelines and procedures for non-radiation hazards. E.g., infection control, electrical hazards and immobilization.
	<b>SMCS.32.f</b>	The program guides monitoring of the staff for radiation exposure, periodically.
	<b>SMCS.32.g</b>	Imaging signage is prominently displayed in all appropriate locations.
	<b>SMCS.30.h</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff.
	<b>SMCS.32.i</b>	The department's leaders maintain records on staff radiation exposure for the last year.
	<b>SMCS.32.j</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff
	<b>SMCS.32.k</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff
	<b>SMCS.32.l</b>	Radiology department leaders maintain records on staff radiation exposure for the last year.
	<b>SMCS.32.m</b>	Radiology department leaders ensure that all staff are aware about the safety program.
	<b>SMCS.32.n</b>	There is a regular audit to monitor the implementation of the safety program.

### **QRM.3 The hospital has an incident reporting and learning system.**

**Guidance** Incident reporting system is a learning system to improve safety, and to achieve sustainable reductions and elimination in risks. Healthcare staff should feel safe and protected from blame to be able to report incidents. They should be involved in follow-up investigations and improvement of hospital's incidents. This standard aims to have a standardized incident reporting system to promote safety culture and to learn from incidents and not to repeat them.

<b>Measures:</b>	<b>QRM.3.a</b>	There is a clear policy for reporting incidents including all adverse events, sentinel events and near misses.
	<b>QRM.3.b</b>	The hospital employees are educated on identification, management and reporting of incidents at regular basis.
	<b>QRM.3.c</b>	A documented policy is available and accessible to all employees. The policy includes, but not limited to event types, response time, roles and responsibilities of quality department and departmental quality teams,
	<b>QRM.3.d</b>	Incidents are reported and investigated in a timely manner.
	<b>QRM.3.e</b>	Incidents' reports with improvement plans and achievements are provided to the leadership team quarterly.
	<b>QRM.3.f</b>	Incidents are monitored regularly, and information is used for improvement.
	<b>QRM.3.g</b>	Learning lessons from adverse events are disseminated to employees.
	<b>QRM.3.h</b>	Root-cause-analysis is used to analyze sentinel events, medication errors and as required.
	<b>QRM.3.i</b>	Sentinel events are defined and documented in the policy.
	<b>QRM.3.j</b>	Sentinel events are discussed in the mortality and morbidity committee.
	<b>QRM.3.k</b>	Patients affected by the incident are informed about the adverse event as per disclosure policy.

### **QRM.11 The hospital has a risk management system.**

**Guidance** Risk reduction has always been the pillar in providing safe service. All activities in the health care system may involve potential risks that may affect the service and the well-being of people. Managing these risks is the most effective approach in achieving this goal. This standard aims in controlling threats, mitigate risks and continue improving hospital services and operations.

<b>Measures:</b>	<b>QRM11.a</b>	Hospital has qualified risk manager with clear roles and responsibilities, with designated focal points in all hospital departments.
	<b>QRM11.b</b>	The hospital develops a risk management program and framework.
	<b>QRM11.c</b>	The hospital leadership defines objectives of the risk management program and scope and responsibilities of the employees responsible for the program.

**QRM11.d**

The hospital ensures that the hospital employees are oriented on their roles and responsibilities toward risk management program activities.

**QRM11.e**

The risk management program is responsible for analyzing, evaluation, and treatment of risks by:

**QRM11.d.1** Using reactive (e.g., root cause analysis) and proactive risk management and assessment tools (e.g., FMEA)

**QRM11.d.2.** The Risk score calculation is implemented.

**QRM11.d.3.** The Severity of the impact scoring is utilized.

**QRM11.d.4.** The Risk is prioritized according to risk score.

**QRM11.d.5.** The Evaluated risk is classified (risk is accepted or mitigated).

**QRM11.d.6.** The mitigation plan includes proposed action plan, resources requirements, responsible person for action plan and timeframe.

**QRM11.d.7.** Clear structure of activities.

**QRM11.d.8.** Sustain risk register.

**QRM11.f**

The Leaders of the clinical departments contribute to the risk management program, by developing, implementing activities that protects patients from potential risks.

**QRM11.g**

The hospital evaluates the effectiveness of the risk management program regularly and make action plans for improvement.

**QRM11.h**

The main areas of Risk management system activities are identified as follows:

1. Patient safety related risks.
2. Employees related risks.

**QRM11.i**

1. Hospital environment related risks.

The hospital recognizes opportunities driven from IRM activities through Sharing positive practices, providing awards of best department in RMS practices or safety culture and other innovative methods.

**QRM11.j**

The hospital sustains an ongoing training and awareness program for risk management system.

**IPC.15 The hospital implements an evidence-based hand hygiene practice.**

**Guidance** Common HAI includes bloodstream infections (BSI), catheter-associated urinary tract infections (CAUTI), and surgical site infections (SSI). The most common factor for the transmission of healthcare-associated infection (HAI) in the hospital is the healthcare staff's hands. According to WHO guidelines, healthcare workers should practice proper hand hygiene before touching the patient, after touching the patient, after touching inanimate objects in the patient's surroundings, after exposure to bodily fluids, and before clean/aseptic procedures. Monitoring of hand hygiene practice among healthcare is a key component in improving processes and compliance that should be conducted regularly. This standard aims to guide hospitals to have standardized constant practice on hand hygiene.

- Measures:**
- IPC.15.a** The hospital adopts and implements evidence-based hand hygiene guidelines.
  - IPC.15.b** Hospital implements effective standardized Hand Hygiene program with monitoring tools.
  - IPC.15.c** All hospital Staff are trained on proper hand hygiene techniques.
  - IPC.15.d** The hospital monitors hand hygiene practice and staff compliance to hand-hygiene guidelines throughout the hospital, and provides regular feedback and action plans for improvement.

**MMU.7 The hospital implements a process for safe management of high alert medications (HAMs).**

**Guidance** Since medication is the main part of the patient management plan, proper medication management is critical to ensure patient safety. While any type of medication if not utilized appropriately, may cause harm to patients, the high alert medication causes a higher risk due to their narrow therapeutic index, as small changes in dosage or blood drug levels can lead to adverse drug events which are life-threatening, permanent, or slowly reversible and can lead to disability or death. High alert medication may include medications that are in a high percentage of sentinel events such as heparin, chemotherapies, warfarin, concentrated electrolytes (e.g., concentrated potassium), Anesthesia drugs (e.g., thiopental, propofol, ketamine), Muscle relaxants, narcotics, Insulin, Chemotherapy, in addition to drugs identified from hospital data which cause frequent adverse events. The management process should include requesting, storage, location, labeling, dispensing, prescribing, administration, and monitoring of high-alert medications.

A list of high-alert medications should be identified and made available to all

staff Examples lists are available from Institute for Safe Medication Practices (ISMP) and the World Health Organization (WHO). The aim of this standard is to minimize the risks of harm resulting from high-alert medications.

<b>Measures:</b>	<b>MMU.7.a</b>	There is a policy and procedures to manage high- alert medications, which includes but is not limited to, the following: <ul style="list-style-type: none"> <li>• The list of all high alert medications,</li> <li>• Management of high alert medication,</li> <li>• Restricting access to high alert medications,</li> <li>• Standardizing the process of ordering, prescription, transcribing, preparation, dispensing,</li> <li>• Administering, and monitoring of high alert medication.</li> </ul> Labeling with identifiable color.
	<b>MMU.7.b</b>	There is training records on the policy.
	<b>MMU.7.c</b>	High alert medications are labeled with identifiable color.
	<b>MMU.7.d</b>	There is updated list of high alert medications and displayed in the pharmacy and all patient care areas.
	<b>MMU.7.e</b>	Access to high alert medications is restricted.
	<b>MMU.7.f</b>	The hospital keeps high concentrated electrolytes in a safe and secure place with special alert labels.
	<b>MMU.7.g</b>	The hospital ensures that high concentrated electrolytes, including potassium chloride, potassium phosphate and sodium chloride, are removed from inpatient care areas (unless patient conditions necessitates the immediate use.
	<b>MMU.7.h</b>	The hospital conducts regular audit following the concentrated electrolytes in patients' service areas.

**MMU.8 The hospital has a system for safe management of look-alike and sound-alike (LASA) medications.**

**Guidance** Medication names that look similar or sound similar have been identified as a potential source of error in healthcare systems. Medications in which packaging is visually similar to another product comes in the category of look-alikes. Medications for which generic or trade names of the product sound similar in the spoken or written words are categorized as sound-alike drugs. Look-alike and sound-alike drug names can lead to the unintended interchange of drugs that can result in patient injury or death. The World Health Organization has identified confusing drug names (Sound Alike) as one of the most common causes of medication error.<sup>6</sup> It has been recognized that confusion, and therefore error, is more likely if medicines appear in the same context or if drugs are being selected from a drop-down list. This standard aims to reduce the risks of harm resulting from LASA medications.

<b>Measures:</b>	<b>MMU.8.a</b>	The hospital has a policy and procedure for safe handling and management of LASA medications.
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<b>MMU.8.b</b>	LASA medications are stored and labeled physically separate from their LASA pairs in all storage areas.
<b>MMU.8.c</b>	LASA medications are prescribed by their generic names.
<b>MMU.8.d</b>	Tall-man lettering is used in the hospital to identify sound alike medications.
<b>MMU.8.e</b>	LASA medications are placed separated from each other and are placed in non-alphabetical order.
<b>MMU.8.f</b>	The hospital adopts specific labels to recognize LASA medications.
<b>MMU.8.g</b>	The hospital has a system for selection and procurement of LASA medications.
<b>MMU.8.h</b>	There is evidence of counter check prior to dispensing and administration of LASA medications.
<b>MMU.8.i</b>	The hospital has a process for monitoring, identifying and reporting significant medication errors that are related to LASA medications.
<b>MMU.8.J</b>	The hospital provides education on LASA medications to all healthcare professionals as a part of orientation and continuing education.
<b>MMU.8.K</b>	Hospital conducts regular audit to ensure proper compliance to management of LASA medications.

**MMU.39 The hospital has a system for detecting, reporting, analyzing and monitoring significant medication errors, including near misses.**

Medication errors detection through management and effective reporting system discloses medication errors and encourages safe practices. Therefore, it is very important to improve patient safety through determining and reducing the major causes of Medication Errors (MEs) by applying preventive strategies. The hospital has a policy and procedure on how to deal with medication errors, incidents and near misses. There should be a regular schedule for investigating and reviewing medication errors, incidents and near misses by a designated member of staff or committee. A clear reporting system and documentation of these errors should be available in the hospital. The reports must be analyzed properly and feedback should be provided for all the staff. The purpose of the standard is to develop a system for detecting, reporting, analyzing and monitoring significant medication errors, including near misses.

<b>Measures:</b>	<b>MMU.39.a</b>	There is policies and procedures for detecting, reporting, analyzing and monitoring significant medication errors.
	<b>MMU.39.b</b>	The hospital has a medication safety committee to monitor, manage, analyze, reduce medication error and improve medication safety.
	<b>MMU.39.c</b>	The treating physician is informed about the error at appropriate



	time.
<b>MMU.39.d</b>	The affected patients by ADRs have to receive timely appropriate intervention.
<b>MMU.39.e</b>	There is a standard format for reporting medication errors.
<b>MMU.39.f</b>	There is a system for proper documentation of the reported medication errors.
<b>MMU.39.g</b>	There is a system to conduct root cause analysis for significant medication errors.
<b>MMU.39.h</b>	There is a standardized system to use the reports to improve medication use process and reduce future errors.
<b>MMU.39.i</b>	There is a system to provide healthcare professionals with feedback on medication error reports.
<b>MMU.39.j</b>	All concerned staff are compliant with medication reporting system.
<b>MMU.39.k</b>	There is a continuing education program for all healthcare professionals in medication safety issues.
<b>MMU.39.l</b>	There is a designated trained pharmacist to oversee medication safety program implementation.

**FMS.9** The hospital has an alternative source of energy (emergency power system), to run all critical hospital facilities in case of main power interruption.

**Guidance** An emergency power system is an independent source of electrical power that supports important electrical systems on loss of normal power supply. A standby power system may include a standby generator, batteries, and others. The aim of this standard is to protect patients' life, and medical equipment from the consequences of loss of primary electric power supply.

<b>Measures:</b>	<b>FMS.9.a</b>	The electrical distribution system, including the essential electrical system, are compliant with 2012 editions of NFPA 101, NFPA 99 along with their referenced codes & standards, as required by CMS.
	<b>FMS.9.b</b>	There is developed program for the inspection, testing, and maintenance of electrical distribution system components and emergency power system in healthcare facilities.
	<b>FMS.9.c</b>	The emergency power system is connected to all key areas of the hospital, including the operating room, intensive care unit, laboratories, refrigerators, elevators, alarms, medical gas systems, fire pumps, escape routes, exit signs, communication systems, elevators, and automatic doors.



<b>FMS.9.d</b>	There is an integrated hazard vulnerability analysis into management of the electrical distribution system and emergency power system.
<b>FMS.9.e</b>	Electrical system shutdowns are planned and scheduled for maintenance, repair, and construction.
<b>FMS.9.f</b>	There is monthly documentation of emergency power testing results on station load for thirty minutes.
<b>FMS.9.g</b>	All of the critical system, equipment, devices in the critical area are connected to the emergency power system

### **FMS.10 The hospital has fire emergency plans within the premise.**

**Guidance** A fire safety is mandated in all buildings. Considering healthcare system as 24/7 fully occupied with people, therefore, fire safety is likewise imperative and an essential element in hospitals. Fire safety program and plan has to be well implemented and monitored in the hospitals to keep all people safe and secured from fire hazards. The aim of the standards is to have a fire safety program which is implemented and monitored in hospitals.

<b>Measures:</b>	<b>FMS.10.a</b>	<p>The hospital has plans and provisions for early detection, abatement and containment of fire and non-fire emergencies.</p> <ul style="list-style-type: none"> <li>• Fire alarm systems are tested and maintained.</li> <li>• Firefighting systems are tested and maintained.</li> <li>• Maintain the fire exit clear of any obstructions and easy to access.</li> </ul>
	<b>FMS.10.b</b>	There is a preventive and corrective maintenance program for fire alarm system and the results are documented.
	<b>FMS.10.c</b>	There is a clear fire evacuation plan in each department, which is known and oriented by patients, families and staff.
	<b>FMS.10.d</b>	A fire exit sign is clearly displayed in each route provides an exit.
	<b>FMS.10.e</b>	All staff are trained on fire safety, and evacuation plans.
	<b>FMS.10.f</b>	Mock drills are held at least twice a year and records are available.
	<b>FMS.10.g</b>	There is a maintenance plan for fire-related equipment & infrastructure where the hospital adheres.

**FMS.11 The hospital has a medical gas system, vacuum, and compressed air with preventive and corrective proper maintenance.**

**Guidance** Patient safety is of paramount importance in the design, installation, commissioning, and operation of medical gas pipeline systems (MGPS). The system has to be operational round the clock, with practically zero downtime and its failure can be fatal if not restored at the earliest.

<b>Measures:</b>	<b>FMS.11.a</b>	There is a Documented procedure governing obtaining, handling, storage, distribution, usage and replenishment of medical gases.
		<ol style="list-style-type: none"> <li>1. Uniform color-coding system is followed.</li> <li>2. Proper signage is kept for used, full, empty cylinders.               <ul style="list-style-type: none"> <li>• Different types of the gases are properly identified.</li> </ul> </li> </ol>
	<b>FMS.11.b</b>	There is a clear procedure that ensures effective use of the medical gas system. Areas covered include, but are not limited to, the procedure for ordering and filling liquid oxygen, documenting all repairs/alterations/tests/filling logs/consumption, etc.
	<b>FMS.11.c</b>	Alternate sources for medical gases, vacuum and compressed air are provided for in case of failure. This may include: <ol style="list-style-type: none"> <li>1. Stand by air compressor and vacuum pump unit.             <ul style="list-style-type: none"> <li>• Stand by gas manifold/bulk cylinders.</li> </ul> </li> </ol>
	<b>FMS.11.d</b>	Emergency shut off valves are available in all units and are clearly marked with areas/ rooms affected.
	<b>FMS.11.e</b>	There is an operational, inspection, testing and maintenance plan for piped medical gas, compressed air and vacuum installation.
	<b>FMS.11.f</b>	A well-trained staff takes the responsibility of the closure of shut off valves, and well-trained individual available in the concerned unit.
	<b>FMS.11.g</b>	The procedures for medical gases address the safety issues at all levels. <ol style="list-style-type: none"> <li>1. Monitoring of plant alarm unit for gas pressure going beyond the set limit.</li> <li>2. There is enough liquid oxygen in the Vacuum Insulated Evaporator (VIE) to last at least seven days             <ul style="list-style-type: none"> <li>• There are backup banks if gas pressure in VIE take beyond the limit.</li> </ul> </li> </ol>

#### *Chapter 4: Specialized Medical Care Services (SMCS)*

Hospitals differ in the care and services provided depending on the size, specialties and population served. Hence, there are various services required to be provided in majority of hospitals in collaboration with other clinical care services. This chapter covers standards that are essential to guide the clinical care starting from general basic care services going to highly specialized care services. Those standards play a pivotal role in the outcome of patients' care and maximize patient satisfaction about the care provided.

The different sets of standards covered in this chapter cover:

- Provision of Care Services
- Diagnostic Laboratory Services (DLS)
- Diagnostic Imaging Services (RD)
- Emergency Department Services (EDS)
- Nursing Services
- Operation Theatre
- Anaesthesia Care (AN)
- Critical Care Services
- Neonatal Intensive Care Unit (NICU)
- Burn Care Unit
- Obstetrics and Gynaecology
- Support Services: Respiratory Services, Medical Rehabilitation Service, & Dietary & Nutrition Service
- Respiratory Services
- Medical Rehabilitation and Physiotherapy Service
- Nutrition and Dietary Services

## Provision of Care Services

Providing quality of patient care requires proper planning, communication, coordination and documentation. The hospital must have an effective registration system provided with comprehensive assessment tools based on the institutional scope of practice to ensure the best possible outcome for the patient. As the care process, a collaborative process should be in place between multidisciplinary team to promote continuity and coordination of care when the patient is admitted, referred, transferred, or discharged. To support continuity of care, patient assessment and all care provided to patient must be clearly documented in a complete medical record for the patient. This section provides unique standards that should be implemented effectively in order to facilitate patient' care process and deliver reliable information to the patient and his/her family about their care and institution.

**SMCS.1** The hospital displays information to patients and families on services provided.

**Guidance** One of the basic rights of a patient is to be informed about services provided by the hospital, and types of care and treatments options provided; while he/ she is undergoing treatment. Patients should be informed about the services provided by the hospital.

**Measures:**

<b>SMCS.1.a</b>	The hospital uses a variety of methods to display information, such as posters, brochures, media, MOH portals, or websites, with methods of how to access its services.
<b>SMCS.1.b</b>	All hospital staff are oriented to these services, mainly the staff in reception, outpatient department, and in-patient departments.
<b>SMCS.1.c</b>	The hospital uses appropriate language and format to provide information about its services to patients, families, and community.

**SMCS.2** The hospital implements a mechanism to ensure the provision of a unified standard of care to patients.

**Guidance** The healthcare providers must treat patients regardless of their religion, race,

literacy level, language, and or economic class in all hospital areas. Moreover, they are expected to treat patients equally without discrimination and implement standardized medical care, as per their clinical condition requirement. To ensure this, hospitals have to create clear policies and procedures that support this practice.

<b>Measures:</b>	<b>SMCS.2.a</b>	Patient's care is provided according to the policies, laws and regulations.
	<b>SMCS.2.b</b>	Department leaders ensure that all patients receive the same standards of care throughout the hospital departments, all the time (during the morning, afternoon, or night, working hours, or off-hours, regardless of their race, gender, or religion and whether they can pay or not.
	<b>SMCS.2.c</b>	Every patient has an individualized care plan based on their initial assessment and reassessment.
	<b>SMCS.2.d</b>	Each patient attending in-patient or outpatient services receives awareness about their rights and responsibilities.
	<b>SMCS.2.e</b>	The hospital designs and carries out processes to provide continuity of patient care services in the hospital and coordination among health care providers.
	<b>SMCS.2.f</b>	The hospital has qualified professionals responsible for the patient's care during all phases of in-patient care.

**SMCS.3**      **The hospital has a standardized method for registration and admission of patients within its scope of services that meet patients' health needs.**

**Guidance**      From patient experience, admission to the hospital as an inpatient is a major event, regardless of this admission being an emergency or for regular service or from a waiting list. For this reason, the hospital should ensure patients' health needs are delivered in a timely manner on admission, whether is a routine admission, or emergency admission. The hospital is obligated to have clear guidance on the admission of patients, ensure all staff is well familiar with their roles and responsibilities in implementing these policies.

<b>Measures:</b>	<b>SMCS.3.a</b>	The hospital has clear policy and procedures describing the process used for admission in various departments, including but not limited to: <ul style="list-style-type: none"> <li>• Roles and responsibilities of each department involved in the admission process.</li> <li>• Elective admissions and patients admitted.</li> <li>• Emergency room.</li> <li>• Day care admission.</li> <li>• Registration of outpatient.</li> <li>• Process for managing patients requiring admission in case of unavailability of beds.</li> <li>• Pathway of admission procedure.</li> </ul>
	<b>SMCS.3.b</b>	All staff are oriented about the standardized process of admission of patients to various hospital settings.
	<b>SMCS.3.c</b>	Each patient has a unique registration identification number through the process of admission.
	<b>SMCS.3.d</b>	Patients are accepted only if the hospital can provide the services.
	<b>SMCS.3.e</b>	Hospital department leaders conduct monitoring audits to assess staff compliance to policies and procedures.
	<b>SMCS.3.f</b>	The staff are oriented to the admission policy and procedure to ensure a consistent admission process in the hospital units/department.
	<b>SMCS.3.g</b>	Each department has an admission criterion designed for their scope of service.
	<b>SMCS.3.h</b>	There is regular audit conducted to monitor compliance admission process by healthcare staff to ensure standardized practice.

#### **SMCS.4 The hospital has clear mechanism for patients transfer.**

**Guidance** The inter or intrahospital transfer process is one of the important aspects of patient care towards high quality and optimum patient safety. The main is to maintain continuity of patient medical/ surgical care in an efficient, effective, and on time. All hospital department leaders must ensure that patients receive the same standard of care when moved from one unit to another within the hospital or to another healthcare facility.

<b>Measures:</b>	<b>SMCS.4.a</b>	The hospital has a documented transfer policy of patients' intra and inter hospital.
	<b>SMCS.4.b</b>	The Hospital staff are oriented about the transfer process.

<b>SMCS.4.c</b>	The hospital leaders and staff are responsible to provide detailed information on patient medical and nursing assessments, the reason for the transfer, clinical findings, medication use, and all related information.
<b>SMCS.4.d</b>	There is a unified checklist is recommended to structure the transfer process and mitigate risks to the patients.
<b>SMCS.4.e</b>	The staff responsible to receive the patient in the receiving unit is responsible to assess the patient's condition on arrival, to ensure patient safety and transfer to appropriate service.
<b>SMCS.4.f</b>	The hospital monitors the compliance of the healthcare staff with the transfer policy to ensure standardized practice.
<b>SMCS.5</b>	<b>The hospital has a clear process for assessment of patients throughout care process.</b>
<b>Guidance</b>	At the time of admission, the staff should obtain the patient's past medical, surgical, and psychological history, examination including vital signs, physical assessment, and drug allergies. Moreover, the nutritional status of the patient, mobility, ability to perform daily activities is measured during the assessment. The patient's initial assessment can be completed within a defined time frame and within 6-12 hours of admission, followed by a sequence of reassessments to ensure proper continuity of care provided. There is a critical need for accurate patient assessment to view patients holistically and identify their individualized needs to implement the right care plan. Hospitals are required to have a unified policy on patient assessment and to orient the staff on the implementation.
<b>Measures:</b>	<div><b>SMCS.5.a</b></div> <div>Hospital has clear policies and procedures for patients' physical assessment and re-assessment, time frame for completion of the initial assessment process and the frequency of reassessment, content of assessment in different care setting such as:</div> <div>Inpatient assessment.</div> <div>Outpatient assessment.</div> <div>Critical care assessment.</div> <div>Emergency assessment.</div> <div><b>SMCS.5.b</b></div> <div>The policy and procedures define the scope and content of assessment by each discipline such as physicians, nurses, social services and dietitians, and other service providers.</div> <div><b>SMCS.5.c</b></div> <div>The hospital ensures training is conducted for the concerned staff to follow policies and procedures of proper assessment.</div> <div><b>SMCS.5.d</b></div> <div>The assessment includes discharge planning, the type of diagnostic testing required, and priorities of the level of care required.</div>



<b>SMCS.5.e</b>	The is evidence to ensure all patients are reassessed at appropriate intervals as per the policy, to determine response to treatment, detect complications or adverse reactions, compliance to treatment, to plan the further continuation of treatment or change accordingly.
<b>SMCS.5.f</b>	<p>The hospital uses standardized assessments tools:</p> <ul style="list-style-type: none"> <li>• Pain score</li> <li>• Fall risk/score</li> <li>• Nutritional assessment</li> <li>• Physical assessments</li> <li>• Skin assessment</li> </ul>
<b>SMCS.5.g</b>	Patients are being reassessed to confirm effectiveness of care plans, patient response to treatment, patient compliance with treatment, plan continuation of treatment etc.
<b>SMCS.5.h</b>	Documentation of patient's care plan is maintained in electronic medical records.
<b>SMCS.5.i</b>	Each department head conducts regular monitoring to ensure staff compliance to their concerned policy and procedures.

**SMCS.6**

**The hospital uses evidence-based clinical practice guidelines to guide care for patients as applicable, in various clinical specialties.**

**Guidance**

Evidence-based is held as the gold standard in the provision of patient care. It is the conscientious use of current best evidence in making decisions about the care of individual patients or the delivery of health services. High quality, evidence-based clinical practice guidelines are considered vital part of quality medical practice and they offer a way of bridging the gap between policy, best practice, and local practice. Guidelines are intended to improve effectiveness and quality of care, decrease variation in clinical practice and reduce the chance of harm to patients. This standard aims to guide the right utilization of updated clinical guidelines.

**Measures:**

<b>SMCS.6.a</b>	The Hospital has clinical practice guidelines, protocols, pathways that are developed as per evidence- based medicine.
<b>SMCS.6.b</b>	These guidelines are used to guide healthcare providers in making appropriate clinical decisions.
<b>SMCS.6.c</b>	These guidelines are updated every 2-3 years or earlier as required.
<b>SMCS.6.d</b>	The department monitors compliance with guidelines to ensure the staff are following the clinical practice guidelines.

**SMCS.7 The hospital has a process to identify and deal with patients requiring urgent or emergent care.**

**Guidance** Patients with major illnesses, traumatic injury, or any other conditions require immediate intervention treatment. Hospital staff including physicians, nurses, and other healthcare providers should follow specific procedures to assess, identify, and provide the care required on time. This standard aims to have a standardized system for managing patients requiring emergent care.

- Measures:**
- |                 |   |
|-----------------|---|
| <b>SMCS.7.a</b> | Hospital has clear written guideline to identify and manage patients who are on need for urgent or emergent care.   |
|                 | Hospital has clear pathways of management life threatening conditions, including but not limited to: <ul style="list-style-type: none"> <li>• Stroke.</li> <li>• Poisoning</li> <li>• VTE</li> <li>• Trauma.</li> <li>• Any arising emergent conditions.</li> </ul> |
| <b>SMCS.7.b</b> | Staff are trained on process of determining the severity of patient's condition and handling patients as per the written guidelines.  |
| <b>SMCS.7.c</b> | The hospital ensures appropriate timely care is provided for emergent cases.  |
| <b>SMCS.7.d</b> | There is always regular process of monitoring the process to ensure proper implantation and follow up.  |

**SMCS.8 The hospital has a process to obtain informed consent before any procedure requiring informed consent.**

**Guidance** Informed consent creates trust between physician and patient by ensuring understanding of the intended procedure. With excellent communication about risks and options, patients can decide on selecting the best options for them. In addition, it provides legal protection for healthcare providers.

- Measures:**
- |                 |   |
|-----------------|---|
| <b>SMCS.8.a</b> | The hospital has a policy for obtaining informed consent from a patient or his/ her legal representative before starting invasive or high-risk procedures or treatment. The policy includes explanations of the nature of the procedures/ treatment, benefits, or expected harms. |
|-----------------|---|

**SMCS.8.b**

The hospital identifies the list of procedures require informed consent, including, but are not limited to:

- All the invasive procedures
- All surgical procedures
- High risk procedures/ treatments
- Blood transfusions
- Organ transplantation
- CT scan with contrast
- Endoscopy
- Biopsy
- MRI

**SMCS.8.c**

The Hospital has evidence of training records for staff on the informed consent policy.

**SMCS.8.d**

The informed consent is available and easily accessible to all staff.

**SMCS.8.e**

Informed consent can only be obtained by the physician conducting the procedure or/and surgery.

**SMCS.8.f**

There is evidence that if a patient is unable to give informed consent (e.g., minors or mentally incompetent patients), consent should be filled by patient's next of kin or guardian.

**SMCS.8.g**

The Hospital has a regular process to measuring the compliance to the policy.

**SMCS.9**

**The hospital has a process to meet the needs of terminally ill patients and end of life care.**

**Guidance**

The goal of care during the last hours and days of life is to ensure comfort and dignity. Therefore, palliative care provides a level of comfort to patients. Responding to the patient's pain is a major concern, and supporting patients and their families psychologically, emotionally, spiritually, and culturally is recommended. This standard aims to have a standardized process followed to promote comfort, maintain dignity, and provide social and spiritual support to dying patients.

**Measures:****SMCS.9.a**

The hospital has clear guide on providing effective care for terminally ill patients such as pain management and other symptoms.

**SMCS.9.b**

The Hospital staff are well oriented on the end-of-life care guide.

**SMCS.9.c**

The hospital staff assesses and attend patients' specific needs such as pain management, feeding, skin care, turning, etc.

	<p><b>SMCS.9.d</b> The hospital staff responds to the individual needs of terminally ill patients, such as physical, psychological, spiritual, and cultural needs.</p> <p><b>SMCS.9.e</b> The hospital staff educates and involves family members on the care decision.</p> <p><b>SMCS.9.f</b> The team follows right process to transfer patient to another hospital if hospital is unable to provide palliative care service to a patient.</p> <p><b>SMCS.9.g</b> There is regular monitoring audit to assess staff compliance to the guide and to assess the effectiveness of the implemented process.</p>
<b>SMCS. 10</b>	<b>Hospital has a mechanism to guide the management of patients with mental/psychiatric problems.</b>
<b>Guidance</b>	Suicide is a growing public health problem all over the world. Although the rate of self-injurious behaviour is low in Oman, compared with other countries, including other Islamic countries, the data shows a rising rate and a tendency to ingest a toxic dose of analgesics e.g. Paracetamol or non-pharmaceutical chemicals. This standard aims to reduce the chance of harm to self or other patients and provide a safe environment during hospitalization.
<b>Measures:</b>	<p><b>SMCS.10.a</b> The Hospital has clear policies to guide on identifying and assessing patients vulnerable to harm self, or others including patients with psychiatric issues such as:</p> <ul style="list-style-type: none"> <li>• Management of patients who is high risk for suicide</li> <li>• Management of violent patients</li> <li>• Management of patients with restraints</li> <li>• Management of patients with psychosis, who need seclusion, ECT.</li> </ul> <p><b>SMCS.10.b</b> The Hospital staff are oriented to these policies.</p> <p><b>SMCS.10.c</b> Referral is made to the hospital providing specific management in case of unavailability of the services required.</p> <p><b>SMCS.10.d</b> There is regular audit performed to assess compliance to these policies.</p>
<b>SMCS.11</b>	<b>The hospital has a process to coordinate patient care among healthcare teams.</b>
<b>Guidance</b>	The patient care process is dynamic and involves various health care providers in multiple care settings, departments, and services. The coordination of patient care results in an efficient care process, more effective use of human and other

resources, and better patient outcomes. Patient care coordination is assessing the care team with setting goals for quality assurance and best practice. Additionally, it monitors adherence to care plans, evaluates effectiveness, monitors patient progress promptly, and facilitates change as needed.

**Measures:****SMCS.11.a**

The Hospital has a system to facilitate the continuity of a coordinated provision of care to patients.

**SMCS.11.b**

The system includes patient's medical records that allow sharing information of patients' care and treatment between authorized multidisciplinary team, including medical, nursing, and all other health care providers.

**SMCS.11.c**

Department leaders ensure that there is complete documentation of care progression of patients and length of stay, effectiveness, and evidence for improvement.

**SMCS. 12**

**The hospital has a clear policy to assess, reassess and manage patients with pain.**

**Guidance**

Pain is an unpleasant sensory and emotional experience that is associated with tissue damage. Pain causes discomfort and can disturb the patient psychologically, which affects the healing process. Ineffective management of patient pain can lead to adverse physical and psychological outcomes for patients and their families.

Hospitals need to implement a structured process to manage patients' pain. Staff training and monitoring on methods of pain assessment and management are one of the strategies to ensure proper implementation of the pain management process, to promote patient comfort and fast healing. This standard aims to ensure there is an effective implemented pain assessment and management process to promote patient comfort.

**Measure****SMCS.12.a**

The Hospital has clear policy and procedures of pain management, which clearly defines the need for comprehensive pain assessment, reassessment, and management.

**SMCS.12.b**

The hospital considers patient pain management as basic patient right.

**SMCS.12.c**

The policy includes process of assessing pain intensity, frequency, location, duration, and type.

**SMCS.12.d**

The Hospital's staff are trained on their role in pain assessment, reassessment, and management.

**SMCS.12.e**

There is evidence of pain assessment based on validated pain assessment scale

<b>SMCS.12.f</b>	The staff conducts pain assessment, and document it frequently as planned for patients, including pain history (site, radiation, intensity, character etc.)
<b>SMCS.12.g</b>	The pain scoring should is done before giving pain medication, and at regular intervals post dosing (e.g., Pain scale-numeric rating system, Wong-Baker FACES pain rating scale).
<b>SMCS.12.h</b>	Planning for pain management is done prior to surgery or any painful intervention/procedure.
<b>SMCS.12.i</b>	The pain management is based on patient's condition, using different pharmacologic and non-therapeutic methods.
<b>SMCS.12.j</b>	Department leaders conduct regular audits to assess staff compliance to the policy.

**SMCS. 13****The hospital implements a systematic patient discharge process.****Guidance**

The process of discharging patients from hospitals is characterized by a variety of patients' circumstances and needs. Nearly 20% of patients experience adverse events within 30 days of discharge. Common post-discharge complications include adverse drug events, hospital-acquired infections, and procedure complications. Many of these can be attributed to inadequate preparation for patient and family related to medication, danger signs or lifestyle changes disconnect between clinician information giving and patient understanding, miscommunication between inpatient and outpatient providers. Involving patients and families in discharge planning can improve patient outcomes, reduce unplanned readmission and increase patient satisfaction. Preparation for discharge occurs throughout the hospitalization through ongoing monitoring of patient progress against expectations for recovery, identification of post-discharge needs, patient teaching, and communication with other providers, and documentation of the preparatory processes

Preparing the patient and family for a successful discharge is evidenced by their ability to manage continuing care needs at home and in community-based settings without recurring need for acute or emergent care services. This standard aims to prepare the patient and the family for discharge as early as possible.

**Measure**

<b>SMCS.13.a</b>	The Hospital has a documented discharge planning policy/guide
<b>SMCS.13.b</b>	The Hospital ensures the staff are aware about the discharge planning policy.
<b>SMCS.13.c</b>	The patient discharge planning starts as early time as the admission time.

<b>SMCS.13.d</b>	Patients and the family are involved in the discharge process.
<b>SMCS.13.e</b>	The process includes at least one meeting between the patient, family, and discharge planner to help the patient to be prepared for discharge. The meeting addresses patients' needs after discharge to prevent possible risks at home
<b>SMCS.13.f</b>	The staff coordinate with other health care institutions as appropriate to patients' needs.
<b>SMCS.13.g</b>	There is a discharge summary prepared for all inpatients before they leave the hospital, with clear documentation
<b>SMCS.13.h</b>	Department leaders conduct regular audit to assess compliance with the policy.

#### **SMCS.14 Hospital identifies and manages patients at risk of developing venous thromboembolism (VTE). (CSS.7)**

**Guidance** Venous thrombosis (VTE) refers to the collective term of deep vein thrombosis (DVT), pulmonary embolism (PE), which is a very serious common complication that might occur in patients undergoing surgery, trauma, immobilization, malignancy. DVT and PE is a common complication on postsurgical patients that do not receive prophylactic treatment. It is important to take the appropriate preventive measures for all hospital's patients and to determine which of them warrant additional prophylaxis. The decision to initiate DVT prophylaxis should be based on the patient's risk of thromboembolism and bleeding, and the balance of benefits versus harms. This standard aims to reduce the risk of developing DVT and prevent its complications.

<b>Measure</b>	<b>SMCS.14.a</b>	Hospital has an updated written thrombo prophylaxis guideline or policy to screen patients for the risk of developing VTE.
	<b>SMCS.14.b</b>	The guidelines are periodically updated as per evidence-based practice
	<b>SMCS.14.c</b>	The guidelines are made available and easily accessible in all departments and staff are well oriented to the guidelines.
	<b>SMCS.14.d</b>	The treating team follows the guideline to identify patients at risk to develop DVT, pulmonary embolism (PE), and implement applicable prophylaxis.
	<b>SMCS.14.e</b>	The hospital establishes measures to audit implementations of appropriate thromboprophylaxis to ensure all at-risk patients, are identified and managed according to the current guidelines.



**SMCS.14.f** The concerned healthcare worker provides health education to patients about the risk of VTE medication use measures to prevent it, and any relevant and needed information.

**SMCS.14.g** The guidelines are made available and easily accessible in all departments and staff are well oriented to the guidelines.

**SMCS.15 The hospital implements a standardized process of patient identification throughout the hospital.(CSS.3)**

**Guidance** Correct patient identification is an essential element in the care processes, as there could be significant consequences if an error occurs. It is a key element in reducing adverse events and enhancing patient safety. The success of all treatment activities within the hospital depends on ensuring that the correct patient identity has been confirmed. The confirmation process to be known and compliant to by all healthcare workers and to be implemented throughout the hospital. Patient identifiers be used throughout the patients' touch points during hospital stay, including emergency room, operation room, outpatient department, diagnostic department, etc. This standard aims to guide the implementation of a standardized process of patient identification to ensure safe care is provided to patients.

**Measures:**

- SMCS.15.a** The hospital has a clear standardized policy of patient identification that covers main identifiers (full name, date of birth, unique hospital identification number), ID wrist band, patient photo identification.
- SMCS.15.b** All hospital staff oriented on the policy and its procedures.
- SMCS.15.c** Patient's identification used before performing any procedure.
- SMCS.15.d** Hospital staff actively involves patient in the confirmation process.
- SMCS.15.e** The hospital conducts regular audit to ensure compliance to the policy.

**SMCS.16 The hospital implements an effective process for timely reporting of urgent**

**critical diagnostic results (CSS.5).**

**Guidance** Delay or failure to receive a laboratory or medical imaging test results poses patient-safety risks which threaten the effectiveness, quality, and safety of patient care. These diagnostic tests can be a laboratory, radiology exam, ultrasound, magnetic resonance imaging, CT scan, nuclear medicine, cardiac exam, etc. Results that are significantly beyond the normal value are considered critical and life-threatening issues. Therefore, having a system that clearly describes how critical results are communicated to the treating team will reduce the risks to patients. This standard aims to have a standardized process of reporting critical to improve patient safety through immediate patient care management and eliminate harm to patient due to delayed or missed critical care and intervention.

<b>Measures:</b>	<b>SMCS.16.a</b>	The hospital implements a policy for reporting abnormal critical diagnostic test results
	<b>SMCS.16.b</b>	The hospital describes the critical values for each diagnostic test.
	<b>SMCS.16.c</b>	The hospital implements a standardized process to ensure immediate and accurate critical results reporting and receiving , describing precisely the first liners (the reporter and the receiver ) of the critical results and alternatives in case first liners are not available , aiming to immediate care management to given to the patients .
	<b>SMCS.16.d</b>	All concerned staff are oriented on the policy.
	<b>SMCS.16.e</b>	The hospital monitors the implementation of reporting process, ensuring information are documented in patients' medical records.

**Diagnostic Laboratory Services (DLS)**

Laboratory services are an essential component of quality healthcare delivery at every level of the healthcare system. Laboratory services are required to support clinical diagnosis, rationalize and monitor treatment/therapy, for the screening for epidemiological purposes, surveillance and control of diseases of public health importance, and to provide early warning of disease outbreaks. To meet the patient needs, the hospital should provide appropriate laboratory services required by its patient population, clinical services offered, and healthcare workers needs. The laboratory services are organized and provided in a manner that meets applicable local and national standards, laws, and regulations. The section highlights safety standards that are highly recommended throughout laboratory service includes efficient operational system and competent healthcare professionals.

**SMCS.17** The hospital has laboratory services that are applicable to national laws and regulations, to meet patient needs.

**Guidance** A clinical or medical laboratory is a place where clinical specimens are tested. Hospitals need to provide laboratory services, such as clinical pathology, biochemistry, etc. The laboratory services need to be set and structured, organized and provided in a way that applies to the national standards, laws, and regulations.

**Measures:**

<b>SMCS.17.a</b>	The hospital has laboratory services that are under national standards, laws, and regulations.
<b>SMCS.17.b</b>	The laboratory services unit has a clear scope of services to meet the needs related to the hospital mission and patient populations, emergency needs, covering twenty- four hours a day, seven days a week.
<b>SMCS.17.c</b>	Essential, simple laboratory services are available twenty- four hours a day, seven days a week. This includes haematology services, biochemistry, and blood bank).
<b>SMCS.17.d</b>	When special diagnostic tests are not available, there is clear process for referral and follow up of diagnostic tests.

**SMCS.18** The laboratory has qualified, competent staff to provide the defined scope of services.

**Guidance** Medical laboratories vary in size, specialization level, and volume of delivered service. The efficiency of clinical laboratory services provided depend first on the competency of the staff appointed, along with structure, and resources. Hospital management should identify the education, qualification, experience, and competency of laboratory staff. This is essential to ensure they are competent in carrying out accurate testing and interpreting results on time. Moreover, the clinical laboratory services must be supervised and directed by a qualified, experienced professional, who has responsibility for the laboratory services provided in the laboratory, and outside the laboratory. This standard aim is to ensure that the laboratory services are provided and coordinated by qualified competent staff to ensure safe efficient practice.

<b>Measures</b>	<b>SMCS.18.a</b>	The director/head of the laboratory services is qualified by education, training and experience in the field
	<b>SMCS.18.b</b>	All laboratory staff are appropriately qualified (by education and training), and experienced to manage and perform tests and interpret results, according to the complexity of laboratory scope of services.
	<b>SMCS.18.c</b>	Laboratory has clear job description for each staff category
	<b>SMCS.18.d</b>	Staff with experience in the area manage different laboratory sections.
	<b>SMCS.18.e</b>	New laboratory personnel receive an orientation to the hospital and laboratory services.
	<b>SMCS.18.f</b>	All laboratory staff have the required education, training, qualifications, and experience to administer and perform the tests and interpret the results.
	<b>SMCS.18.g</b>	Laboratory uses appropriate competency assessment tools to assess staff performance.

**SMCS.19**

**The laboratory has an established comprehensive quality management system**

**(QMS)****Guidance**

The laboratory procedures and processes have a complexed and complex cycle (Path of Workflow). This cycle consists of 3 major stages; the pre-examination, the examination, and the post-examination stage. To ensure the accuracy and reliability of testing, the testing cycle must be protected from any errors in all stages. The quality management system should address all processes and procedures carried out in the cycle, including hospital, personnel, equipment, purchase and inventory, process control, information management, documents and records, occurrence management, assessment, process improvement, customer service facilities, and safety. All staff should be oriented on laboratory quality system.

This standard aims to have a standardized system to ensure a Quality Management System is developed and implemented in all laboratories to achieve good laboratory performance.

**Measures:**

- |                  |   |
|------------------|---|
| <b>SMCS.19.a</b> | The laboratory management has an established, documented, implemented and monitored quality management system manual.   |
| <b>SMCS.19.b</b> | The laboratory management has assigned a quality manager or a quality focal point with clear responsibilities and roles.                                      |
| <b>SMCS.19.c</b> | The quality management system is fulfilling the integration of all processes, policies, and objectives in the testing cycle and meets the needs of the users. |
| <b>SMCS.19.d</b> | Laboratory quality indicators are established and monitored.  |
| <b>SMCS.19.e</b> | All laboratory staff are oriented about the quality management system in the lab.   |
| <b>SMCS.19.f</b> | There is periodic audit conducted to assess compliance to policies related to quality management in the lab.  |
| <b>SMCS.19.g</b> | Non-conformance management system is followed with corrective action plan.  |

**SMCS.20**

**The laboratory has an implemented, health safety program.**

**Guidance**

The clinical laboratory is one of the most hazardous places to work in any health care setup. Laboratory personnel is exposed to numerous potential hazards including chemical, biological, physical, and radioactive hazards, as well as musculoskeletal stresses. These hazards can lead to serious accidents/incidents

causing injury, the transmission of infection, or even death. A laboratory health and safety program is important to protect the personnel, patients, facilities, and the environment.

This standard aims to ensure there are standardized, adequate, and effective health safety and security measures applied in the laboratories.

**Measures:**

<b>SMCS.20.a</b>	<p>The laboratory has an approved health and safety program, and infection control policies and procedures manuals that comply with the national laws and regulations. This includes but is not limited to:</p> <p><b>SMCS. 18.a.a</b> Laboratory health and safety measures including</p> <ul style="list-style-type: none"> <li>i. Standard Precautions.</li> <li>ii. Personal Protective Equipment (PPE)</li> <li>iii. Occupational Health &amp; Staff Immunization</li> <li>iv. Laboratory Signs and symbols</li> <li>v. Laboratory Visitors</li> <li>vi. House Keeping practices</li> </ul> <p><b>SMCS. 18.a.b</b> Biological safety.</p> <ul style="list-style-type: none"> <li>vii. Labeling, transporting, handling and storage of specimen</li> <li>viii. Handling of high-risk specimen</li> <li>ix. Biological spillage guideline</li> </ul> <p><b>SMCS. .18.ac</b> Chemical safety</p> <ul style="list-style-type: none"> <li>x. Procedure of handling chemicals</li> <li>xi. Hazardous chemicals</li> <li>xii. Storage of chemicals</li> <li>xiii. Chemical spillage guideline</li> </ul> <p><b>SMCS. .18.ad</b> Laboratory Equipment and machinery safety</p> <ul style="list-style-type: none"> <li>xiv. Guideline for proper use of laboratory equipment</li> </ul> <p><b>SMCS. .18.ae</b> Fire safety</p> <ul style="list-style-type: none"> <li>xv. Guidelines for fire safety</li> <li>xvi. Training for fire safety</li> </ul> <p><b>SMCS. .18.af</b> Disinfection and Sterilization safety</p> <p><b>SMCS. .18.ag</b> Guideline for handling, storage and disposal of waste</p>
<b>SMCS.20.b</b>	The laboratory has a health and safety officer with clear job roles and responsibilities.
<b>SMCS.20.c</b>	The laboratory has a risk management plan which addresses potential safety risks in the lab and other areas outside the laboratory where laboratory services are provided.

<b>SMCS.20.d</b>	The laboratory has a safety and security training plan, documented.
<b>SMCS.20.e</b>	The laboratory has an internal and external disaster plan.
<b>SMCS.20.f</b>	The laboratory dress code policy is implemented and monitored
<b>SMCS.20.g</b>	An updated detailed inventory of all hazardous material is available.
<b>SMCS.20.h</b>	Staff has received necessary vaccinations as per the requirement of performed tasks.
<b>SMCS.20.i</b>	Infectious and hazardous waste are handled, treated and disposed appropriately.
<b>SMCS.20.j</b>	All incident and injuries are addressed according to the protocols.
<b>SMCS.20.k</b>	There is regular audit plan to assess compliance to the safety program guidelines.

**SMCS.21**

**The laboratory has a suitable adequate workspace, services, to maintain a safe and appropriate working environment.**

**Guidance**

There shall be sufficient space available for staff to perform their duties comfortably, with adequate provision of lighting and with precautions taken to minimize noise. Laboratory accommodation and environmental conditions requirements depend on the nature of activity and types of samples to be tested. It may also be judged on how it affects staff competence in performing specific tests. Laboratory leadership should monitor and control environmental conditions: light, dust, hazardous fumes, ventilation, radiation, temperature, humidity, noise, vibration, water, energy source. This standard aims to ensure the laboratory has suitable accommodation and environmental conditions to perform the tasks and maintain safety and quality standards.

**Measures**

<b>SMCS.21.a</b>	The laboratory has standard working environment guidelines.
<b>SMCS.21.b</b>	<p>The hospital ensures there is adequate space allocated for the laboratory that provides:</p> <p><b>SMCS.19.b.1</b> Facilities for performing laboratory procedures and activities</p> <p><b>SMCS.19.b.2</b> Facilities for safe, and adequate storage space for reagents, materials,</p> <p><b>SMCS.19.b.3</b> Adequate patient waiting areas.</p>



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<b>SMCS.22.d</b>	The laboratory has an evaluation protocol for new reagents.
<b>SMCS.22.e</b>	The laboratory has an inventory system for reagents and consumables.
<b>SMCS.22.f</b>	The laboratory has procedures available for Malfunction/manufacturing defects of reagents and consumables.
<b>SMCS.22.g</b>	Safety Data Sheets are available for all applicable reagents.
<b>SMCS.22.h</b>	Laboratory has an audit system to ensure safety and functions of the reagents

**SMCS.23**

**The laboratory has a system for introducing, validating, and the management of equipment.**

**Guidance**

The proper management of laboratory equipment is necessary to ensure that the laboratory can fulfil the requirements of users. Having a specific system that introduces, validates, and monitors the laboratory's equipment is very essential and critical to ensuring that the equipment's use is reaching high-quality testing services. Moreover, proper management of the equipment will ensure accurate, reliable, and timely testing.

**Measures:**

<b>SMCS.23a</b>	Laboratory implements policies and procedures for equipment selection, specification, describing the methods of validation for its intended use
<b>SMCS.23.b</b>	Laboratory has a copy of all equipment maintenance contracts.
<b>SMCS.23.c</b>	Laboratory has an equipment's S.O.P
<b>SMCS.23.d</b>	There are clear procedures for the calibration of equipment with traceable certificates of calibrators.
<b>SMCS.23.e</b>	Laboratory has a procedure for the verification of equipment performance.
<b>SMCS.23.f</b>	Equipment is operated and maintained by trained and competent personnel.
<b>SMCS.23.g</b>	Equipment Log books are maintained.
<b>SMCS.23.h</b>	Laboratory management conducts regular audit to ensure compliance to policies and procedures to ensure safe equipment management.

**SMCS.24****The hospital an established laboratory quality assurance program****Guidance**

A quality assurance (QA) program in a hospital laboratory is a critical process to ensure accuracy and high-quality test results. The hospital laboratory should have documented quality assurance program that includes internal and external quality assurance, pre-and post-analytic phases, test standardization, etc. Having a standardized successful QA program provides consistent results and data integrity, and avoids mistakes. Thus, there is a need to have clear policies and procerus/ guidelines, with trained competent staff, to ensure proper implementation.

**Measures:**

- |                   |   |
|-------------------|---|
| <b>SMCS.24.a</b>  | The laboratory implements policies and procedures on quality performance indicators and systems checks.       |
| <b>SMCS.24.b</b>  | The laboratory internal quality assurance program is established  |
| <b>SMCS.24..c</b> | The internal quality control results are reviewed and analyzed regularly with needed corrective action plans. |
| <b>SMCS.24..d</b> | The laboratory external quality assurance program is available  |
| <b>SMCS.24..e</b> | The program addresses verification and / or validation of test methods.                                       |
| <b>SMCS.24..f</b> | The program addresses surveillance of test results.   |
| <b>SMCS.24..g</b> | The Laboratory has a documented procedure to identify, manage and control nonconformance.                     |
| <b>SMCS.24..h</b> | The program includes the documentation of corrective and preventive actions.                                  |
| <b>SMCS.24..i</b> | All laboratory staff are well oriented on laboratory quality assurance program.                               |
| <b>SMCS.24..j</b> | There is constant audit to assess compliance to the QA program implementation                                 |

**SMCS.25****Laboratory implements a total Testing Processes (TTP) system.**

**Guidance** Pre-examination, Examination, and Post examination phases in medical laboratories represent the sample journey. Lack of standardized procedures for test requesting patient preparation, specimen collection, handling, and storage account for up to 93% of the errors currently encountered within the clinical laboratories. In addition, the laboratory test results have a 70% impact on clinical decisions making processes. With this high degree of influence, the quality of laboratory testing in the examination phase and the reporting of critical results on time in the post-examination phases is the most important process to any clinician and clinical activity. An error rate of about 10% in clinical medical laboratories practice has been consistently reported as most of the errors in laboratory medicine occur in the pre-and post-analytical phases, one will likely forget to focus on the analytical phase as well. The examination phase processes in laboratories have always been leading in quality management. Therefore, laboratories have to minimize their error in all samples receiving, processing, and resulting phases.

This standard is to ensure that all pre-examination, examination, and post-examination activities are established, implemented, and controlled to ensure optimal adherence to improve and maintain the best quality diagnosis services.

<b>Measures:</b>	<b>SMCS.25.a</b>	Laboratory has an updated user manual, reception and rejection standard operation procedures S.O.P.
	<b>SMCS.25.b</b>	The laboratory has a standard operation procedure (SOP) that clearly explains the pre-examination, examination and post examination process (e.g., Examination, reporting, storage, retention and disposal of clinical samples) with authorized responsibilities including routine, urgent, and referral samples.
	<b>SMCS.25.c</b>	The laboratory ensures the selection of approved and validated examination procedure before introducing the test into service.
	<b>SMCS.25.d</b>	The internal and the external quality control systems are implemented, interpreted, data analyzed and corrective action performed and maintained.
	<b>SMCS.25.e</b>	The laboratory defines the biological reference intervals and /or clinical decision limits.
	<b>SMCS.25.f</b>	All staff laboratory staff are oriented and aware about the SOP.
	<b>SMCS.25.g</b>	The lab has a defined system for reporting method with an effective communication with the end-users by authorized person with a clear and accurate reporting format.
	<b>SMCS.25.h</b>	There are clear procedures for the amendment of results.

**SMCS.25.i** Laboratory monitors key quality indicators covering the pre-examination, examination and post examination process phases of the laboratory operations.

## SMCS.26

**Hospital has a comprehensive system for effective management and use of point of care testing (PoCT).**

### Guidance

Point of Care Testing (**PoCT**) commonly refers to tests performed near the patient or bedside, and its use will become more widespread in the future due to new medical advances and new technology. It can add a significant benefit to the early diagnosis, treatment, and monitoring of patients because of its ability to provide a rapid test result.

The health care workers outside the laboratory using **PoCT** lack training or skills in laboratory methods. As they are responsible for performing analyses, they need to ensure the safety and quality, and accuracy of test results. Thus, it can lead to errors resulting from a lack of understanding of the importance of quality control and quality assurance practices. It mandates a significant amount of support from the laboratory to ensure quality testing and patient safety.

This standard aims to ensure Safe and Effective Management and Use of point of care testing.

### Measures:

- |                  |   |
|------------------|---|
| <b>SMCS.26.a</b> | The laboratory implements <b>PoCT</b> policies and procedures, which describe responsibilities of managing the <b>PoCT</b> to the lab, process of <b>PoCT</b> , training requirement, quality control testing of <b>PoCT</b> methods. |
| <b>SMCS.26.b</b> | Laboratory has <b>PoCT</b> committee members with rules and regulations and terms of references.  |
| <b>SMCS.26.c</b> | There are clear guidelines describing the process of <b>PoCT</b> .  |
| <b>SMCS.26.d</b> | The staff are trained and assessed for competency for testing   |
| <b>SMCS.26.d</b> | The laboratory has assigned personnel as <b>PoCT</b> coordinator.   |
| <b>SMCS.26.e</b> | There is regular audit to ensure, quality control testing is performed and recorded for <b>PoCT</b> .   |
| <b>SMCS.26.f</b> | Patients' results are interpreted by trained personnel, and all abnormal results are confirmed by the laboratory if recommended.  |

**SMCS.27****The laboratory has a defined information and data management system.****Guidance**

Data information management is where data from all the stages of laboratory testing are processed, stored, and managed. Access to all this information should be controlled and secured. The management of laboratory information and data can be achieved either by using an electronic Laboratory Information Management system (LIMS), simple computerized software, or even by keeping hard paper copies and register books.

The use of the Laboratory Information Management System (LIMS) is advised for all laboratories. This guarantees that required information is accurately reproduced.

Therefore, the key feature of robust data/information management is to have secure and readily available information. It helps in saving time and reducing errors for better patient care. This standard guides toward having a system in place to ensure an effective information and data management system is in place.

**Measures:**

- |                  |  |
|------------------|--|
| <b>SMCS.27.a</b> | The laboratory has a defined system (manual/electronic) to identify and relate information to patients |
| <b>SMCS.27.b</b> | Laboratory has a procedure for information and data management.  |
| <b>SMCS.27.c</b> | Laboratory information are protected from/against unauthorized access, tempering and loss.             |
| <b>SMCS.27.d</b> | Laboratory has a contingency plan system failure/breakdown   |
| <b>SMCS.27.e</b> | Laboratory has a system for sample tracking and data traceability.                                     |
| <b>SMCS.27.f</b> | Laboratory ensures training of all staff in using a data management system.                            |

## Diagnostic Imaging Services (RD)

Radiology and Imaging Services standards are developed to be patient-focused, to cover the functions and systems of a whole diagnostic imaging and interventional radiology service, and to address quality in service delivery and support quality improvement. The hospital offers radiology and imaging services based on scope of practice and these services are provided to the patients based on their clinical assessment to determine proper diagnosis and treatment plan. The standards in this section cover the vitals of quality and safety program for imaging services that would facilitate delivering high quality care. The standards also cover policies and procedures pertaining to all diagnostic and interventional imaging services and enhancing healthcare professionals' capabilities.

### SMCS.28

**The radiology department is well staffed with qualified, trained, experienced staff.**

#### Guidance

Radiology and diagnostic imaging services, at any location in a hospital, need to be under the direction of qualified staff, by education, training, and experience.

Managerial and technical staff should be given work assignment that is consistent with their qualifications, training, skills, and experience. This is to manage, perform, interpret and promptly report study results, to ensure immediate management and high quality of service provided to patients. This standard aims to ensure that radiology service is provided efficiently.

#### Measures:

- |                  |  |
|------------------|--|
| <b>SMCS.28.a</b> | The director/ head of radiology department is qualified, trained, skilled and experienced radiologist. |
| <b>SMCS.28.b</b> | The radiology department staff have proper qualifications, training, and experience.                   |
| <b>SMCS.28.c</b> | Hospital has twenty-four-hour radiology service coverage   |
| <b>SMCS.28.d</b> | The radiology department has a mechanism on developing human resources.                                |
| <b>SMCS.28.e</b> | The radiology department have records of staff trained in Basic Life Support (BLS).                    |



**SMCS.29**

**The hospital radiology imaging services are provided as per the scope of the hospital, and National laws and regulations.**

**Guidance**

Scope of services of the department is important to define the roles and responsibilities, coordinate and integrate the services in the department and with other departments. By defining the scope of services, the department will be able to develop policies and procedures for the services provided, as well as to determine the outsourced tests and the required space, equipment, supplies, staffing, and other resources. It also helps to determine the required qualifications of the staff in terms of education, skills, training, experience, license, certification, or registration. This standard aims to improve quality and ensure patient safety.

**Measures:**

- |                  |  |
|------------------|--|
| <b>SMCS.29.a</b> | Radiology department services comply with legal and other requirements.  |
| <b>SMCS.29.b</b> | Scope of the imaging services is commensurate to the services provided by the hospital.  |
| <b>SMCS.29.c</b> | The infrastructure (physical and equipment) and manpower is adequate to provide for its defined scope of services.   |
| <b>SMCS.29.d</b> | Adequately qualified and trained personnel perform, supervise and interpret the investigations.  |
| <b>SMCS.29.e</b> | Documented and updated policies and procedures exist to ensure correct identification and safe and timely transportation of patients to and from the imaging services. |
| <b>SMCS.29.f</b> | The results are available within a defined timeframe   |
| <b>SMCS.29.g</b> | Critical results are intimated immediately to the personnel concerned  |
| <b>SMCS.29.h</b> | The results are reported in a standardized manner.   |
| <b>SMCS.29.i</b> | There is a mechanism to address recall / amendment of reports whenever applicable.   |
| <b>SMCS.29.j</b> | Imaging tests that are not available in the hospital are outsourced to other hospital(s) based on their quality assurance system                                       |

**SMCS.30**

**The radiology department has policy and procedures manual to guide all radiological procedures.**

**Guidance**

Policies and Procedures are essential guidance in providing safe quality images. Policies and procedures assist radiologists/ radiographers to prevent errors and perform procedures safely as per evidence-based guiding policy. They assist the radiologists/ radiographers by knowing their roles and responsibilities within their scope of services. This standard aims to provide clear guidance as per evidence-based practice and to have standardized service provision.

**Measures:****SMCS.30.a**

Hospital radiology department has policy and procedures address all important radiological investigations and procedures, including but is not limited to:

X-ray, ultrasounds, computed tomography (CT) scan, magnetic resonance imaging (MRI), angiogram, nuclear medicine imaging, portable radiology machines, mammography, etc.

**SMCS.30.b**

All radiology staff are trained and oriented to policies and procedures in their concerned areas.

**SMCS.30.c**

Department leaders conduct audit to assess compliance to policies and procedures safety measures in a regular predefined interval.

**SMCS.30**

**The radiology department has a quality assurance program for radiology and diagnostic imaging services.**

**Guidance**

Availability of a quality assurance program is essential to ensure the safety, efficiency, and excellence of radiology services in the hospital. This includes the provision of high-quality imaging services and ensures the safety of patients and staff from the high doses of radiation as well as calibration and maintenance of all equipment as per the manufacturer's recommendations and records. Availability of a quality assurance program also raises awareness of the staff for better performance and put quality first in their job. This standard aims to ensure quality and patient safety.

**Measures:****SMCS.31.a**

Hospital implements a quality assurance program for radiology and diagnostic testing.

**SMCS.31.b**

The program addresses periodic internal/external peer reviews of imaging protocols and results using appropriate sampling.

**SMCS.31.c**

The program addresses surveillance of imaging results in collaboration with referring clinicians for follow up wherever applicable.

<b>SMCS.31.d</b>	A system is in place to ensure the appropriateness of the investigations and procedures for the clinical indications.
<b>SMCS.31.e</b>	The program includes periodic calibration and maintenance of all equipment.
<b>SMCS.31.f</b>	The program includes the documentation of corrective and preventive actions.
<b>SMCS.31.g</b>	The program includes daily surveillance and documentation of imaging results.
<b>SMCS.31.h</b>	The program includes regular audit process for correction and improvement.

**SMCS.32      The radiology department has an established documented safety program in the diagnostic imaging services. (CSS.11)**

**Guidance**      The availability of radiation safety programs helps to prevent radiation risks to patients. The program includes the implementation of the "As Low as Reasonably Achievable" (ALARA) principle in all investigations, especially those requiring periodic screening of patients. Modify exposure parameters to the lowest possible for each individual, and maintain the image quality appropriate for the clinical indication as the radiation parameters depend on the patient's weight. This standard aims to ensure patients and staff safety.

<b>Measures:</b>	<b>SMCS.32.a</b>	The department has documented radiation-safety program, which aligns with the hospital's safety program.
	<b>SMCS.32.b</b>	The program includes the management (Handling, usage and disposal, storing and transportation) of radioactive materials and hazardous materials used for therapeutic and diagnostic purposes.
	<b>SMCS.32.c</b>	The program includes checking/screening patients for safety risks before exposure to any imaging procedures, e.g., checking female patients for pregnancy.
	<b>SMCS.32.d</b>	The program includes guidelines and procedures that governs the use of contrast media.
	<b>SMCS.32.e</b>	The program includes guidelines and procedures for non- radiation hazards. E.g., infection control, electrical hazards and immobilization.
	<b>SMCS.32.f</b>	The program guides monitoring of the staff for radiation exposure, periodically.

<b>SMCS.32.g</b>	Imaging signage is prominently displayed in all appropriate locations.
<b>SMCS.32.h</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff.
<b>SMCS.32.i</b>	The department's leaders maintain records on staff radiation exposure for the last year.
<b>SMCS.32.j</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff
<b>SMCS.32.k</b>	The program includes regular testing of radiation protecting aprons, thyroid, and gonad shield for patients and staff
<b>SMCS.32.l</b>	Radiology department leaders maintain records on staff radiation exposure for the last year.
<b>SMCS.32.m</b>	Radiology department leaders ensure that all staff are aware about the safety program.
<b>SMCS.32.n</b>	There is a regular audit to monitor the implementation of the safety program.

## Emergency Department Services (EDS)

The hospital provides emergency care over 24-hour to patients who need minor, major care or urgent medical attention. Emergency Department (ED) must be well equipped and staffed with highly trained healthcare professionals on site to deal with emergencies. They assess, treat, stabilize and start the management of patients according to the institution's scope of practice. In order to provide optimum care to patients in a safe, appropriate, efficient, responsive and caring manner, the services must be organized by establishing a reliable and consistent triage system performed by qualified staff. The following standards define the requirements for ED that healthcare providers are required to comply with to be able to provide high quality emergency care.

### SMCS.33

#### The Emergency Department has documented scope of services.

#### Guidance

The scope of service for any given specialty outlines the services provided by that specialty and the competencies required by the health professionals to effectively provide these services.

The ED is at the front of the hospital and provides non-stop access to its services. It functions as an integral component of the health care system through providing assessment, diagnosis, treatment, and disposition of emergency patients. The initial care for emergency patients is provided in the ED before admission or transfer to other specialties or health institutions. The hospital must ensure there is a written document that outlines the scope of service known to all hospital staff. This standard aims to define the scope of the Emergency Department as an independent and specialized service.

#### Measures:

##### SMCS.33.a

The Emergency Department has clearly written scope of service.

##### SMCS.33.b

The emergency staff are well oriented to the scope of service

##### SMCS.33.c

Emergency care is provided to all patients seeking treatment at the ED regardless of their gender, religion, nationality or socioeconomic status.

**SMCS.34**

**Emergency Department is well equipped with qualified medical and nursing staff.**

**Guidance**

The emergency department is a complex department where the hospital receives different conditions requiring categorization and proper management. This process requires a standardized system and well-qualified staff. The presence of emergency management leaders will ensure a smooth operation and workflow by taking full responsibilities in terms of work coordination and staff selection. These leaders also play an essential role in facilitating and promoting evidence-based practice and research activity in emergency medicine.

The presence of well-qualified and trained staff in the Emergency Department will follow updated evidence-based guidelines that ensure clinical performance and skills that meet the standards of patient safety and best quality of care. Additionally, these people are competent to assess their patient's clinical status and request the needful investigations and other treatment regimens.

**Measures:****SMCS.34.a**

Emergency Department is directed by a physician who is qualified by education, training, and experience in managing emergency patients.

**SMCS.34.b**

The Emergency Department is covered by registered physicians, who are qualified to manage emergency cases, twenty-four hours a day seven days a week.

**SMCS.34.c**

Emergency Department nurse manager is qualified by education, training and experience in emergency.

**SMCS.34.d**

Emergency Department staff receive training, and education as per relevant scope of services.

**SMCS.34.e**

Emergency Department medical and nursing staff are certified in BLS, ACLS.

**SMCS.34.f**

There is documented ongoing competency assessment for all medical and nursing team in the department.

**SMCS.35**

**The emergency department physical setting is well designed to provide safe and easily accessible environment to facilitate receiving and managing emergency patients.**

**Guidance**

The ED physical setting should be designed to provide a safe and accessible environment that facilitates accomplishment of the purpose of the emergency care service. The physical setting should be constructed and well equipped to

provide adequate space and proper environment to meet the patients' needs, staff educational and administrative needs of the service with safety and efficiency.

The hospital must ensure that its ED has entrances are separate from the other hospital entrances, and these entrances are easily accessible through appropriate signages and unobstructed paths. Therefore, a system needs to be in place to ensure the appropriate utilization of these entrances. The triage room is the patient's first contact point within the ED, and it needs to be strategically located near the ED entrance. This enables the triage staff to identify patients with life-threatening conditions as soon as they arrive. A waiting room is intended for patients to wait in both before and after triage, for entry to treatment areas, for waiting for transportation post-discharge, or for waiting of patients' attendants.

This standard emphasizes the importance of having dedicated access for emergency patients to ensure unhindered and prompt care through proper categorization and assessment.

<b>Measures:</b>	<b>SMCS.35.a</b>	The Emergency Department is identified through clear signage from outside and inside the hospital.
	<b>SMCS.35.b</b>	The emergency department has separate identified entrance (s).
	<b>SMCS.35.c</b>	ED entrance is controlled and only limited for clinical staff; and not allowed for the by non-clinical staff and off-hours visitors.
	<b>SMCS.35.d</b>	The ED triage area is directly visible and accessible from the department entrance
	<b>SMCS.35.e</b>	The ED triage area is properly equipped with: <ol style="list-style-type: none"> <li>1. Physiological monitor (ECG, NIBP, SpO2, Temperature)</li> <li>2. Glucometer</li> <li>3. Weighing scale</li> <li>4. Washbasin</li> <li>5. Wheeled examination bed</li> <li>6. Snellen chart</li> <li>7. Ophthalmoscope/otoscope</li> <li>8. Personal protective equipment</li> </ol>
	<b>SMCS.35.f</b>	The ED triage area has easy access to 12 leads ECG



<b>SMCS.35.g</b>	The ED triage room has a glass window or alternatives (e.g., CCTV) that allows visual access of patients in the waiting room.
<b>SMCS.35.h</b>	The triage area maintains patient privacy
<b>SMCS.35.i</b>	There is an existing or provisional area to be utilized as a secondary triage post to support the main triage area when needed
<b>SMCS.35.j</b>	There is a utilization plan that describes when to operate the additional triage.
<b>SMCS.35.k</b>	<p>The waiting area allows maximum comfort by providing</p> <ul style="list-style-type: none"> <li>• Privacy needed (e.g., breastfeeding)</li> <li>• Toilets</li> <li>• Air-conditioned environment</li> <li>• AV media, with display of public and health information</li> <li>• Vending machines</li> </ul>

**SMCS.36**

**Emergency department has documented policies, procedures, pathways, and guidelines, and applicable laws and regulations to guide the care of patients.**

**Guidance**

The Emergency Department is a complex area, dealing with a variety of cases such as medico-legal cases, road-traffic crashes, or other cases that may need special management. Therefore, it is important to ensure adherence to rules and regulations while providing medical care. In addition, it is equally important to communicate to staff the desired outcomes of the hospital. This helps staff understand their roles and responsibilities within the hospital. In the healthcare environment specifically, policies, and procedures guide toward delivery of safe, and effective quality care. This standard aims to ensure the standardization of emergency care provided which is based on policies and procedures.

**Measures:**

<b>SMCS.36.a</b>	ED has clearly documented policies and procedures that are consistent with the hospital and emergency department scope of services.
<b>SMCS.36.b</b>	The ED policies, procedures, and guidelines are prepared by the emergency department multidisciplinary team including the ED head, nurse leader.
<b>SMCS.36.c</b>	The policies address the handling of medico-legal cases, such as cases such as alcohol and narcotic abuse and criminal acts.

<b>SMCS.36.d</b>	The policies address the management of suspected victims of abuse, neglect, and domestic violence.
<b>SMCS.36.e</b>	The policies address the management of poisoning, multi-trauma, acute coronary syndrome, VTE, stroke, sepsis, acute pain, etc.
<b>SMCS.36.f</b>	The policies guide the triage of patients.
<b>SMCS.36.g</b>	The ED documented policies and procedures guide the management of patients found dead on arrival at the hospital.
<b>SMCS.36.h</b>	ED staff are all familiar and trained with policies and procedures.
<b>SMCS.36.i</b>	The department/ unit conducts a regular audit to assess compliance and well implantation of the guidelines and policies.

**SMCS.37****The ED has effective ambulance services.****Guidance**

The ambulance service is part of the healthcare delivery process as it plays a critical role during the transition of patients to hospitals with limited equipment and resources. Therefore, hospitals should implement a clear process to manage and maintain ambulance service. This is to ensure patients are safe throughout the time they are under the care of the ambulance service.

**Measures:**

<b>SMCS.37.a</b>	ED has adequate access and space for the ambulance(s).
<b>SMCS.37.b</b>	ED has full supervision and responsibility for the ambulance services.
<b>SMCS.37.c</b>	The ambulance adheres to the national rules and regulations
<b>SMCS.37.d</b>	The ambulance is operated by trained personnel in BLS.
<b>SMCS.37.e</b>	The ED has a clear written protocol for communication between ambulance and the hospital, for receiving or transferring patients.
<b>SMCS.37.f</b>	The ambulance is fully equipped and has enough supply, to be ready for transfer of patients all the time.
<b>SMCS.37.g</b>	Ambulance is equipped with basic life support equipment for both adult and pediatric patients, and medications.

<b>SMCS.37.h</b>	Ambulance equipment and medications are checked on a daily basis using standardized checklist.
<b>SMCS.37.i</b>	Ambulances maintenance is conducted on regular predefined schedule, and documented.
<b>SMCS.37.j</b>	Emergency department leader ensures there is adherence to infection control policy, in running vehicle and maintaining equipment cleaning, ensuring there is a regular schedule for cleaning with assigned personnel.

**SMCS. 38****Emergency department has adequate resources and space to support the provision of safe care to patients.****Guidance**

The emergency department is meant to receive, triage, stabilize and provide acute care to patients. EDs are becoming increasingly congested, due to the increasing demand of the population, requiring well-structured space to deal with any mass emergency and disaster situations. It needs to be structured with proper space and division for each area of care and needs to be well equipped in order to manage all different cases of emergency in an efficient manner and best quality of care. Creating new spaces or renewing old spaces to accommodate increased patient numbers and hospital needs can have a positive impact on providing safe care.

**Measures:**

<b>SMCS.38.a</b>	The ED is equipped with all necessary equipment, resources and medications suitable to types of services provided.
<b>SMCS.38.b</b>	The ED resuscitation room that is easily accessible from the ED entrance and physically located in close proximity to OT, ICU and radiology
<b>SMCS.38.c</b>	Resuscitation/trauma rooms have sufficient space to perform resuscitation
<b>SMCS.38.d</b>	The ED has treatment area assigned for high acuity patients.
<b>SMCS.38.e</b>	The ED has a treatment area assigned for low acuity patients.
<b>SMCS.38.f</b>	The ED has a treatment area assigned for pediatric patients.
<b>SMCS.38.g</b>	The ED has a treatment area assigned for GYN assessment.
<b>SMCS.38.h</b>	The resuscitation trolley is located in the center of the resuscitation area and has even spaces around it and the surrounding space that ensures 360° access to all parts of the patient for procedures.

<b>SMCS.38.i</b>	There is specialized equipment necessary for management of ophthalmology, ENT, and dental emergency cases.
<b>SMCS.38.j</b>	ED has specific facility to ensure patient privacy and safety are maintained in all locations.
<b>SMCS.38.k</b>	All bed locations have direct access and easily observed by ED staff.
<b>SMCS.38.l</b>	ED has regular process of checking supply stock and equipment.

**SMCS.39**

**Emergency department implements standardized effective triage system to prioritize patients.**

**Guidance**

Triage is the process by which patients are evaluated and categorized according to the urgency of their condition to determine treatment priorities. As such, the triage process in the ED prioritizes incoming patients and identifies those who are critical. The emergency health care provider performs a brief, focused assessment and assigns the patient a triage acuity level, which is a proxy measure of how long a patient can safely wait for a medical assessment and

This standard aims to have a standardized triaging system to ensure that arriving patients are sorted out according to the urgency of their condition and improve the patient experience and reduce the total length of stay.

**Measures:**

<b>SMCS.39.a</b>	The ED has a clear written guide on triage system to categorize patients and identify those with emergent care needs.
<b>SMCS.39.b</b>	ED has a structured training program to ensure all staff are aware about the system
<b>SMCS.39.c</b>	ED staff ensure patients with urgent needs are provided with appropriate care on timely manner.
<b>SMCS.39.d</b>	There is a regular quality audit system to monitor the right implementation of triaging system, such as under triage and over triage are promptly addressed and corrected.

**SMCS.40**

**Emergency department laboratory and imaging tests are completed and results are communicated on a timely manner.**

**Guidance**

The emergency department is sometimes considered a diagnostic testing center in which a physician can coordinate patient care, and the results of most

diagnostic tests are known within a few hours. In most centers, advanced diagnostic imaging, ultrasounds, CT scans, and even MRI studies can be obtained quickly and have a marked effect on patient care by providing a prompt definitive diagnosis for conditions such as intracranial hemorrhage, pulmonary embolus, aortic aneurysm or dissection, and more. This standard aims to have appropriate management of patients on time and avoid unwanted complications.

**Measures:****SMCS.40.a**

ED has laboratory and radiology diagnostic services available all days and times.

**SMCS.40.b**

Laboratory and diagnostic imaging results are available to the ED staff within identified timeframe.

**SMCS.40.c**

There is regular scheduled audit to ensure investigation results are communicated on time to ensure appropriate, timely patient management.

**SMCS. 41**

**The ED has measures to ensure safe redirection of low acuity cases.**

**Guidance**

Patients with minor illnesses and injuries usually constitute a large portion of the total patients attending the ED, which may contribute to overcrowding and delay the care of more sick patients. Low acuity patients should ideally be treated in lower acuity care institutions, namely the primary health centers and polyclinics. Despite having no apparent serious medical illness, these patients should be properly assessed by an ED doctor to ensure safe redirection to the appropriate healthcare facility.

**Measures:****SMCS.41.a**

There is a clear written guide for the redirection process.

**SMCS.41.b**

Staff are educated on patient redirection.

**SMCS.41.c**

Redirection is done for low acuity patients (triage levels 4 and 5 only).

**SMCS.41.d**

There is a process to regularly review patient redirection.

**SMCS.42**

**ED has written scheduling guide for emergency physicians and nurses.**

**Guidance**

Preserving the well-being of emergency physicians and nurses in an inherently stressful environment is fundamental to the safety of patients in the ED as well as sustaining the workforce. A key factor in this is the maintenance of natural circadian rhythms through evidence-based shift scheduling. A shift work

schedule that does not respect natural rhythms has been shown to harm provider performance, patient safety, and workforce morale as well as increase the risk of occupational injury and illness.

**Measures:**

<b>SMCS.42.a</b>	ED has duty roster for clinical staff (doctors and nurses), as per the institution policy for each team, covering number of hours, number of shifts, on-call, annual leave plan, training activities schedule, approved by head of department.
<b>SMCS.42.b</b>	There are clockwise shift rotation patterns (mornings, afternoons, nights).
<b>SMCS.42.c</b>	The staff schedule is easily accessible to all ED staff
<b>SMCS.42.d</b>	There is a minimum of 10 hours between finishing and resuming clinical duties.
<b>SMCS.42.e</b>	Leadership conducts regular random audit to assess compliance with the duty roster guidelines.
<b>SMCS.42.f</b>	There are regular 48-hour minimum periods off work with no less than a total of 60 hours per fortnight.
<b>SMCS.42.g</b>	On-call is limited to no more than two overnight on-calls per seven days with neither being consecutive.
<b>SMCS.42.h</b>	There is a proper skill mix staffing for each shift as per ED needs.
<b>SMCS.42.i</b>	There is provision for adequate annual leave, conference leave and professional development leave.
<b>SMCS.42.j</b>	There is a regular predefined schedule to monitor the compliance to the policy.

**SMCS.43**

**The hospital has a Clinical Pharmacist available to attend the ED during each shift.**

**Guidance**

The involvement of clinical pharmacists in inpatient care in the hospital setting results in safer and more effective medication use. These pharmacists are typically involved in assuring appropriate prescribing and administration of drugs, providing drug information consultation to providers, monitoring patient responses and laboratory values, and providing patient and provider education.

Clinical pharmacists play an important role in EDs, especially in departments with unique and complex nature. They can help enhance patient safety by reducing errors related to drug prescription, as well as improving processes

and the quality of services demanded by ED staff.

This standard aims to ensure prompt and safe use of medications and avoid potential morbidity.

<b>Measures:</b>	<b>SMCS.43.a</b>	The hospital has a qualified (by education, and experience) clinical pharmacist to cover the ED.
	<b>SMCS.43.b</b>	The clinical pharmacist is available to respond to calls from the ED during peak volume hours, 24 hours a day.
	<b>SMCS.43.c</b>	The clinical pharmacist has a clear job description in the ED
	<b>SMCS.43.d</b>	The clinical pharmacist is part of a multidisciplinary team.

#### SMCS. 44

**Emergency Department has performance quality indicators that are monitored regularly.**

#### Guidance

Quality assessment of emergency care service is critical for the improvement of ER care provision. Having a set of measurable clinical quality indicators for the provision of care in ED is critical. These indicators will lead to enhanced quality and safety of care provided, facilitate the National and International comparison of emergency care improvement and development. This standard aims to ensure that there is a system to measure and improve the quality and safety of care provided in ED.

<b>Measures:</b>	<b>SMCS.44.a</b>	The ED has a set of key quality indicators to monitor and report on regular basis, including but is not limited to: ER Triage to physician time, average length of stay of patients, etc.
	<b>SMCS.44.b</b>	These quality indicators are well known by all ED staff.
	<b>SMCS.44.c</b>	ED conducts audit to assess performance on a regular predetermined interval, and set plan of actions accordingly.



## Nursing Services

Nursing, as an integral part of the health care system, encompasses the promotion of health, prevention of illness, and care of patient of all ages in the health care. Nurses have the responsibility to ensure that quality standards are adhered to in order to minimize risk and provide safe care to patients. The institution has the responsibility for developing and maintaining the scope of practice statement and policies and procedures that apply to the practice of all professional nurses. This section covers standards that are related to nursing practice concerning nursing procedures and nurses' competencies.

### SMCS.45

**The Nursing department maintains a current scope of practice for the Nursing department.**

#### Guidance

Scope of Practice is the variety of roles, functions, responsibilities, and activities that the registered nurses or midwives are authorized to perform as per their level of education and specialty they possess. Due to the rapid developments in the field of health care, nurses must be able to practice fully of their educational level and skills, to provide competent, efficient, and high-quality nursing care. This standard aims to protect both nurses and the patients, by having boundaries to the staff individual practice, as they have responsibilities to determine what is within their scope of practice.

#### Measures:

- |                  |  |
|------------------|--|
| <b>SMCS.45.a</b> | There is a written scope of practice for each nursing specialty that is approved and signed by the director/ head of nursing and directorate of nursing Affairs. |
| <b>SMCS.45.b</b> | Each nursing specialty desired education, skills, knowledge and other requirement is defined in the scope of practice document.                                  |
| <b>SMCS.45.c</b> | Each unit has a head nurse/nurse manager with the required nursing and managerial experience, and a clear scope of practice                                      |
| <b>SMCS.45.d</b> | Each staff nurse's specific responsibilities are defined in the current scope of practice.   |
| <b>SMCS.45.e</b> | All nurses are aware about their scope of practice.  |

**SMCS.45.f**

Nursing staff are allocated according to skill level and appropriate qualifications and specialties.

**SMCS.45.g**

Nurse leaders conduct periodic review to ensure that nursing services are provided by registered nurses in accordance with their license and scope of practice.

**SMCS.46**

**The nursing department has essential policies and procedures available, to guide the nursing practice.**

**Guidance**

Well updated policies and procedures for nursing practices are essential for nurses to provide safe quality patient care. Policies and procedures assist nurses to perform procedures safely to patients and prevent errors and harm. They assist the nurses to know what their roles and responsibilities are toward the provision of saving care to patients. It also brings standardization in daily clinical practice. Nursing leadership needs to ensure there are updated as per sound evidence and relevant policies and procedures for each nursing practice (clinical and administrative). All nurses should be well oriented on those policies to have them as a reference in daily practice. Moreover, there should be a regular audit to assess and monitor the compliance to those policies, with monitoring checklists.

**SMCS.46.a**

The nursing department has documented policies and procedures manuals for all activities of the nursing services that are approved and signed by nursing directors/ head of nursing, updated every three years.

These policies include but not limited to the following:

- Admission policy.
- Discharge policy.
- Patient transfer policy.
- Patients' rights and responsibilities.
- Basic patient care (hygiene, skin care).
- Fall prevention and management policy.
- Pressure ulcer prevention and management policy.
- Safe drug administration policy.
- Intravenous care policy (drug administration, blood collection, IV cannulation).
- Patient handover policy e.g. SBAR.
- Pain management.
- Patient physical assessment.
- Infection control policies.
- Medication's administration and monitoring

**Measures:**

	<ul style="list-style-type: none"> <li>Controlled, High Alert and Narcotic Drugs Management".</li> <li>Crush trolley policy.</li> <li>Any other policy according to institutional service needs.</li> </ul>
<b>SMCS.46.b</b>	Department nurse leaders ensure that the policies are available and current (updated within 3 years and approved by nursing director), and accessible to all nursing unit.
<b>SMCS.46.c</b>	All nurses are aware and oriented about the above listed policies.
<b>SMCS.46.d</b>	The nursing department performs essential monitoring to assess compliance to the nursing policies.

**SMCS.47**

**The nursing department maintains effective communication process among all levels of nursing.**

**Guidance**

The operation and existence of healthcare institutions are based on effective communication among individuals and groups. It is proven that communication is one of the main activities in any healthcare Institution. It is very important to have a system of communication within the nursing team to enhance and promote a culture of timely, accurate, relevant, and coordinated communication among all nurses, as well as to provide a regular flow of information through an established plan of framework that is developed based on each institution's needs.

This standard is to promote a culture of timely, accurate, relevant, and coordinated communication among all nursing teams and provide a regular flow of information through an established plan of work.

**Measures:**

<b>SMCS.47.a</b>	Nursing department has clear process directing nursing team on channels of communication among all levels. These guidelines are in alignments with the hospital communication processes.
<b>SMCS.47.b</b>	There is a regular nursing leaders/management meeting with meeting minutes.
<b>SMCS.47.c</b>	There is evidence of regular nursing department meetings, and it is reflected in the meeting minutes. The meeting minutes are shared with all nursing staff.
<b>SMCS.47.d</b>	The nursing team has a system to monitor and review the implementation of effective communication. This could be

done through staff feedback, satisfaction survey etc.

**SMCS.48 The nursing department has updated Staff work schedule (roster) system.**

**Guidance**

The proper nursing staff is essential for the delivery of care in health care institutions. To maintain the provision of effective care, the nursing leadership must have safe and healthy scheduling for the nursing workforce. This is by ensuring fair, equitable staffing per unit, proper skill mix, and staffing numbers per unit/ specialty need.

The aim of this standard is to ensure fair and consistent scheduling of duties for nurses and medical orderlies and to maintain standards of roster management.

**Measures:**

- SMCS.48.a** There is a detailed nursing scheduling policy that covers:
- 1- Number of productive and non-productive hours
  - 2- Numbers and duration of shifts (8 hours- or 12 hours)
  - 3- Assignment for on-call if required
  - 4- Training activities schedule
  - 5- Annual leave schedule
- SMCS.48.b** All nursing units have work schedule updated as per the institution policy, displayed to all unit staff
- SMCS.48.c** There is a proper skill mix staffing for each shift as per unit needs.
- SMCS.48.d** The nursing department leaders conduct regular audit to monitor the compliance to the policy.

**SMCS.49 The nursing department maintains comprehensive nursing assessment and care plan for each patient.**

**Guidance**

When a patient enters the hospital, nurses follow the initial steps of the nursing process to work toward achieving desired outcomes and goals identified for the patients, by performing a comprehensive assessment upon admission. The effectiveness of the care plan is evaluated by determining whether the outcomes and goals are achieved or the problem remains at the time of discharge. The care plan needs to be planned upon admission and updated daily.

Nurses should be competent in performing physical assessments and plan the patient's individualized care accordingly. This standard aims to ensure there is a standardized nursing assessment process for a patient at each care station and according to patients' condition requirements.

<b>Measures</b>	<b>SMCS.49.a</b>	The nursing department has clear written policy to guide the nursing care plan process.
	<b>SMCS.49.b</b>	<p>There is a comprehensive nursing assessment conducted for each patient upon admission, which identifies nursing care needs for each patient using standardized assessments tools, which includes:</p> <ol style="list-style-type: none"> <li>1- Current and history of patient complaints</li> <li>2- Current physical and psychological status.</li> <li>3- fall risk score</li> <li>4- Pain assessment</li> <li>5- Drug allergies</li> <li>6- Skin assessment</li> <li>7- Nutritional status</li> <li>8- Discharge planning</li> </ol>
	<b>SMCS.49.c</b>	<ol style="list-style-type: none"> <li>1- Physical assessments</li> <li>2- Obstetric history</li> <li>3- Vaccination history</li> </ol> <p>There is an individualized documented nursing care plan developed for each patient according to nursing assessment, which is consistent with the medical plan.</p>
	<b>SMCS.49.d</b>	Patients with specific needs (elderly, bedridden, handicapped, etc.) are assessed for level of activity/dependency.
	<b>SMCS.49.e</b>	Patient fundamental of care needs is planned, and provided according to their needs. E.g., feeding, drinking, mobilization, pain, skincare, hygiene.
	<b>SMCS.49.f</b>	The nursing staff perform reassessment and review the nursing care plan every shift, or upon any changes in patients' condition and change in treatment.
	<b>SMCS.49.g</b>	The nursing assessment and plan of care is documented in patients' medical file.

**SMCS.49.h**

There is a regular monitoring process to ensure patients' care plans are implemented and documented as per the policy.

**SMCS.50**

**The hospital implements a process for effective identification, and management of patients who are at falling risk (CSS.8).**

**Guidance**

Patient's fall is the most commonly reported patient safety incident in healthcare institutions. Patient's fall is considered as one of the nursing-sensitive key performance indicators (KPI), reflecting the quality of care provided to patients. The human cost of patient falls includes injury, pain, distress, loss of confidence in performing activities of daily living, loss of independence, and high mortality rate. Hospitals should implement clear policies to guide the standardized practice of prevention and management of patients' falls in the hospital. Hospital staff should be oriented on the policy, to ensure safety of all patients. As a part of patient education, communicate fall risk to patients and family members on discharge to take precautions to prevent falls at home. This standard aims to guide the healthcare providers to accurately and systematically identify patients at risk of falls and direct the implementation of an individualized fall prevention, assessment and reassessment plan.

**Measures:****SMCS.50.a**

The hospital has a clear policy for effective identification, assessment, and management of patient at risk of fall, and management of patients after fall incidence.

**SMCS.50.b**

All concerned staff are oriented on the fall prevention policy and the assessment tool.

**SMCS.50.c**

Hospital leaders ensure that resources are available for implementation of fall prevention policy.

**SMCS.50.d**

Nursing team follow fall risk assessment for all patients at the point of access to determine their risk for falling across the hospital premises, when patient move from one unit to another, when patients' condition changes, using validated fall risk assessment tool.

**SMCS.50.e**

Interventions for fall prevention are implemented based on assessment score.

<b>SMCS.50.f</b>	Patient assessment and interventions, patient and family teaching are documented on patient electronic record and communicated among nursing team and other healthcare providers.
<b>SMCS.50.g</b>	Departments' heads conduct regular audits to assess compliance to the fall prevention policy and related scales.

**SMCS.51      The hospital implements a process for effective identification and management of patients who are at risk for pressure ulcers (CSS.9).**

**Guidance**      Pressure ulcers have become a concern for healthcare providers throughout the world, due to their significant impact on patients' health conditions, the treatment process, and their burden on the health care system. Pressure ulcer rate is considered a key performance indicator that reflects the quality of nursing care. Proper skin assessment, early detection of skin damage, and implementation of adequate preventative strategies can prevent tissue damage or reduce the seriousness of the ulceration. Hospitals need to ensure there is a clear policy to guide health care staff on methods of prevention and management of pressure ulcers. All nursing staff should be trained on their roles and responsibilities toward the implementation of the policy and procedures of pressure ulcer prevention and management. This standard intends to guide implementation of a standardized practice of pressure ulcer prevention, identification, and management.

<b>Measures:</b>	<b>SMCS.51.a</b>	The hospital has written policies and procedures to guide proper identification, assessment, and management of patients at risk develop a pressure ulcer.
	<b>SMCS.51. b</b>	Nurses are all oriented on the pressure ulcer prevention and management policy and the assessment tool.
	<b>SMCS.51. c</b>	Hospital and nursing leaders ensure that resources are available for implementation of the pressure ulcer prevention policy.
	<b>SMCS.51. d</b>	Nurses conduct an initial pressure ulcer risk assessment to all patients on admission using a validated, risk assessment tool, and then reassessment thereafter as per the policy.



<b>SMCS.51. e</b>	Nurses apply Interventions for pressure ulcer prevention based on risk assessment score. This includes positioning schedule with skin inspection, use of pressure relieving devices, nutritional requirement, pain management, continence management, etc.
<b>SMCS.51.f</b>	Patient assessment and interventions, patient and family teaching are documented on patient electronic record and communicated among nursing team and other healthcare providers.
<b>SMCS.51.g</b>	The is regular audit to assess compliance with the pressure ulcer prevention and management policy and related scales.

**SMCS.52**

**Nursing team implements and maintains a standrdized nursing documentation process for every patient.**

**Guidance**

Nursing documentation is a vital component for safe, ethical, and effective nursing practice, whether it is paper-based or electronic. A complete, accurate, relevant, and timely documentation is important for the continuity of patient care and serves as a safe communication tool, as well as important evidence in legal cases.

Documentation that is incomplete, inaccurate, untimely, illegible can lead to many undesirable outcomes, including putting at risk (endangering) the legal rights of the patients, the health care providers/health care institutions, and increasing the risk of liability. The Standard describes nurses' accountability and the expectations for documentation in all practice settings, regardless of the documentation method or storage. Any patient enters the hospital, whether as an emergency or an outpatient or inpatient, complete nursing documentation is needed.

**Measures:**

<b>SMCS.52.a</b>	The nursing department has a comprehensive nursing documentation policy (assessment, treatment and response to treatment, the use of one approved language for documentation, etc.
<b>SMCS.52.b</b>	The nursing department conducts structured training program on nursing documentation.
<b>SMCS.52.c</b>	All nurses are oriented about any updates on nursing documentation.
<b>SMCS.52.d</b>	The hospital follows a regular system to monitor the implementation of the nursing documentation. The audit

focuses on the timeliness, completeness, and legibility of nurses' documentation.

**SMCS.53****The Hospital has a process of using restraints safely.****Guidance**

Few practices can cause stress or anxiety for a nurse to follow, such as placing a patient in a restraint, who may feel his or her autonomy, is being taken away. However, in certain circumstances, restraining a patient is the only option to ensure patient's as well as others' safety. Restraints include any mechanical, chemical, or environmental procedures used to restrict patient movement to prevent injury and manage patient behaviours that could cause harm to him/her or others. Nurses are ethically obliged to maintain patients' basic rights through the appropriate use of restraints. Restraints are not to be used for coercion, punishment, discipline, or staff convenience. According to the Joint Commission (JCI), restrains may only be used to assist in keeping the patient, staff, other patients, and visitors safe, and should be sort as the last choice. Improper use of restraining can lead to injuries to patients (light or serious), leading to a serious legal obligation to health care providers. This standard aims to ensure that the actions are taken are consistent with all ethical, legislative, and professional obligations under the Law of regulating the practice of the medical professions by the Royal Decree No **75/2019**, Subject No 43; to ensure the safety of the patient, staff, and others.

**Measures:****SMCS.53.a**

The hospital implements policies and procedures that guide the care of patients on restraints, which clearly explain:

- Indications, circumstances /conditions in which restraints is permitted
- Criteria of patient who are on need for any type of restraints
- Who authorizes the use of restraints.
- Type of restrains.
- Material used.
- Consent.
- Ethical and legal consideration.
- The frequency of monitoring patients on and documentation.
- Roles and responsibilities of staff.
- Appropriate intervention when the patients' circulation is being impaired, etc.

**SMCS.53.b**

Nursing department leaders ensure that nursing staff are trained and competent on the use of restraints.

<b>SMCS.53.c</b>	The restraints are only applied with an order by treating physician who clearly orders with restrain type to use, the time limits the restraints will be used.
<b>SMCS.53.d</b>	The restraints order is renewed every 24 hours.
<b>SMCS.53.e</b>	The nurses preserve and protect patient's dignity during the use of restraints.
<b>SMCS.53.f</b>	Nurses conduct assessment prior restraints application, reassessment during the restraints usage until restraints is removed. Patient is assessed frequently (at least hourly and as required).
<b>SMCS.53.g</b>	The team ensures to inform and involve the patient/ or family the decision of applying restraints.
<b>SMCS.53.h</b>	Nurses document all assessment, reassessment, orders, actions and interventions appropriately in patient electronic records. Nursing documentation include the following. <ul style="list-style-type: none"> <li>• Event leading to the need of restraints.</li> <li>• Purpose of the restrain.</li> <li>• Clinical justification for length of time.</li> <li>• Methods of restrain.</li> <li>• Location of the restrain.</li> <li>• Time (applied and released).</li> <li>• Family/ patient involvement in the decision of applying restraints.</li> </ul>
<b>SMCS.53.i</b>	The nurse leaders conduct regular audits to monitor the safe implementation of and compliance toward the restrains policy.

**SMCS.54**

**The nursing department implements various approaches to enhance Rest and Comfort to patients while receiving the health care service.**

**Guidance**

According to the National Heart, Lung, and Blood Institute, ensuring enough quality sleep at the right times can protect psychological and physical health, safety, and quality of patient life.

Hospitals need to implement various mechanisms that should be followed by all concerned staff, to ensure patient comfort. These include proper pain management, vital signs monitoring and maintenance, promoting patient hygiene and proper positioning, providing regular meals, noise, and light control during sleep hours, prompt response to patient calls/ alarms, proper isolation methods of certain cases as per hospital policies, control of

visitors, etc. All staff should be oriented on these mechanisms to ensure patient rest, comfort, and facilitate fast healing.

<b>Measures:</b>	<b>SMCS.54.a</b>	The nursing department implements and maintains various mechanisms to enhance rest and comfort for the patient.
	<b>SMCS.54.b</b>	Each department nurse leader ensures that nurses are oriented on the best strategies to maintain patient rest and comfort.
	<b>SMCS.54.c</b>	Patients with specific needs are assessed regularly to meet their needs.
	<b>SMCS.54.d</b>	There is a process to monitor the application of patient rest and comfort measures, and patients are assessed regularly.

## **SMCS.55 The nursing department leaders implement various approaches to maintain competency of nursing staff.**

**Guidance** Nurses and midwives play a fundamental role in all health services. There is potential to improve health care quality if nurses routinely use the best available evidence in their clinical practice. As part of the Code of professional Conduct for nursing, the nurse must have knowledge, skills, and abilities for legal, safe and effective practice. This can be accomplished by maintaining the clinical updates in nursing practice, education and training. The implementation of the knowledge acquired will help to reduce the burden of financial cost of the hospital if any injury or health issues happen to the staff. Monitoring the practice will help to reduce patient risk and improve patient safety outcomes. This Standard aims to promote and maintain nursing competency and ensure safe nursing care is delivered to patients.

<b>Measures:</b>	<b>SMCS.55.a</b>	The nursing department has a structured orientation program for all new nursing staff that is in alignment with the hospital orientation program, with a general orientation checklist.
	<b>SMCS.55.b</b>	The nursing department follow a structured approach to promote the competency of nursing staff in various specialties, including nursing clinical education and update programs for each specialty, mandatory training as per specialty, continuous monitoring, through clinical competency, etc.

<b>SMCS.55.c</b>	<p>The nursing team follows hospital mandatory training programs covering but is not limited to:</p> <p>BLS/ ACLS certification and recertification (every 2 years), equipment training, pain management (once a time), IV drug calculation and IV cannulation (every 2 years), Disaster plan, Fire safety and evacuation plan, Blood and blood product handling, occupational hazards, Patient Safety, any competencies as per specialty assignment.</p>
<b>SMCS.55.d</b>	Staff training records and certificates are maintained in staff files.
<b>SMCS.55.e</b>	There is evidence of assessing staff competency on the practice related to listed courses.
<b>SMCS.55.f</b>	Each Nursing unit has specific competency assessment tools to monitor staff performance in the unit procedures.
<b>SMCS.55.g</b>	Nursing competencies are assessed and monitored regularly as per specialty and institutional needs, using different methods such as competency checklist, demonstration, written tests, feedback form supervisors and peers, etc.
<b>SMCS.55.h</b>	<p>Assessment of nursing competencies includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Professionalism, and compliance to code of conduct and ethics elements.</li> <li>• Medication administration.</li> <li>• Safe use of patient restraints.</li> <li>• Iv therapy, infection control guidelines.</li> <li>• Fall prevention.</li> <li>• Skin care and pressure ulcer prevention strategies.</li> <li>• Cardiopulmonary resuscitation skills.</li> <li>• Nurses' role in disaster.</li> <li>• Emergency and fire drill.</li> <li>• Managing blood and blood products.</li> <li>• Safe surgical practice.</li> <li>• Pain management.</li> <li>• All other competencies as per service scope.</li> </ul>
<b>SMCS.55.i</b>	The staff progress report and any actions taken are documented in the staff files.
<b>SMCS.55.j</b>	There is a regular follow up from nursing leadership to assess effective monitoring of staff competence.

## Operation Theatre

Surgery is associated with high levels of mortality and morbidity complications, and with an annual estimate of 234 million surgeries being performed around the world; surgical care is an essential aspect of healthcare. The complications arising from surgery are not only harmful to patients, but they are also expensive for healthcare systems. Thus, quality and standard of surgical care in hospitals is an important issue. The OT must be well equipped and surgeries should be performed in a safe environment by qualified OT team. The standards of this section define the safety issues that are essential to perform the surgeries efficiently with better outcome.

### SMCS.56

#### **The hospital has a system to guide patient acceptance into the operation room**

##### **Guide**

Pre-operative preparation is essential to enhance patient safety and minimize risks of surgical errors. This will contribute to improving surgery outcomes, reducing surgical complications, and ensuring effective and safe surgery as possible. The pre-operative procedure can reduce the patient's anxiety. Additionally, adequate physical and psychological preparations lead to fast post-operative recovery. This standard is to ensure that the surgical patient is fully prepared and consented to for surgery and all documentation is maintained and valid.

<b>Measures</b>	<b>SMCS.56.a</b>	<p>The hospital has policies and procedures to guide acceptance of patients into operation rooms, including but is not limited to:</p> <ol style="list-style-type: none"> <li>1. Patient is scheduled in the list.</li> <li>2. Patient identification by name, medical record number with patient ID band.</li> <li>3. Complete consent form.</li> <li>4. Surgical site marking and its preparation.</li> <li>5. The operation/procedure name plus surgeon name are checked.</li> <li>6. Documented Pre -Anesthesia Checkup (PAC).</li> <li>7. Complete pre-anesthesia form.</li> <li>8. Documented pre-operative assessment by surgeons.</li> <li>9. Handover process all transition points.</li> <li>10. Infection control measurement for patient in operation room.</li> <li>11. The radiology and laboratory result.</li> <li>12. The complete physical and medical history.</li> <li>13. The requisition of blood and blood product is verified to ensure blood reserved in blood bank, if needed.</li> <li>14. Ensure correct patient, correct surgery, and correct site.</li> <li>15. Handling laboratory specimens in operation room.</li> <li>16. The availability of resources (Blood, ICU or high dependency bed, materials, equipment and human resources).</li> </ol>
	<b>SMCS.56.b</b>	<p>The policies are developed by OT multidisciplinary teams including surgeons, nurses, anesthesia, and approved by head of the department.</p>
	<b>SMCS.56.c</b>	<p>There is regular quality audit to ensure compliance to the policy.</p>
<b>SMCS.57</b>	<b>The Operation Theatre has standardized pre-operative Checklist for safe surgery.</b>	
<b>Guidance</b>	<p>Patient safety remains the most important priority for healthcare and this includes ensuring a safe experience for patients who experience surgery. The preparation of patients for surgical procedures and transfer to the operation room demonstrates the previous step of moving the operation room that is where is critical to have guidelines that guarantee the safety of patients. A pre-operative checklist is a tool that the surgical team uses to identify, document, and communicate patient preoperative preparations. The pre-procedural checklist is important for the surgical team to ensure that the patient is ready for surgery.</p>	



The hospital must have a standardized pre-operative checklist to be used for all patients undergoing surgeries to ensure all information about procedures needed for safe surgery is included to ensure safe surgery. All concerned staff should be oriented on the checklist.

<b>Measures:</b>	<b>SMCS.57.a</b>	The hospital has a pre-operative checklist that is completed and signed by a nurse, which includes: <ol style="list-style-type: none"> <li>1- Patient identification.</li> <li>2- Informed consent.</li> <li>3- Surgical site preparation.</li> <li>4- Surgical site marking.</li> <li>5- Last food and drink time.</li> <li>6- Vital signs.</li> <li>7- Removal of jewelries, dentures, contact lenses.</li> <li>8- Bowel preparation and bladder emptying.</li> <li>9- Premedication if required.</li> <li>10- Allergic status.</li> <li>11- Availability of results of diagnostic tests (radiology, laboratory etc.) if required.</li> <li>12- Antibiotic and VTE Prophylaxis if required.</li> <li>13- Availability of requested blood or blood products.</li> </ol>
	<b>SMCS.57.b</b>	All department concerned staff are oriented and trained on their responsibilities toward the pre-operative procedures and checklist.
	<b>SMCS.57.c</b>	A standardized communication process is used for handing over patient to Operation Theatre.
	<b>SMCS.57.d</b>	Department leaders ensure that all staff are oriented and competent on using the per-op checklist.

## **SMCS.58 The Operation Theatre has a guideline for surgical list management.**

**Guidance** The principle of theatre list is based on multidisciplinary and patient safety approaches. List management requires surgeons to have good communication, leadership, and hospital skills. Surgical list management is important to enhance Theatre utilization, minimize overtime cost and minimize the unexpected delay between cases and cancellation this standard intends to provide an effective guideline for Proper utilization of operating Theatre.

<b>Measures:</b>	<b>SMCS.58.a</b>	The hospital has clear guidelines for scheduling and cancellation of elective, day care and emergency cases.
	<b>SMCS.58.b</b>	All concerned staff are aware of these guidelines.

<b>SMCS.58.c</b>	Required information for scheduling surgical procedure includes the following: <ol style="list-style-type: none"> <li>1- Date preferred.</li> <li>2- Time preferred.</li> <li>3- Team.</li> <li>4- Procedure name (including side as applicable).</li> <li>5- Specific equipment needs (including implants).</li> <li>6- Estimated procedure time required.</li> <li>7- Inpatient /Outpatient Status.</li> <li>8- Anesthesia type.</li> <li>9- Diagnosis.</li> <li>10- Patient Information.</li> <li>11- Classification of surgery.</li> </ol>
<b>SMCS.58.d</b>	Surgical waiting lists are regularly monitored and updated, and clients are kept informed about the anticipated date of their scheduled procedure.
<b>SMCS.58.e</b>	The operation Theatre follows performance indicators to monitor Theatre utilization at least include: <ul style="list-style-type: none"> <li>- Starting first case time</li> <li>- Cancellation</li> <li>- Waiting list</li> </ul>

**SMCS.59**

**All operating Theatres apply evidenced-based surgical safety checklist for all the patients.**

**Guidance**

The surgical Safety Checklist (SSC) was established by WHO in 2009 to minimize errors and adverse events and increase cooperation and communication in surgery. Surgical Safety Checklist is a patient safety communication tool that is used by the operation Theatre team (nurses, surgeons, anesthetists, and others), to discuss all important details and actions performed on each surgical case. The usage of the checklist showed a significant reduction in both morbidity and mortality rates. The Surgical Safety Checklist includes three phases, which include sign-in (before the induction of anesthesia), time-out (before skin incision), and sign-out (before the patient leaves the operating room). All hospitals are required to implement this standard to ensure safe surgery and patient safety. Hospital staff working in operation Theatre must be well oriented on this checklist.

**Measures:**

<b>SMCS.59.a</b>	The hospital has a standardized surgical safety checklist.
<b>SMCS.59.b</b>	Hospital staff are trained on implementing surgical safety checklists.
<b>SMCS.59.c</b>	Surgical safety checklist is used for every patient undergoing surgical procedure.

**SMCS.59.d**

There is regular audit conducted to ensure proper implementation.

**SMCS.60 The hospital has a process to prevent Wrong-patient, Wrong surgery/ procedure, and Wrong-site. (CSS.10)**
**Guidance**

Wrong Surgery-Site, Wrong Surgery/ Procedure commonly occurs in hospitals. This could be an overwhelming experience for the patients and the surgical team. These medical errors could be avoided with the implementation of effective communication among the surgical team, effective patient involvement in site marking, and effective verification of the operative site. Additionally, effective patient assessment, adequate medical record review, and avoidance of abbreviations are common factors that can contribute to avoiding these errors. Wrong-Site Surgery commonly occurs in orthopedic or podiatric procedures, general surgery, urological and neurosurgical procedures. According to the Joint Commission (JCI), the universal protocol of avoiding wrong surgery/ procedure, wrong site, and wrong patient covers marking the surgical site, preoperative verification process, and time-out that is performed before conducting the procedure/ surgery. Site marking, Verification, and Time out should be consistent throughout the hospital Site marking must be done in cases that involve laterality, multiple structures, or levels. The pre-operative checklist is developed and used to verify that all documents and patient information needed for surgery or invasive procedures are on hand and completed before the start of the surgical or invasive procedure. This standard aims to eliminate and prevent Wrong-Site, Wrong-Patient, and Wrong-Procedure surgery.

**Measures:****SMCS.60.a**

The hospital implements a clear standardized process to prevent wrong patients, wrong sites, and wrong surgery/ procedure for all invasive procedures performed in any operating/ procedure rooms. The process covers three phases: verification, site marking, and time out.

**SMCS.60.b**

The verification of patient information as per the pre-operative checklist includes checking the identity of the patient, completing a consent form appropriate to the type of the procedure, description for the surgical procedure, laboratory or radiology image results.

**SMCS.60.c**

The team use consistent marking process for all invasive and surgical procedure sites throughout the hospital.

**SMCS.60.d**

The procedure/ surgical site is marked by the healthcare staff that will perform the procedure.

**SMCS.60.e**

The patient is involved in the marking process.

<b>SMCS.60.f</b>	The time-out process is implemented is just before the procedure/surgery is initiated, to ensure the correct site, correct procedure/ surgery, and correct patient surgery.
<b>SMCS.60.g</b>	All the surgical/ procedure teams use active communication process during the time out, to agree on the correct patient identity, correct procedure/surgery to be performed, correct site.
<b>SMCS.60.h</b>	All the process is documented in patient medical records.

**SMCS.61****Hospital has clear documented policies and procedures to direct the care in the operating Theatre.**

## Guidance

The operating theatre (OT) is a unique unit in which complex clinical care is provided by highly trained multidisciplinary teams, using costly procedures and a large number of instruments and surgical implants that can be difficult to manage during surgical procedures. Operating theatre staff must be trained on the risks related to patient mismanagement, including patient misidentification, surgical site infection, and equipment.

To reduce the chance of patient mismanagement, it is recommended that clinical practices in OR be based on the best available evidence in the form of best practice guidelines, policies, and procedures. The implementation of best practice guidelines, policies, and procedures support the clinical decision-making to improve quality care, lead to good patient outcomes, and cost-effectiveness. Staff should be all be aware of the best available policies and procedures available in OT.

<b>Measures:</b>	<b>SMCS.61.a</b>	<p>Hospital operating room has policies and procedures that guide the care of patients that include, but is not limited to:</p> <ol style="list-style-type: none"> <li>1- Informed consent.</li> <li>2- Pre-operative checklist.</li> <li>3- Handover process between unit nurse and operating room nurse.</li> <li>4- Prevention of wrong patient, wrong surgery, wrong site.</li> <li>5- Preparation of patient for surgery.</li> <li>6- Handling patients with infectious diseases.</li> <li>7- Infection control measure in the operating room.</li> <li>8- Management and handling equipment, and periodic checks.</li> <li>9- Management and transport of patients' laboratory samples.</li> <li>10- Safe handling of commonly used chemicals, and hazardous materials in the OT.</li> <li>11- Safe handling, storage and management of blood and blood products.</li> <li>12- Fire safety.</li> <li>13- Waste management.</li> <li>14- Management of visitors to the operation Theatre, etc.</li> <li>15- Operating Theatre response to disaster effectively</li> </ol>
	<b>SMCS.61.b</b>	All policies and procedures are consistent with the hospital and MoH regulations.
	<b>SMCS.61.c</b>	All operation room concerned staff are well oriented on all OR policies and procedures.
	<b>SMCS.61.d</b>	There is regular audit and monitor the compliance to the policies.

## **SMCS.62**      **Operation Theatre has a standardized process to prevent accidental retention of instruments and sponges in the surgical wound.**

**Guidance**      The surgical count is very important to ensure surgical safety. Unintentionally leaving sharps, sponges, objects, or tools in a patient at the end of the operation is unusual but can result in severe harm. Retained sponges and instruments may lead to serious outcomes including bleeding, infection, bowel perforation, fistula or obstruction, and even death. Therefore, hospitals need to implement strict mechanisms to ensure safe practice in OT and prevent miscounts and harm to patients. Effective clear communication and read back process is very important in this process, to avoid count inconsistency.

**Measures:**      **SMCS.62.a**      The hospital implements clear guidelines for surgical count.

<b>SMCS.62.b</b>	The hospital had a develop process and implements to prevent inattentive retention of instrument or sponges in surgical wound.
<b>SMCS.62.c</b>	The count process includes items used during surgery such as instrument, sponges, sharps, and other as applicable.
<b>SMCS.62.d</b>	The policy addresses the procedure to follow in case of a count inconsistency.
<b>SMCS.62</b>	The count process is standardized.
<b>SMCS.62.f</b>	The count process is clearly documented in the count sheet.
<b>SMCS.62.g</b>	All staff in OT are trained on the guidelines for surgical count.
<b>SMCS.62.h</b>	There is regular audit and monitor the compliance

**SMCS.63****Operation Theatre implements process for collecting, safe handling, and dispatch of specimens.****Guidance**

In the operation room, specimens are usually taken during the surgical procedure. It is very important that each lab specimen reaches the department of pathology, histology, or cytology in optimum condition, without delay or mislabeling, to facilitate identification of organism or disease

The specimen is very important in determining the correct diagnosis or detecting infectious agents. Therefore, timely treatment will be given to the patient. Correct collection methods, good storage conditions, transportation times, correct patient details, and supporting information, should be double-checked before handling the specimen to the pathology department. It is important that the hospital implements a guide for safe collection, handling, dispatching, and disposing of specimens. All staff dealing with these specimens should be oriented and trained on this guide.

**Measures:**

<b>SMCS.63.a</b>	The OT has clear written guidelines that guide proper, safe handling of specimens.
<b>SMCS.63.b</b>	All staff are oriented with the guidelines.
<b>SMCS.63.c</b>	The hospital has a protocol to deal with mislabeling errors or loss of specimens.
<b>SMCS.63.d</b>	There is recipient notification when the specimen reaches the intended study lab.
<b>SMCS.63.e</b>	There is regular audit conducted to monitor compliance to the guideline.

**SMCS.64****Post-operative report is documented immediately after surgery.****Guidance**

A patient's post-operative care depends on the findings of the surgical procedures. Therefore, it is essential that all information, actions, and results related to the patient's condition are entered in the patients' record. It is crucial that information about the surgery is recorded in the patients' medical records.

An operation report is critical to facilitate communication between the operating team and other colleagues and provides a legal record of a patient's care. Patient long-term care is influenced by the quality of the report that should be accurate, clear, and informative, and contains all the steps in the surgical procedure, so it can be used in the further follow-up of the patient treatment process and can be used as a reference for any situation concerning patient condition.

**Measures:****SMCS.64.a**

There is a documented operative report about the surgery that covers the followings:

- 1- Pre- and post-operative diagnosis.
- 2- The operation/ procedures performed and
- 3- description of procedure findings.
- 4- Perioperative complications;
- 5- Name of surgical team
- 6- Amount of blood lost.
- 7- Intraoperative complications.
- 8- Amount of blood loss and amount of transfused blood;
- 9- Registry number of all implantable devices; and
- 10- Date, time, and signature of responsible physician
- 11- Surgical specimens sent for examination;

**SMCS.64.b**

The operative report is completed by responsible surgeon before patient leaves the recovery room to facilitate continuity for patient care

**SMCS.64.c**

The report is signed by the surgeon who performed the surgery.

**SMCS.65****Each patient has individual post-operative care plan, and continuously monitored and managed.****Guidance**

Therefore, management and transport of patients immediately after anesthesia can potentially be hazardous. All patients who have undergone surgery, and anesthesia are at risk of postoperative complications including compromised airway, breathing, circulation, bleeding, uncontrolled pain, etc. If adequate standards of care are not provided, it is quite likely serious complications can



occur. Therefore, monitoring assessment and observation of patient postoperatively is critical. Health care staff can support patients recovering from surgery and identify complications. Hospitals should implement and maintain clear mechanisms of postoperative monitoring, ensuring that staff are oriented about and are competent to implement these mechanisms. The early detection of deterioration and taking the action in PACU can prevent these complications or reduce their severity.

<b>Measures:</b>	<b>SMCS.65.a</b>	Operation Theatre has implemented guidelines for post-operative care starting from the recovery room, to the receiving ward.
	<b>SMCS.65..b</b>	The patient has a clear post-operative plan, written by the surgeon responsible. The plan may include: <ol style="list-style-type: none"> <li>1. Wound care</li> <li>2. Drains</li> <li>3. Vital signs monitoring</li> <li>4. Pain management</li> <li>5. Special positioning</li> <li>6. Nutritional instructions</li> <li>7. Post-operative care follow-up</li> <li>8. Time to start mobilization</li> <li>9. Any other recommendations or referrals.</li> </ol>
	<b>SMCS.65.c</b>	In recovery room, patient is properly monitored for sedation, bleeding, any other complications, before moving to recommended unit.
	<b>SMCS.65.d</b>	Patient is assessed for pain, at agreed intervals and provided with adequate pain relief.
	<b>SMCS.65.e</b>	The treating team documents all information, interventions and recommendation in the patient's medical record.
	<b>SMCS.65.f</b>	Regular audit is conducted to monitor compliance to the guideline, and documentations.

## **SMCS.66**      **Operation Theatre has clear process to ensure patient is discharged safely from operation room.**

**Guidance**      Discharging patient from recovery or post anaesthesia unit (PACU) should be in right time and to an appropriate destination in order to maintain patient safety and comfort and maximizing efficiency of the unit. Discharge process assesses the fitness of patients to return to the ward or other clinical areas. Furthermore, it can assist the recovery team to ensure patient safety, comfort and adequacy of documentation. As a result, discharge protocols can improve the efficiency of the service with appropriate and timely discharges.

<b>Measures:</b>	<b>SMCS.66.a</b>	The OT has written guideline with clear criteria for the discharge or transfer of patients from recovery room or post-anaesthesia unit.
	<b>SMCS.66.b</b>	All the recovery room or PACU staff are familiar with the guide.
	<b>SMCS.66.c</b>	Patients are discharged when they meet discharge criteria.
	<b>SMCS.66.d</b>	Patients are discharged by qualified anesthesiologists.
	<b>SMCS.66.e</b>	Patient's condition is communicated with receiving area before transferring the patient.
	<b>SMCS.66.f</b>	OT nurses prepare all equipment and devices required for patient transfer.
	<b>SMCS.66.g</b>	A summary of the patient's care and follow up is documented in the patient's record.
<b>SMCS. 67</b>	<b>The operation theatre implements various approaches to maintain competency of the unit staff.</b>	
<b>Guidance</b>	The provision of education and training for all OT staff are considered a top priority due to its fundamental link with the delivery of safe and high-quality patient care. The skills required for a nurse in OT need sufficient training, monitoring and follow up to ensure proficiency in providing high quality service in the OT.	
<b>Measures:</b>	<b>SMCS.67.a</b>	The operation Theatre has a specific orientation program and training for all newly joining nursing staff, with a written orientation checklist. The program aligns with the hospital generic orientation program.
	<b>SMCS.67.b</b>	All unit nursing staff receive required training and education on operation theatre, including but not limited to: <ol style="list-style-type: none"> <li>1. Policies and procedures related to OT.</li> <li>2. Safety usage and maintenance of instruments and equipment.</li> <li>3. Infection control measures.</li> <li>4. Environmental safety (electrical, fire plan, Hazmat, etc.</li> <li>5. Management of visitors to the operation theatre</li> <li>6. Operating Theatre response to disaster effectively</li> </ol>
	<b>SMCS.67.c</b>	The unit has an annual training plan to ensure proper coverage of the staff in different courses.
	<b>SMCS.67.d</b>	The staff performance is monitored through a competency checklist.

**SMCS.67.e**

The staff competency assessment is documented and kept in the staff's file.

**SMCS.68**

**The hospital has a standardized operating theatre design.**

**Guidance**

The physical layout of the operating theatre should be designed to consider client flow, traffic patterns, the types of procedures performed, ergonomics, and equipment movement logistics. Having standardized structured Operation Theatre is important to facilitate workflow, patient flow (in and out) of the Operating Theatre, allow flexibility for new technologies incorporation, and maintain a safe environment for patients and healthcare workers.

**Measures:****SMCS.68.a**

The operation Theatre has a standardized design that includes a reception area, operation Theatre suites according to the scope of service and needs for the hospital), a recovery bay for post-operative patients, with provisions for other special rooms required.

**SMCS.68.b**

The department has three levels of access that include unrestricted, restricted and semi restricted area.

**SMCS.68.c**

The department has standardized operating rooms that include standardized ventilation system and basic equipment / machines.

**SMCS.68.d**

All corridors are kept free of any materials to ensure free patient flow at all times.

**SMCS.69**

**Operation Theatre strictly follows and supervises infection control and prevention standards.**

**Guidance**

To minimize risk of acquiring post-surgical site infection and protect Operation Theatre staff from contacting infectious germs.

**Measures:****SMCS.69.a**

The Operation Theatre follows hospital infection control and prevention guidelines.

**SMCS.69.b**

All OT staff are well trained and oriented to the infection control guidelines applied to OT.

**SMCS.69.c**

The operation Theatre is always maintained clean all the time

<b>SMCS.69.d</b>	Standard precautions are strictly followed in the operating rooms with a strict emphasis on the hand hygiene and appropriate PPEs and other barriers.
<b>SMCS.69.e</b>	There is clear guide to control traffic and movement in the operating room.
<b>SMCS.69.f</b>	The OT has positive pressure with respect to corridors.
<b>SMCS.69.g</b>	Operating room scrubs suits are only allowed inside the restricted areas of the OT.
<b>SMCS.69.h</b>	There are clear guidelines for cleaning and disinfecting operating rooms by cleaners, after each surgical procedure.
<b>SMCS.69.i</b>	There is clear guideline for cleaning and disinfecting equipment.
<b>SMCS.69.j</b>	Patients with infectious diseases are handled properly inside the operating rooms.
<b>SMCS.69.k</b>	There is regular audit to assess compliance to those guidelines.

**SMCS.70****Operation Theatre strictly follows hospital fire safety plan.****Guidance**

An environmental hazard is a form of hazard resulting from chemical, biological, or physical agents either from ongoing or previous human activity or maybe a property present in the natural environment. The optimum outcomes depend on how well the place is prepared and how familiar are the staff with their roles and responsibilities in the prevention and management of fire. Department leaders must train all the staff on the hospital fire safety plan, with their roles and responsibilities.

**Measures:**

<b>SMCS.70.a</b>	The OT follows hospital operating fire safety plan
<b>SMCS.70.b</b>	All OT staff are periodically trained and oriented on the fire safety plan
<b>SMCS.70.c</b>	The team follows proper methods or rescue and escape
<b>SMCS.70.d</b>	There is regular fire drill where the OT staff participate
<b>SMCS.70.e</b>	Fire-fighting equipment are available and staff trained on using it.

**SMCS.70.f**

All equipment or instruments that may cause fire or harm to patients are stored in places away from patients when are on active use

### Anaesthesia Care (AN)

Anesthesia is necessary for surgery and some invasive procedures. The types of anesthesia are depending into types of surgery, patient condition and procedures. Patients may get adverse reactions from the anesthesia drugs administered before, during and after surgery. Although the potential hazards, anesthesia can be relatively safe if proper standards are maintained. Performance of pre-anesthetic assessment before the administration of sedation or anesthetic and patient monitoring during and after surgery can reduce the likelihood of hazards. The following standards require a well-trained staff for anesthesia care with availability of anesthetic supplies and equipment to avoid further anesthesia related complications.

**SMCS.71**

**The hospital has a qualified anesthesiologists managing anaesthesia and sedation service.**

**Guidance**

Anesthesia and sedation services need to be under the direction of one or more personnel who are qualified by education, training, and experience in the field of anesthesia that should be consistent with country applicable laws and regulations. These qualified leaders are responsible for developing, and implementing policies, providing administration in regards to anesthesia services. This standard aims to ensure that anesthesia service throughout the hospital is uniform throughout the hospital.

**Measures:****SMCS.71.a**

The department is directed by an anesthetist who is qualified by education, training, and experience in the field of anesthesia e.g., pediatric anesthesia, cardiothoracic anesthesia, neuro anesthesia, and transplant anesthesia.

**SMCS.71.b**

There is clear job description for the head of department with clear responsibilities.

**SMCS.71.c**

The head of the anaesthesia department supervises the development and implementation of policies and procedures related to sedation and anaesthesia practice throughout the hospital.

**SMCS.71.d**

The head of the department enforces continuous quality management and risk management activities, and infection control guidelines.

**SMCS.72**

**All anesthesia staff are qualified with appropriate qualification.**

**Guidance**

The qualification of physicians, nurses, or any other staff responsible for patients undergoing sedation is critical. Having the knowledge and skills on sedation and relating it to the procedures performed on patients has a strong effect on the level of patient tolerance of painful procedures and decreases the chance of complications. In addition, certification in basic/ advanced life support is also important to ensure patient safety.

**Measures:****SMCS.72.a**

All anaesthesia team members providing anaesthesia service are certified with appropriate qualifications.

**SMCS.72.b**

All major surgeries/ procedures such as paediatric surgery, cardiac, transplant, neurosurgery operations are supervised by the anesthesia consultant.

**SMCS.72.c**

Operation room has anesthetist available throughout the operation.

**SMCS.72.d**

All Medical and Nursing staff working in the anesthesia unit have essential cardiac life support certificates concerning the age group they serve including basic life support, adult cardiac life support, pediatric cardiac life support (PCLS), and Neonatal resuscitation program for pediatric anesthesia.

**SMCS.73**

**The anesthesia department has clear policies to guide the provision of anesthesia care.**

**Guidance**

The primary goal of the anesthesia unit is to provide safe and effective anesthesia care for patients undergoing operative and other invasive procedures.

Having well-written updated policies/ guidelines/ protocols is critical to guide sedation and anesthesia care. Having clear policies will guide the team on appropriate actions, and their responsibilities.

<b>Measures:</b>	<b>SMCS.73.a</b>	The department has written policies and procedures that are approved by hospital management, covering but is not limited to: <ol style="list-style-type: none"> <li>1. pre-anesthesia and post anesthesia CARE</li> <li>2. preoperative, intraoperative and post-operative monitoring of patients undergoing anesthesia</li> <li>3. handling of anesthesia agents safely</li> <li>4. Handover policy.</li> <li>5. Pre-operative fasting</li> <li>6. Pre medication</li> <li>7. Pre-operative anesthesia evaluation</li> <li>8. Day-care anesthesia</li> <li>9. Intra operative monitoring</li> <li>10. Post anesthesia care unit</li> <li>11. Post-operative pain care</li> </ol>
	<b>SMCS.73.b</b>	All staff are well trained and oriented on the policies.
	<b>SMCS.73.c</b>	The unit conducts audit and develops an action plan to improve the care.

**SMCS.74**

**The department has all required equipment and supplies for the provision of anesthesia care.**

**Guidance**

The provision of general anesthesia requires the availability of functioning, safe anesthetic equipment and patient monitors, and the essential anesthetic and resuscitative medications.



<b>Measures:</b>	<b>SMCS.74.a</b>	<p>The unit has essential a multifunctional anesthesia machines and equipment and supplies required for anaesthesia, including:</p> <ol style="list-style-type: none"> <li>1. Anaesthesia workstation</li> <li>2. Hand ventilating assemblies.</li> <li>3. Suction apparatus.</li> <li>4. Airway management kits (including difficult airways equipment).</li> <li>5. Resuscitation Work Station (Crash Trolley).</li> <li>6. Access to bronchoscope</li> <li>7. Video laryngoscope</li> <li>8. Elastic gum bougie</li> <li>9. Ultra Sound (US) machine</li> <li>10. Invasive and non-invasive monitoring equipment (Electro Cardio Graph- ECG, Pulse Oximeter, Endo Tracheal- ET CO2, invasive and non-invasive BP monitoring and Temp).</li> <li>11. Defibrillator and pacing facilities.</li> <li>12. ECG machine</li> <li>13. Patient's Temperature controlling equipment.</li> <li>14. Infusions and specialized pumps.</li> <li>15. Portable Transport equipment (Monitors, Ventilators and Transport Kit)</li> <li>16. Point of care equipment: Random Blood Sugar (RBS) monitoring,</li> <li>17. Arterial Blood Gas (ABG) monitoring and analysis.</li> <li>18. Difficult airway kit</li> <li>19. Neonatal and paediatric airway equipment</li> </ol>
	<b>SMCS.74.b</b>	The equipment complies with the National Standards.

<b>SMCS.74.c</b>	All anesthesia machine and equipment are checked and undergo preventative maintenance regularly, with evidence of records.
<b>SMCS.74.d</b>	The unit has an access to maintain, replace and clean the equipment.
<b>SMCS.74.e</b>	The unit has designated storage area for this equipment.
<b>SMCS.74.f</b>	The unit has an access to emergency equipment.
<b>SMCS.74.g</b>	The unit has an access to indent consumables.
<b>SMCS.74.h</b>	All staff are trained on the use of the equipment, with records.

**SMCS.75**

**Patient's anesthesia care is planned and documented in the patient's record.**

**Guidance**

Patient anesthesia plan should be documented in the patient's record, which includes patient assessment exam information, types of anesthesia to be used, route of administration, any other medication needs, the monitoring process, predicted post-anesthesia care needed.

**Measures:**

<b>SMCS.75.a</b>	There is clear policy and procedures for the provision of anaesthesia care, covering, monitoring of patients during anaesthesia, post-anaesthesia care in the recovery room.
<b>SMCS.75.b</b>	Assessment is conducted before anaesthesia.
<b>SMCS.75.c</b>	The planned anesthesia care is documented in patient's anesthesia record during anesthesia covering: <ol style="list-style-type: none"> <li>1. Patients' name, age height, weight, and vital signs</li> <li>2. Type of anesthesia, dose, time, and route of administration,</li> <li>3. Blood investigation carried out</li> <li>4. Patient blood sugar and blood gas</li> <li>5. Any blood or blood product given, with the reason</li> <li>6. Type of intravenous fluid given</li> <li>7. Any complications</li> <li>8. Patients' condition status.</li> </ol>
<b>SMCS.75.d</b>	Qualified anaesthesiologist evaluates the patients before all electives and emergency procedures under general anaesthesia, regional anaesthesia
<b>SMCS.75.e</b>	Each patient anaesthesia care is planned and documented in patients' records.

<b>SMCS.75.f</b>	Patient's physical status is continuously monitored and documented during anaesthesia.
<b>SMCS.75.g</b>	Patient assessment and monitoring finding is clearly documented.
<b>SMCS.75.h</b>	Person who administers and person monitors patients' condition signature is maintained.
<b>SMCS.75.i</b>	When patient is transferred to recovery room, he is handed over and evaluated, and his condition status and time are documented.
<b>SMCS.75.J</b>	Post-anaesthesia patients are continuously monitored and managed in the recovery room.

**SMCS.76**

**There is a clear process to guide the care of patient going for moderate and deep sedation/ analgesia.**

**Guidance**

The preoperative evaluation is the first step in ensuring the safe conduct of anaesthesia care. The goals of the preoperative evaluation are to gain information regarding the patient's current status, comorbid conditions, and the intended procedure. This process helps to plan any additional investigation and to plan the type of perioperative anaesthesia care and the postoperative analgesia plan.

This standard guides the hospital on the appropriate care of patients going for moderate and deep sedation to reduce the patient's surgical and anesthetic perioperative morbidity or mortality.

<b>SMCS.76.a</b>	The unit has clear written policies and procedures for moderate and deep anaesthesia care.
<b>SMCS.76.b</b>	All patients are evaluated and monitored before receiving any general anaesthesia, regional anaesthesia, and post anaesthesia care.
<b>SMCS.76.c</b>	The physician obtains informed consent from the patient after a detailed explanation about the benefits and expected risks. Consent is signed by the patient/ or guardian.
<b>SMCS.76.d</b>	Patients undergoing surgeries/procedures under moderate and deep sedation are prepared properly.
<b>SMCS.76.e</b>	The pre-sedation assessment is done by an anesthetist covering:  Age, sex  Medical/surgical history

		Comorbidities Drug allergy medication history Patient NPO Status Vital signs Age and weight ECG.
	<b>SMCS.76.f</b>	Preoperative evaluation is valid for three months; unless there were changes in the clinical status of the patient.
	<b>SMCS.76.g</b>	Preoperative evaluation is recorded in the patient's medical record.
<b>SMCS.77</b>	<b>The patient is continuously monitored during and after anesthesia (general, moderate, and deep).</b>	
<b>Guidance</b>	Because of the rapid changes in patient status during anaesthesia, qualified anaesthesia personnel shall be continuously present to monitor the patient and provide anaesthesia care, detect and manage any unexpected adverse events and complication. This standard aims to ensure optimal perioperative patient care.	
<b>Measures:</b>	<b>SMCS.77.a</b>	The unit has clear guide of monitoring patient during anaesthesia process (including moderate and deep anaesthesia).
	<b>SMCS.77.b</b>	The unit ensures continuous clinical monitoring of the patient by a qualified anesthesiologist throughout the conduct of general anaesthesia, regional anaesthesia until the patient until discharged from anaesthesia care.
	<b>SMCS.77.c</b>	Patient with sedation is monitored in the Operation Room and in recovery covering, Vital signs, Oxygen saturation, level of consciousness, skin colour.
	<b>SMCS.77.d</b>	Patient's monitoring continues after transfer to recovery room until the patient is stable.
	<b>SMCS.77.e</b>	All monitoring findings are documented in patient electronic record
	<b>SMCS.77.f</b>	Monitoring records are charted at the anaesthesia record at least every 5 minutes.
	<b>SMCS.77.g</b>	The unit conducts audit to monitor the efficacy of patient

care

**SMCS.78**

**There is a clear process to monitor and manage patients post anaesthesia.**

**Guidance**

During the period of sedation, the patient has the highest risk for anaesthesia-related complications. Postanaesthesia care means monitoring patients immediately after receiving anaesthesia or sedation. Discharge from the Post Anaesthesia Care Unit (PACU) should follow standard discharge criteria. Particular attention should be given to monitoring oxygenation, ventilation, circulation, level of consciousness, and temperature. This standard aims to provide care based on patient condition and as needed and reduce post-anesthetic complications.

**Measures:****SMCS.78.a**

The unit has a clear policy and procedure guiding monitoring of patient during post-aesthesia phase.

**SMCS.78.b**

All staff are oriented on the policy.

**SMCS.78.c**

Patients are transferred safely to Post Anaesthesia Care Unit (recovery room).

**SMCS.78.d**

The patient is continuously evaluated, and managed during the transport.

**SMCS.78.e**

Patients are continuously evaluated at Post Anaesthesia Care Unit (PACU).

**SMCS.78.f**

An ACLS Qualified nurse provides post anaesthesia care

**SMCS.78.g**

All monitoring finding and service provided in the recovery room are documented patients' records.

**SMCS.78.h**

Patients are discharged for PACU when discharge criteria are met.

**SMCS.78.i**

Discharge order from PACU is signed by the anaesthesiologist.

## Critical Care Services

Critical Care provides curative and life support treatment for the critically ill patient and should be provided with high technology system. The critical care unit must be capable to provide services unique to its setting such as mechanical ventilation. The following standards are intended to promote and improve the safe and effective practice of intensive care units including adult and pediatric intensive care units as well as coronary care units.

### SMCS.79

**The ICU is well structured, and designed for the care critically ill patients.**

#### Guidance

A high standard of intensive care medicine is influenced by good design and adequate space. It is "a high specialty area of a hospital, dedicated to the management of patients with life-threatening illnesses, injuries and complications, and monitoring of potentially life-threatening conditions. For this reason, the unit facilities, equipment should be well planned, structured, and organized, to facilitate ease smooth work.

#### Measures:

##### SMCS.79.a

The intensive care unit is controlled area with restricted access.

##### SMCS.79.b

The patients' area is sufficient to deliver care (20 meters of floor area).

##### SMCS.79.c

The unit has hand hygiene facilities available near each patients' care, all access areas.

##### SMCS.79.d

The unit has facility for isolation measures.

##### SMCS.79.e

The structure of the unit ensures the availability of the followings:

1. Computing Working Station
2. Central Monitoring Station
3. Designated storage area for medication and essential - life supporting equipment.
4. Medication Preparation area

5. Clean and dirty utility areas.
6. Counselling area
7. Mothers Rest Rooms, for pediatric ICUs.
8. Family Rest Area
9. Doctor's On Call Rooms in a close approximate to the unit.
10. Medical and Nursing Office
11. Staff Lounge/ Rest area
12. Patient Toilets.

**SMCS.79.f**

The unit follows the hospital infection control measures.

**SMCS.79.g**

The unit ensures the presences of natural light and window views.

**SMCS.80****A senior qualified consultant is assigned to supervise the intensive care unit (ICU).****Guidance**

The presence of qualified critical care leaders ensures a smooth operation and workflow, work coordination, and staff management. These leaders play an essential role in facilitating and promoting evidence-based practice and research activity, develop and follow up implementation policies and guidelines.

**Measures:****SMCS.80.a**

The intensive care unit is directed by qualified critical care consultant, who is qualified by education, experience and training.

**SMCS.80.b**

A consultant has minimum of 2 years' experience as a full time intensivist.

**SMCS.80.c**

The head of ICU oversees, approves, and evaluate quality management activities in the unit.

**SMCS.80.d**

The head of ICU approves local critical care policies and protocols.

**SMCS.81****The ICU has well trained and qualified intensive care medical and nursing staff.****Guidance**

Trained personnel in intensive care units will follow updated evidence-based guidelines, which ensure clinical performance, and skills that meet the standards of patient safety and best quality of care. Additionally, these people are competent in assessing a patient's clinical status, requesting the needful investigations and other treatment regimens.



<b>Measures:</b>	<b>SMCS.81.a</b>	The intensive care unit is covered by registered physicians, who are qualified to manage critically ill patients 24/7. These Physicians have training in intensive care (completed membership), or a senior specialist and above, or registered Specialist who has worked under supervision of responsible physician
	<b>SMCS.81.b</b>	The intensive care unit nurse manager is a registered nurse, who is qualified by education, training and experience in critical care practice, and undertaken leadership management training.
	<b>SMCS.81.c</b>	The ICU bedside nurses are qualified and experienced in managing critically ill patients.
	<b>SMCS.81.d</b>	Medical and nursing staff working in the adult intensive care unit are certified in Basic Life Support (BLS), advanced cardiac life support (ACLS), Pediatric Cardiac Life Support (PCLS).
<b>SMCS.82</b>	<b>The ICU implements various approaches to maintain the competency of the unit staff.</b>	
<b>Guidance</b>	The provision of education and training for all intensive care staff is considered a top priority due to its fundamental link with the delivery of safe and high-quality patient care	
<b>SMCS.82</b>	<b>SMCS.82</b>	The unit has an orientation program and training for all newly joining nursing staff, with a written orientation checklist.
	<b>SMCS.82</b>	All unit nursing staff receive required training and education on intensive care related cases and procedures, covering: <ul style="list-style-type: none"> <li>• Fundamentals of critical care</li> <li>• VAP bundle,</li> <li>• Care of patient with ventilator</li> <li>• Care of patient with tracheostomy, and others</li> <li>• Safe Medication Practice</li> <li>• Infection control</li> </ul>
	<b>SMCS.82.c</b>	The unit has a clinical nurse educator/ instructor, who is responsible for staff training and monitoring competency.
	<b>SMCS.82.d</b>	The unit has an annual training plan to ensure a proper coverage of the staff into different courses.
	<b>SMCS.82.e</b>	The staff performance is monitored using competency checklist.

**SMCS.82.f**

The staff competency assessment is documented and kept in staff's file.

**SMCS.83**

**The ICU has written policies and guidelines to guide the provision of care to critically ill patients.**

**Guidance**

Having well-written updated policies and guidelines is critical to guide safe care and practice. Policies and guidelines are important to standardize the care for critically ill patients, as they set the foundation for the delivery of safe and effective quality care. Intensive care unit leaders must educate the staff on these policies.

**SMCS.83.a**

The unit has policies and procedures/ guidelines that guide the care of critical care patients including but is not limited to:

1. Patient initial assessment and re-assessment, including time frames for completing of initial assessments
2. ICU admission and discharge criteria
3. evidence-based criteria for intubation, weaning off ventilator and extubating
4. Infection control practices in ICU.
5. Venous Thromboembolism (VTE) Prophylaxis.
6. Ventilated Associated Pneumonia (VAP) Bundle
7. Central line Associated Blood Stream Infection (CLABSI)
8. Monitoring of patient circulation, respiration, and oxygenation, and other hemodynamic
9. Care of patient with ventilator
10. Care of patient with tracheostomy, and others
11. Handover procedure
12. Safe medication practice
13. Fire Safety in ICU.

**SMCS.83.b**

All ICU medical and nursing staff are trained with policies and procedures, which are easily accessible.

**SMCS.83.c**

The ICU sets number of Key Performance Indicators (KPIs) that includes but is not limited to the followings:

1. Venous Thromboembolism (VTE) Prophylaxis.
2. Central Line Associated Blood Stream Infection (CLABSI).
3. Ventilated Associated Pneumonia (VAP).
4. Unplanned ICU Readmission within 48 hrs.
5. Re-intubation within 24 hrs.
6. Re-Exploration within 24 hrs. Post-Cardiac Surgery.
7. Length of Stay (LOS).
8. Pressure ulcer development in ICU.

**SMCS.83.d**

The ICU conducts regular to assess compliance to policies and guidelines, and monitor KPIs.

**SMCS.84**

**The unit has adequate equipment and supplies to run critical care service.**

**Guidance**

Since critically ill patients are highly dependent on safe functioning complex medical equipment, there is a need to have a standard that ensures proper supply of such equipment, to maintain a safe functioning environment for patient care.

**Measures:****SMCS.84.a**

The unit has the following equipment are available and accessible:

1. Ventilators
2. Specialized Beds.
3. Lifting and weighting equipment.
4. Mechanical ventilators (Invasive and non-invasive).
5. Hand ventilating assemblies.
6. Suction apparatus.
7. Airway management kits (including difficult airways equipment, airway sets).
8. Resuscitation Work Station (Crash Trolley that has defibrillator and all emergency supplies and medications).
9. Access to bronchoscope
10. Ultra Sound (US) machine
11. Invasive and non-invasive monitoring equipment (Electro Cardio Graph- ECG, Pulse Oximeter, Endo Tracheal- ET CO<sub>2</sub>, invasive and non-invasive BP monitoring and Temp).
12. Defibrillator and pacing facilities.
13. ECG machine
14. Patient's Temperature controlling equipment.
15. Infusions pumps.
16. Access to renal replacement therapy.
17. Portable Transport equipment (Monitors, Ventilators and Transport Kit).
18. Point of care equipment: Random Blood Sugar (RBS) monitoring, Arterial Blood Gas (ABG) monitoring and analysis.
19. Intravenous infusion and blood transfusion pumps.

**SMCS.84.b**

The unit has enough isolation rooms with a negative pressure room.

**SMCS.84.c**

The unit has a system that ensures maintenance, safety and function of the equipment.

**SMCS.84.d** The unit has designated storage area for this equipment.

**SMCS.84.e** The unit has an access to emergency equipment.

**SMCS.84.f** All staff are trained on the use of the equipment.

**SMCS.85** **The intensive care unit has implemented process of admission and discharge of patients.**

**Guidance** The decision to admit patients in the ICU or discharge them to the ward is considered a daily task for the critical care team, a life-changing event for patients. Decisions must be made urgently in conditions in situations of uncertainty about the risks and benefits. The outcomes of the decisions are strongly affected by available resources, staffing, and skills. Patients should be admitted to intensive care before their conditions deteriorate and recovery is impossible. Having clear criteria may help to identify those at risk and to trigger a call for help from intensive care staff.

**SMCS.85** **SMCS.85** The unit has clear written guideline with criteria of admission and discharge of patients.

**SMCS.85.b** The written criteria for admission and discharge are collaboratively written between relevant teams and are based on patients' physical parameters.

**SMCS.85.c** The admission and discharge process in the ICU is coordinated between the ICU physician and the parent department.

**SMCS.85.d** There is documented handover between the intensive care unit team and other unit team.

**SMCS.86** **Patients care in adult intensive care unit is provided by multidisciplinary team.**

**Guidance** Patient care depends on the communications among various multidisciplinary teams especially in ICU, where a patient's status is critical and life-threatening. Consequently, the multidisciplinary approach is important in delivering advanced care and treatment to ICU patients. It is also a key part of establishing and achieving a high standard of quality care and enhancing better patient outcomes.

<b>Measures:</b>	<b>SMCS.86.a</b>	The intensive care is coordinated with different disciplines participating in the plan of care including: <ol style="list-style-type: none"> <li>1. Intensivist.</li> <li>2. Critical Care Nurses.</li> <li>3. Respiratory therapist.</li> <li>4. Physiotherapist/ occupational therapist.</li> <li>5. Clinical pharmacist.</li> <li>6. Clinical Dieticians.</li> <li>7. Social worker.</li> <li>8. Infection prevention and control</li> <li>9. Patient Safety Officer</li> </ol>
	<b>SMCS.86.b</b>	The care provided to all critical ill patients is fair and equal in ICU and outside ICU (e.g., patient on ventilator in ED).
	<b>SMCS.86.c</b>	The team communicates with the admitting and referring services.
	<b>SMCS.86.d</b>	The coordinated care between the multidisciplinary team is documented in patient medical records.

### **SMCS.87 The intensive care unit has an active Early Warning System (EWS).**

**Guidance** The EWS facilitates early detection of patients who are at risk of clinical deterioration and it provides a direction to all clinical staff regarding the timely response needed. The system ensures patient assessment, records, and interprets physiological parameters of inpatients admitted in general wards. It categorizes the patients' severity of illness, prompting nursing staff to request assigned ICU nurse, intensivist/anesthetist, on-call doctor, and cardiac arrest team review at specific trigger points and for timely response to clinical deterioration. Hospitals need to implement this system to void deterioration of patients and reduce ICU admission. Staff needs to be trained on the system and categorization of severity levels.

<b>Measures:</b>	<b>SMCS.87.a</b>	The unit has a guideline for implementing EWS process with term of reference for the team.
	<b>SMCS.87.b</b>	The hospital adapts clinical guidelines that ensure implementation of the system
	<b>SMCS.87.c</b>	All staff are trained on the importance of adherence to the guide of the system and are familiar on their roles and responsibilities.
	<b>SMCS.87.d</b>	The hospital provides all resources for the right implementation, EWS monitoring, and documentation of the EWS process.

**SMCS.87.e**

When patient EWS score requires an action, all steps of action done as per the guide and treatment plans are documented in patient's records.

**SMCS.87.f**

There is regular audit conducted to ensure the compliance to the guideline and its procedures.

**SMCS.88**

**The intensive Care unit strictly follows and supervises the infection control and prevention standards.**

**Guidance**

Infection acquired in the hospital, basically, the intensive care unit (ICU) setting, is most common, which may lead to further complications in more than 40 % of critically ill patients. The most usual causes of infections are ventilator-associated pneumonia, central line-associated bloodstream infection (CLABSI), catheter-associated urinary tract infection, surgical site infection, Therefore, the application and strict follow-up of preventive strategies are critical.

**Measures:****SMCS.88.a**

The intensive Care unit follows hospital infection control and prevention guidelines.

**SMCS.88.b**

All intensive Care unit staff are well trained and oriented to the infection control guidelines applied to the unit. The unit allocate champion to monitor infection within the unit.

**SMCS.88.c**

The intensive Care unit is maintained clean and disinfected.

**SMCS.88.d**

Standard precautions are strictly followed in the intensive Care unit with strict emphasis on the hand hygiene and appropriate PPEs and other barriers.

**SMCS.88.e**

All intensive care unit equipment and rooms are clean and disinfected as per the guidelines.

**SMCS.88.f**

Intensive Care unit scrub suits are only allowed inside the restricted areas of the unit.

**SMCS.88.g**

There is clear guideline on management, and proper handling of patients with infectious diseases.

**SMCS.88.h**

There is regular audit to assess compliance to those policies.

**SMCS.89**

**The unit has a system in place that ensures safe medication practice.**

**Guidance**

Patient safety is one of the essential aspects of health care system Deliverance

of quality and safe patient care is considered as an ultimate goal for every healthcare provider regardless of area. On the other hand, medication errors remain to be one of the most common causes of unintended harm to patients. Critically ill patients receive twice the number of medications than non-critically ill, hospitalized patients, thus increasing the opportunity for adverse drug events to occur. ICU patients are more likely to have drug-drug interactions, drug accumulation due to failing organs, and a sensitivity to drug responses resulting from their labile status. The complexity of the patient's drug regimens and the environment provide a risk for patient harm.

<b>Measures:</b>	<b>SMCS.89.a</b>	The unit follows hospital policy of safe medication management (obtaining, prescribing, preparing, recording, handling, storing, securing, dispensing, safe administration and disposal of drug
	<b>SMCS.89.b</b>	The unit has safe place for medication preparation.
	<b>SMCS.89.c</b>	The unit staff are oriented and updated and trained about their roles in medication practice
	<b>SMCS.89.d</b>	The unit follows high alert and LASA medications policy.
	<b>SMCS.89.f</b>	The unit has a clinical pharmacist.
	<b>SMCS.89.g</b>	The unit audits staff compliance to the policy to ensure safe medication practice

## **SMCS.90 The unit ensures provision of proper and adequate nutritional support for critically ill patients.**

**Guidance** Adequate nutrition intervention has shown to reduce metabolic response to stress and favorably modulate immune responses. Nutritional support in critically ill patients prevents further metabolic deterioration and loss of lean body mass.

<b>Measures:</b>	<b>SMCS.90.a</b>	The unit has access to clinical dietitian who is experienced in critical care nutritional support.
	<b>SMCS.90.b</b>	There is a guideline for initiation of feeding (oral, enteral or parenteral).
	<b>SMCS.90.c</b>	The unit has access for parenteral nutrition 24hr/7 days.
	<b>SMCS.90.d</b>	Patients' nutritional needs are daily evaluated
	<b>SMCS.90.f</b>	Nurses attend training of Enteral Nutrition infusion.



### Neonatal Intensive Care Unit (NICU)

The neonatal intensive care unit has highly trained staff and equipment designed to meet the unique needs for premature and sick newborns. The following standards are intended to promote and improve the safe and effective practice of neonatal care.

#### SMCS.91

**A senior qualified physician (Neonatologist/pediatrician) is assigned to manage the Neonatal Intensive Care Unit (NICU).**

#### Guidance

It is important to have a team leader for the NICU to ensure that the standard of care is well established and maintained. The leader is responsible to oversee the services provided by the NICU team, and guide the team members to ensure they are fulfilling their roles. The leader is also responsible for developing and guiding the implementation of the department policies and guidelines.

<b>Measures:</b>	<b>SMCS.91.a</b>	A consultant neonatologist/pediatrician is assigned to lead the <b>NICU</b> , who is qualified by education, experience and training.
	<b>SMCS.91.b</b>	The unit leader takes the responsibility for the management overall care of the unit.
	<b>SMCS.91.c</b>	The hospital ensures that senior competent staff (neonatologist/pediatrician) is on call all times to be approached for any concerns related to the NICU.
<b>SMCS.92</b>	<b>The NICU has well trained, qualified, and competent medical, nursing staff, and supportive staff.</b>	
<b>Guidance</b>	The arising number of babies admitted to the NICU necessitates to have a prompt and proper management. Hence, a well-trained and qualified multidisciplinary team is needed to provide the best possible advanced care to babies admitted to NICU. To achieve the best care, sufficient numbers of qualified medical and nursing staff with special education advanced training must be available at NICU.	
	<b>SMCS.92.a</b>	The NICU is covered by a registered qualified pediatrician/ Neonatal intensive care physician twenty-four hours a day, seven days a week (24hrs/7days).
	<b>SMCS.92.b</b>	The NICU nurse manager is qualified by education, experience in the intensive care.
	<b>SMCS.92.c</b>	The unit bedside nurses are qualified and experienced in managing neonatal intensive care babies.
	<b>SMCS.92.d</b>	Medical and nursing staff working in the <b>NICU</b> unit are certified in Pediatric Cardiac Life Support (PCLS), and neonatal resuscitation program (NRP).
	<b>SMCS.92.e</b>	The unit ensures the availability of multidisciplinary services with skilled and trained staff in different areas such clinical dietitians, occupational therapists, physiotherapists, speech and language therapists, respiratory therapist, and pharmacists.
	<b>SMCS.92.e</b>	The hospital ensures that NICU monitors and maintains an appropriate number of staff of all levels.
	<b>SMCS.92.f</b>	NICU leadership monitors competency levels of the staff (doctors, nurses and respiratory therapists), using competency checklist for each team.

**SMCS.93**

**The Neonatal ICU has evidence-based clinical policies, procedures, and guidelines to guide the provision of care for new-born.**

**Guidance**

Policies, and procedures, are the foundation of patient care in all clinical settings, NICU. Therefore, in order to provide high-quality care to patients in NICU, updated evidence-based policies, and procedures should be available, and easy to access to all staff. Policies and guidelines assist in establishing criteria for admission, discharge, as well as referral, and transport to higher, more intensive levels of care throughout the healthcare continuum in the country. Unit staff should be oriented on these policies to be able to provide safe care to babies in NICU.

**Measures:****SMCS.93.a**

The unit has current/updated written policies and procedure, written by qualified NICU team, and approved by head of department. These policies and procedures include but are not limited to the following:

- Criteria and process of admission and discharge of new-born in the NICU.
- Conduction of assessment, and frequency of reassessment of newborn
- Monitoring newborns vital signs, circulation, respiration
- Clinical handover between staff during transition points.
- Infection control practice.
- Nutritional supplement enteral, and parenteral (TPN).
- Guidelines on safe perinatal transfer of high-risk newborns.

**SMCS.93.b**

The NICU has current evidence based clinical guidelines to deal with and manage different and specific conditions.

**SMCS.93.c**

All unit staff are oriented and trained on the guidelines and policies.

**SMCS.93.d**

Unit leadership conducts audits, reviews, and updates the guidelines regularly.

**SMCS.94**

**The NICU has adequate supplies equipment, and structure to run critical care service for new-born.**

**Guidance**

The NICU is designed for critically ill newborns who require constant and continuous care and supervision. Therefore, the unit requires specific criteria for structure, resources and equipment. These requirements vary in each level of care. In this standard we focus in the most important requirements to ensure that appropriate neonatal services provided.

SMCS.94	<b>SMCS.94.a</b>	The NICU has the following equipment are available and accessible including: <ul style="list-style-type: none"> <li>• Ventilators</li> <li>• Incubators</li> <li>• Suction machines</li> <li>• Airways sets</li> <li>• Emergency trolley that includes defibrillator, all neonate's emergency drugs, infant resuscitator, etc.</li> <li>• Monitors</li> <li>• Infusion pumps.</li> <li>• ECG machine</li> </ul>
	<b>SMCS.94.b</b>	The unit has enough isolation rooms with all required supply, and negative pressure.
	<b>SMCS.94.c</b>	The unit has designated storage area for equipment.
	<b>SMCS.94.d</b>	The unit has an access to emergency equipment
	<b>SMCS.94.e</b>	All staff are trained on the use of the equipment
	<b>SMCS.95.f</b>	Equipment is disinfected and cleaned on daily based as required

<b>SMCS.95</b>	<b>The NICU strictly implements and maintains and supervises infection control prevention practice.</b>
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<b>Guidance</b>	NICU newborns are at high risk for infection due to their immature immune system, exposure to invasive devices and procedures, and their illness. NICU must implement infection control standards, with staff education, surgical scrubbing, controlled access, infection surveillance, and frequent disinfection practices, to maintain the safety of newborns and avoid complications.
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<b>Measures:</b>	<b>SMCS.95.a</b>	The NICU strictly follows and implements hospital infection control and prevention guidelines.
	<b>SMCS.95.b</b>	The NICU environment is maintained clean and disinfected all times.
	<b>SMCS.95.c</b>	All unit staff are well trained and oriented to the infection control guidelines applied to the unit. The unit allocates champion to monitor infection control practice.
	<b>SMCS.95.d</b>	Standard precautions are strictly followed in the NICU, with strict emphasis on the hand hygiene and appropriate PPEs and other barriers.
	<b>SMCS.95.e</b>	There is regular audit to assess compliance to ICP

		guidelines.
	<b>SMCS.95.f</b>	Unit rooms, equipment, and ventilators is cleaned and disinfected as per the ICP guidelines.
	<b>SMCS.95.g</b>	The unit scrubs suits are only allowed inside the restricted areas of the unit.
	<b>SMCS.95.h</b>	There is clear guideline on management, and proper handling of patients with infectious diseases.
	<b>SMCS.95.i</b>	Patients with infectious diseases are isolated in rooms with appropriate pressure.
<b>SMCS.96</b>	<b>The NICU implements various approaches to maintain competency of the unit staff.</b>	
<b>Guidance</b>	The provision of education and training for all NICU unit staff is considered a top priority due to its fundamental link with the delivery of safe and high-quality patient care. This standard aims to have competent staff in providing high-quality care to critical newborns.	
<b>Measures:</b>	<b>SMCS.96.a</b>	The unit has a structured orientation program and training for all newly joining nursing staff, with a written orientation checklist.
	<b>SMCS.96.b</b>	<p>All unit nursing staff receive required training and education on intensive care related cases and procedures, covering:</p> <ul style="list-style-type: none"> <li>• Fundamentals of newborn critical care</li> <li>• VAP bundle</li> <li>• Care of newborns with ventilator</li> <li>• Care of infants in incubator.</li> <li>• Safe Medication Practice in NICU</li> <li>• Handover guides in NICU</li> <li>• CLABSI bundle</li> <li>• Assisting physicians in the different procedures performed in the NICU including securing central lines access</li> <li>• Care of newborns with endo-tracheal tube (ETT),</li> <li>• Care of newborns with tracheostomy.</li> </ul>
	<b>SMCS.96.c</b>	The unit has a clinical nurse educator/ instructor, responsible about staff training and competency.
	<b>SMCS.96.d</b>	The unit has an annual training plan to ensure a proper coverage of the staff into different courses.
	<b>SMCS.96.e</b>	The staff performance is monitored through competency checklist

**SMCS.96.f**

The staff competency assessment is documented and kept in staff personal file

**SMCS.97**

**The care in NICU is coordinated with other multidisciplinary team, to provide and monitor the quality of care provided to new-born.**

**Guidance**

Being very dynamic and busy with many procedures and interventions conducted frequently, it is very crucial that NICU has a system to monitor events and outcomes, and auditing them regularly. Quality monitoring should continuously improve the service provided, encourage excellence, and ensure adherence to patient safety measures.

**Measures:****SMCS.97.a**

The unit has multidisciplinary team includes but not limited to:

NICU physicians, NICU nurse, respiratory therapist, clinical pharmacist, dietitian, infection control team, and other specialties that affect the practice in the NICU,

**SMCS.97.b**

The unit has a written, structured program for quality management in the NICU.

**SMCS.97.c**

Regular joint meetings are conducted with Obstetrics department (and other departments when indicated) to review shared cases, and to improve service provided.

**SMCS.97.d**

Unit leadership reviews cases of perinatal mortalities regularly

**SMCS.97.e**

Morbidities are reviewed regularly with recommendations to reduce them.

**SMCS.97.f**

NICU team monitors the outcomes of their extreme preterm new-born.

**SMCS.97.g**

The unit leadership review reported incidents, with analysis and disseminate learning lessons.

**SMCS.97.h**

Unit has a set of key performance indicators, which are reported regularly, with improvement action plans.

**SMCS.97.i**

Training is conducted for both NICU doctors and nurses on patient safety and quality.

## Burn Care Unit

Burn care is a sophisticated service that requires adherence to certain requirements to be safe, efficient, and effective. The goals of burn care are to maintain the patient's physiologic stability, repair skin integrity, prevent infection, and promote maximal functioning and psychosocial health. All hospitals provided with a burn unit must have competent staff, and policies and procedures that guide healthcare workers for appropriate burn care. This section defines the principles and standards that ensure a patient's safety during his/her journey at the burn unit.

### SMCS.98

**The burn care unit is covered by qualified, well-trained medical, nursing, and supportive staff.**

#### Guidance

The availability of trained personnel in the burn unit will follow updated evidence-based guidelines which ensure clinical performance and skills that meet the standards of patient safety and best quality of care. These staff must be competent to assess their patients' clinical status and used the best clinical



judgments to manage their patients as per unit protocols and evidence-based standards. Additionally, the presence of clinical experienced leaders and managers shall ensure a smooth operation and workflow by taking full responsibilities in terms of work coordination and staff selection. These leaders also play an essential role in facilitating and promoting evidence-based practice and research activity.

<b>Measures:</b>	<b>SMCS.98.a</b>	The director of burn care unit is a plastic surgeon (consultant), who is qualified by education, training and experience in burn care and plastic surgery.
	<b>SMCS.98.b</b>	The burn care unit is covered by registered burn consultants/qualified plastic surgeons, twenty-four hours a day, seven days a week.
	<b>SMCS.98.c</b>	The burn unit nurse manager is a registered nurse, who is qualified by education, training and experience in burn care.
	<b>SMCS.98.d</b>	The burn unit bedside nurses are qualified and experienced in managing burn patients.
	<b>SMCS.98.e</b>	Medical and nursing staffing plan is based on patient acuity and volume to ensure there is adequate coverage for twenty-four hours a day, seven days a week.
	<b>SMCS.98.f</b>	All medical and nursing staff providing care for burn patients are certified in advanced life support for different patient age group.

**SMCS.99** The burn care unit has a process of admission, discharge, and referral of patients.

**Guidance** The decision for admission to the burn unit needs to be very well planned and organized. There should be strict criteria intended to provide proper care of resuscitation, monitoring, nursing care, surgical intervention, social work intervention, initiation of rehabilitation, referrals, plan for discharge, and transfer.

<b>Measures:</b>	<b>SMCS.99.a</b>	The burn care unit has updated admission, discharge, and referral policies and procedures with specific criteria as per evidence-based practice.
	<b>SMCS.99.b</b>	The admission, discharge, and referral criteria are collaboratively developed by senior medical and nursing staff.
	<b>SMCS.99.c</b>	All staff are trained and oriented on the admission and discharge criteria.

**SMCS.99.d**

The unit leaders implement regular audit to assess the implementation of the criteria

**SMCS.100**

**The burn care unit has written policies and guidelines to guide the provision of care to burn patients.**

**Guidance**

A well written updated policies/ guidelines/ protocols on burn care unit is essential to guide and facilitate effective and efficient care of critical burn patients. Staff are well oriented to those policies and monitored to ensure proper implementation.

**Measures:****SMCS.100.a**

The burn unit has policies and procedures/ guidelines that guide the care of burn patients, including but are not limited to, the following:

- Initial assessment and reassessment of burns injury
- Burns wound assessment and management
- Assessment and management of inhalation injury
- Monitoring vital signs, circulation, and respiration
- Clinical handover between staff during transition time and points.
- Continuous burn patient monitoring
- Total burn care
- Management of changing degrees/types of burns.
- Use of skin grafts.
- Thermal and Electrical Injuries
- Infection control in burn unit.
- Care of ventilated burn patient.
- Others.

**SMCS.100.b**

All staff are trained and oriented on the policies.

**SMCS.100.c**

There is regular audit conducted to assess compliance to policies.

**SMCS.101**

**The burn Care unit strictly implements and supervises infection control and prevention practice.**

**Guidance**

Infection in burn patients is a leading cause of complication and death and remains the most challenging concern for the burn team. Therefore, prevention of infection in the burn unit is critical. This is by following strict guidelines of aseptic techniques, using sterile gloves, sterile dressing materials, putting on masks, isolation of patients, and educating staff about infection control practices.

<b>Measures:</b>	<b>SMCS.101.a</b>	The burn unit strictly implements infection control and prevention guidelines to guide all practices in the unit.
	<b>SMCS.101.b</b>	The unit environment is always maintained clean and disinfected all times.
	<b>SMCS.101.c</b>	All unit staff are well trained and oriented to the infection control guidelines applied to the unit.
	<b>SMCS.101.d</b>	Standard precautions are strictly followed in the burn unit, with strict emphasis on the hand hygiene and appropriate PPEs, use of masks, gowns, gloves, and other barriers.
	<b>SMCS.101.e</b>	All unit rooms and equipment are cleaned and disinfected as per the ICP guidelines.
	<b>SMCS.101.f</b>	The unit scrubs suits are only allowed inside the restricted areas of the unit.
	<b>SMCS.101.g</b>	There is clear guideline on management, and proper Separation of cases.
	<b>SMCS.101.h</b>	The team strictly implements aseptic dressing change, and care of skin graft.
	<b>SMCS.101.i</b>	The burn care unit has positive pressure with High Efficiency Particulate Air (HEPA) filters.
	<b>SMCS.101.j</b>	There is regular audit to ensure that policies and guidelines related to infection control are implemented in daily practice and recorded in patients' medical records.

**SMCS.102**      **The burn unit has adequate equipment and supplies for the provision of burn care service.**

**Guidance**      Since burn patients are highly dependent on safe functioning complex medical equipment, there is a need to have a standard to ensure proper supply of such equipment to maintain a safe functioning environment for burn patient care.

<b>Measures:</b>	<b>SMCS.102.a</b>	The burn unit has the following equipment are available and accessible:
		<ul style="list-style-type: none"> <li>• Ventilators (for burns ICU only)</li> <li>• Monitors for vital reading (heart rate, BP, O2 saturation, ECG, respiratory rate, central venous or arterial pressure)</li> <li>• Infusion pumps</li> <li>• ABG (Arterial Blood Gas) machine</li> <li>• Crash cart</li> <li>• ECG machine</li> <li>• Electro - cautery machine</li> <li>• Sterile dressing sets</li> <li>• Escharotomy, fasciotomy, Venous cut down set and tracheostomy set</li> <li>• Central Venous Catheter set</li> <li>• Airway management kits (including difficult airways equipment, airway sets).</li> <li>• Suction machines</li> <li>• Blood sugar machines.</li> <li>• Urinary catheter sets</li> </ul>
	<b>SMCS.102.b</b>	All staff are trained on the use of the equipment.
	<b>SMCS.102.c</b>	Equipment is disinfected and cleaned on daily based as required.
	<b>SMCS.102.d</b>	The unit has designated storage area for equipment.
	<b>SMCS.102.e</b>	The unit has an access to emergency equipment, and any new set or new supply.

**SMCS.103**

**The burn care and service in burn care unit is coordinated with other multidisciplinary team, to meet the need of burn patients.**

**Guidance**

A burn injury can have a devastating impact on the emotional and psychological well-being of patients and their families. Patient care in the burn unit depends on the communications of various multidisciplinary teams, which is an important approach in delivering advanced care and treatment to burn patients. It is also a key part of establishing and achieving high-quality care and enhancing better patient outcomes. For example, the involvement of Psychologists, and social workers as part of a multidisciplinary team, provide expertise in assisting patients and their families to cope with the effects of the injury and complications.

<b>Measures:</b>	<b>SMCS.103.a</b>	The multidisciplinary team includes, but is not limited to, the following: <ul style="list-style-type: none"> <li>• Burns surgeon/ Plastic surgeon.</li> <li>• Anesthesia services.</li> <li>• Respiratory therapist.</li> <li>• Physiotherapist/ occupational therapist.</li> <li>• Clinical pharmacist.</li> <li>• Clinical dieticians.</li> <li>• Social worker.</li> <li>• Infection prevention and control</li> <li>• Psychologist.</li> <li>• Microbiologist,</li> <li>• Occupational therapist/ Physiotherapist</li> <li>• General physician</li> </ul>
	<b>SMCS.103.b</b>	The staff are all aware about multidisciplinary care approach.
	<b>SMCS.103.c</b>	The team communicates with the admitting and referring services.
	<b>SMCS.103.d</b>	Care is coordinated between the multidisciplinary team and documented in patient medical records.
<b>SMCS.104</b>	<b>The Burn care unit implements various approaches to enhance staff knowledge and competency.</b>	
<b>Guidance</b>	The provision of education and training for all burn care unit staff is considered a top priority due to its fundamental link with the delivery of safe and high-quality patient care.	
<b>Measures:</b>	<b>SMCS.104.a</b>	The unit has an orientation program and training for all newly joining nursing staff, with a written orientation checklist.

<b>Measures:</b>	<b>SMCS.104.b</b>	<p>All unit nursing staff receive required training and education on burn care related cases and procedures, covering:</p> <ul style="list-style-type: none"> <li>• Fundamentals of burn care</li> <li>• Acute management of burns injuries</li> <li>• Infection control guidelines in burn unit</li> <li>• Handover guides in burn unit.</li> <li>• Management of electrolytes and other high alert medication including, the dosage, side effects, and complications.</li> <li>• Fluid replacement</li> <li>• Management of different charts used in burn unit including:               <ol style="list-style-type: none"> <li>1. Lund and Browder chart, Fluid resuscitation chart</li> <li>2. Vital signs chart</li> <li>3. Input / Output chart</li> <li>4. Medication chart</li> <li>5. Investigation chart</li> <li>6. ICU chart for ventilated patients</li> <li>7. Abbreviated Burns Severity Index (ABSI) scoring</li> <li>8. Nutrition chart</li> </ol> </li> </ul>
	<b>SMCS.104.c</b>	The unit has a clinical nurse educator/ instructor, responsible about staff training and competency.
	<b>SMCS.104.d</b>	The unit has an annual training plan to ensure a proper coverage of the staff into different courses.
	<b>SMCS.104.e</b>	Nursing staff receive continuous training with competency assessment.
	<b>SMCS.104.f</b>	The staff performance is monitored through competency checklist
	<b>SMCS.104.g</b>	The staff competency assessment is documented and kept in staff personal file.

## Obstetrics and Gynaecology

The department of obstetrics and gynecology is dedicated to women's health and wellbeing. It provides comprehensive medical treatment for gynecological problems as well as obstetric services. The labor room must be well equipped and staffed with qualified physicians and midwives to deal efficiently with high-risk pregnancy and obstetric emergencies. The labour room should be also close to the Emergency operation theatre which provides all emergency services for Obstetrics and gynaecology and should be supported by a well-equipped nursery, which is manned by pediatricians round the clock. The standards of this section define the safety issues includes policies and training that are essential to deliver optimal care for obstetric services and gynaecological problems.

**SMCS.105** The director of obstetrics and gynecology department is qualified physician.

**Guidance** Obstetrics/gynecology is a highly specialized department that needs a director who is highly qualified by education and experience in the field. The director directs the staff and programs of the obstetrics and gynecology (OB/GYN) department. The Obstetrics/ Gynecology Director ensures quality care for patients and introduces approved standards and guidelines for OB/GYN services and programs.

**Measures:**

<b>SMCS.105.a</b>	The head of the obstetrics and gynecology department is an obstetrician who is qualified by education, training and experience
<b>SMCS.105.b</b>	The head of the department is responsible for monitoring the development and implementation of department policies, guidelines, and protocols.
<b>SMCS.105.c</b>	The department head ensure there is regular monitoring and audits to ensure compliance to the policies.

**SMCS.106** The department of obstetrics and gynaecology has well trained, qualified, and competent medical, midwives and nursing staff.



**Guidance** The need for highly qualified personnel in the obstetric department is needed to ensure that women get the best-required care. To achieve the best care, a sufficient number of qualified medical and nursing staff, with special advanced training must be available to ensure safe care for admitted women.

<b>Measures:</b>	<b>SMCS.106.a</b>	The delivery room is covered by registered obstetrician twenty-four hours a day, seven days a week.
	<b>SMCS.106.b</b>	All obstetricians are certified in advanced life support in obstetrics (ALSO).
	<b>SMCS.106.c</b>	At time of caesarean section delivery there a qualified pediatrician/ neonatologist available who is certified in neonatal resuscitation program (NRP).
	<b>SMCS.106.d</b>	The obstetrics department nurse manager/in charge is qualified registered nurse with training, education, experience in obstetric and midwifery.
	<b>SMCS.106.e</b>	The department bedside nurses are trained and qualified in managing women with obstetric problems.
	<b>SMCS.106.f</b>	The nurse manager monitors the competency of the midwives and nursing staff using checklist.
	<b>SMCS.106.g</b>	The department maintains competency levels of the staff (doctors, nurses).

**SMCS.107** Department of OB/GYN has policies, procedures, clinical pathways to guide the care of women in labor and obstetrical patients.

**Guidance** The intent of this standard is to have standardized provision of care women in labor and obstetrical patients.

<b>SMCS.107.a</b>	<p>The department has updated policies and procedures and clinical pathways to guide the care of women in labor and obstetrical patients, these policies include, but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Assessment and management of women in labor.</li> <li>• Induction of labor</li> <li>• The use of episiotomy</li> <li>• Management of anti-partum and post-partum bleeding</li> <li>• Management of preeclampsia</li> <li>• Management of hypertensive disorders in pregnancy</li> <li>• Infection control measure and guidelines.</li> <li>• Management of pregnant women with diabetes in labor and post-partum</li> </ul>
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<b>Measures:</b>	<b>SMCS.107.b</b>	Polices are written by collaborative team and approved by head of department and hospital management.
	<b>SMCS.107.c</b>	All staff are familiar and oriented with the department policies.
	<b>SMCS.107.d</b>	There is regular audit to assess proper implementation of these policies.
<b>SMCS.108</b>	<b>The Obstetrics and Gynaecology department has a systematic approach for admission and discharge of women.</b>	
<b>Guidance</b>	Obstetrics and Gynaecology department has a defined scope of care which is delivered for in-patients and outpatient settings. Admission and discharge of women to the department requires careful assessment and evaluation; this is to ensure the continuity of care for patients based on patient condition and needs.	
<b>Measures:</b>	<b>SMCS.108.a</b>	The obstetric department of obstetrics has specific identified admission, discharge and transfer policies.
	<b>SMCS.108.b</b>	The criteria are developed collaboratively with other relevant departments, covering gestational age of women, and the available resources.
	<b>SMCS.108.c</b>	The department has evaluation process for admission through a triage system.
	<b>SMCS.108.d</b>	Planning for discharge/ transfer /follow-up starts at admission
	<b>SMCS.108.e</b>	All staff are trained on the admission and discharge, and transfer criteria
	<b>SMCS.105.f</b>	The patient readiness for discharge/transfer/follow-up is assessed and documented and follow-up requirements are determined.
	<b>SMCS.108.g</b>	Checklist is completed for each patient prior to discharge or transfer.
	<b>SMCS.108.h</b>	There is an audit and monitoring process to assess compliance to those policies.
<b>SMCS.109</b>	<b>The Obstetrics and gynecology department has an individualized clinical assessment and management plan.</b>	

**Guidance** Plan of care provides a framework for executing the medical and nursing management strategies. This is modified individually to address the patient's medical condition and needs. It involves proper coordination among the concerned health care professionals (e.g., Obstetrics and gynecology, midwifery, nursing, laboratory, pharmacy, dietician, etc.) and prompt interventions of team members.

<b>Measures:</b>	<b>SMCS.109.a</b>	Patient history taking with clinical assessment is carried out and documented during the initial contact with the patient.
	<b>SMCS.109.b</b>	The patient's assessment and documented carried out by caregivers (e.g., doctors, midwives, nurses, etc.)
	<b>SMCS.109.c</b>	Senior input is obtained according to the assessment of the patient's clinical condition.
	<b>SMCS.109.d</b>	Care plan is initiated and modified as required, then clearly communicated to other care providers.
	<b>SMCS.109.e</b>	The care plan is reviewed and modified as required and clearly communicated to the patient and family who participate in the decision about plan of care.

**SMCS.110**

**The Obstetrics and gynecology unit has adequate medical equipment, physical facilities, and essential medications for the provision of safe care.**

**Guidance** Since Obstetrics and gynecology care is highly dependent on having high expert staff and on having safe functioning complex medical equipment, there is a need to have a standard to ensure proper supply of such equipment, essential medications, to maintain a safe functioning environment for women.

<b>Measures:</b>	<b>SMCS.110.a</b>	<b>The Obstetrics and Gynecology department has appropriate physical facilities, including:</b>
		<p>Space for the patient to receive necessary care (at bedside or in treatment area).</p> <ul style="list-style-type: none"> <li>• Nursery facilities for newborns.</li> <li>• Bathing and toilet facilities.</li> <li>• Nursing stations to adequately accommodate all functions that must take place.</li> <li>• Operating rooms and delivery suite facilities.</li> <li>• Operating rooms with appropriate airflow systems and with restricted entry.</li> <li>• Anti-static flooring and appropriately grounded electrical circuits.</li> <li>• An uninterrupted power supply.</li> <li>• Effectively positioned hand washing (scrub) facilities.</li> <li>• Separate change rooms for male and female staff.</li> <li>• Post anesthetic recovery area located next to operating rooms.</li> </ul>

- Appropriate storage of medication, equipment, and supplies.
- Safe facilities that protect against infection (all surfaces in the operating rooms are smooth and non-porous).
- Ambulatory care area includes consultation and examination areas.
- Labour rooms (first stage of labour) are located in proximity to delivery room.
- Operating room is in close proximity to delivery suite and readily available for crash and emergency caesarian sections or other post-partum complications.

**SMCS.110.b**

The Obstetrics and Gynecology department have appropriate medical equipment required for provision of care, including but are not limited to, the following:

- Anesthetic equipment.
- Intercom facilities.
- Crash carts, with different sizes of equipment for adults and neonates.
- Caesarian section set.
- Fetal and maternal monitoring device.
- Equipped delivery room.
- Equipped neonatal resuscitation table is in each delivery room and operating rooms where caesarian sections may take place.
- Reticulated and/or portable oxygen and suction equipment.
- Equipped nursery.

**SMCS.110.c**

The Obstetrics and Gynecology department has essential medication required for safe care including, but are not limited to:

- Oxytocin.
- Syntometrine.
- Magnesium Sulphate.
- Calcium gluconate.
- Xylocaine.
- Vitamin K.
- Prostaglandin.
- Misoprostol.
- Carboprost.
- Tocolytic medication.

- SMCS.110.d** All staff are trained on the use of the equipment and medications.
- SMCS.110.e** The unit has designated storage area for equipment.
- SMCS.110.f** The unit has an access to emergency equipment, and any new set or new supply.

**SMCS.111** **The Obstetrics and Gynecology department strictly follows and supervises infection control and prevention practices.**

- Measures:**
- SMCS.111.a** The Obstetrics and Gynecology department follows hospital infection control and prevention guidelines.
- SMCS.111.b** All Obstetrics and Gynecology department staff are well trained and oriented to the infection control guidelines applied to the unit. The unit allocate champion to monitor infection within the unit.
- SMCS.111.c** The Obstetrics and Gynecology department is maintained clean and disinfected.
- SMCS.111.d** Standard precautions are strictly followed in the Obstetrics and Gynecology department unit with strict emphasis on the hand hygiene, appropriate PPEs and other barriers.
- SMCS.111.e** All Obstetrics and Gynecology department equipment and rooms are clean and disinfected as per the hospital guidelines.
- SMCS.111.f** The labour room scrub suits are only allowed inside the restricted areas.
- SMCS.111.g** There is clear guideline on management, and proper handling of patients with infectious diseases.
- SMCS.111.h** There is regular audit to assess compliance to those policies.

**SMCS.112** **The Obstetrics and Gynecology department has an implemented quality and safety improvement plan.**

A method exists for determining the priority for selection of various quality improvement activities and may be based on the level of risk or volume of problems associated with the activity. The nature of quality improvement activities and staff workload are considered when selecting staff to participate in these activities.

**Guidance:**

<b>Measures</b>	<b>SMCS..112 a</b>	The Obstetrics and Gynecology department has a clear implemented quality and safety improvement plan.
	<b>SMCS..112. b</b>	The department has list of performance indicators, which are monitored as part of the quality improvement activities.

**Support Services: Respiratory Services, Medical Rehabilitation Service, & Dietary & Nutrition Service**

<b>SMCS.112.c</b>	The department quality activities are aligned with hospital quality activities.
<b>SMCS.112.d</b>	The Obstetrics and Gynecology department staff are aware of quality improvement activities and department indicators.

## Respiratory Services

Respiratory services are provided to manage critically ill patients or to the general ward for patients who need less acute respiratory care and support. In order to provide this service effectively, trained and qualified respiratory therapists are allocated to work around the clock with the ICU team to cater to the emergency respiratory requirements of patients. The standards in this section emphasize on having system for respiratory services in the hospital.

### SMCS.113

**The hospital has a Respiratory Therapy care provision, covering twenty-four seven.**

#### Guidance

Respiratory therapists have a broad scope of practice in the hospital. Their daily responsibilities cover various respiratory care modalities in the treatment of pulmonary diseases and advanced critical care procedures. They help in maintaining airways and operate patients' respiratory equipment. Therefore, having respiratory care unit in the hospital is crucial.

#### Measures:

##### SMCS.113.a

The hospital has respiratory care service provided 24 hours seven days a week (24/7), covering ED, ICU (adult ICU, pediatric ICU, Neonatal ICU).

##### SMCS.113.b

The respiratory care service team has clear scope of service with clear roles and responsibilities.

##### SMCS.113.c

The respiratory care team is directed (Lead) by qualified respiratory therapists by education with at least bachelor's in respiratory care science, training and experience in respiratory care.

##### SMCS.113.d

All respiratory care staff are trained, experienced in respiratory care and certified in advance life support applicable to the age category they serve.

### SMCS.114

**Hospital has clear policies and procedures to guide the respiratory care service.**



**Guidance** Policies provide evidence-based guides on best practices in specific situations, communicate to healthcare providers the desired outcomes and help them to understand their roles and responsibilities within the organization. This standard aims to provide the best service to patients as per sound evidence-based practice, to ensure the best quality of care.

<b>Measures:</b>	<b>SMCS.114.a</b>	<p>The team has policies and procedures to guide the provision of service, covering:</p> <ul style="list-style-type: none"> <li>• Equipment use and calibration.</li> <li>• Pulmonary function test (PFT).</li> <li>• Dealing with infected case.</li> <li>• Mechanical ventilator support.</li> <li>• Troubleshooting the ventilators.</li> <li>• Dealing with different types of masks.</li> <li>• Infection prevention and control guideline for respiratory equipment.</li> <li>• Use Auto feed humidification for ICU ventilator in critical care. unit (Adult, Pediatric &amp; neonatal)</li> <li>• Use aerosol therapy.</li> <li>• VAP guidelines.</li> <li>• Assisting in tracheostomy and bronchoscopy procedures.</li> <li>• Collecting and processing arterial blood gases.</li> <li>• Escorting ventilated patients in and out hospital.</li> </ul>
	<b>SMCS.114.b</b>	Policies are approved by head of respiratory team, head of intensive care department, and hospital top management.
	<b>SMCS.114.c</b>	All respiratory team staff are well oriented on the policies.
	<b>SMCS.114.d</b>	The policies are properly implemented by the respiratory care team.
	<b>SMCS.114.e</b>	There is regular monitoring and audit for the staff to assess their compliance to the policies.

<b>SMCS.115</b>	<b>Respiratory care service equipment undergoes regular calibration and maintenance.</b>
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<b>Guidance</b>	All ventilators are re-circuited, calibrated, and tested immediately, with a regular schedule of maintenance activity as per manufacturer recommendation to keep them free of defects and ensure they are safe for use. This standard aims to ensure operational efficiency and safe use of respiratory equipment, and avoid any unexpected failure.
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**Measures:** **SMCS.115.a** All respiratory care equipment is calibrated and operated as per

		the operation guide and manufacturer's specifications.
		Major Calibration includes: <ul style="list-style-type: none"> <li>• Flow Sensor Test</li> <li>• Leak Test/ Tightness Test</li> <li>• Oxygen Sensor Test</li> </ul>
	<b>SMCS.115.b</b>	There is regular periodic preventative maintenance as per the manufacturer recommendations with clear documentation.
	<b>SMCS.115.c</b>	There is clear guide for circuit change after each use.
	<b>SMCS.115.d</b>	Equipment calibration is done after each use, according to the patient age category (Infant, Pediatric or Adult)
<b>SMCS.116</b>	<b>The hospital implements various approaches to maintain competency of the respiratory therapist team.</b>	
<b>Guidance</b>	<p>The process of ongoing monitoring and evaluation is meant to advance staff competency as it is related to high-quality service and safe patient care. Monitoring the practice will help to reduce patient's risk and enhance safety outcomes.</p> <p>This standard aims to promote and maintain respiratory therapists' competency and ensure safe care delivered to the patients. Respiratory therapists take an annual written examination given by the In-charge and return demonstrations with a provided checklist.</p>	
<b>Measures:</b>	<b>SMCS.116.a</b>	The hospital has a structured approach to promote the competency of respiratory care staff, through clinical training and updated programs and policies, mandatory training as per specialty, continuous monitoring, through clinical competency, etc.
	<b>SMCS.116.b</b>	Respiratory staff attend orientation program.
	<b>SMCS.116.c</b>	All Respiratory therapists receive ongoing training and educations, within the unit protocols and guides.
	<b>SMCS.116.d</b>	All Respiratory therapists has valid BLS/ACLS certification.
	<b>SMCS.116.e</b>	There is Annual assessment by written examinations and knowledge in practice focused on: <ul style="list-style-type: none"> <li>a. Patient assessment.</li> <li>b. Initiation and follow-up of Mechanical ventilation.</li> <li>c. Laboratory and Diagnostic Results.</li> </ul>

**SMCS.116.f**

All training and competency records are maintained in staff personal files.

### Medical Rehabilitation and Physiotherapy Service

The rehabilitation services at hospital are provided at several levels of care to ensure that each patient receives the specific support they need to achieve better outcomes whether recovery from trauma, stroke or improved mobility after a minor injury. These services may include physiotherapy, occupational therapy and speech-language therapy, prosthetics and orthotics services in a variety of inpatient and/or outpatient settings. The standards in this section ensure the high quality of medical rehabilitation services provided to patients through establishing an evidence-based system.

**SMCS.117**

### Medical rehabilitation department has qualified trained therapists.

**Guidance**

The availability of qualified therapists in physiotherapy and rehabilitation care will follow updated evidence-based guidelines, which will ensure the best quality of care. Additionally, qualified therapists are competent to assess their patient's clinical status and have better clinical judgment. This standard intends to ensure a safe plan of care provided to patients as per their specific needs.

**Measures:****SMCS.117.a**

The medical rehabilitation department is supervised by well qualified staff.

**SMCS.117.b**

All unit staff are qualified with appropriate training and qualification, and experience in rehabilitation.

**SMCS.117.c**

The medical rehabilitation department has a clear scope of service for each rehabilitation discipline, which is known by all unit staff.

**SMCS.117.d**

Research activities are encouraged and organized in all medical rehabilitation services.

**SMCS.118**

**The medical rehabilitation department has documented policies and procedures to guide the care of patients undertaking physiotherapy/ rehabilitation care.**

**Guidance**

Policies and guidelines provide standardization in daily operational activities, communicate desired outcomes to healthcare providers, and assist them in understanding their roles and responsibilities within the organization. This standard aims to ensure the delivery of efficient and unified rehabilitation care for all medical rehabilitation services.

**Measures:****SMCS.118.a**

The rehabilitation department has clear written policies, guidelines and procedures on the care of patients undergoing medical rehabilitation in the hospital including, but are not limited to, the following:

- Management of patients with neurological disorders (e.g., stroke).
- Management of patient with orthopedic issues (e.g., fracture, hip/knee replacement, etc.).
- Management chronic back pain.
- Safety measures in mobilization.
- In and out- patient management policy.
- Equipment policy.
- Patient safety policy.
- Safe moving and handling policy.
- Staff induction/ orientation policy.
- 0. On-call policy.
- 1. Stroke rehabilitation guideline.
- 2. Dry needling guideline.
- 3. In-patient mobilization guideline.

**SMCS.118.b**

Policies, guidelines and procedures are reviewed and approved by head of department and hospital top management.

**SMCS.118.c**

All rehabilitation policies, guidelines and procedures are accessible to all medical rehabilitation departments' staff.

**SMCS.118.d**

The department conducts regular audit to ensure all staff are aware and comply with the written policies, guidelines and procedures.

**SMCS.119**

**Rehabilitation service is provided by multidisciplinary team.**

**Guidance** Multidisciplinary team is an essential component of medical rehabilitation services to provide best care and to ensure continuity of care to patients 24/7. The team should include a unit treating doctor, a rehabilitation therapist, nurses in the patient unit, and other professional experts.

<b>Measures:</b>	<b>SMCS.119.a</b>	There is a clear referral guide for providing medical rehabilitation services for patients within the hospital units.
	<b>SMCS.119.b</b>	Medical Rehabilitation Services is offered only after referral by a physician. The referral is requested to the specialty required i.e., physiotherapy, occupational therapy, speech and language therapy and prosthetic and orthotic.
	<b>SMCS.119.c</b>	The response to routine referrals issued within maximum 24 hours.
	<b>SMCS.119.d</b>	Rehabilitation professionals communicate effectively with the multidisciplinary team about patient's plan of care and perform the necessary activities.
	<b>SMCS.119.e</b>	All communication and patient 'plan of care provided are clearly documented by the rehabilitation staff and all other team members in the patient's medical record.
	<b>SMCS.119.f</b>	The plan of patient care includes a multidisciplinary team involved in the rehabilitation, and the intensity and duration of the sessions to be arranged depending on the patient's progression and needs.
	<b>SMCS.119.g</b>	The patient's response to therapy is documented in patient's electronic record.
	<b>SMCS.119.h</b>	The team provides information booklets for patients when available and needed.

**SMCS.120** The rehabilitation department has an established comprehensive quality management system.

**Guidance** In all healthcare institutions, patient safety and quality of care provided are the top priorities. The aim of this standard is to keep patients safe and provide high-quality medical rehabilitation treatments while they are being delivered.

<b>Measures:</b>	<b>SMCS.120.a</b>	The rehabilitation service has a quality management plan (e.g., monthly collection of data).
	<b>SMCS.120.b</b>	Quality focal point is appointed to monitor quality plan.

**SMCS.120.c**

The availability of the following measures is essential to maintain quality and patient safety:

- Emergency resuscitation trolley.
- Availability of essential resources and equipment to meet the scope of service
- Equipment and environmental safety.
- List of emergency contact numbers.
- The physical environment has to be accessible for wheelchair users.
- Regular check-up of inventory items / equipment.
- Patient satisfaction forms/ surveys.
- Quality training for staff, including safe manual handling program and BLS.
- Incident report system.

**SMCS.120.d**

There is a regular scheduled audit, using checklist that classifies areas for improvement and the action plans.

**SMCS.121**

**Patients are assessed comprehensively by medical rehabilitation professionals to identify their functional risks and needs.**

**Guidance**

Patients receiving rehabilitation services are assessed at regular intervals throughout their treatment to ensure that treatments are tailored to their specific needs. The aim of this standard is to deliver high-quality care in a timely manner based on assessment findings.

**Measures:****SMCS.121.a**

Patient rehabilitation care is guided by a comprehensive functional assessment process that is performed by a qualified therapist for each patient. The assessment includes collecting subjective and objective data.

**SMCS.121.b**

Evidence based clinical assessment tools are used to generate rehabilitation goals and action plans.

**SMCS.121.c**

Functional assessment is completed within twenty-four hours of referral. This can be applied in inpatient settings. For outpatients, it is limited by appointment date after referral which mostly exceeds 24 hours.

**SMCS.121.d**

Functional screening and assessment findings are documented in the patient's medical record.

**SMCS.121.e**

The rehabilitation staff in collaboration with other multidisciplinary team develop appropriate plan of care for patients with functional needs that meets the needs of the patient.

**SMCS.122**

**There is a clear process of follow-up/ discharge plan for the patients.**

**Guidance**

The presence of a documented follow up and discharge process enhances continued care and prevents recurrent admissions. The aim of this standard is to ensure the continuity of care provision in order to achieve the optimum rehabilitation outcomes.

**Measures:****SMCS.122.a**

Rehabilitation patient discharge procedure is available.

**SMCS.122.b**

During the patient care process, there is planning for discharge/follow-up arranged in timely intervals depending on the diagnosis and prognosis of the patient.

**SMCS.122.c**

Identified goals are met through various standardized assessment tools.

**SMCS.122.d**

Discharge decision is based on the agreed plan of care.

**SMCS.122.e**

Education of the patient/ family for follow up/ discharge is provided, using various applicable methods.

**SMCS.122.f**

Patient's summary upon discharge includes but not limited to:

- Subjective and objective assessments as mentioned in the assessment standard.
- Overall patient's progress.
- Achieved rehabilitation goals.

## Nutrition and Dietary Services

Hospital diet and nutrition are an essential part of modern therapy in all medical departments. It comprises both the so-called normal diets, which are prepared according to modern nutrition knowledge, dietetic foods, and the various forms of artificial nutrition. The dietary department provides food and nutrition services that consistently promote adequate nutritional intake, improve health and enhance the quality of life. This section covers standards that are essential to promote dietary and nutrition services in the institution.

### SMCS.123

**The hospital has a standardized nutritional screening for all age group patients.**

#### Guidance

Malnutrition is an independent risk factor that negatively affects patients' clinical outcomes, quality of life, body function, and patients' autonomy. Early identification of patients at risk of malnutrition is critical in order to start a timely and adequate nutritional support.

#### Measures:

##### SMCS.123.a

The hospital has an effective policy and procedure for a comprehensive nutritional assessment, that includes, but is not limited to:

**SMCS.1.aa** Height and weight chart for children

**SMCS.1.ab** Body mass index (BMI) for adults.

**SMCS.1.ac** Eating habits

**SMCS.1.ad** Food allergies.

**SMCS.1.ae** Need for therapeutic diet.

**SMCS.1.af** Physical difficulties with eating and drinking and the need for any assisting devices.

##### SMCS.123.b

Nutritional screening is only conducted by a qualified/trained nurse to determine the risk score that indicates whether a patient requires dietary consultation or not, within twenty-four hours of admission.

##### SMCS.123.c

Nutritional assessment is only conducted by qualified dietitian to determine the patient's nutritional requirements and to initiate medical nutritional therapy.



**SMCS.123.d** The nutritional screening and assessment findings are documented in the patient's medical record.

## SMCS.124

**The hospital dietary services are provided by qualified clinical nutritionists.**

### Guidance

Dietitians who work with patients need a dietetic degree program that combines academic studies and practical experience, to ensure that dietitians can practice lawfully, safely, and effectively with adequate academic background to meet the job demands.

### Measures:

**SMCS.124.a** All aspects of the hospital's dietary services are overseen by a qualified dietitian.

**SMCS.124.b** Dietitians provide a variety of services, including, but not limited to:

**SMCS. 121.ba.** A nutritional screening, assessment and reassessment is required for all patients.

**SMCS. 121.bb.** The nutritional plan of care is developed.

**SMCS. 121.bd.** Highlighting "food-drug interaction and allergic" to clinical staff.

**SMCS. 121.be.** Patient dietary recommendation.

**SMCS. 121.be** Nothing by mouth (NPO) monitoring sheet.

**SMCS. 121.bf** Patient and Family Education related to nutrition issue.

**SMCS. 121.bg** Reviewing and updating the dietary manual every 3 years

**SMCS.124.c** Activities conducted by the dietician are documented in the patient's electronic record.

## SMCS.125

**Hospital maintains dry food store temperature under 25 degrees Celsius in catering facilities.**

**Guidance**

The dry food stores are usually used to store dry food, canned food, and used as day stores for food supplements, feeds, baby milk powder, and ready to use baby milk (RTF) which may spoil if the temperature exceeds 30°C. The storeroom for dry food should be located near the receiving area and close to the main kitchen. This standard aims to ensure the appropriateness of the delivered food.

**Measures:**

<b>SMCS.125.a</b>	Essential points (temperature and humidity) within the dry store of the catering facility, to be monitored.
<b>SMCS.125.b</b>	Records to ensure that dry stores should be dry and cool to prevent spoilage and the swelling of canned goods. The ideal temperature range is 10°C to 15°C (50°F to 59°F) and not to exceed 25°C (77°F).
<b>SMCS.125.c</b>	Records to ensure cleanness from biological, chemical and physical spoilage.
<b>SMCS.125.d</b>	All procedures (e.g., building specifications etc.) required to ensure safety from biological, chemical, physical and allergic hazards.

The quality program must be supported by the top management in the healthcare organization to ensure continuity and inspire all staff in the organization to be involved in these programs. All quality programs must be documented, and the data collected used for further improvement. The data is collected from all areas, including high-risk areas in the hospital. In the event of any error, the staff should report the incident and explain how that happened, then investigate, follow up, and improve the system to prevent such an event from happening again.

**This chapter has 11 standards, and outlines the following points:**

- Hospital quality committee
- Qualify quality leader
- Incident reporting system
- Key performance indicator
- Budget
- Safety culture program
- Risk management

#### **QRM.1**

**The hospital has a Quality Management and Patient Safety Committee to develop, implement and sustain relevant projects/activities.**

**Guidance:** Quality Management and patient safety committee is a multidisciplinary team that oversees the implementation of all quality management and patient safety activities' institutional wide to ensure they are implemented effectively to drive continuous improvements of patient care and sustaining the continuity of quality management. The intent of the standard to establish, implement, evaluate, and sustain a comprehensive quality and patient safety activities with associated structures, policies, and processes, which are the vehicle of improving quality and patient safety.

<b>Measures:</b>	<b>QRM.1.a</b>	The hospital has Quality Management and Patient Safety Committee.
	<b>QRM.1.b</b>	The committee has defined accountability, responsibilities and authority .
	<b>QRM.1.c</b>	The committee is chaired by DG/Hospital Director and the members at senior level from different disciplines.
	<b>QRM.1.d</b>	Regular minutes of the meeting includes agenda, topic, discussion, action steps, responsible staff and timeframe.
	<b>QRM.1.e</b>	Quality management plan is comprehensively established which meets the hospitals' vision, mission and strategic priority and covers all departments within the hospital.
	<b>QRM.1. f</b>	The committee guides implementation of the quality management and patient safety action plans and manages the activities needed to be carried out.
	<b>QRM.1. g</b>	Quality Management committee supports all Quality Management initiatives and provides oversight for the Quality Management program.
	<b>QRM.1. h</b>	The Quality management receives annual reports/ proposal from all teams, heads of departments about quality improvement projects.
	<b>QRM.1.i</b>	The quality management and patient safety committee provides feedback to their staff on quality improvement projects.
	<b>QRM.1. j</b>	The hospital quality improvement activities are regularly updated.

**QRM.2**

The hospital has a department of quality management and patient safety led by a qualified professional.

**Guidance:** The quality and patient safety department are the cornerstone of all hospitals to observe the organizational function and facilitate high quality care with optimum patient safety. The department must be led by a qualified individual to drive the organization towards excellence in healthcare.

<b>Measures:</b>	<b>QRM.2.a</b>	The quality management and patient safety department is directed by a competent healthcare professional who is qualified by experience, training, and education in quality of healthcare.
	<b>QRM.2.b</b>	The department provides continuous guidance and consultation to all departments at regular basis.
	<b>QRM.2.c</b>	The department is responsible to provide educational activities on quality management activities and patient safety aspects to hospital leaders and employees.
	<b>QRM.2.d</b>	The department allocates quality champions in all hospital department.

### **QRM.3      The hospital has an incident reporting and learning system (CSS.12).**

**Guidance:** Incident reporting system is a learning system to improve safety, and to achieve sustainable reductions and elimination in risks. Healthcare staff should feel safe and protected from blame to be able to report incidents. They should be involved in follow-up investigations and improvement of hospital's incidents. This standard aims to have a standardized incident reporting system to promote safety culture and to learn from incidents and not to repeat them.

<b>Measures:</b>	<b>QRM.3.a</b>	There is a clear policy for reporting incidents including all adverse events, sentinel events and near misses.
	<b>QRM.3.b</b>	The hospital employees are educated on identification, management and reporting of incidents at regular basis.
	<b>QRM.3.c</b>	A documented policy is available and accessible to all employees. The policy includes, but not limited to event types, response time, roles and responsibilities of quality department and departmental quality teams,
	<b>QRM.3.d</b>	Incidents are reported and investigated in a timely manner.
	<b>QRM.3.e</b>	Incidents' reports with improvement plans and achievements are provided to the leadership team quarterly.
	<b>QRM.3.f</b>	Incidents are monitored regularly, and information is used for improvement.
	<b>QRM.3.g</b>	Learning lessons from adverse events are disseminated to

	employees.
<b>QRM.3.h</b>	Root-cause-analysis is used to analyze sentinel events, medication errors and as required.
<b>QRM.3.i</b>	Sentinel events are defined and documented in the policy.
<b>QRM.3.j</b>	Sentinel events are discussed in the mortality and morbidity committee.
<b>QRM.3.j</b>	Patients affected by the incident are informed about the adverse event as per disclosure policy.

**QRM.4**

**The hospital has an auditing system to evaluate and improve the existing hospital services.**

**Guidance:**

Auditing in healthcare is a systematic objective mechanism that enables the hospital to review and monitor of the hospital processes and outcomes to ensure that policies, procedures, and operations are well implemented. In addition, auditing system is crucial to assess and evaluate its daily practice against predefined standards (Oman National Standards) to identify nonconformity areas, addressing action plans for those areas through corrective and preventive actions. This ultimately improves quality of care and provide safe care.

**Measures:**

<b>QRM4.a</b>	The hospital has clear guidelines on auditing health care services.
<b>QRM4.b</b>	The hospital designated and trained team led by quality department to conduct the audit.
<b>QRM4.c</b>	Auditing reports are shared with department's leaders for improvements.
<b>QRM4.d</b>	The departments are responsible to create action plans and implement them based on the reports of auditing.
<b>QRM4.e</b>	The auditing team follows up the implementation of action plans.

**QRM.5**

**The hospital develops a performance measurement system that provides a structured framework for monitoring and improving performance and supporting innovation.**

**Guidance:**

Indicators are measures of performance based on standards determined through evidence-based literature or through the consensus expertise when evidence unavailable. The ability to monitor healthcare quality is essential to measure the performance effectively which can be accomplished by the assistance of performance indicators. Performance indicators facilitate the capture of

healthcare trends, and indicate areas required further investigation.

<b>Measures:</b>	<b>QRM5.a</b>	The hospital has a performance measurement and improvement system which is constant with hospital vision, mission, objectives, quality improvement plan, patient safety, and risk management.
	<b>QRM5.b</b>	The Hospital employees receive training on basic concepts of performance measurements, and improvement, and participate in quality improvement activities.
	<b>QRM5.c</b>	The hospital has set of performance indicators which are developed, monitored, analyzed, and implemented by hospital leaders.
	<b>QRM5.d</b>	The departments' directors select and monitor the applicable performance indicators to their department.
	<b>QRM5.e</b>	The department director is responsible to ensure regular data collection, and analysis, comparison of performance indicators over time, and/or with national /international evidence-based practice and benchmarks.
	<b>QRM.5.f</b>	Outcomes of performance measurement and improvement are periodically reported to the hospital leadership and shared with employees.
	<b>QRM.5.g</b>	The data are coordinated with other performance monitoring activities such as patient safety and risk management.
	<b>QRM.5.h</b>	Each indicator must have a title, definition, rational, dimension, target, calculation (dominator and numerator ratio), data collection frequency and frequency of reporting, sources of data collection.
	<b>QRM.5.i</b>	The quality management and patient safety conducts a minimum of one research.
	<b>QRM.5.j</b>	The hospital leadership defines performance indicators of the hospital.
	<b>QRM.5.k</b>	The quality and patient safety department monitors hospital performance indicators.
	<b>QRM.5.l</b>	The hospital shares its performance indicators results through annual report or MOH portal.

**QRM.6** The hospital has an annual operating budget for quality management and patient safety activities, covering manpower and training needs.

**Guidance:** Quality management and patient safety activities are mandatory for continuous quality management. Therefore, allocating a budget to facilitate implementation of these activities is essential to ensure their accomplishment as per the hospital annual plan. The aim is to secure an annual budget to conduct hospital' quality management and patient safety activities.

<b>Measures:</b>	<b>QRM6.a</b>	The hospital has clear annual action plan addressing the allocated budget for quality management and patient safety activities, consumables, manpower, and training needs.
	<b>QRM6.b</b>	The hospital monitors utilization of the budget.
	<b>QRM6.c</b>	The hospital leaders utilize resources to support the patient safety and quality improvement programs and activities.
	<b>QRM6.d</b>	The hospital adopts safe practices that have been prove to improve patient safety and reduce harm to patient such as National and International organizational concerned with patient safety.
	<b>QRM6.f</b>	Patient safety and quality improvement activities are communicated to the staff and other relevant groups and used as the base for improving the hospital processes.

**QRM.7**      **The hospital has Quality Management and Patient Safety Goal as a strategic priority.**

**Guidance:**      The hospital strategic plan shall include quality and patient safety as one of the top priorities. The strategic plan outlines actionable steps needed to reach specific goals which promote quality management and patient safety.

<b>Measures:</b>	<b>QRM7.a</b>	The hospital has a document demonstrating patient safety strategy and/or hospital strategy.
	<b>QRM7.b</b>	The hospital leaders develop a strategic plan guided by the mission, vision, objectives and values of the hospital.
	<b>QRM7.c</b>	The Hospital allocates resources to support the implementation of the strategic plan.
	<b>QRM7.d</b>	The strategic plan is based on comprehensive evaluation of internal and external environment factors (e.g., PESTEL, SWOT, Fish bone diagram and other tools)
	<b>QRM8.e</b>	The strategic plan does not exceed 3 years for short term plan and 5 years for long term plan with review bi-annually.
	<b>QRM8.f</b>	Patient safety action plan is detailed and has a monitoring strategy.

**QRM.8**      **The hospital leadership promotes Patient Safety Culture Program.**



**Guidance:** Patient safety culture program demonstrates people perceptions and attitudes towards each other and towards hospital environment. Key features of this program are addressing and an identifying high-risk nature of different hospital activities to achieve safe practices. In addition, patient safety culture encouraging friendly environment for reporting adverse events with no blame culture and promote effective communication and collaboration between all hospital disciplines, patients, and stakeholders.

<b>Measures:</b>	<b>QRM8.a</b>	The Hospital conducts patient safety culture survey (e.g., The Agency for Healthcare Research and Quality) to assess patient safety culture.
	<b>QRM8.b</b>	The Hospital leaders use information from the analysis to formulate action plan for improvements.
	<b>QRM8.c</b>	The leadership conduct monthly/regular patient safety walk-rounds to identify safety challenges, learn about risks in the system, and act on patient safety improvement opportunities.
	<b>QRM8.d</b>	Feedback is shared with employees to act on improvement plans.
	<b>QRM8.e</b>	The hospital leadership promotes innovative actions to spread the culture of patient safety and eliminate blame among employees.
	<b>QRM8.f</b>	The hospital leaders are responsible to monitor implementation of patient safety culture and provide resources required.

## **QRM.9 The hospital has Morbidity and Mortality Committee.**

**Guidance:** The committee of mortality and morbidity is one of the essential committees that must be present in all hospitals. Discussion of cases during the committee meetings, provides an insight to hospital leaders on excellent practices that must be disseminated and identifies challenges and risks of patient management. The committee meetings shall discuss mortality and morbidity cases to assess safety and efficacy care and to identify implementation of the standards/policies, and consequently, come up with recommendations for care improvement.

<b>Measures:</b>	<b>QRM9.a</b>	The hospital has a Morbidity and mortality committee with equivalent with terms of reference, chaired by the hospital directors or their deputies.
	<b>QRM9.b</b>	The hospital has documented policy on accountability, responsibilities and authority for morbidity and mortality team members.
	<b>QRM9.c</b>	The hospital conducts regular monthly morbidity and mortality meetings, with documented minutes.

<b>QRM9.d</b>	The departments' directors conduct departmental review of morbidities and mortalities monthly and as required.
<b>QRM9.e</b>	The corrective actions and recommendations are monitored at a regular basis.
<b>QRM9.f</b>	The discussions at the mortality and morbidity meetings are kept confidential.
<b>QRM9.g</b>	The mortality and morbidity review team members receive education and training on the process of auditing/ reviewing of cases.
<b>QRM9.h</b>	The hospital disseminates learning lessons from the mortality and morbidity committee regularly.

**QRM.10**

**There is a multidisciplinary committee to address environmental and occupational health and safety.**

**Guidance:**

There is a multidisciplinary committee with terms of reference and assigned responsibilities in its organizational structure addressing environmental and occupational health and safety. Occupational hazards which can lead to the risk of injury and occupational or work-related diseases in the healthcare industry have been well documented. One of the most effective ways to reduce workplace hazards and injuries is through implementing a comprehensive, proactive occupational health and safety management system. The benefits of implementing such system are protecting and promoting the health of worker, as well as saving organization expense through injury prevention programs. Patient safety and worker's health and well-being are inextricably linked, therefore, addressing health and safety of healthcare workers directly improves the quality of patient care. This standard aims to maintain environmental and occupational health safety for employees, patients, families and visitors in the healthcare settings.

**Measures:**

<b>QRM10.a</b>	The hospital has multidisciplinary environment and occupational health and safety committee that is chaired by the hospital leadership and includes members from hospital departments: medical director, nursing director, Bioengineering, quality management, and safety officer, health and safety officers, Fire officer and other invitees as appropriate.
<b>QRM10.b</b>	The committee has defined functions, roles and responsibilities, list of members and titles, etc. The multidisciplinary team is expected to meet quarterly.
<b>QRM10.c</b>	The department heads actively participate in committee's activities as evidenced by meeting minutes.

<b>QRM.10.d</b>	The multidisciplinary environment and occupational health and safety committee provides coordination and oversight of the safety, health, and quality of environment for patient and employees.
<b>QRM.10.e</b>	The committee receives incident reports and complains and any other concerns regarding environment and occupational health and safety and provides feedback to relevant stakeholders.
<b>QRM.10.f</b>	The hospital identified the hazards in the workplace and determined risk associated with them.
<b>QRM.10.g</b>	A documented policy for occupational health services (employee health program) includes, but is not limited to:
	<b>QRM.10.j.1.</b> Immunization program
	<b>QRM.10.j.2.</b> Reporting of occupational diseases and injuries
	<b>QRM.10.j.3.</b> Screening examination (pre-employment, periodic, accidental exposure/injury, on retirement)
	<b>QRM.10.j.4.</b> Availability of staff clinic with clear responsibilities with trained doctor in occupational health, with minimum of two nurse/professionals in occupational health as per the hospital capacity.
	<b>QRM.10.5</b> Fitness for work that covers chronic disease, infectious disease and sick leave (Return to work after sick leave or present of chronic disease).

**QRM.11      The hospital has a risk management system. (CSS.13)**

**Guidance:** Risk reduction has always been the pillar in providing safe service. All activities in the health care system may involve potential risks that may affect the service and the well-being of people. Managing these risks is the most effective approach in achieving this goal. This standard aims in controlling threats, mitigate risks and continue improving hospital services and operations.

**Measures:**

<b>QRM11.a</b>	Hospital has qualified risk manager with clear roles and responsibilities, with designated focal points in all hospital departments.
<b>QRM11.b</b>	The hospital develops a risk management program and

	framework.
<b>QRM11.c</b>	The hospital leadership defines objectives of the risk management program and scope and responsibilities of the employees responsible for the program.
<b>QRM11.d</b>	The hospital ensures that the hospital employees are oriented on their roles and responsibilities toward risk management program activities.
<b>QRM11.e</b>	<p>The risk management program is responsible for analyzing, evaluation, and treatment of risks by:</p> <p><b>QRM11.d.1</b> Using reactive (e.g., root cause analysis) and proactive risk management and assessment tools (e.g., FMEA)</p> <p><b>QRM11.d.2.</b> The Risk score calculation is implemented.</p> <p><b>QRM11.d.3.</b> The Severity of the impact scoring is utilized.</p> <p><b>QRM11.d.4.</b> The Risk is prioritized according to risk score.</p> <p><b>QRM11.d.5.</b> The Evaluated risk is classified (risk is accepted or mitigated).</p> <p><b>QRM11.d.6.</b> The mitigation plan includes proposed action plan, resources requirements, responsible person for action plan and timeframe.</p> <p><b>QRM11.d.7.</b> Clear structure of activities.</p> <p><b>QRM11.d.8.</b> Sustain risk register.</p>
<b>QRM11.f</b>	The Leaders of the clinical departments contribute to the risk management program, by developing, implementing activities that protects patients from potential risks.
<b>QRM11.g</b>	The hospital evaluates the effectiveness of the risk management program regularly and make action plans for improvement.
<b>QRM11.h</b>	<p>The main areas of Risk management system activities are identified as follows:</p> <ol style="list-style-type: none"> <li>1. Patient safety related risks.</li> <li>2. Employees related risks.</li> <li>3. Hospital environment related risks.</li> </ol>
<b>QRM11.i</b>	The hospital recognizes opportunities driven from IRM activities through Sharing positive practices, providing awards of best department in RMS practices or safety culture and other innovative methods.

**QRM11.j**

The hospital sustains an ongoing training and awareness program for risk management system.

**QRM12**

**The Hospital ensure adherence to the national Disclosure policy.**

**QRM12.a**

The hospital has documented policy National Disclosure policy.

**QRM12.b**

The Hospital ensures all staff are oriented and has easy access on the National Disclosure policy.

**QRM12.c**

The hospital monitors the compliance to the National Disclosure policy.

*Chapter 6: Infection Prevention and Control (IPC)*

Infection prevention and control (IPC) is a practical, evidence-based strategy for preventing patients and healthcare professionals from being harmed by avoidable infections and as a result of antimicrobial resistance. The hospital must have a mechanism to control the infections and provide a safe environment. This includes supporting the infection control program, antimicrobial management program, and action plan to control outbreak infections, etc.

This chapter contains 15 standards and outlines the following:

- Infection Prevention and Control Program
- Preparedness Plan
- Screening and Vaccination
- Equipment Sterilization
- Safe Waste Management
- Cleaning Program.
- Decontamination Program.

#### IPC.1

**The Hospital has an effective infection prevention and control program.**

**Guidance:** The hospitals are recognized as the most complex man-made system, and they are continuously challenged by healthcare-associated infections (HAI). WHO data showed that up to 7% of patients in developed and 10% in developing countries will acquire at least one Hospital Acquired Infection (HAI). Those infections in addition to causing significant morbidities and mortalities are known to be an economic burden for the hospital and the country. The prevention of a large percentage of HAI within this complexity requires an effective infection prevention and control program. The aim of this standard is to have a constructive program in hospitals managing all aspects of infection prevention and control.

<b>Measures:</b>	<b>IPC.1.a</b>	<p>The Hospital structure includes an infection prevention and control program that has:</p> <p><b>IPC.1.a.a.</b> At least two dedicated full-time infection prevention staff with clear job responsibilities.</p> <p><b>IPC.1.a.b.</b> A clear service description.</p> <p><b>IPC.1.a.c.</b> A Written annual operational plan based on regular risk assessment.</p> <p><b>IPC.1.a.d.</b> Clinical guidelines, policies, and procedures that are based on evidence/ best practice and are in line with national regulations.</p>
	<b>IPC.1.b</b>	The infection prevention staff are qualified by education, training or experience.
	<b>IPC.1.c</b>	The hospital has an infection control committee (ICC)
	<b>IPC.1.d</b>	The hospital provides the program accessible to patient clinical and laboratory data.
	<b>IPC.1.e</b>	The head of IPC team reports directly to the hospital management and represents the team in the hospital directors' meeting.
	<b>IPC.1.f</b>	The hospital allocates a budget to support IPC activities (e.g., hand hygiene, personnel protective equipment, isolation signs, space, etc.).
	<b>IPC.1.g</b>	The ICP team provides ongoing (24/7) consultation to all hospital departments.

**IPC.2** The hospital has a preparedness plan for infectious diseases epidemics/pandemics that links with the *Oman National Emergency Management Center*.

**Guidance:** Infectious diseases disaster events like emerging infections, flue pandemics, hospital or community infections outbreak are not infrequently happening. When occurring; they result in crucial numbers of patients requiring hospitalization, Isolation, mechanical ventilation, and intensive care. Studies indicate that most healthcare facilities do not have adequate resources, or the infrastructure needed to manage all aspects of patient care during an event that

lasts longer than a few days. Ensuring hospitals preparedness for such events is crucial for appropriate response to such events and to minimize the panic that may happen during it. The aim of this standard is to have a preparedness plan within hospital for management of infectious diseases epidemics/pandemics.

<b>Measures:</b>	<b>IPC.2.a</b>	There is a documented infectious diseases preparedness plan for the hospital lead by infection head of department, that includes, <b>IPC.2.a.a.</b> Roles and responsibilities of the team. <b>IPC.2 a.b</b> clear communication strategy that is tested with periodic drills annually. <b>IPC.2 a.c</b> The plan includes links with the national team.
	<b>IPC.2.b</b>	The preparedness guides staff in how to investigate and control infectious diseases epidemics/pandemics.
	<b>IPC.2.c</b>	There is a clear communication procedure that is disseminated and tested in the hospital with periodic drills annually.
	<b>IPC2.d</b>	The hospital conducts annual training and regular awareness sessions as per schedule and whenever required for the staff and supporting services.
	<b>IPC.2.e</b>	Logistics and supplies are provided, and emergency stock is maintained.
	<b>IPC.2.f</b>	The Results of epidemics/pandemics investigations are utilized to prevent recurrence.

### **IPC.3 The hospital infection prevention and control (IPC) program conducts healthcare associated infections (HCAIs) surveillance.**

**Guidance:** Healthcare associated infections (HCAIs) are considered as a major challenge to the healthcare system. The Hospitals should develop and/or adopt a surveillance system for HCAIs that should include CLABSI, CAUTI, VAP and SSI when applicable. The surveillance system uses standardized criteria/definitions for HCAIs as per national guidance. The hospitals must show evidence of HCAIs reporting within the hospital and at national level. Measures and actions taken by Hospital to prevent and/or reduce the risk of HCAI must be based on surveillance results to ensure the implementation of different care bundles. This standard aims standard is to provide reliable data on the rates of HCAIs within the hospital to be used for improvement plans.

<b>Measures:</b>	<b>IPC.3.a</b>	The hospital has risk-based healthcare associated infection surveillance that include: <b>IPC3.a.1</b> Surgical Site Infection (SSI), <b>IPC3.a.2.</b> Catheter Associated Bloodstream Infection (CLABSI), <b>IPC3.a.3.</b> Ventilation Associated Pneumonia (VAP), <b>IPC3.a.4.</b> Catheter Associated Urinary Tract Infection (CAUTI)
	<b>IPC.3.b</b>	The ICP team conducts systematic and continuous surveillance process That is coordinated with national surveillance program.



- IPC.3.c** The surveillance report is generated quarterly and communicated to the hospital leadership, infection control committee and clinical areas.
- IPC.3.e** Intervention programs/activities are planned based on the surveillance results and risk assessment.

**IPC.4**

**The hospital has a comprehensive program to control the transmission of antimicrobial resistance organisms (AMR).**

**Guidance:** The challenge of the antimicrobial resistance (AMR) is a global concern for all healthcare facilities as it is contributing in many of the healthcare associated infections. Without appropriate and timely interventions, AMR will overtake cancer and become the world's largest cause of death by 2050. The hospital should ensure is being part of national antimicrobial resistant and usage surveillance program and to report any new resistant pathogen. The aim of this standard is to rationalize the utilization of antimicrobials within the hospital and contribute to the national and global efforts in controlling AMR.

**Measures:**

- IPC.4.a** There is an Antimicrobial Surveillance Program in the hospital that is coordinated with the national program.
- IPC.4.b** There is an Antimicrobial Stewardship Program with clear objectives, roles and responsibilities to manage all the AMR related activities within the hospital including:
- IPC.4.b.1.** An antimicrobial stewardship teams
  - IPC.4.b.2.** A clear policy on restricted antimicrobials in accordance with the national guideline.
  - IPC.4.b.3.** Regular audit is conducted for the compliance with the national surgical prophylaxis guidelines.
  - IPC.4.b.4.** An annual anti-bigram is issued or adapted from the national version.
- IPC.4.c** The hospital has a screening, isolation and management policy for patients colonized/infected with multidrug resistant organisms.

**IPC.5**

**The hospital ensures the implementation of standard and transmission-based precautions.**

**Guidance:** Patients may carry an infection that could take time to be diagnosed and has the potential to spread between patients and healthcare providers (HCPs). Transmitting the infections is found to be higher if the standard precautions are not implemented. However, implementing the standard precautions for all patients and transmission-based precautions upon suspicion will prevent or reduce the risk of exposure. This standard aims to reduce the risk of cross transmission of infection in the hospital.

<b>Measures:</b>	<b>IPC.5.a</b>	<p>The hospital has a policies and procedure for isolation precautions with clear roles and responsibilities that include, but are not limited to the following:</p> <p><b>IPC.5.a.1.</b> Early identification</p> <p><b>IPC.5.a.2.</b> Notification methods</p> <p><b>IPC.5.a.3.</b> Types of isolation (contact, droplet, airborne)</p> <p><b>IPC.5.a.4.</b> Placement of patients within the hospital.</p> <p><b>IPC.5.a.5.</b> Cohering strategies</p> <p><b>IPC.5.a.6.</b> Transfer of isolated patients within and between healthcare facilities</p> <p><b>IPC.5.a.7</b> Cleaning and decontamination of isolation facilities.</p>
	<b>IPC.5.b</b>	<p>The hospital ensures the availability of facilities for different isolation types:</p> <p><b>IPC 5.b.1.</b> Personal protective equipment (PPE) is accessible and readily available.</p> <p><b>IPC 5.b.2.</b> Hand hygiene facility is available and accessible at all point of care areas.</p> <p><b>IPC 5.b.3.</b> Isolation signages are clear and appropriately displayed.</p> <p><b>IPC 5.b.4.</b> Airborne infection isolation setup is available (e.g., a negative-pressure room).</p>
	<b>IPC.5.c</b>	<p>The hospital provides training to all HCPs on use of PPE including fit-tested of respirator particulate mask (e.g.N95 mask). Moreover, brochures, pamphlets and other visible educational materials to be displayed for healthcare providers, patients, families and visitors.</p>

## **IPC.6** The hospital has a system for contact tracing and management in the event of communicable disease exposure.

**Guidance:** Exposure of the healthcare workers to communicable disease can cause major outbreak in the healthcare facilities. Contact tracing and management of exposed personnel can prevent secondary transmission. The hospital has a system for identification, notification and contact tracing for exposed individuals to the confirmed case of communicable diseases. Infection control team in the hospital is responsible for investigating and listing the contacts for follow up and management according to risk assessment (high, medium, and low). The counseling of exposed patients/staffs is documented and those declining care and follow up signing responsible for their decisions.

<b>Measures:</b>	<b>IPC.6.a</b>	The hospital has policies and procedures with clear role and responsibilities for managing communicable diseases exposure within the hospital.
	<b>IPC.6.b</b>	The hospital has clear guides to report communicable diseases to the national reporting and surveillance system.



<b>IPC.6.c</b>	The hospital infection prevention and control program report the exposure and its management to the Central Department of Infection Prevention and Control in ministry of health.
<b>IPC.6.d</b>	The hospital ensures follow up of all exposed staff and patients for the duration of the disease incubation period with clear documentation of outcome.
<b>IPC6.e</b>	The hospital has a system that documents counseling of exposed individuals including those declining care.

## **IPC.7 The hospital has a program for healthcare workers screening and vaccination.**

**Guidance:** Vulnerable/non-immune HCPs to vaccine-preventable diseases (VPD) can pose a great risk to the patients and others immune compromised personnel within the hospital. They could be the source of an outbreak within hospital. Hence, ensuring the immunity of HCPs against VPD enhances safety.

<b>Measures:</b>	<b>IPC.7.a</b>	The hospital has a policy for healthcare providers' screening and vaccination with clear roles and responsibilities.
	<b>IPC.7.b</b>	The hospital maintains records for HCPs screening and vaccination.
	<b>IPC.7.c</b>	The hospital maintains the declaration form for employees refusing vaccination.

## **IPC.8 The hospital applies measures for safe management of sharps and body fluids exposure.**

**Guidance:** Occupational exposure to contaminated sharps and body fluid can cause major risk of possible transmission of blood borne diseases. Unsafe handling and disposal of contaminated sharps and needles can lead to major safety issues to the HCWs that are most of the time preventable. CDC estimated that about 385,000 sharps-related injuries occur annually among healthcare workers in USA. Globally the figures for sharp and body fluids exposures are not reflective of the true incidence due to under reporting of such events by HCWs. Applying management measures within the hospital for the sharps and body fluid exposure is one of the essential aspects to prevent transmission of blood borne diseases. This standard aims to reduce the potential infectious risk to HCWs from contaminated sharps and body fluids exposure.

<b>Measures:</b>	<b>IPC.8.a</b>	The hospital has policies and procedures on safe management of sharp and body fluids, which includes but are not limited to the following: <b>IPC.8.a.1.</b> Sharp and body fluid management. <b>IPC8.a.2.</b> Event Reporting and follow up system. <b>IPC8.a.3</b> Risk assessment based on evaluating the events of
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	<p>exposure.</p> <p><b>IPC8.a.4</b> Maintain prophylaxis availability.</p>
	<p><b>IPC.8.b</b> The hospital has evidence-based processes for safe disposal of contaminated needles/sharps.</p>
	<p><b>IPC.8.c</b> The hospital conducts education and training for safe sharp and post exposure management.</p>
	<p><b>IPC.8.d</b> The ICP team shares an annual report of sharps and body fluids incidence with the hospital and national leadership.</p>
	<p><b>IPC.8.e</b> The hospital selects sharp boxes that are safe, appropriate in size, puncture proof and leak proof.</p>
	<p><b>IPC.8.f</b> Sharp boxes are disposed when they are <math>\frac{3}{4}</math> full, according to the National rules and regulations.</p>
<b>IPC.9</b>	<p><b>The hospital ensures safe reprocessing and sterilization of equipment, devices, and supplies.</b></p>
<b>Guidance:</b>	<p>Improper cleaning and sterilization of medical/ surgical equipment had been linking to healthcare associated infection and was listed on the top of healthcare safety hazards. According to WHO estimates, approximately 15% of all hospitalized patients suffer from these infections. When cleaning, disinfection, and sterilization processes are accurately implemented, the risk of healthcare associated infection is reduced. However, for these processes to be effective, healthcare providers should follow strictly the cleaning, disinfection, and sterilization standards and recommendations. This standard aims in guiding the hospital employees to provide safely processed and sterilized medical/surgical equipment.</p>
<b>Measures:</b>	<p><b>IPC.9.a</b> The Hospital has policies and procedures for reprocessing and sterilization of surgical instruments, that include but are not limited to the following:</p> <p><b>IPC 9.a. 1.</b> A one-way workflow structure.</p> <p><b>IPC 9.a.2.</b> Transportation, cleaning, disinfection, sterilization, and storage of equipment.</p> <p><b>IPC 9.a.3.</b> Recall of sterile items system.</p> <p><b>IPC 9.a.4.</b> Reprocessing of single used items.</p> <p><b>IPC 9.a.5.</b> A procedure for monitoring and documentation of quality control.</p> <p><b>IPC.9.b</b> The hospital has appropriate skill mixed and qualified employees in each area of sterilization unit covering all shifts, with roles and responsibilities.</p>

<b>IPC.9.c</b>	The hospital maintains the national audit of decontamination and reprocessing of instruments record.
<b>IPC.9.d</b>	The medical and surgical devices' cleaning, disinfection, and sterilization process takes place in a centralized sterilization area.
<b>IPC.9.e</b>	The reprocessing unit collects information from all hospital areas annually that require reprocessing services to determine the range and delivery process.
<b>IPC.9.f</b>	Purchase of reprocessing equipment is based on inputs from stakeholders.
<b>IPC.9.g</b>	Appropriate testing is performed prior use of reprocessing equipment including: installation qualification (IQ), operation qualification (OQ), and performance qualification (PQ).
<b>IPC.9.i</b>	The hospital has a policy on shared and loaned equipment.

**IPC .10**

**The hospital infection prevention and control (IPC) program provides supervision for environmental related services within the facility.**

**Guidance:** The adherence to evidence and / or best practices for monitoring of catering services, water quality, the construction and renovation activities, proper ventilation for specialized care areas such as operating rooms and airborne infection isolation, laundry services, and the pest control will minimize the risk of environmentally related infections within the facility. This standard aims in reducing the risk of infections associated with environmental contamination.

<b>Measures:</b>	<p><b>IPC.10.a</b> The hospital has an environmental policies and procedures that include:  <b>IPC.10.a.1.</b> The role of IPC team in the supervision of catering, laundry, housekeeping &amp; pest control, water quality &amp; ventilation; construction, renovation, and demolition services.  <b>IPC.10.a.2 .</b>IPC involvement in the process of review and approval of contracts for the above-mentioned services.  <b>IPC.10.a.3.</b> Medical fitness and vaccination requirements for the contracted services staff.</p> <p><b>IPC.10.b</b> Laundry machines undergo periodic preventive maintenance records.</p> <p><b>IPC.10.c</b> The laundry Staff are following evidence-based practices, with appropriate dedicated dirty and clean carts, color coded hamper bags and signage in the materials and physical structure.</p> <p><b>IPC.10.d</b> Implementation of Integrated Pest Management (alternative pest control methods without using toxic chemicals) and available treatment schedule in various areas.</p> <p><b>IPC.10.e</b> Water quality sampling in various areas with documentation of results based on adapted national/international guidelines.</p>
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<b>IPC.10.f</b>	The IPC team Conducts risk assessment before, during and after construction, renovation, and demolition and implementing appropriate management including barriers and engineering designs control measures.
<b>IPC.10.g</b>	The hospital environment, stairs, lockers, shelves, chairs, equipment are kept clean with continuous monitoring and inspection by supervisors.
<b>IPC.10.h</b>	Clean and dirty utility are separately available in every patient ward/unit.
<b>IPC.10.i</b>	Staff accommodations are clean, appropriately ventilated, overcrowd is avoided and pets free

**IPC .11**

**The hospital has a system for safe management of the healthcare waste.**

**Guidance:** Most of the waste produced in healthcare facilities is general waste (75%-90%), and only remaining (10-25%) is considered as “hazardous” and may potentially cause health and environmental risk. The proper segregation and dispose of healthcare waste are important to prevent potential hazard to the environment and public. Within the hospital it prevents staff injuries from exposure to contaminated waste and ensure safety of healthcare workers, housekeeping staff, patients, and visitors setting. A system for waste identification and classification will minimize the production of infectious waste reducing the financial cost of such waste treatment and disposal. The aim of the standard is to prevent potential diseases/injuries from improper handling and management of healthcare waste.

<b>Measures:</b>	<p><b>IPC.11.a.</b> The hospital has policies and procedures for healthcare waste management that include:</p> <p><b>IPC.11.a.1.</b> Clear roles and responsibilities in each area of the hospital (e. g kitchen, mortuary)</p> <p><b>IPC.11.a.2.</b> Appropriate segregation and storing</p> <p><b>IPC.11.a.3.</b> Waste reduction program</p> <p><b>IPC.11.a.4.</b> Color coded bags are used</p> <p><b>IPC.11.a.5.</b> Use of hazard labels.</p> <p><b>IPC.11.a.6.</b> Training for healthcare worker and contracted services</p> <p><b>IPC.11.b.</b> The hospital has a monitoring program for waste management and action taken based on results.</p> <p><b>IPC.11.c.</b> The hospital estimates and classifies the waste generated in the facility and the required elements (e.g.; number of containers, bags, transportation carts, storage areas) and process to properly implement the national guideline for healthcare waste management.</p> <p><b>IPC.11.d.</b> The waste containers are cleaned regularly per a planned schedule.</p>
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**IPC.12**

**The hospital has a comprehensive environmental cleaning and decontamination program.**

**Guidance:** There are increasing evidence from outbreak reports on the role of environment in the transmission of hospital-acquired infections (HAI), commonly caused by Gram positive and negative bacteria including MDROs, fungi and viruses. It is estimated that 30–40% of HAIs are caused by the contamination of healthcare worker hands either from contact with infected or colonized patients, or with their environment. The use of detergent- and disinfectant-based cleaning agent helps in removing those pathogens from the environment.

**Measure:**

- IPC.12.a.** The hospital has policy and procedures for environmental cleaning and decontamination that includes:
- IPC.12.a.1.** Clear role and responsibilities of all stakeholders
  - IPC.12.a.2.** Product evaluation
  - IPC.12.a.3.** Areas, schedule, and cleaning process
  - IPC.12.a.4.** Training for cleaning employees
  - IPC.12.a.5.** Monitoring process
- IPC.12.b.** The hospital has documents including:
- IPC12.b.6.** Action taken based on monitoring of environmental cleaning
  - IPC12.b.7.** List of all the cleaning chemicals approved for use with safety data sheets (SDS)
  - IPC12.b.8.** Schedule of cleaning in various areas
- IPC.12.c.** Department concerned staff are oriented to the policy and their responsibilities.

**IPC.13**

**The Hospital ensures continuous education and training on infection prevention and control for all HCPs.**

**Guidance:** Evidence shows that the lack of knowledge among HCPs and availability of organized in-service training programs have facilitated poor implementation of infection control practices leading to sustained increase in HAIs. Enhancing knowledge and ensuring evidence-based practice of infection prevention and control by all staff can be achieved by initiating a standardized education and training program, targeted to specific group of staff and their needs. This enhances infection control practices in hospitals and provide safe environment for healthcare providers, patient and visitors.



<b>IPC.13.e</b>	<p>The hospital conducts training and competency assessment in the following core components:</p> <p><b>IPC13.e.1</b> Hand Hygiene,</p> <p><b>IPC13.e.2</b> Donning &amp; Doffing of Personal Protective equipment including N95 fit testing,</p> <p><b>IPC13.e.3</b> Standard and transmission-based precautions,</p> <p><b>IPC13.e.4</b> Sharps and body fluids exposure management,</p> <p><b>IPC13.e.5</b> Healthcare waste management,</p> <p><b>IPC13.e.6</b> Healthcare worker screening and immunization,</p> <p><b>IPC13.e.7</b> Emerging infections and outbreaks,</p> <p><b>IPC13.e.8</b> Other aspects of infection prevention and control including HAIs Surveillance and antibiotic stewardship.</p>
<b>IPC.13.f</b>	<p>The hospital maintains records of training program and attendance documents.</p>

## **IPC .14 Patients, and visitors are engaged in infection control and prevention activities.**

**Guidance:** IPC activities are mainly designed to prevent the spread of infection to healthcare employees, patients, and visitors by providing health education materials and orientation programs. Hand hygiene plays the main role in reducing infection. This standard aims to ensure all healthcare professionals, patients and visitors are aware about the hand hygiene and the hand sanitizers are available in hospitals corridors.

<b>Measure:</b>	<b>IPC.14.a</b>	Educational materials on hand hygiene, use of PPE and other related education are available and visible in all over the hospital.
	<b>IPC.14.b</b>	Patients are provided with infection control and prevention education on admission.
	<b>IPC.14.c</b>	Hand hygiene resources (e.g., sanitizers) are available and accessible in all hospital areas including corridors, entrances, lifts and all patient areas.

## **IPC.15 The hospital implements an evidence-based hand hygiene practice. (CSS.14)**

**Guidance** Common HAI includes bloodstream infections (BSI), catheter-associated urinary tract infections (CAUTI), and surgical site infections (SSI). The most common factor for the transmission of healthcare-associated infection (HAI) in the hospital is the healthcare staff's hands. According to WHO guidelines, healthcare workers should practice proper hand hygiene before touching the patient, after touching the patient, after touching inanimate objects in the patient's surroundings, after exposure to bodily fluids, and before clean/aseptic procedures. Monitoring of hand hygiene practice among healthcare is a key component in improving processes and compliance that should be conducted regularly. This standard aims to guide hospitals to have standardized constant practice on hand hygiene.



<b>Measures:</b>	<b>IPC.15.a</b>	The hospital adopts and implements evidence-based hand hygiene guidelines.
	<b>IPC.15.b</b>	Hospital implements effective standardized Hand Hygiene program with monitoring tools.
	<b>IPC.15.c</b>	All hospital Staff are trained on proper hand hygiene techniques.
	<b>IPC.15.d</b>	The hospital monitors hand hygiene practice and staff compliance to hand-hygiene guidelines throughout the hospital, and provides regular feedback and action plans for improvement.

### *Chapter 7: Medication Management and Use (MMU)*

Medication management is the process of monitoring a patient's medications to verify that they are taken correctly and that the intended therapeutic outcome is achieved. The clinical, cost-effective, and safe use of medicines to ensure patients get the maximum benefit from the medicines they need, while at the same time minimising potential harm. The hospital must have a safe and clear medication process, including protocols and guidelines that regulate the prescriptions and disapprove the medications, as well as high-risk medication orders.

Healthcare providers should report any discrepancies or errors in regards to the medication to prevent any further repetition of such errors.

The 39 standards of this chapter are outline the following:

- Staff qualification and experience.
- High alert medications
- Management of look-alike and sound-alike (LASA) medications
- Safe storage
- Prescribing, ordering and transcribing
- Despising
- Administrating
- Labelling
- Medical supplies and consumables
- Adverse Drug Reactions (ADRs)
- Medication errors

#### MMU.1

**The hospital has a pharmaceutical care and medical supply unit that complies with national laws and regulations, directed by a qualified pharmacist.**

#### Guidance:

Considering the critical role of the pharmaceutical care and medical unit in the health care system, effective governance and leadership are needed to achieve high performance and enhance employees' capabilities to improve the quality of care and outcomes. The aim of this standard is to ensure the existence of effective governance and leadership structures and mechanisms those contribute to achieving the desired levels of care and outcomes.

<b>Measures:</b>	<b>MMU.1.a</b>	The hospital has a pharmaceutical care and medical supply unit, which complies with national laws and regulations to provide medication management system to address the patients' needs.
	<b>MMU.1.b</b>	The head of unit is a licensed pharmacist, who is qualified by education, training and experience.
	<b>MMU.1.c</b>	The head of the unit has clear job responsibilities, authorities and accountabilities, to oversee the medication management system that addresses patients' needs.
	<b>MMU.1.d</b>	Head of the unit oversees the development of policies, guidelines and protocols, and required resources, staff and required training.

**MMU.2**      **The pharmaceutical care and medical supply unit is well staffed with qualified, trained, experienced staff.**

**Guidance:**      Appropriate number of qualified knowledgeable, skilled staff who are adequately distributed, is essential to perform and achieve the units' goals.

<b>Measures:</b>	<b>MMU.2.a</b>	The unit is appropriately staffed with qualified registered pharmacists.
	<b>MMU.2.b</b>	The unit has clear job descriptions and responsibilities, signed by all staff.
	<b>MMU.2.c</b>	The unit has continuous professional development plan for all staff.
	<b>MMU.2.d</b>	The unit has structured orientation and training program for all new staff, with assessment competency checklist.
	<b>MMU.2.e</b>	The department ensures that only trained and competent staff are authorized to perform specialized services.
	<b>MMU.2.f</b>	The department has an approved staffing plan based on workload needs that assure the availability of sufficient staff to deliver the required services.
	<b>MMU.2.g</b>	Staffing levels is maintained on all shifts 24 hours a day, 7 days a week.

**MMU.3**      **The hospital has multi-disciplinary approved policies and procedures to guide the implementation and monitoring of medication management system.**

**Guidance:** The policies and procedures are very important to address situations related to procurement, prescription, storage, dispensing, administration, monitoring and use of medication.

<b>Measures:</b>	<b>MMU.3.a</b>	The hospital has clear documented updated policies and procedures on medication management system, which are consistent with national rules and regulations, and easily accessible. These policies include, but are not limited to, the following: <ul style="list-style-type: none"> <li>• Selection and procurement of medication;</li> <li>• Storage of medication;</li> <li>• Ordering and transcribing;</li> <li>• Preparing and dispensing;</li> <li>• Administration, and</li> <li>• Monitoring and follow-up</li> </ul>
	<b>MMU.3.b</b>	The unit policies are formulated in collaboration with all multidisciplinary team, including nursing, medical and management staff.
	<b>MMU.3.c</b>	All staff involved in medication use and management are trained on the policies and procedures manual.
	<b>MMU.3.d</b>	The hospital ensures adequate sources of drug information to all staff involved in the medication management (e.g., updated websites, medication books, etc.).
	<b>MMU.3.e</b>	There is a regular audit to monitor compliance to policies and procedures.

**MMU.4** The hospital has a multidisciplinary drug and therapeutics committee as per the National Ministerial Decision (Qarar).

**Guidance:** Having a multidisciplinary drug and therapeutic committee that involves healthcare professionals from different specialties, working in prescribing, ordering, dispensing, administering and patient monitoring processes as members will maintain and monitor the use of medications in the hospital based on their patients' needs, safety, effectiveness and risks.

<b>Measures:</b>	<b>MMU.4.a</b>	The <b>drug and therapeutic committee</b> , chaired by a hospital director general/ director.
	<b>MMU.4.b</b>	The committee has approved terms of reference.
	<b>MMU.4.c</b>	<b>The committee is responsible but not limited for:</b> <ol style="list-style-type: none"> <li>1. Approving criteria for selecting medication including the indication, effectiveness, potential risks, and cost.</li> </ol>

MMU.4.d	<ol style="list-style-type: none"> <li>2. Development of drug protocols and procedures to ensure safe and effective drug management.</li> <li>3. Evaluating and selecting medication for the formulary list</li> <li>4. Developing standard treatment guidelines</li> <li>5. Assessing medications use</li> <li>6. Conducting effective interventions to improve medication use</li> <li>7. Managing adverse drug reactions</li> <li>8. Monitoring medication- related reported incidents, analyzing them and implement improvement plans.</li> <li>9. Information and transparency of medication use.</li> <li>10. Conducting educational programs to hospital staff for safe and cost- effective use of medication.</li> <li>11. Quality improvement activities related to safe medication management system, including distribution, safe use of medication and administration, and follow up plans.</li> </ol> <p>The members of the committee meet at least quarterly, with meeting minutes that reflect the attended members, items discussed, actions and decisions provided and lead accountability assigned for action undertaken, with agreed timeframe.</p>
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**MMU.5**

**The hospital has an effective management process in dealing with controlled Drugs (CDs) (Narcotics, Psychotropic, and other controlled medications) in compliance with the national guidelines.**

**Guidance:** Control drugs has tendency to cause dependence and more likely to be misused and abused. In addition, their serious side effects on the respiratory and central nervous system. Therefore, their restricted use is crucial at all levels in handling them. In view of that the hospital has to effectively manage and control these agents as per the national guidelines, “Management of Narcotics & Psychotropic Substances in Health Institutions & Pharmaceutical Establishments”

<b>Measures:</b>	<b>MMU.5.a</b>	There is a clear mechanism to follow the national guidelines of safe and effective management of narcotics and psychotropic.
	<b>MMU.5.b</b>	All concerned staff are trained on the guidelines.
	<b>MMU.5.c</b>	All hospital units have updated list of approved narcotics and psychotropic drugs used in the unit.

<b>MMU.5.d</b>	There is regular audit to assess compliance to the guidelines.
<b>MMU.5.e</b>	There is a monitoring and improvement process of narcotic drugs management and related incidents.

## **MMU.6 The hospital has an updated and structured drug formulary.**

### **Guidance:**

The hospital drug formulary is a developed, reviewed and updated by the hospital drug and therapeutic committee. It contains a wide range of generic and brand names, approved by the Federal Food and Drug Administration (FDA). Hospital drug formulary contains list of drugs that is required by patients within the hospital scope of service, and approved by the drug and therapeutic committee.

The committee has major role in updating the drug formulary as per changing in service requirement.

### **Measures:**

<b>MMU.6.a</b>	There is an approved drug formulary by the drug and therapeutic committee.
<b>MMU.6.b</b>	The formulary is clear and accessible to all staff.
<b>MMU.6.c</b>	<p>The hospital formulary includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• List of FDA approved drugs (Generic and brand name) that are used in the hospital as per scope of service.</li> <li>• Guidance on antibiotics use (prophylactic and therapeutic).</li> <li>• List of approved prescribing abbreviations.</li> <li>• List of prohibited prescribing abbreviations.</li> <li>• Have appendices on important policies, therapeutic guidelines, drug safety in pregnancy and lactation, and dose adjustment in organ failure.</li> </ul>
<b>MMU.6.d</b>	The drug and therapeutic committee review, update the medications list, monitor the use of medications in the hospital, and evaluate the new types of medications added to the list
<b>MMU.6.e</b>	The approved medications are properly indexed in alphabetically and classified based on the therapeutic classification.

## **MMU.7 The hospital has a process for safe management of high alert medications. (CSS.15).**

**Guidance:** Proper medication management is a cornerstone in providing safe care to

patients particularly cautious management of high alert medication. High alert medications cause high risk to patients due to their narrow therapeutic index, and small changes in dosage or blood drug levels can lead to adverse drug reactions, sentinel events or even death. Some of these high alert medications are, Heparin, Chemotherapies. Warfarin, **concentrated electrolytes** (e.g., concentrated potassium), Anesthesia drugs (e.g., thiopental, propanol, ketamine), Muscle relaxants, Narcotics, and Insulin. Controlling the presence of such medication across the hospital is required. The management process should include requesting, storage, location, labeling, dispensing, prescribing, administration and monitoring of high-alert medications.

A list of high-alert medications should be identified and made available to all staff. Examples of lists are available from Institute for Safe Medication Practices (ISMP) and the World Health Organization (WHO).

Therefore, hospital has to implement a mechanism to control the use of these medications in order to reduce the risk of errors and death associated with these drugs.

<b>Measures:</b>	<b>MMU.7.a</b>	There is a policy and procedures to manage high- alert medications, which includes but is not limited to, the following: <ul style="list-style-type: none"> <li>• The list of all high alert medications,</li> <li>• Management of high alert medication,</li> <li>• Restricting access to high alert medications,</li> <li>• Standardizing the process of ordering, prescription, transcribing, preparation, dispensing,</li> <li>• Administering, and monitoring of high alert medication.</li> <li>• Labeling with identifiable color.</li> </ul>
	<b>MMU.7.b</b>	There is training records on the policy.
	<b>MMU.7.c</b>	High alert medications are labeled with identifiable color.
	<b>MMU.7.d</b>	There is updated list of high alert medications and displayed in the pharmacy and all patient care areas.
	<b>MMU.7.e</b>	Access to high alert medications is restricted.
	<b>MMU.7.f</b>	The hospital keeps high concentrated electrolytes in a safe and secure place with special alert labels.
	<b>MMU.7.g</b>	The hospital ensures that high concentrated electrolytes, including potassium chloride, potassium phosphate and sodium chloride, are removed from inpatient care areas (unless patient conditions necessitates the immediate use.
	<b>MMU.7.h</b>	The hospital conducts regular audit following the concentrated electrolytes in patients' service areas.

**MMU.8 The hospital has a system for safe management of look-alike and sound-alike (LASA) medications. (CSS.16).**

**Guidance:** Medication names that look similar or sound similar have been identified as a potential source of error in healthcare systems. Medications in which packaging is visually similar to another product comes in the category of look-alike. Medications for which generic or trade names of the product sounds similar in the spoken or written words are categorized as sound-alike drugs. Look-alike and sound-alike drug names can lead to the accidental interchange of drugs that can result in patient harm and sometimes death. Hospitals need to implement and maintain a mechanism to prevent errors involving LASA medications, including staff educations, appropriate labeling, separate storages, writing the indication, and the diagnosis with the medicine ordering, etc.

<b>Measures:</b>	<b>MMU.8.a</b>	The hospital has a policy and procedure for safe handling and management of LASA medications.
	<b>MMU.8.b</b>	LASA medications are stored and labeled physically separate from their LASA pairs in all storage areas.
	<b>MMU.8.c</b>	LASA medications are prescribed by their generic names.
	<b>MMU.8.d</b>	Tall-man lettering is used in the hospital to identify sound alike medications.
	<b>MMU.8.e</b>	LASA medications are placed separated from each other and are placed in non-alphabetical order.
	<b>MMU.8.f</b>	The hospital adopts specific labels to recognize LASA medications.
	<b>MMU.8.g</b>	The hospital has a system for selection and procurement of LASA medications.
	<b>MMU.8.h</b>	There is evidence of counter check prior to dispensing and administration of LASA medications.
	<b>MMU.8.i</b>	The hospital has a process for monitoring, identifying and reporting significant medication errors that are related to LASA medications.
	<b>MMU.8.j</b>	The hospital provides education on LASA medications to all healthcare professionals as a part of orientation and continuing education.



**MMU.8.k**

Hospital conducts regular audit to ensure proper compliance to management of LASA medications.

**MMU.9**

**The hospital has an effective mechanism for appropriate and safe storage of medication in stores, pharmacies and patient service areas.**

**Guidance:**

All medications are stored in designated areas according to manufacturer's recommendations, ensuring proper clean place, temperature, light, ventilation, moisture control, segregation and security in different areas such as pharmacy, medical stores or patient service areas. Inappropriate storage of medications may affect stability, effectiveness and safety of the medications. Hence, the existing of a good storage practice system for the storage of regular medications will maintain the potency, stability, and integrity of the drugs, and prevent any adverse patient outcomes caused by deteriorated or sub-potent drugs. This standard is required to ensure safe and efficient storage of regular medications in the hospital.

**Measures:****MMU.9.a**

There is a clear guide on proper storage and control of medication, which clearly guides to secure medication storage areas, including limiting access, appropriate locking handling of door keys.

**MMU.9.b**

There is a system to control access of pharmacy staff and other staff to the pharmacy areas, medical stores and medication storage areas in the patient service areas.

**MMU.9.c**

There are clear measures to limit access only for authorized staff, to prevent loss or theft of medications (e.g., electronic door locks).

**MMU.9.d**

All storage areas of medications are identified and checked regularly to ensure medications are stored appropriately.

**MMU.9.e**

All medications and products are stored properly under conditions suitable to product stability based on manufacturers' guidance.

**MMU.9.f**

All ingredients and chemicals used to prepare medications are safely stored and labeled with the name of the product, strength, expiry date and warnings.

**MMU.9.g**

The medications are organized in the storage areas appropriately based on alphabetical order or pharmacological order, for safe, easy and secure storage of medications.

<b>MMU.9.h</b>	Regular medications are stored in controlled temperature areas (18- 25 °C) around the clock.
<b>MMU.9.i</b>	The room temperature is daily checked and recorded on the temperature record sheet.
<b>MMU.9.j</b>	Temperature records are kept for at least 3 years.
<b>MMU.9.k</b>	Medication freezers and fridges are equipped with proper thermometers temperature recording.
<b>MMU.9.l</b>	Enteral and injectable medications are stored separately from medications for external use, disinfectants and antiseptics.
<b>MMU.9.m</b>	Issuing and dispensing of the stored medications are maintained according to the first expiry first out (FEFO).
<b>MMU.9.n</b>	There is a clear mechanism to monitor all medications stored outside the pharmacy (e.g., ambulances) to ensure medication stability and appropriateness on regular basis.
<b>MMU.9.o</b>	Medication quality issues are reported to the quality section in the Directorate General of Medical Supplies.
<b>MMU.9.p</b>	Expired and damaged medications are labeled and stored separately from other medications until disposal.
<b>MMU.9.q</b>	No other items than medication allowed to store inside the refrigerators or freezers, such as Food, drinks, biological samples, and culture media are not allowed inside any medication refrigerator or freezer.
<b>MMU.9.r</b>	Relevant staff has to have the required training related to mechanism of medication storage and safety.
<b>MMU.9.s</b>	There is a regular monitoring of compliance to the mechanism.

**MMU.10**

**The hospital has a system for ensuring accessibility, availability, monitoring, and security of emergency and life-saving medications.**

**Guidance:**

Emergency medications are those required for the patient in urgent healthcare need and should be kept in an easy access place (e.g., crash trolley and emergency room medications), while life-saving medications are available at all times. Emergency medications are of the most sensitive part during emergency, and health care professional should be very careful and ensure that patient is receiving the correct medication for the correct reason prior

to medication administration. The hospital needs to follow a mechanism to ensure emergency and lifesaving medications are readily available, standardized, within expiry dates, always supplied and replaced in timely manner. Availability of crash cart allows hospitals to safely store their medication in unified manner, to be ready and easily accessible for emergency situations. The hospital has processes to measure compliance with policies and procedures for emergency and life- saving medications.

<b>Measures:</b>	<b>MMU10.a</b>	The hospital has a policy and procedure for emergency crash cart and lifesaving medications.
	<b>MMU10.b</b>	The hospital has standardized crash carts that are readily available and accessible in all patient care areas, with an updated defined list of emergency and lifesaving medications.
	<b>MMU10.c</b>	The hospital has a list of life saving medications based on the needs of each department, with clear labels.
	<b>MMU10.d</b>	Hospital ensures that lifesaving emergency medications are available at all patient service areas.
	<b>MMU10.e</b>	The hospital has regular routine checking and monitoring of emergency medication stock to ensure there is adequate quantity at all time.
	<b>MMU10.f</b>	The hospital maintains documentations for emergency medication inspection by nurses and pharmacists.
	<b>MMU10.g</b>	The hospital has training records of staff trained for life saving medications.
	<b>MMU10.h</b>	The hospital ensures documentations of the used emergency medications.

**MMU.11** The hospital has a safe and effective system for safe management of hazardous medications.

**Guidance:** Hazardous medications are known to pose a safety risk and cause adverse health effects from exposures in the workplace; therefore, existence of a safe system is fundamental to ensure safety of healthcare workers. Hazardous medications include (but not limited) cytotoxic, antiviral and radiopharmaceutical agents. To ensure hazardous medications are stored and handled properly and safely in the hospital.

<b>Measures:</b>	<b>MMU.11.a</b>	The hospital has clear written policy and procedures to guide safe, and appropriate handling of hazardous medications.
	<b>MMU.11.b</b>	The hospital has a list of hazardous medications in units where they are used or stored.

<b>MMU.11.c</b>	The hospital staff are well trained on proper handling, storage of the hazardous medications, pharmaceutical chemicals and spillage management.
<b>MMU.11.d</b>	The hospital ensures that hazardous medications is stored in separate shelves and in the special label containers, in areas with sufficient ventilation.
<b>MMU.11.e</b>	Hospital ensures that flammable and explosive materials are stored in appropriate safety cupboards with sufficient ventilation.
<b>MMU.11.f</b>	Emergency water shower and eye wash place is located in the storage areas of hazardous medication.
<b>MMU.11.g</b>	Spillage kits and personal protective equipment are readily available in all storage areas of hazardous medications.
<b>MMU.11.h</b>	Compounding of hazardous medications is maintained according to the standards of the United States Pharmacopoeia USP chapters 797 and 800.
<b>MMU.11.i</b>	Hospital ensures that staff, who are attempting to conceive, pregnant, or breast feeding, are not allowed to work in areas for handling hazardous medications.
<b>MMU.11.j</b>	The work in hazardous medications areas is scheduled and rotated.
<b>MMU.11.k</b>	Hospital has clear process for management of hazardous medications spillage and disposal.
<b>MMU.11.l</b>	Spill accidents of hazardous medications are documented.
<b>MMU.11.m</b>	Material Safety Data Sheets ( <b>MSDS</b> ) for hazardous medications is available and accessible for all staff.
<b>MMU.11.n</b>	Hospital conducts regular planned audit to ensure safety and compliance with the policy.

**MMU.12**

**The hospital has a safe and effective process to manage medications in the patient service areas (units).**

**Guidance:**

Under some circumstances, it may be necessary to store medications in specific patient care areas. This should be based on implementation of appropriate safety measures that address all identified risk points. As a general rule, medications should not be kept in patient care areas unless urgently needed.

The hospital should have a system to guide the healthcare professionals on managing medications at patient care areas. The storage area of these medications should be properly secured to ensure patient safety and reduce risk of error. Moreover, these medications should be clearly labeled and reachable when required by the healthcare professionals. The purpose of the standard is to have a safe and secure system for managing medications in the patient service areas.

<b>Measures:</b>	<b>MMU.12.a</b>	The hospital has clear policy and procedure to guide the management of medications and assignment in patient care units.
	<b>MMU.12.b</b>	Staff are trained on the policy.
	<b>MMU.12.c</b>	The hospital ensures that distribution of medication quantities (stocks) to patient service areas is done based on the needs of the service unit.
	<b>MMU.12.d</b>	There is a customized list of medications for each specialized patient care area.
	<b>MMU.12.e</b>	All medications at service units are well stored, organized, and properly labeled.
	<b>MMU.12.f</b>	Narcotic and psychotropic medications are made available in all patient care areas as per stocked and as per unit used and needs.
	<b>MMU.12.g</b>	High concentrated electrolytes including potassium chloride, potassium phosphate and sodium chloride are removed from general patient care areas, and supplied when patients' conditions necessitate, following all necessary precautions.
	<b>MMU.12.h</b>	Medications are routinely checked and replaced to avoid unnecessary shortage and expiration.
	<b>MMU.12.i</b>	Hospital conducts regular audit to follow compliance and to ensure safe distributions of medication.
<b>MMU.13</b>	<b>The hospital has clear process of medication reconciliation at all patients' transition points of care (admission, transfer and discharge).</b>	

**Guidance:** Medication reconciliation is when patients bring in medications to the hospital; they are checked by a qualified pharmacist for proper use and identification, if they can be used. It is critical to ensure medication the patient receives, is completed and related to clinical condition and current plan of care, to avoid any discrepancy, medication doubling and avoid medication errors.

The physician's medication order should be checked against medication brought by the patients at time of patient admission, patient transfer from one unit to another, and at the time of patient discharge. There is a need to have clear system of effective communication during handover concerning reconciliation of medications.

<b>Measures:</b>	<b>MMU.13.a</b>	The hospital has clear written policy and procedure to guide medication reconciliation throughout the hospital.
	<b>MMU.13.b</b>	The policy has clear guidance for medication reconciliation at all transition points of care, including admission, at transfer and/or discharge.
	<b>MMU.13.c</b>	All hospital staff are oriented and familiar with the policy.
	<b>MMU.13.d</b>	The hospital implements medication reconciliation at all transition of patient care points (admission, transfer and discharge).
	<b>MMU.13.e</b>	The hospital conducts regular audit to measure the compliance with the policies and procedures of medication reconciliations.
	<b>MMU.13.f</b>	There is a specific form to list the medications of the patient during transition of care.
	<b>MMU.13.g</b>	All the process is documented in patient medical records to review medication reconciliation at admission.
	<b>MMU.13.h</b>	Hospital utilizes the documented information to provide the healthcare professionals with feedback and improve patient safety.

**MMU.14** The hospital implements and maintains a clear process of obtaining medications when the pharmacy is closed.

**Guidance:** The existing of a **system** for obtaining Medications will ensure availability of medications all the time. Therefore, an ideal system is required to determine situations to obtain any required medications when the pharmacy is not officially functioning.

**Measures:** **MMU.14.a** The hospital has a clear guide for process of obtaining medication when the pharmacy service is closed.

<b>MMU.14.b</b>	Hospital staff are familiar and oriented to the process.
<b>MMU.14.c</b>	The hospital has a criterion to permit authorized staff to access the pharmacy when is closed.
<b>MMU.14.d</b>	The hospital ensures there is qualified pharmacist is on-call to answer clarifications, and to provide the needed medications.
<b>MMU.14.e</b>	There is clear documentation of the process.
<b>MMU.14.f</b>	Hospital conducts regular audit to ensure safe compliance to the process.

**MMU.15**

**The hospital implements safe process of prescribing, ordering and transcribing of medication.**

**Guidance:** Medication errors can happen at any stage of the medication management process. Wrong medication, wrong dose, wrong frequency, and wrong indication are examples of prescribing errors. Hence, having a clear mechanism to guide safe prescribing, ordering, and transcribing is important to prevent harmful errors that result from wrong prescribing. Prescribers should be familiar with the different types of prescriptions available in the hospital including white, pink and green prescriptions. Generic names are used only to write medication names in the hospital. Components of prescription are maintained throughout all medication prescribing or ordering.

<b>Measures:</b>	<b>MMU.15.a</b>	The hospital has policy and procedure to guide the practice of ordering, prescribing, and transcription of all of medications.
	<b>MMU.15.b</b>	Hospital staff are trained on proper, correct method of prescribing, ordering, and transcribing process.
	<b>MMU.15.c</b>	The treating team conducts medication reconciliation process at time of patient admission and discharge.
	<b>MMU.15.d</b>	Initial medication orders are compared with the list current patient medications prior admission for medication reconciliation.
	<b>MMU.15.e</b>	The medication orders are clear, complete, updated, and legible. This includes patients' name, diagnosis, and indication, date of prescription, medication name, route, and dosage frequency.
	<b>MMU.15.f</b>	The hospital ensures that the staff use the approved prescribing abbreviations, and avoid the illegal abbreviations.



<b>MMU.15.g</b>	Controlled drugs are prescribed according to policies and laws.
<b>MMU.15.h</b>	Hospital staff complies with the proper use of approved and prohibited prescribing abbreviations.
<b>MMU.15.i</b>	The hospital has a system to identify incomplete orders and processes to manage illegible orders.
<b>MMU.15.j</b>	Hospital staff are oriented and trained about the hospital do not use list of abbreviations such as dangerous abbreviations, symbols, and dose labels identified by the hospital.
<b>MMU.15.k</b>	The hospital has clear process to ensure medication orders are transcribed accurately.
<b>MMU.15.l</b>	The hospital conducts regular audits to monitor compliance with the policies and procedures, with improvement plans.

**MMU.16**

**The hospital has a well- established effective antimicrobial stewardship program.**

**Guidance:** The use of antibiotics is very important interventions. However, it may cause unintentional consequences including drug toxicity, drug-drug interaction, fatal adverse reactions, and development of organism resistance to the antibiotic, which has significant effect on the health and safety of patients. Therefore, hospital antimicrobial stewardship program is important to ensure appropriate and optimum utilization of antibiotics to improve patients' outcomes, prevent any adverse reactions, and prevent antimicrobial resistance. The hospital should implement this system which includes appropriate selection, prescribing, ordering, dose selection, intervals, and durations.

<b>Measures:</b>	<b>MMU.16.a</b>	The hospital has clear written updated antimicrobial stewardship policy and procedures that guides proper and safe antimicrobials.
	<b>MMU.16.b</b>	The policy and procedures include mechanisms to improve the antibiotic use, such as having specific antibiotic ordering forms, clinical pathways for antibiotic utilization, dose adjustment and optimization, audit and monitoring, etc.
	<b>MMU.16.c</b>	The policy involves multidisciplinary team, including physicians, nurses, pharmacists, infectious disease physicians, microbiology staff, and administration staff.
	<b>MMU.16.d</b>	All health care staff involved in the patient care are oriented on the policy and procedures.



<b>MMU.16.e</b>	The pharmacy and therapeutics committee oversee and monitor the proper implementation of the policy for antibiotic prophylaxis before surgery or any invasive procedures.
<b>MMU.16.f</b>	Hospital conducts regular follow up and evaluation of the program to ensure compliance and effectiveness with shared action plans.

**MMU.17****The hospital has a safe system for dispensing of medication.**

**Guidance:** The existing of good medication dispensing practices will ensure that the effective form of the correct medication is dispensed to the right patient, in the correct dosage, the appropriate frequency, timing and duration with clear instructions on the package that maintains the potency of the medication to reduce the medication errors, thus improve patient safety.

This standard aims to ensure all medications are dispensed in a safe and efficient manner.

<b>Measures:</b>	<b>MMU.17.a</b>	The pharmaceutical care department has a policy and procedure of safe dispensing of medications.
	<b>MMU.17.b</b>	There is a current, documented complete medication profile for each patient in the pharmaceutical care department.
	<b>MMU.17.c</b>	All medication orders in the hospitals are reviewed by a trained pharmacist before dispensing (except in lifesaving medications, emergencies, or medications orders by a prescriber who physically present with the patient during diagnostic imaging services)
	<b>MMU.17.d</b>	Medications are prepared and dispensed in a safe and clean environment.
	<b>MMU.17.e</b>	All medications are reviewed for patient's allergies.
	<b>MMU.17.f</b>	All medications are reviewed for approved indications for use.
	<b>MMU.17.g</b>	All medications are reviewed for potential interactions with other drugs or with food.
	<b>MMU.17.h</b>	All medications are reviewed for confirmed interactions with other drugs or with food.
	<b>MMU.17.i</b>	All medications are reviewed for their appropriate: dose, route of administration, frequency and duration.
	<b>MMU.17.j</b>	All medications are reviewed for contraindication and therapeutic duplications.

<b>MMU.17.k</b>	All medications are removed from their original package, are labelled appropriately.
<b>MMU.17.l</b>	All medication orders' concerns and queries are discussed with the prescriber and documented before dispensing.

## **MMU.18 The hospital implements a unit-dose drug system in safely manner.**

**Guidance:** A unit-dose drug system, if well implemented, known to streamline healthcare worker works in terms of delivering medications for inpatients. The system also helps in safe administration of medicines by the nurses and it saves nurses' time and makes medicines distribution faster and accurate. Furthermore, the system supports more efficient and reliable medication storage. The purpose of this standard is to ensure safe dispensing of medication to inpatients through efficient unit-dose drug system.

<b>Measures:</b>	<b>MMU.18.a</b>	A qualified clinical pharmacist leads the operation of unit dose system.
	<b>MMU.18.b</b>	There is a documented, updated procedures available to guide unit dose system operation, which are available and clear to all relevant staff.
	<b>MMU.18.c</b>	Unit dose system provides medication for not more than twenty-four hours supplies, except bulk oral liquids and topical preparations.
	<b>MMU.18.d</b>	The system delivers medications for patients in most ready-to-administer form as possible to reduce medications errors during distribution and administration.
	<b>MMU.18.e</b>	The system only provides medications for patients as per their needs and within the time frame defined by the hospital.
	<b>MMU.18.f</b>	All dispensed medications are recorded in the hospital information system.
	<b>MMU.18.g</b>	Relevant staff is trained in proper handling Unit dose system as per the documented procedure.
	<b>MMU.18.h</b>	There is a regular audit with documentation to assure compliance, with improvement plan.

## **MMU.19 The hospital has a safe system for labelling medications.**

**Guidance:** All medications stored or prepared for dispensing/ administration are labeled properly with the name, strength/ concentration, dates of preparation and expiration, and warnings, to avoid medication errors. This standard aims to ensure that all medications are labeled safely and properly.

<b>Measures:</b>	<b>MMU.19.a</b>	The pharmaceutical care department has a policy and procedures for appropriate labeling of medications.
	<b>MMU.19.b</b>	Prepared medications which are not intended for immediate dispensing or administration are labelled, including all compounded medications stored in the refrigerator and injectable medications drawn into syringes.
	<b>MMU.19.c</b>	All compounded intravenous preparations are labelled with the name of diluent, concentration, and its volume.
	<b>MMU.19.d</b>	All compounded solutions of parenteral nutrition are labelled with each component name, quantity, and the total volume.
	<b>MMU.19.e</b>	All outpatient medications are labeled using understandable language for patients with:
		<b>MMU.19.e .1</b> Name of the hospital
		<b>MMU.19.e .2</b> Patient name.
		<b>MMU.19.e .3</b> Hospital Patient's medical record number.
		<b>MMU.19.e .4</b> Medication name, strength/ concentration, dosage form, quantity.
		<b>MMU.19.e.5</b> Duration of use, and common side effects
		<b>MMU.19.e.6</b> Expiry date and date of dispensing.
		<b>MMU.19.e.7</b> Instructions for use.

**MMU.19.f**

All Medications prepared for multiple patients are labeled with all necessary information:

**MMU.19.f. 1** Patient's name and hospital patient medical record number

**MMU.19.f. 2** Patient's location (i.e., ward, team, room, bed number)

**MMU.19.f. 3** Instructions for use (e.g., shake before use, common side effects such as drowsiness)

**MMU.19.f. 4** Storage conditions (e.g., refrigerate)

**MMU.19.f.5** Date and time of preparation.

**MMU.19.f. 7** Infusion rate (in case of infusion solution)

**MMU.19.f. 8** All medications prepared for a single patient (e.g., in the emergency room) are labeled with the medication name and dose.

**MMU.19.f. 9** All medications removed from its original package are labelled with the name, the strength/concentration, dosage, batch number, dates of preparation and expiration.

**MMU.20**

**The hospital implements and maintains safe process of medication administration.**

**Guidance:** Medication administration is a multistep system, and due to its complexity, errors can be unavoidable. Inappropriate drug administration process may lead to induce medication errors and adverse drug events, and deteriorate the therapeutic outcomes. Therefore, the right medication should be administered with the right form, right dosage, and right route, right time to the right patient, hence, there has to be a standardized process of ordering, preparation and administration of medication. This standard aims to ensure safe and timely process of medications administration in the patient care areas.

<b>Measures:</b>	<b>MMU.20.a</b>	<p>The hospital has a clear documented guideline for safe drug administration, demonstrates verification of the following:</p> <p><b>MMU.20.a.1.</b> Right patient.  <b>MMU.20.a.2.</b> Right medication.  <b>MMU.20.a.3.</b> Right dose and frequency.  <b>MMU.20.a.4.</b> Right route.  <b>MMU.20.a.5.</b> Right time.  <b>MMU.20.a.6.</b> Expiry date.  <b>MMU.20.a.7.</b> No contraindication, clearance of medications from any clues of instability or loss of integrity, e.g., any unusual particulates, unpleasant smell, discoloration  <b>MMU.20.a.8.</b> Right and clear documentation  <b>MMU.20.a.9.</b> Patient education  <b>MMU.20.a.10.</b> Patient assessment</p>
	<b>MMU.20.b</b>	The hospital ensures staff involved in the drug administration is qualified, trained and competent.
	<b>MMU.20.c</b>	Guidelines for safe administration of intravenous medications are displayed in all patient care areas.
	<b>MMU.20.d</b>	Guidelines on standard administration time of medications are displayed in all patient care areas.
	<b>MMU.20.e</b>	The prepared medication and verification that the medication is exactly as ordered or prescribed is counter checked by a qualified staff before administration.
	<b>MMU.20.f</b>	The hospital has a process to inform the patient regarding the medication before administration and given an opportunity to ask questions
	<b>MMU.20.g</b>	The administered medication and the time of administration are recorded and updated in the patient's medical records.
	<b>MMU.20.h</b>	Special safety precautions are in place during administration of high-alert medications.
	<b>MMU.20.i</b>	There is a designated clinical staff responsible for keeping accurate documentations of the disposal of the unused portions of controlled and narcotic medications.
	<b>MMU.20.j</b>	There is documentation for compliance to drug administration guideline.
	<b>MMU.20.k</b>	<p>There is a safe approach for self-administration of medication where patients/care givers are educated and instructed on the following :</p> <p><b>MMU.20. k.1</b> Medication name, type, and indication.  <b>MMU.20.k. 8</b> Medication dose, strength, frequency, time and route.  <b>MMU.20.k.3</b> Potential side effects.  <b>MMU.20.k. 4</b> Report side effects to pharmacist.</p>

**MMU.21**

**The hospital has an appropriate approach for providing patient counselling and education regarding their medication.**

**Guidance:** Patient counseling is a key competency element of the pharmaceutical care process. The inappropriate counseling process may affect patient's compliance with the medication therapy and compromise the therapeutic outcomes. This standard aims to ensure providing a comprehensive process of patient counseling and education on medications.

<b>Measures:</b>	<b>MMU.21.a</b>	The pharmaceutical care department has documented guidelines on patient counselling.
	<b>MMU.21.b</b>	Counseling is provided by the pharmacy staff depending on the patient's individual needs.
	<b>MMU.21.c</b>	The pharmacy staff provides verbal counseling to the patient or the care giver all needed information regarding medication use, safety, side effects and all drug use related information.
	<b>MMU.21.d</b>	Written information or patient educational leaflets is provided when needed.
	<b>MMU.21.e</b>	Patient privacy is ensured during the counseling process.
	<b>MMU.21.f</b>	Patient engagement is maintained during the counseling.
	<b>MMU.21.g</b>	All information and verbal counselling given to patients to is documented in patients' medical records.

**MMU.22**

**The hospital ensures safe management of discharge medications.**

**Guidance:** Multiple changes to medications can happen during patient admission. It is recommended that patients have their medications reconciled before discharge to prevent medication discrepancies. Discharged patients are vulnerable to adverse drug events that can result in emergency visit or readmission. It is important to minimize the risks of adverse drug events after hospitalization. Strategies such as medication reconciliation and patient counseling are proven to reduce the risks of adverse drug events. It is well established that reconciling medications at discharge prevents medication discrepancies. Therefore, the hospital has to establish clear procedures for documenting medication information on discharge summaries. Information should include full discharge updated medication list, generic name, indication, dose, route of

administration, frequency, duration of medications and modifications. This standard aims to ensure that ongoing care is consistent with any new regimen that introduced in the hospital.

<b>Measures:</b>	<b>MMU.22.a</b>	The hospital has a policy and procedures on discharge medication.
	<b>MMU.22.b</b>	The hospital implements medication reconciliation at discharge and write an updated medication list for the patient.
	<b>MMU.22.c</b>	Changes in medication therapies during inpatient stay are highlighted in discharge summary.
	<b>MMU.22.d</b>	Detailed medication information is mentioned clearly in the discharge summary.
	<b>MMU.22.e</b>	Education is given to patients/ care givers about the prescribed medications prior to discharge, and documented.
	<b>MMU.22.f</b>	Medications reconciliation at discharge is documented in patient file.
	<b>MMU.22.g</b>	The pharmacy department conducts regular audit to ensure implementation of discharge medication policy, with improvement plan.

### **MMU.23 The hospital has a system for handling recalled, discontinued, and damaged medications.**

**Guidance:** Recalled, discontinued or damage medications may cause serious health problems or a temporary or reversible adverse health problems. Therefore, it is important to have a multidisciplinary policy & procedure on retrieval of such medications. This standard aims to reduce medication's serious health problems that may be result from medication's that (Recalled, discontinued or damage).

<b>Measures:</b>	<b>MMU.23.a</b>	There is a multidisciplinary policy & procedure on retrieval and handling of recalled, discontinued, and damaged medications, within specified time frame for patient safety.
	<b>MMU.23.b</b>	The hospital ascertains and maintains records for all memorandums from Ministry of Health, manufacturer and other relevant legal bodies and makes sure all concerned staff are aware of them.
	<b>MMU.23.c</b>	The hospital notifies all those involved in prescribing, dispensing and administration of recalled, discontinued, and damaged medications.

<b>MMU.23.d</b>	The hospital informs patients that their medications have been recalled or discontinued for safety reasons, and provides alternatives whenever is applicable.
<b>MMU.23.e</b>	The hospital has an effective mechanism to assure compliance with handling discontinued, recalled and damaged medications policy and procedure.

### **MMU.24      The hospital has a process to reduce the risk from the communication of verbal and telephonic orders (CSS.4).**

**Guidance:** The most error-prone communications are patient care orders given verbally and those given over the telephone when permitted under local rules and protocols. Different dialects and pronunciations can make it difficult for the receiver to understand the order being given. Hospitals must develop and implement a process for verbal/ telephonic order to avoid errors that might occur and might affect directly patient safety. Verbal orders are more prone to error because of misinterpretation when compared to orders prescribed through electronic health records. Different accents, pronunciations, background noise, and interruptions can make it difficult for the receiver to understand the order being given and may lead to treatment errors causing harm to patients. Once received, a verbal order must be transcribed as a written order. Verbal order is documented and is read back with confirmation.

<b>Measures:</b>	<b>MMU.24.a</b>	Hospital has multidisciplinary policies and procedures to control telephonic and verbal orders limiting verbal communication of prescription , medication orders , interventions and procedures to urgent situations in which immediate written or electronic communication is not feasible.
	<b>MMU.24.b</b>	The policy addresses control, verification, authentication, and limiting the use of verbal and telephone orders, the policy lists of not allowed verbal orders.
	<b>MMU.24.c</b>	Time frame for Verbal order is as soon as emergency situations are over, for telephone order is within 24 hours.
	<b>MMU.24.d</b>	Hospital has policies and procedures on effective communication, guiding how to deal with telephonic or verbal orders by the receiver using the read- back method, which should be confirmed by the physician, who gives the order.
	<b>MMU.24.e</b>	Hospital has training records for all staff on the policy and procedure .
	<b>MMU.24.f</b>	Hospital defines the situations in which verbal orders are not allowed



**MMU.24.g**

Department's head/director conducts a regular audit measuring compliance with policies and procedures for effective communication'

**MMU.25**

**The hospital has a system for procurement and prescription of non-formulary medication.**

**Guidance:**

In some circumstances, the prescribers require to use other medications not included in approved hospital formulary (non-formulary medications). The hospital has its own approved medications to be used in the hospital (hospital formulary) adopted from the national Ministry of Health approved drug list based on the hospital's scope of service and, however, in some occasions, the hospital might need to use medications not available within the hospital formulary and for that they require to have a system regulate the procurement and prescription of such medications. Therefore, the hospital has to have a policy that regulates the procurement and prescribing of non-formulary medications.

This standard aims is to have a system to regulate the procurement and prescription of non-formulary.

**Measures:****MMU.25.a**

There is a policy and procedure for selection, approval and procurement of non-formulary medications.

**MMU.25.b**

There is a specific time frame for dealing with each individual patient-specific non-formulary drug request.

**MMU.25.c**

There is a multidisciplinary policy and procedure on prescribing non-formulary medications.

**MMU.25.d**

All non-formulary medications prescriptions are documented in specific form (Form A)

**MMU.25.e**

All concerned staff implement the standardized procedure for requesting non- formulary medications.

**MMU.25.f**

Non- formulary medication requests are reviewed by the hospital drug and therapeutic committee

**MMU.26**

**The hospital has a system for prescription of medications for off-label (unapproved) use.**

**Guidance:**

In certain situations, in hospitals, prescribers may use medications for their off-label indications (un-approved indication). The hospital has its own approved medications to be used in the hospital (hospital formulary) adopted from the national Ministry of Health approved drug list based on the hospital's

scope of service. However, in some occasions, there might be an urgent need to use medications for un-approved indications. Therefore, it is necessary to have a system for managing prescription of such medications. This system should be properly implemented by the hospital. Therefore, the hospital must have a policy to regulate the prescribing medications for off label use.

The purpose of the standard is to have an effective system to prescribe medications for off-label (un-approved) use.

<b>Measures:</b>	<b>MMU.26.a</b>	There is a multidisciplinary policy and procedure in prescribing off-label use.
	<b>MMU.26.b</b>	All medications for off-label use prescriptions have to be documented in a specific form
	<b>MMU.26.c</b>	All concerned staff implement the standardized procedure for requesting medications for off-label use.
	<b>MMU.26.d</b>	All medications for off-label use requests are reviewed by the hospital drug and therapeutic committee.

## **MMU.27 The hospital has an effective system for handling: out-of-stock, shortage and disaster needs of medications**

**Guidance:** Therapeutic goals are often compromised or not achieved because of out-of-stock medications which may lead to undesired situations. The existing of effective medication procurement system which covers situations of shortage and disaster needs of medications will ensure continuing of required medications at all times. In case of medication unavailability, due to temporary shortage of supply, delayed delivery, or other reasons not anticipated through normal inventory control, efforts shall be made to obtain the drug; at the same time, the prescriber is informed about other available therapeutic alternatives. When the medication becomes readily available in stock, the process will be repeated.

This standard aims to ensure availability of an efficient and effective system for managing out of stock and shortage of medications.

<b>Measures:</b>	<b>MMU.27.a</b>	There is a clear policy and procedure on proper communication of medication out-of-stock and shortage to prescribers and other concerned health care workers in case of a disaster.
	<b>MMU.27.b</b>	There is an approved medication substitution guideline, developed by the hospital drug and therapeutic committee in the event of medication shortage.

<b>MMU.27.c</b>	The prescribers and other concerned health care workers implement the hospital approved medication substitution guidelines.
<b>MMU.27.d</b>	There is a monitoring mechanism to assure compliance with medication substitution guidelines
<b>MMU.27.e</b>	There is a plan for emergency preparedness to respond to urgent and huge demand of medications during internal and external disasters.
<b>MMU.27.f</b>	The plan is tested for effectiveness and integrated with the hospital disaster plan.

## **MMU.28 The pharmaceutical care department adheres to the hospital infection prevention and control guidelines.**

**Guidance:** Infection prevention and control is a scientific approach and practical solution designed to prevent harm caused by infection from patients and health workers. It is grounded in infectious diseases, epidemiology, social science and health system strengthening. This standard aims to prevent or reduce the risk of infection and ensure maximal protection of patients, visitors and healthcare workers against infection.

<b>Measures:</b>	<b>MMU.28.a</b>	All areas where medications are stored, compounded, prepared, dispensed, and administered are kept organized and clean.
	<b>MMU.28.b</b>	All areas where medications are stored, compounded, prepared, dispensed, and administered are provided with a sink, antiseptic hand soap or hand rub.
	<b>MMU.28.c</b>	All areas where medications are stored, compounded, prepared, dispensed, and administered are not permitted for eating, drinking or smoking.
	<b>MMU.28.d</b>	There are separate housekeeping consumables dedicated specifically for pharmaceutical care.
	<b>MMU.28.e</b>	Pharmaceutical care professionals adhere to the hospital approved infections prevention and control guidelines including standard precautions of the hospital's isolation policy, hand washing technique, etc.
	<b>MMU.28.f</b>	There is a regular documented preventative maintenance for laminar flow Cabinet used in the pharmaceutical care department.
	<b>MMU.28.g</b>	There is schedule for proper cleaning of laminar flow

Cabinet work surface which is under supervision of pharmaceutical care.

**MMU.28.h**

There is a regular monitoring of compliance to the hospital guidelines for infection prevention and control in the pharmaceutical care.

**MMU.29**

**The hospital has a safe system for preparation of extemporaneous compounds.**

**Guidance:** Extemporaneous are non-sterile preparations which may cause harms if prepared inappropriately. Therefore, a safe system for such preparations is required to be in place to ensure safe, effective and stable prepared medications, based on professional practice standards and formulas. This standard aims to establish a safe, efficient and proper system for extemporaneously prepared medications.

**Measures:**

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| <b>MMU.29.a</b> | The pharmaceutical care department has a policy and procedure of extemporaneous pharmaceutical preparations.   |
| <b>MMU.29.b</b> | The pharmaceutical care adheres to medication preparations rules and professional standards of practice.   |
| <b>MMU.29.c</b> | There is an updated published edition of Ministry of Health oral extemporaneous formulation book, and other formulas.  |
| <b>MMU.29.d</b> | Extemporaneous preparations are carried out in a clear, uncluttered and safe area, with proper medical equipment and supplies, and by qualified pharmacy staff.          |
| <b>MMU.29.e</b> | The compounding area is located in a suitable space with appropriate lightening, and has smooth work surfaces, free of cracks and crevices.                              |
| <b>MMU.29.f</b> | The compounding area has a clean working bench with a smooth surface and a sink with water supply and stainless-steel surface.   |
| <b>MMU.29.g</b> | The compounding, weighing and measuring equipment used are calibrated, with appropriate design and capacity, and maintained in a good working order in storage cabinets. |
| <b>MMU.29.h</b> | All Staff work in preparations, are well trained, competent and adheres to principles of medication preparation.   |
| <b>MMU.29.i</b> | Needles and syringes are single patient use only and should never be reused.   |

<b>MMU.29.j</b>	There is a documentation for each compounded product in a worksheet includes the patient's details, the formula, procedure, labelling instructions, source of formula, batch number, preparation date, expiry date, patient details, name and signature of prepared by and checked by.
<b>MMU.29.k</b>	The compounded preparation is labelled with the patient's details, name, concentration and the quantity of the medication, and the expiry date. The prepared medication is kept in the refrigerator.
<b>MMU.29.l</b>	Documentations and records of all prepared preparations are kept for a minimum of 3 years

### **MMU.30 The hospital has a safe system for preparation of sterile compounded preparations.**

**Guidance:** Preparation of sterile medications may cause harms and adverse events if prepared inappropriately. Therefore, the system for preparation of sterile compounded preparations will ensure these preparations meet the clinical needs of patients, satisfying quality, safety, and environmental control requirements in all phases of preparation, storage, transportation, and administration in compliance with established standards, regulations, and professional best practices (e.g., the standards of the United States Pharmacopoeia USP 797).

This standard aims to ensure sterile medications are prepared efficiently and safely, in compliance with international guidelines.

<b>Measures:</b>	<b>MMU.30.a</b>	The pharmaceutical care department has policies and procedures of compounding sterile preparations, including recycling of un-used sterile preparations.
	<b>MMU.30.b</b>	Preparation of sterile medications adheres to regulations and professional standards of practice (e.g., the standards of the United States Pharmacopoeia USP 797).
	<b>MMU.30.c</b>	There is a protocol for aseptic technique and intravenous admixture based on the United States Pharmacopoeia USP 797.
	<b>MMU.30.d</b>	The design of the clean room is directed by the standards of the United States Pharmacopoeia USP 797.

<b>MMU.30.e</b>	Sterile compounded preparations are carried out by qualified pharmacy staff, in clear, uncluttered and safe areas, with proper medical equipment and supplies,
<b>MMU.30.f</b>	There is full implementation of aseptic technique in all areas of preparations.
<b>MMU.30.g</b>	A laminar airflow hood (ISO Class 5) and positive-pressure room is used for preparing all sterile preparations.
<b>MMU.30.h</b>	There is compliance to the hospital approved guidelines in preparing, stability and compatibility of sterile medications.
<b>MMU.30.i</b>	All needles and syringes are single patient use only and never re-entering a vial with a used needle or syringe.
<b>MMU.30.j</b>	The pharmaceutical care staff, involved in compounding sterile preparations, are adequately skilled, and adhered to aseptic technique measures.
<b>MMU.30.k</b>	All compounded sterile preparations are inspected (by trained staff) for evidence of loss of integrity, particulate and discoloration.
<b>MMU.30.l</b>	The pharmaceutical care staff follow standards of safe and clean preparation of medications (e.g., the need to wear a mask or to use a laminar airflow hood).
<b>MMU.30.m</b>	The pharmaceutical care staff wear Personal Protective Equipment (PPE) when compounding in a Biological Safety Cabinet (BSC).
<b>MMU.30.n</b>	The laminar airflow hood is assessed regularly based on the manufacturer's recommendations and the professional's organization's standards of the United States Pharmacopoeia USP 797.

**MMU.31**

**The hospital has a safe system for preparation of sterile chemotherapy compounded preparations.**

**Guidance:** Sterile chemotherapy medications are cytotoxic and high-alert medications that may cause significant harms if handled inappropriately by the authoritative staff. Therefore, the system for preparation of sterile chemotherapy compounded preparations will ensure these preparations meet the clinical needs of patients, satisfying quality, safety, and environmental control requirements in all phases of preparation, storage, transportation, and administration in compliance with established standards, regulations, and professional best practices (e.g., the standards of the United States

Pharmacopoeia USP 797). This standard aims to ensure sterile chemotherapy medications are prepared efficiently and safely, in compliance with international guidelines.

<b>Measures:</b>	<b>MMU.31.a</b>	Preparation of sterile chemotherapy medications adheres to regulations and professional standards of practice (e.g., the standards of the United States Pharmacopoeia USP 797).
	<b>MMU.31.b</b>	Only qualified and trained pharmaceutical care professionals are permitted to work in chemotherapy compounding areas.
	<b>MMU.31.c</b>	Sterile chemotherapy compounded preparations are carried out in clear, uncluttered and safe areas, with proper medical equipment and supplies to prevent contamination and ensure product sterility.
	<b>MMU.31.d</b>	The design of the clean room is directed by the standards of the United States Pharmacopoeia USP 800.
	<b>MMU.31.e</b>	ISO Class 5 biological safety cabinets with 100% exhaust air outside the hospital building (class II B vertical laminar airflow hood) is used for preparing chemotherapy.
	<b>MMU.31.f</b>	All concerned staff strictly adhere to aseptic technique in all areas of chemotherapy preparations.
	<b>MMU.31.g</b>	All concerned staff complaint with the hospital approved guidelines in preparing, stability and compatibility of sterile chemotherapy preparations.
	<b>MMU.31.h</b>	Staff involved in preparations, are well trained and competent in principles of medication preparation.
	<b>MMU.31.i</b>	Visual inspection is performed for all preparations of sterile chemotherapy to check occurrence of particulate, discoloration or loss of integrity.
	<b>MMU.31.j</b>	The biological safety cabinets are assessed regularly based on the manufacturer's recommendations and the professional organizations' standards of the United States Pharmacopoeia USP 800.
	<b>MMU.31.k</b>	There are approved guidelines for safe administration and disposal of chemotherapy medications and its implementation is monitored in the intended patient care wards.



<b>MMU.31.l</b>	Chemotherapy approved plastic bags are used during transport and storage of chemotherapy preparations to avoid accidental spills.
<b>MMU.31.m</b>	All staff dealing with chemotherapy compounds use personal protective equipment, including gloves, gowns and masks, which are specially-designed for chemotherapy compounds.
<b>MMU.31.n</b>	Staff are trained and compliant to the proper management of chemotherapy spills.
<b>MMU.31.o</b>	Spill kits are readily available in all storage, dispensed and administered areas of chemotherapy preparations.
<b>MMU.31.p</b>	Trash plastic bags for collection and disposal of contaminated materials are used for preparation, dispensing and administration of chemotherapy preparations based on the international organization standards (e.g., Occupational Safety & Health Administration (OSHA)).
<b>MMU.31.q</b>	There is a regular scheduled audits conducted to monitor compliance of policies, guidelines and protocols of chemotherapy management.

**MMU.32**

**The hospital has a safe system for total parenteral nutrition preparation (TPN).**

**Guidance:** Preparation of parenteral nutrition may cause harms and adverse events if prepared inappropriately. Therefore, the system for preparation of parenteral nutrition will ensure these preparations meet the clinical needs of patients, satisfying quality, safety, and environmental control requirements in all phases of preparation, storage, transportation, and administration in compliance with established standards, regulations, and professional best practices (e.g., the standards of the United States Pharmacopoeia USP 797). This standard aims to ensure parenteral nutrition is prepared safely and efficiently, in compliance with international guidelines.

**Measures:**

<b>MMU.32.a</b>	The pharmaceutical care department has policies and procedures for total parenteral nutrition preparation.
<b>MMU.32.b</b>	Parenteral nutrition preparations are carried out in a separate, sterilized, well ventilated room, and with proper medical equipment and supplies.



<b>MMU.32.c</b>	All essential macro and micro nutrients required for parenteral nutrition preparations are available all the time.
<b>MMU.32.d</b>	All concerned staff strictly adhered to aseptic technique in all areas of total parenteral preparations.
<b>MMU.32.e</b>	Laminar airflow hood and positive- pressure room are used for preparing all parenteral nutrition preparations.
<b>MMU.32.f</b>	Only qualified and trained pharmaceutical care staff are permitted to work in parenteral nutrition compounding areas.
<b>MMU.32.g</b>	Comprehensive TPN education program and competency assessments are conducted for all staff involved in care of patients receiving TPN therapy.
<b>MMU.32.h</b>	Compliance to TPN preparation procedure is regularly monitored and actions taken based on monitoring results.
<b>MMU.32.i</b>	All stages of TPN preparations are counterchecked and the final product is visually inspected.
<b>MMU.32.j</b>	All preparation stages and counterchecking are documented.
<b>MMU.32.k</b>	There are approved guidelines/ reference books for preparing, stability and compatibility of parenteral nutrition solutions, and are reviewed and updated regularly.
<b>MMU.32.l</b>	All prepared TPN solutions are labelled properly.

**MMU.33**

**The hospital has a safe and secure system for storage and distribution of temperature sensitive pharmaceutical products in stores, pharmacies, and patient care areas.**

**Guidance:** Proper storage and distribution of temperature sensitive pharmaceutical products are essential to maintain their efficacy, stability and safety. This standard aims to ensure safe and efficient management of temperature sensitive pharmaceutical products in the hospital.

<b>MMU.33.a</b>	The hospital has policies and procedures for storage of temperature sensitive pharmaceutical products in all medication storage and distribution areas in the hospital.
<b>MMU.33.b</b>	The hospital has a list of temperature sensitive pharmaceutical products, e.g. Drugs, biological and vaccines.
<b>MMU.33.c</b>	The hospitals store temperature sensitive pharmaceutical products under the storage conditions specified by the manufacturers.
<b>MMU.33.d</b>	The hospital has dedicated medications refrigerators and medications freezers that are solely used to store temperature sensitive pharmaceutical products.

<b>MMU.33.e</b>	The hospital monitors temperature fluctuations using data loggers or thermometers.
<b>MMU.33.f</b>	The temperature of refrigerators and freezers is checked and recorded at least once daily on log charts.
<b>MMU.33.g</b>	The hospital maintains temperatures of pharmaceutical grade refrigerators in the range 2-8°C.
<b>MMU.33.h</b>	The hospital uses emergency power source for pharmaceutical grade refrigerators.
<b>MMU.33.i</b>	The hospital prevents storage of food, drinks, biological samples, and culture media inside any pharmaceutical grade refrigerators.
<b>MMU.33.j</b>	The temperature of vaccines refrigerators is monitored around the clock.
<b>MMU.33.k</b>	The hospital has a system to deal with any electric power shutdown and an emergency power supply is maintained and checked on regular basis.
<b>MMU.33.l</b>	The hospital has a mechanism to deal with the refrigerated and frozen pharmaceutical products in the event of an expected electrical power shutdown, and this mechanism is disseminated to all relevant staff.

**MMU.34**

**The hospital has a system for ensuring stability of medications available in multi-dose containers.**

**Guidance:** Multi-dose containers are medications that are packaged to be administered more than one dose and sometimes for more than one patient. These medications lose their sterility and stability after opening. Using these medications for multiple patients poses risk of transmitting infections. Therefore, existing of guidelines for handling multiple-dose containers in the hospital will ensure that these medications are utilized properly. The pharmacy department with conjunction with infection prevention and control develop guidelines to implement safe practices of using multiple-dose containers. Clean and sterile areas must be dedicated for preparation of parenteral medications. Nurses should write date of opening and expiry date on containers and avoid sharing medications with multiple patients. This standard aims to ensure stability and efficacy of multi-dose containers in the hospital.

**Measures:** **MMU.34.a** The hospital has guidelines to maintain stability of multi-dose vials and for the use of multi-dose containers.

<b>MMU.34.b</b>	Multi-dose containers are labelled with date and time of opening, expiry date and initials of the staff.
<b>MMU.34.c</b>	Multi-dose vials intended for parenteral administration are prepared in clean medication preparation areas.
<b>MMU.34.d</b>	There are no expired or unlabeled vials allowed to be available at patient care areas.
<b>MMU.34.e</b>	Multi-dose containers prescribed for single patient are labelled with patient name, opening date and expiry date.
<b>MMU.34.f</b>	Whenever possible, to provide one container for just one patient.

**MMU.35**

**The hospital has a system for selection and procurement of medical supplies and consumable.**

**Guidance:** Selection and procurement of medical supplies and consumables are fundamental processes to ensure availability of all required medications all the times, and based on the patient needs and types of services provided by the hospital. This standard aims to ensure continuous availability of quality, safe and cost-effective medical supplies.

<b>Measures:</b>	<b>MMU.35.a</b>	The hospital has multidisciplinary policies and procedures for procurement of medical supplies based on the national laws and regulations.
	<b>MMU.35.b</b>	There is a system to select the list of medications, taking into consideration hospital's scope of service, patient needs, type of services, safety measures and cost effectiveness.
	<b>MMU.35.c</b>	There is a process to notify the prescribers of the shortage and suggested alternatives.
	<b>MMU.35.d</b>	Medical supplies are stored in a clean, safe and secure environment following the manufacturer's specifications and recommendations.
	<b>MMU.35.e</b>	There is a guide for inventory control practices for medical supplies.
	<b>MMU.35.f</b>	Staff are trained in the policies and procedures for procurement of medical supplies and follow up with assessment checklist.

**MMU.36**

**The hospital has a safe system for self-administration of medications**

**Guidance:** Self-administration of medications can impose several risks, for example adverse reactions, drug interactions, incorrect method of administration, incorrect medication and drug abuse. Hence, a hospital system will ensure safe self-medication. This standard aims to ensure safe and efficient system for self-administration of medications.

<b>Measures:</b>	<b>MMU.36.a</b>	The hospital implements a process for identifying and documenting the medications brought by the patient/caregiver.
	<b>MMU.36.b</b>	The hospital has a standard operating procedure for storage and safe disposal of self- administration medications.
	<b>MMU.36.c</b>	Medications brought by patients/caregivers are known to physicians and recorded in the patient's medical record.
	<b>MMU.36.d</b>	The hospital provides education for patients about medications which are recognized as self- administration medication, including name, type, indication, side effects and monitoring parameters.
	<b>MMU.36.e</b>	The hospital does not allow administration of medications brought from outside the hospital unless prescribed by the treating doctors.
	<b>MMU.36.f</b>	The patients are educated on how to handle and dispose of self-administration medications safely.

**MMU.37** The hospital has a system to monitor the patient response to medications.

**Guidance:** Mentoring the patient response to medications is a complementary part in the therapeutic plan to achieve the desired therapeutic outcomes and reduce adverse drug events. Monitoring processes can be in different forms. This includes monitoring laboratory tests, drug concentrations, adverse drug reactions and clinical response to treatment. Laboratory tests (e.g., LFT, RFT, and CBC) can help to detect early signs of adverse drug reactions like renal or liver impairment. Biochemical markers can guide the response to therapy especially for medications like warfarin, thyroxine and statins. Patients can exhibit initial reactions to medication upon the administration of the first dose (e.g., allergic reactions). These reactions can guide physicians to avoid prescribing medications in future. This standard aims to develop a system to monitor the patient response to medications.

<b>Measures:</b>	<b>MMU.37.a</b>	The hospital has a multidisciplinary policies and procedures for monitoring patients' response to medications.
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<b>MMU.37.b</b>	Medication adverse effects, especially those affecting patients' balance are monitored and recorded in patient's medical file and annually update the list of drug formulary of such medications.
<b>MMU.37.c</b>	Previous adverse drug reactions or allergies are recorded in the patient's medical record and actions taken based on that.
<b>MMU.37.d</b>	Drug therapeutic monitoring is documented.
<b>MMU.37.e</b>	The hospital maintains a list of drugs that require therapeutic monitoring
<b>MMU.37.f</b>	There is a multidisciplinary approach to monitor patient's response to medication.

### **MMU.38 The hospital has a system for reporting, monitoring and analyzing Adverse Drug Reactions (ADRs).**

**Guidance:** The existence of a system for ADRs reporting, monitoring and analyzing will reduce potential harms to patients by preventing reoccurrence incidents. The hospital has to have a proper system for detecting and reporting ADRs. There should be a specific form (manual or electronic) in order to document the finding ADRs. These reports should be collected and analyzed in professional way. The healthcare professional should receive the feedback from these reports in order to help in predicting ADRs and consequently planning for improving activities, actions taken accordingly and hence enhance patient safety. This standard aims to ensure there is a system for reporting and managing adverse drug reactions (ADRs).

<b>Measures:</b>	<b>MMU.38.a</b>	The hospital has policies and procedures for management of Adverse Drug Reactions (ADRs).
	<b>MMU.38.b</b>	There is a proper system for reporting ADRs.
	<b>MMU.38.c</b>	All concerned staff are compliant to the hospital policies and procedures for managing and reporting ADRs.
	<b>MMU.38.d</b>	The treating physician is informed at appropriate time.
	<b>MMU.38.e</b>	The affected patients by ADRs receive timely appropriate intervention.
	<b>MMU.38.f</b>	There is a system to analyze the ADRs reports, and feedback sent to the staff.
	<b>MMU.38.g</b>	There is a system to increase staff awareness for ADR reporting.
	<b>MMU.38.h</b>	ADRs are documented in the patient medical record.

**MMU.39 The hospital has a system for detecting, reporting, analyzing and monitoring significant medication errors, including near misses. (CSS.17)**

**Guidance:** Medication errors detection through management and effective reporting system discloses medication errors and encourages safe practices. Therefore, it is very important to improve patient safety through determining and reducing the major causes of Medication Errors (MEs) by applying preventive strategies. The hospital has a policy and procedure on how to deal with medication errors, incidents and near misses. There should be a regular schedule for investigating and reviewing medication errors, incidents and near misses by a designated member of staff or committee. A clear reporting system and documentation of these errors should be available in the hospital. The reports must be analyzed properly and feedback should be provided for all the staff.

This standard aims to ensure there is a system for detecting, reporting, analyzing and monitoring significant medication errors, including near misses.

<b>Measures:</b>	<b>MMU.39.a</b>	There is policies and procedures for detecting, reporting, analyzing and monitoring significant medication errors.
	<b>MMU.39.b</b>	The hospital has a medication safety committee to monitor, manage, analyze, reduce medication error and improve medication safety.
	<b>MMU.39.c</b>	The treating physician is informed about the error at appropriate time.
	<b>MMU.39.d</b>	The affected patients by ADRs have to receive timely appropriate intervention.
	<b>MMU.39.e</b>	There is a standard format for reporting medication errors.
	<b>MMU.39.f</b>	There is a system for proper documentation of the reported medication errors.
	<b>MMU.39.g</b>	There is a system to conduct root cause analysis for significant medication errors.
	<b>MMU.39.h</b>	There is a standardized system to use the reports to improve medication use process and reduce future errors.
	<b>MMU.39.i</b>	There is a system to provide healthcare professionals with feedback on medication error reports.
	<b>MMU.39.j</b>	All concerned staff are compliant with medication reporting system.
	<b>MMU.39.k</b>	There is a continuing education program for all healthcare professionals in medication safety issues.

**MMU.39.1**

There is a designated trained pharmacist to oversee medication safety program implementation.

## Chapter 8: Patient Rights and Education (PRE)

Healthcare professionals must devote time to patients and educate them about their cases in order to improve health care outcomes. Patient education is important to assist the patient in achieving the best possible condition of health through their own activities. Prior to admission, healthcare professionals are responsible for educating patients about their rights. The healthcare professionals should use easy, clear and understandable language to explain to the patients and their families. This chapter covers 6 standards outlining patients and their families' Protection, Education, Feedback and complaints.

### PRE.1

**The Hospital implements and maintains a mechanism to ensure adherence to the national document on patients' and families' rights, and responsibilities.**

#### Guidance:

To assure that basic rights of patients and their families for independence of expression, decision and action, concern of personal dignity are protected for all patients and their families and at the same time, patients and their families are required to abide and comply with their responsibilities towards the hospital as per the national documents of patients and their families' rights and responsibilities. In addition, healthcare workers have to be taught on the stated national documents on patients' rights and responsibilities. Patients' rights and responsibilities are written in easy understandable language, clearly posted and available to all those receiving health care. The hospital should set up a policy of patient's rights and responsibilities and maintains its implementation.

#### Measures:

##### PRE1.a.

The hospital has a clear written statement that informs patients and their families about their rights and responsibilities.





<b>PRE1.b.</b>	Written and approved patients and families rights statement includes but is not limited to: <ul style="list-style-type: none"> <li>• Access to care in hospitals</li> <li>• Respect of patient dignity throughout hospital stay</li> <li>• Right to have clear information about care treatment and all medical decisions</li> <li>• Respect of privacy and confidentiality of medical information and treatment.</li> <li>• Right to have proper treatment for patient medical problem and pain management</li> <li>• Respect of patients' cultural, psychological, religious and spiritual believes and needs, and patient's preferences.</li> </ul>
<b>PRE1.c.</b>	The hospitals provide assistance for disabled patients and patients with special needs , for example , preserved parking near hospitals entrance , easily accessible wheelchair , aids for disabled patients ( gripping bars , bathrooms specially designed for them ).
<b>PRE1.d.</b>	The statement is visible, accessible and understandable to all patients, health care workers and families.
<b>PRE1.e.</b>	There is evidence that patients and their families are provided with a written information about their rights and responsibilities upon admission.
<b>PRE1.f.</b>	There is evidence that patients are encouraged to provide clear, complete information about their health, medication use, any allergy, and use of any dietary support.
<b>PRE1.g.</b>	All staff are required to be oriented on the patients' and families' rights statement as part of their mandatory orientation program up on their recruitment.
<b>PRE1.h.</b>	There is a regular audit to monitor compliance.

**PRE.2****The hospital ensures protection of patients and their families.**

**Guidance:** The patients/families need to feel secured and protected inside health premises and it is a hospital responsibility to provide a secured environment to the patients/families which is an essential and basic right for them

**Measures:** **PRE2.a.** There is a clear process available in the hospital to protect vulnerable patients (newborns, children, pregnant women, disabled and elderly )

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| <b>PRE2.b.</b> | There is a clear mechanism available to protect patients/families from abuse and neglect by any staff in the hospital. |
| <b>PRE2.c.</b> | There is an appropriate security services that monitor visiting hours.   |
| <b>PRE2.d.</b> | There is an appropriate security services strict access to vulnerable areas ( SCABU,NICU).                             |

**PRE.3****The hospital facilitates patient and family health education.****Guidance:**

Patient education proves to promote patient-centered care and facilitates compliance to treatment and medications. Ultimate outcome to such compliance, more efficient and cost-effective healthcare delivery system. In addition, health education, ensures reduced illness-related complications and continuity of care. Therefore, the hospital should promote and support effective methods for patient health education.

**Measures:**

- |                |   |
|----------------|---|
| <b>PRE3.a.</b> | There is an approved document that ensures efficient patient and family continuous education throughout the journey of patient care.  |
| <b>PRE3.b.</b> | There is designated health educators cover the needs of the patients according to the services provided by the hospital.  |
| <b>PRE3.c.</b> | All clinical staff in the hospital have a role in patient education according to their type of care they provide, which is clearly demonstrated in their job description.                             |
| <b>PRE3.e.</b> | Health education is given to the patients based on their individualized needs, preferences, religious, cultural values, reading and language skills, and at appropriate stations in the care process. |
| <b>PRE3.f.</b> | The health education includes information required through all patient's care journey.  |
| <b>PRE3.g.</b> | All health education provided to patient/family is clearly documented in patients' medical records.   |
| <b>PRE3.h.</b> | There are adequate and sufficient health education materials (hard /soft copies) available for patients which are displayed and provided in clear and understandable language.                        |
| <b>PRE3.i</b>  | There is a monitoring mechanism to assure compliance to the effective health education document through obtaining feedback from patient/family.   |

**PRE.4**

**The hospital promotes and facilitates patients' and family's and community empowerment.**

**Guidance:**

The hospital management should create a work environment that support healthcare providers as well as patients and their families to play important role in patients and their families' empowerment. To create such environment, the hospitals should promote and facilitates patient education activities, through increase number of staff, allowing time for teaching, providing clear guidelines and available teaching resources and developing staff's educating skills.

Effective implementation of patient empowerment and education should be rewarded to increase motivation. Patient empowerment through education is the responsibility of every health professional as it is a part of total health care and should be included in all settings available in the hospital; inpatient, outpatient, or emergency care. Patient empowerment facilitates their participation in the provided care and make informed care decisions and it has been proved to improve patients' willingness to accept and adhere to the treatment, reduce anxiety, and increase patient's satisfaction. It promotes a higher quality healthcare and may affect healthcare cost by shortening patients' hospital stay. Hospitals provide health education to patients and families so that they have enough knowledge to participate in their care and decisions and hence their empowerment.

**Measures:**

- |                |  |
|----------------|--|
| <b>PRE4.a.</b> | The hospital has clear written document to guide effective patient and family empowerment process, which demonstrates the role of health care providers and the role of the patients in patients/family's empowerment. |
| <b>PRE4.b.</b> | There is a training program for all clinical staff on patients/familys' empowerment document.  |
| <b>PRE4.c.</b> | The hospital ensures affective implementation of the written document of patients/ family's empowerment.   |
| <b>PRE4.d.</b> | There is a follow-up system to monitor the compliance to the written document.   |
| <b>PRE4.e.</b> | Hospital ensures patient empowerment during care and treatment plan, which includes desired results.   |
| <b>PRE4.f.</b> | Hospital ensures involving patients and families in discharge, and referral planning.  |
| <b>PRE4.g.</b> | The hospital engages patients through various methods that includes but not limited to : focus groups, interviews, satisfaction surveys.   |

<b>PRE4.h.</b>	The hospital considers formulating patient experience committee/team that oversees patient centered-care matters.
<b>PRE4.i.</b>	Services, care and treatment plan are planned by seeking input from clients and families and community.
<b>PRE4.j.</b>	The hospital conducts regular community activities.
<b>PRE4.k.</b>	Staff receive education and training that fosters people centered care.
<b>PRE4.i.</b>	Hospital staff guide patients and families on the use of technology on healthcare related issues (telemedicine, Al Shifa App., etc)
<b>PRE4.j.</b>	Patients preferences and expressed needs are attended.

**PRE.5**

**The hospital has an effective mechanism to obtain feedback from patients and to handle patients' complaints.**

**Guidance:**

Patient's interaction with different touch points at hospital has an important value in assessing and measuring their experience in the healthcare institution and hence their feedback and suggestion about the received health services or even the hospital environment matters in improving quality of health services. Therefore, obtaining patient's feedback on regular basis provides a valuable source in improving patient experience and hence better improvement of patient safety-related issues.

Patient complaints considered to be valuable tool for improving patients-safety related issues and can provide insights into managing risks within health care institutions. These complaints revealed while the patients crossing different touch points, and as a result of interactions with the health care services, including communication with clinical/non-clinical hospital staff, hospital environment such as quietness and hygiene, hospitality of the hospital staff and interaction with the provided care, etc.

Proper handling of patients' complaints facilitates in improving quality of health services as well as, it assists in solving patient-safety problems, through integration of patient's complaints and feedback into learning issues shared to relevant staff in the hospital. The hospital has the role to establish an easy-to-use channel for patients to give their feedback and to express their complaints (no blame-no shame culture) and to provide the proper awareness on how to effectively use them. It also has the role to educate its staff to effectively utilize.

**Measures:**

<b>PRE5.a.</b>	There is an approved document available that explains effective management of patient's complaints in timely manner and the designated personnel/unit for handling patient's complaints.
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	<b>PRE5.b.</b>	The hospital conducts a regular patient satisfaction survey.
	<b>PRE5.c.</b>	The hospital has 3C'S box that is accessible to patients and families.
	<b>PRE5.d.</b>	Hospital management utilizes data from patient satisfaction, feedback, and complaints, and convert them into a plan of action for health services quality improvement.
	<b>PRE5.d.</b>	Hospital ensures that the available complain process is available and can be used by the public.
<b>PRE.6</b>	<b>Hospital ensures the implementation of the national patient engagement framework.</b>	
<b>Guidance</b>	<b>PRE6.a.</b>	Hospital has the document national patient engagement frame work.
<b>Measures:</b>	<b>PRE6.b.</b>	All hospital staff are trained on the implementation of the national patient engagement framework.
	<b>PRE6.c.</b>	Hospital monitors the implementation of patient engagement framework to ensure compliance.

### *Information Management System (IMS)*

The Information Management System (IMS) is a system designed to manage healthcare data and is responsible for providing the right information to the right patient. Leadership decisions are made as per the accurate information provided by the IMS in the organization. Evaluation of this information helps to improve the services and make the right decisions for improvement in healthcare institutions. The IMS is appropriately generating, storing, and utilizing the data. As well as having a mechanism to retrieve the information when needed.

This chapter contains 8 standards that addresses as the following:

- Effective information system plan
- Data controlling
- Data managing
- Medical record

**IMS.1**

**The hospital has an effective information system plan/system to serve the needs of the hospital internal and external users.**

**Guidance:**

Information is an important resource for the effective and efficient delivery of health care. The provision of health care and its continued improvement depends to a large extent on the information generated, stored, and utilized appropriately by the hospital. This standard aims to ensure data and information meet the hospital's needs and support the delivery of quality of care and service.

**Measures:**

- |                |  |
|----------------|--|
| <b>IMS.1.a</b> | Information management resources are available to the hospital in a comprehensive way.   |
| <b>IMS.1.b</b> | The hospital identifies, describes, and categorizes the needed information into a computerized manual.   |
| <b>IMS.1.c</b> | Hospital's information needs are determined based on the services it provides.   |
| <b>IMS.1.d</b> | The hospital contributes to external databases in accordance with the law and regulations.   |
| <b>IMS.1.e</b> | Data and information are securely stored and retrieved.  |
| <b>IMS.1.f</b> | Data and information are accurately and timely distributed to the targeted internal and external users and stakeholders in a structured format, for decision-making. |

**IMS.2**

**The hospital implements a document control system.**

**Guidance:**

A hospital has to implement a control system that ensures optimal security for documents, protecting patient information and privacy. The goal is to control information access and increase confidentiality. The hospital develops a policy and procedure that guide staff on how to control the documents within the organization for both which generated internally and externally. The policy should include ways of storing and retrieving the documents.

**Measures:**

- |                |  |
|----------------|--|
| <b>IMS.2.a</b> | The hospital has a documented policy and procedure for document control, each document has a unique identification, shows dates of issues, updates, and authorization. |
| <b>IMS.2.b</b> | Documents generated both internally and externally are covered by the system.  |
| <b>IMS.2.c</b> | Issue of documents in the hospital is controlled and all copies of all documents are readily accessible.   |

**IMS.2.d** There is a process of evaluation of compliance with policies and procedures.

### IMS.3

**The hospital implements a system of controlling and managing data.**

**Guidance:** Healthcare data management is the process of storing, protecting, and analyzing data pulled from diverse sources, thus, it can be used as a database in order to improve healthcare outcomes, to create holistic views of patients, personalize treatments, and improve communication. A hospital should provide the necessary resources for the process of collecting, analyzing, storing, and retrieving data. Data should be collected in a standard format whenever a data collection is intended and known by the staff.

**Measures:**

- IMS.3.a** The hospital has standardized systems/ formats for collecting and managing, storing, and retrieving data.
- IMS.3.b** Resources are available for collecting, managing, storing, retrieving, and analyzing data.
- IMS.3.c** Documented procedures are in place to ensure accurate and timely dissemination of data.
- IMS.3.d** Appropriate clinical and managerial staff participate in selecting, integrating, and using the data.
- IMS.3.e** Collective data and information may include information requirements for hospital key functions such as facility management and safety, infection control, clinical data and information, identified hospital-wide indicators, department-specific indicators.
- IMS.3.f** Data collected are transformed into information that hospital management may use to make decisions to support patient care, identify or prioritize quality improvement projects.

### IMS.4

**The hospital has a document describing its policy on confidentiality, integrity, and security of records, data, and information.**

**Guidance:** Patient confidentiality is considered an essential element of the patient-healthcare provider's relationship that is intended to protect patient rights; thus, the medical record must be confidential and protected from unauthorized disclosure. It is important to prevent disclosure of the patient information and to maintain the confidentiality of the patient. Patients' information should be treated as confidential and used only for professional purposes. It is essential to maintain trust between health care providers and patients that their health information is treated with integrity.



<b>Measures:</b>	<b>IMS.4.a</b>	The hospital has a policy/ guide that is consistent with national laws on maintaining confidentiality, integrity, and security of medical records, data, and information.
	<b>IMS.4.b</b>	The policy describes the process for making medical records available to patients (inpatients, outpatients, and emergency department patients).
	<b>IMS.4.c</b>	The hospital maintains records in a confidential, safe, and secure manner, including electronic medical records, data, and information, as required by law.
	<b>IMS. 4.d</b>	The hospital ensures that data and records are protected against loss, destruction, and tampering by using technology that improves confidentiality, integrity, and security.
	<b>IMS.4.e</b>	The hospital implements an approval process that regulates when medical records can be released for purposes other than direct patient care, such as quality improvement, morbidity, and mortality, research, or as required by law and not disclosed without the patient's consent.

## **IMS.5** The hospital has a process that compliance with local laws and regulations for the retention of data.

**Guidance:** The medical records contain records, data, and information related to patients and care received; these data must be stored and secured to maintain privacy private. The policy and procedure for retention determines the period after which these records, data, and information can be retained and how is essential.

<b>Measures:</b>	<b>IMS.5.a</b>	The policy addresses the retention period of the different types of medical records as well as the permanent types (e.g., records of medico-legal cases).
	<b>IMS.5.b</b>	The policy specifies the retention period for different types of medical records, as well as the permanent kinds (e.g., records of medico-legal cases).
	<b>IMS.5.c</b>	It is mandatory that medical records are retained for at least five years after the patient has last been seen unless otherwise required by law. Children's records are be kept until they turn 18 and then for a minimum of five additional years.
	<b>IMS.5.d</b>	The policy addresses confidentiality, integrity, and security of information.

## **IMS.6** The hospital determines what constitutes a medical record and maintains it.

**Guidance:** Medical records are the document that explains all details and information

about the patient's history, clinical findings, diagnostic test results, pre and postoperative care, patient's progress and medication. In order to maintain all the information about a patient that might be necessary to provide care.

<b>Measures:</b>	<b>IMS.6.a</b>	The patient record that has been initiated is identified by a unique patient identifier through the use of preprinted labels.
	<b>IMS.6.b</b>	The record is initiated for every patient assessed and/or provided care or services by the hospital.
	<b>IMS.6.c</b>	All medical records must contain the following information at a minimum: <ol style="list-style-type: none"> <li>1. The patient's name, address, date of birth, and next of kin. The name must include family name, first name, and middle name.</li> <li>2. The medical history of the patient.</li> <li>3. Details of the present illness, including, when appropriate, assessment of the patient's emotional, behavioral, and social status</li> <li>4. Relevant past, social, and family histories are appropriate to the age of the patient.</li> <li>5. Appropriate to the age of the patient, a summary of the patient's psycho/social needs.</li> <li>6. Reports of relevant physical examinations.</li> <li>7. Diagnostic and therapeutic orders.</li> <li>8. Physician includes his/her assessment, diagnosis, impression, and plan of care revisions when indicated and therapeutic intervention.</li> <li>9. Reports of procedures, tests, and their results.</li> </ol>
	<b>IMS.6.d</b>	Medical records contain information about operations and other procedures performed.
	<b>IMS.6.e</b>	The medical record of a patient who has been transferred to another hospital includes the date of the transfer, the reason for the transfer, and the name of the receiving hospital.
	<b>IMS.6.f</b>	The medical record contains a copy of the discharge summary duly signed by appropriate and qualified personnel.

## IMS.7

**The hospital establishes and maintains an accurate medical record for every patient.**

**Guidance:** All health care providers are required to keep complete, accurate medical records. Health Management provides a means of communication between providers and between providers and members about health status, preventive health services, treatment, and planning. Documentation should be patient-centered, legible, timely, accurate, complete covering all the facts and procedures related to the patient. It should be

standardized and ensure that only authorized individuals make entries in patient records.

<b>Measures:</b>	<b>IMS.7.a</b>	Medical records have unique identifiers.
	<b>IMS.7.b</b>	A hospital's policy identifies who is authorized to enter information into medical records.
	<b>IMS.7.c</b>	Every entry in the medical record is named, signed, dated, and timed.
	<b>IMS.7.d</b>	Authors of entries can be identified.
	<b>IMS.7.e</b>	The contents of the medical records are identified and documented.
	<b>IMS.7.f</b>	The hospital has a documented policy for the usage of abbreviations and develops a list based on accepted practices.
	<b>IMS.7.g</b>	The record provides a complete, up-to-date, and chronological account of patient care.
	<b>IMS.7.h</b>	Continuity of care is ensured by providing round-the-clock access to the patient's record to all care providers.

## **IMS.8** The hospital has a medical Records Review Committee, to follow the quality of documentation

**Guidance:** Quality health care is based on accurate and complete clinical documentation in the medical record. Thus, to improve the clinical documentation is by conducting medical record audits. It is necessary to determine areas that require improvements and corrections.

<b>Measures:</b>	<b>IMS.8.a</b>	An audit of medical records is conducted periodically.
	<b>IMS.8.b</b>	A trained individual conducts the audit.
	<b>IMS.8.c</b>	A medical record audit focuses on timeliness, legibility, and completion.
	<b>IMS.8.d</b>	Audits include both active and discharged patient records.
	<b>IMS.8.e</b>	A documented plan is followed for taking corrective and preventive measures following the identification of any deficiencies.

## *Chapter 10: Facility Management System (FMS)*

The facilities management department is responsible for supervising the maintenance, operations and overall security of healthcare facilities. This includes safe water, electricity, medical gases, and vacuum systems. As well as providing a safe and secure environment for patients, staff and visitors. The organization should have proactive risk mitigation and emergency plans within the facilities. The organization must be no-smoking area and manages hazardous materials in a safe way. Staff in healthcare institutions must be fully oriented and aware of their responsibilities for any safety issues.

The 13 standards in this chapter outlines the following:

PPM for the machines.

Heating, Ventilation and Air Conditioning (HVAC).

Emergency power system

Fire emergency plans

Medical gas system

**FMS.1**

**The hospital has a clear preventive maintenance (PPM) system, as per manufacturers' recommendation.**

**Guidance:** Planned preventive maintenance is a regular service activity that comprises specified tasks such as lubrication, calibration, filter cleaning, and replacement of spare components that are predicted to wear out after a certain amount of time or workload. The Required documents should be available as follows:

- Preventive maintenance reports including maintenance schedules, failure and repairs.
- Electrical safety test checklist.

Follow-up document related to investigating incidents. This standard aims to ensure operational efficiency, avoid any unexpected failure and to ensure a prolonged use of the medical equipment.

<b>Measures:</b>	<b>FMS.1.a.</b>	There is a periodic preventive maintenance plan that covers at least the following: <ul style="list-style-type: none"> <li>• Electrical system,</li> <li>• Elevators,</li> <li>• Refrigerators/Freezers,</li> <li>• Air conditioning system, etc.</li> </ul>
	<b>FMS.1.b.</b>	Service manual for all medical equipment in use.
	<b>FMS.1.c.</b>	A preventive maintenance program is implemented for all medical equipment.
	<b>FMS.1.d.</b>	Preventive maintenance reports are frequently generated and improvements are made based on the reports and other sources.
	<b>FMS.1.e.</b>	The end-users receive training prior operating any equipment.
	<b>FMS.1.f.</b>	Safety Manuals are available to the biomed
	<b>FMS.1.g.</b>	The hospital ensures that maintenance work is done by qualified and trained staff.

**FMS.2**

**There is an updated inventory for medical equipment technologies at the hospital.**

**Guidance:** For appropriate maintenance planning and scheduling, a precise inventory is essential. It must provide accurate information on any medical device at any moment. Budgets for capital purchases, maintenance, and operating expenditures can all be developed using the inventory. An inventory is also used to support facility risk analysis and both emergency and disaster plan. This standard aims to streamline the workflow, maintain and track equipment and to control the cost.

<b>Measures:</b>	<b>FMS.2.a.</b>	There is a medical equipment plan available, reviewed periodically.
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<b>FMS.2.b.</b>	The plan covers instructions how to perform checkup on all new equipment for conformity before commissioning including those brought for "demos"
<b>FMS.2.c.</b>	There is comprehensive inventory of medical equipment with their corresponding locations, Inventory number.
<b>FMS.2.d.</b>	<p>Inventory list with the following equipment details is available:</p> <ul style="list-style-type: none"> <li>• Name of the item</li> <li>• Supplier</li> <li>• Model</li> <li>• Manufacturer</li> <li>• Date of installation</li> <li>• Serial number</li> <li>• Inventory number</li> <li>• Location at the hospital</li> <li>• Test and due date</li> <li>• Warranty period</li> <li>• Contract details if applicable</li> <li>• Condition of the item</li> </ul>

**FMS.3**

**Hospital staff are trained on safe handling and operation of medical equipment based on their specialty.**

**Guidance:** Training of the biomedical team by the company representative or application specialist in case of capital equipment. Training shall be carried out (not restricted) in the following cases;

- Training on new equipment
- Staff transferred from other section
- New staff joined
- Reoccurrence misuse of the equipment
- Refresh training whenever requested by the staff

This standard aims to is to ensure a safe and effective utilization of medical equipment technologies in the hospital.

<b>Measures:</b>	<b>FMS.3.a</b>	Hospital staff are trained to operate all medical equipment. The training includes physicians, nurses, and paramedics
	<b>FMS.3.b</b>	<p>The training covers:</p> <ul style="list-style-type: none"> <li>• New equipment.</li> <li>• Newly appointed or transferred staff.</li> <li>• Recurrent incident reports on the misuse of equipment.</li> </ul>
	<b>FMS.3.c.</b>	Each department has registered training record.

**FMS.3.d** Hospital leaders conduct regular audit to ensure only trained staff handle equipment's.

**FMS.4** **There is a written procedure for upgrading/ replacing and removal of medical equipment from service at the hospital.**

**Guidance:** All medical equipment has certain life span for premium functionality. It is very crucial to identify which equipment shall be removed from the service due to aging or any other reason. On the other hand, introducing a new technology requires detailed study. History log of all medical equipment, Incident reports, Breakdown/failure reports, Requests for any upgrading service with justifications are all to be considered. This standard aims to ensure the efficiency of all equipment to deliver a good service without any delays.

- Measures:**
- FMS.4.a.** There is a written policy available to all staff, on equipment removal from service, upgrading or replacement.
  - FMS.4.b.** There is Procedure for replacing medical equipment.
  - FMS.4.c.** There is Procedure for upgrading medical equipment.
  - FMS.4.d.** All staff are aware about the policy.
  - FMS.4.e.** hospital has a process to ensure that this practice is on place.

**FMS.5** **The hospital has a clearly written guideline for maintenance and breakdown of medical equipment.**

**Guidance:** Maintenance has a positive impact on the safety and effectiveness of healthcare technology, it increases the lifetime of equipment and thus helps to save investment resources. The following documents are important:

- Breakdown report.
- Incident report (if available).
- A list of replaced Spare parts.
- Evidence of acceptance from end-user ensures the functionality of the machine.
- Supplier attendance log (for equipment under contract).

The aim of this standard is to ensure maintenance service is carried out in a timely, economical, and professional manner.

- Measures:**
- FMS.5.a.** There is documented maintenance breakdown guideline that describes measures of follow-up and investigation of equipment failure/ breakdown that address reporting of failures, immediate corrective actions, and assessment of the breakdown's effect on reported results and services.

**FMS.5.c.**

Qualified and trained staff are handling the maintenance.

**FMS.5.d.**

Equipment maintenance and repairs procedures are documented.

**FMS.6****The hospital has periodic maintenance program for Heating, Ventilation and Air Conditioning (HVAC).****Guidance:**

- Proper HVAC systems in medical care facilities are helpful in the prevention of diseases transmission.
- PPM is done on time as per the approved schedule and breakdowns are attended immediately, especially for the critical care departments (OT, ICU, CCU, etc.).
- Recommended spare parts for at least one-year operation are available under custody of the Maintenance Department.
- HVAC systems are connected to a building management system (BMS), which must function properly and be monitored by the Maintenance Department. BMS is capable of sending alerts notifications (SMS, Email, etc.) to the key persons of the maintenance department in case of emergency.
- HVAC systems are connected to emergency power supply (Electrical Generator) and emergency water supply (additional water storage tank) if chiller system is available.

The aim of this standard is to ensure the efficacy of the HVAC systems for the safety of patients and infection control.

**Measures:****FMS.6.a.**

The design of the HVAC systems is as per the latest International Standards (ASHRAE and equivalent) and Approved Codes of Practice, to control air quality by doing cleaning/replacement of filters, cleaning of diffusers and cleaning ducts.

**FMS.6.b.**

Qualified and trained personnel are handling the PPM of the heating, ventilating and air conditioning (HVAC) system.

**FMS.6.c.**

PPM checklist is as per manufacturer's recommendation, International Standards and Approved Codes of Practice.

**FMS.6.d.**

There are updated records of HVAC system maintenance and follow up.

**FMS.6.e.**

HEPA filters are monitored on a monthly basis and the results are documented



**FMS. 7****Hemodialysis water treatment system.**

**Guidance:** The maintenance often includes lubrication, cleaning, and adjusting the parts of a machine to keep the machine running smoothly. Set Goals for Preventive Maintenance Plan. The equipment inventory covers the following:

- Model of the equipment's.
- Serial number.
- Basic specification and capabilities
- Asset number, brass tag number, or unit number
- Category.
- The location of the equipment
- The department who holds responsibility
- Any high-cost items of the asset

The aim of this standard is to ensure that all equipment, devices and systems are running at maximum efficiency.

<b>Measures:</b>	<b>FMS.7.a.</b>	Water treatment system is designed as per the latest version of the International Standards.
	<b>FMS.7.b.</b>	Qualified and trained staff are handling the PPM of water System.
	<b>FMS.7.c.</b>	PPM checklist is as per manufacturer's recommendation, International Standards and Approved Codes of Practice
	<b>FMS.7.d.</b>	Water sampling is carried out monthly for microbiological and endotoxin tests at approved laboratory.
	<b>FMS.8.e.</b>	PPM is done on time as per the approved schedule and breakdowns are attended immediately.
	<b>FMS.7.f.</b>	There are updated water system maintenance records for water availability, chemical testing every 6-month and monthly bacterial testing.

**FMS. 8**

**Preventive maintenance programs are implemented for non-medical devices, non-medical equipment, and non-medical technology.**

**Guidance:** The maintenance often includes lubrication, cleaning, and adjusting the parts of a machine to keep the machine running smoothly. Set Goals for Preventive Maintenance Plan. The equipment inventory covers the following:

- Model of the equipment's.
- Serial number.
- Basic specification and capabilities.
- Asset number, brass tag number, or unit number
- Category.
- The location of the equipment.
- The department who holds responsibility.
- Any high-cost items of the asset.

The aim of this standard is to ensure that all equipment, devices and systems are running at maximum efficiency.

<b>Measures:</b>	<b>FMS.8.a.</b>	There is documented schedule for conducting preventative maintenance for all equipment, machines and instruments, which conforms to the manufacturer's instructions.
	<b>FMS.8.b.</b>	Qualified and trained staff are handling the PPM.
	<b>FMS.8.c</b>	Technical service manuals for all equipment are available at the biomedical departments.
	<b>FMS.8.d</b>	Equipment maintenance and repairs are documented to help in the decision making for replacement.
	<b>FMS.8.e</b>	Preventative Maintenance data are used for upgrading/replacing of equipment

**FMS. 9      The hospital has an alternative source of energy (emergency power system), to run all critical hospital facilities in case of main power interruption. (CSS.18)**

**Guidance:** An emergency power system is an independent source of electrical power that supports important electrical systems on loss of normal power supply. A standby power system may include a standby generator, batteries and others. The aim of this standard is to protect patient life and medical equipment from the consequences of loss of primary electric power supply.

<b>Measures:</b>	<b>FMS.9.a</b>	The electrical distribution system, including the essential electrical system, are compliant with 2012 editions of NFPA 101, NFPA 99 along with their referenced codes & standards, as required by CMS.
	<b>FMS.9.b</b>	There is developed program for the inspection, testing, and maintenance of electrical distribution system components and

	emergency power system in healthcare facilities.
<b>FMS.9.c</b>	The emergency power system is connected to all key areas of the hospital, including the operating room, intensive care unit, laboratories, refrigerators, elevators, alarms, medical gas systems, fire pumps, escape routes, exit signs, communication systems, elevators, and automatic doors.
<b>FMS.9.d</b>	There is an integrated hazard vulnerability analysis into management of the electrical distribution system and emergency power system.
<b>FMS.9.e</b>	Electrical system shutdowns are planned and scheduled for maintenance, repair, and construction.
<b>FMS.9.f</b>	There is monthly documentation of emergency power testing results on station load for thirty minutes.
<b>FMS.9.g</b>	All of the critical system, equipment, devices in the critical area are connected to the emergency power system

**FMS. 10**

**The hospital has fire emergency plans within the premise. (CSS.19)**

**Guidance:**

A fire safety is mandated in all buildings. Considering healthcare system as 24/7 fully occupied with people, therefore, fire safety is likewise imperative and an essential element in hospitals. Fire safety program and plan has to be well implemented and monitored in the hospitals to keep all people safe and secured from fire hazards. The aim of the standards is to have a fire safety program which is implemented and monitored in hospitals.

**Measures:**

<b>FMS.10.a</b>	The hospital has plans and provisions for early detection, abatement and containment of fire and non-fire emergencies. <ul style="list-style-type: none"> <li>• Fire alarm systems are tested and maintained.</li> <li>• Firefighting systems are tested and maintained.</li> <li>• Maintain the fire exit clear of any obstructions and easy to access.</li> </ul>
<b>FMS.10.b</b>	There is a preventive and corrective maintenance program for fire alarm system and the results are documented.
<b>FMS.10.c</b>	There is a clear fire evacuation plan in each department, which is known and oriented by patients, families and staff.
<b>FMS.10.d</b>	A fire exit sign is clearly displayed in each route provides an exit.
<b>FMS.10.e</b>	All staff are trained on fire safety, and evacuation plans.

- FMS.10.f** Mock drills are held at least twice a year and records are available.
- FMS.10.g** There is a maintenance plan for fire-related equipment & infrastructure where the hospital adheres.

**FMS. 11**      **The hospital has a medical gas system, vacuum, and compressed air with preventive and corrective proper maintenance. (CSS.20).**

**Guidance:** Patient safety is of paramount importance in the design, installation, commissioning, and operation of medical gas pipeline systems (MGPS) and vacuum system. The system has to be operational round the clock, with practically zero downtime and its failure can be fatal if not restored at the earliest.

- Measures:**
- FMS.11.a** There is a Documented procedure governing obtaining, handling, storage, distribution, usage and replenishment of medical gases.
3. Uniform color-coding system is followed.
  4. Proper signage is kept for used, full, empty cylinders.
  5. Different types of the gases are properly identified.
- FMS.11.b** There is a clear procedure that ensures effective use of the medical gas system. Areas covered include, but are not limited to, the procedure for ordering and filling liquid oxygen, documenting all repairs/alterations/tests/filling logs/consumption, etc.
- FMS.11.c** Alternate sources for medical gases, vacuum and compressed air are provided for in case of failure. This may include:
2. Stand by air compressor and vacuum pump unit.
  3. Stand by gas manifold/bulk cylinders.
- FMS.11.d** Emergency shut off valves are available in all units and are clearly marked with areas/ rooms affected.
- FMS.11.e** There is an operational, inspection, testing and maintenance plan for piped medical gas, compressed air and vacuum installation.
- FMS.11.f** A well-trained staff takes the responsibility of the closure of shut off valves, and well-trained individual available in the concerned unit.
- FMS.11.g** The procedures for medical gases address the safety issues at all levels.
3. Monitoring of plant alarm unit for gas pressure going beyond the set limit.
  4. There is enough liquid oxygen in the Vacuum Insulated Evaporator (VIE) to last at least seven days
  5. There are backup banks if gas pressure in VIE take beyond the limit.

**FMS. 12**

**The hospital facilities operate in a planned manner to ensure safety of patients, visitors and staff and promotes environment friendly Measures.**

**Guidance:** The hospital's environment and facilities must meet all safety requirements including the safety of patients, visitors and staff both in regular and circumstances in the event of any hazards such as fire, biohazard, radiation and gas leaks, which requires the provision of all safety requirements. The hospital has a policy to regulate all the safety concerns.

<b>Measure:</b>	<b>FMS.12.a</b>	There are warning signs posted as appropriate in the hospital and include: <ol style="list-style-type: none"> <li>1. Signs for wet floors during cleaning.</li> <li>2. No smoking signs.</li> <li>3. Signs and warning lights for x-ray room(s).</li> <li>4. Signs to restrict cellular phones in sensitive areas as appropriate, e.g., MRI or critical care units.</li> </ol>
	<b>FMS.12.b</b>	There are internal and external directive signs posted in the hospital in a language understood by the patient, families and community.
	<b>FMS.12.c</b>	Patient-safety devices & infrastructure is installed across the hospital and inspected periodically. <ul style="list-style-type: none"> <li>• Grab bars, bed rails, sign posting.</li> <li>• Alarms both visual and auditory where applicable.</li> <li>• Warning signs like radiation or biohazard.</li> </ul>
	<b>FMS.12.d</b>	There are documented hospital environmental rounds describing findings and actions taken.

**FMS. 13**

**The hospital ensures that the buildings, space, equipment and supplies meet the requirements needed by the stated service, and complies with national laws and regulations.**

**Guidance:**

<b>Measure:</b>	<b>FMS.13.a</b>	The hospital complies with the national safety laws and regulations.
	<b>FMS.13.b</b>	The required buildings, space, equipment and supplies are provided as per stated services.
	<b>FMS.13.c</b>	There is regular testing and monitoring, testing of the available facilities and supplies.
	<b>FMS.13.d</b>	There is documented action plan for update and replacement.

## Glossary

### **Accreditation**

A systematic process by which a recognized agency (an "accrediting body") evaluates and certifies that a healthcare organization complies with pre-determined requirements.

### **Access**

Individual's ability to get required medical care and medical services when desired. This is determined by the availability of medical care services and their acceptance of individuals and community, availability of transportation.

### **Adverse drug events**

An adverse drug event (ADE) is an injury that occurs as a result of medical treatment for a drug. Medication errors, adverse drug responses, allergic reactions, and overdoses are all examples of this. ADEs can occur in a variety of settings, including hospitals, long-term care facilities, and outpatient clinics.

### **Adverse drug reactions**

A harmful and unanticipated response to a therapeutic agent that occurs at levels commonly employed in man for disease prevention, diagnosis, or therapy, or for the restoration, correction, or modification of physiological function.

### **Adverse events**

In a health-care organization, an unplanned, unwanted, or potentially harmful occurrence.

### **Antipyretics**

A fever-relieving substance

### **Acute management**

Active short-term treatment for a severe injury or illness. used to stabilize the patient to complete initial evaluation and assessment

### **Assess compliance**

A gap assessment to identify between the existing control environment and what is required.

### **Antimicrobial resistance (AMR)**

Bacteria, viruses, fungi and parasites change over time and not respond to medicines.

### **Assessment**

The action of making a judgment about something

### **Best practices**

A clinical, scientific, or professional technique, method, or process that is regarded by the majority of professionals in an area as being more effective than any other practice in providing a specific outcome. These practices, often known as good or better practice, are usually evidence-based and consensus-driven.

### **Calibration**

Calibration is the process of comparing your instrument's measurement to a known measurement (the standard). The standard's accuracy should typically be ten times that of the measuring device being tested. Most standards bodies, however, consider a 3:1 accuracy ratio acceptable. Controls offers proactive field servicing to verify that your instruments and controls are calibrated correctly.

### **Care Plan (Plan of care)**

Patient treatment plan that is designed based on individualized assessment, history taking, physical examination and need identification. The planning is an interdisciplinary process

### **Clinical staff**

A clinical staff member is someone who works under the supervision of a physician or other certified health care professional and is authorized by law, regulation, or facility policy to perform or assist in the performance of a specific professional service but does not report it

individually. Other policies may have an impact on who is allowed to report specific services.

**Competency**

To do the work, you'll need the following knowledge, abilities, and attitudes. The ability to comprehend information and procedures is known as knowledge. The capacity to accomplish specified tasks is referred to as a skill.

**Compliance**

The ongoing process of meeting the legal, ethical, and professional standards applicable to a particular healthcare organization.

**Community**

The environmental, social, and economic resources to sustain emotional and physical well-being among people in ways that advance their aspirations and satisfy their needs in their unique environment.

**Confidentiality**

Access to data and information is restricted to individuals who have a need, a reason, and permission for such access. An individual's right to personal and informational privacy, including the right to access to his or her medical records. The knowledge, skills, and attitudes required to do the job. Understanding of facts and procedures is referred to as knowledge. The ability to perform specific actions is referred to as skill.

**Credentialing**

The process of obtaining, verifying, and assessing a health care practitioner's qualification to provide patient care services in or for a health care organization. Recredentialing is the process of checking staff qualifications on a regular basis.

**Credentials**

Credentials Competence, current and applicable licensure, education, training, and experience are all required. A health-care organization may add additional criteria.

**Safety Data Sheets (SDS)**

A document created for substances or mixtures containing a wide range of information on the composition, physical, chemical, health and environmental effects of the substance or mixture and on the safe usage, storage and disposal of the products.

**Evaluating the events**

Activity that seeks to understand and measure the extent to which an event has succeeded in achieving its purpose.

**Evaluation process**

Evaluation is a process that critically examines a program. It involves collecting and analyzing information about a program's activities, characteristics, and outcomes. Its purpose is to make judgments about a program, to improve its effectiveness, and/or to inform programming decisions

**Formulary**

An approved list of medications and associated information related to medication use, which is subject to periodic review and modification.

**Framework**

An outline, overview, or "skeleton" of interconnected items that can be modified at any time by adding or deleting items.

**Goal**

The end toward which effort is directed

**Governance**

The system by which an organization is controlled and operates, and the mechanisms by which it, and its people, are held to account. Ethics, risk management, compliance and administration are all elements of governance.

**Handover**



The transition of a patient from one health care provider to another. Also known as a *handoff* or a *transition of care*.

**Hazardous chemicals**

A chemical that has properties with the potential to do harm to human health.

**Hazardous waste**

A waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.

**Indications**

A sign, symptom, or medical condition that leads to the recommendation of a treatment, test, or procedure.

**Informed consent**

Permission granted in full knowledge of the possible consequences, typically that which is given by a patient to a doctor for treatment with knowledge of the possible risks and benefits.

**Imaging**

The process of making a visual representation of something by scanning it with a detector or electromagnetic beam.

**Job descriptions**

A written statement that describes the duties, responsibilities, required qualifications of candidates, and reporting relationship and coworkers of a particular job.

**Leaders**

The identified and designated individuals who have the responsibility to oversee effective functioning of processes within a defined scope of services.

**Licensure**

A mandatory process by which governmental agency grants time-limited permission to an individual to engage in a given occupation after verifying that he or she has met predetermined and standardized criteria”

**Medication Administration Record (MAR)**

A process of documenting of all medications administered to a patient with the date and time of delivery.

**Medication errors**

Any preventable event that may cause inappropriate medication use or risk to the patient safety.

**Medication Management**

Process that occurs in stages by the hospital and manufacturers to reduce the chance of medication errors, including: selection of medication, procurement, prescription, transcription, dispensing, distribution, administration, and monitoring.

**Medication Order**

An order made by physician to the pharmacist to dispense a medicine to a patient in a hospital or any health care institution. This order can be hand written, preprinted or electronic.

**Medication Reconciliation**

The process of comparing patient’s medication orders to all of the medication that the patient has been taking, and creating the most accurate list including the dosage, frequency, route. This is to ensure patients get the correct medication at any transition point in hospital.

**Medication Recall**

The process of removing a product of medication that is proved to be in violation of the laws administered by Food and Drug Administration (FDA). This may be conducted by the MoH or voluntarily by the manufacturer.



**Medical equipment & device**

Medical technology Fixed and portable medical devices and equipment used for the direct diagnosis, treatment, monitoring, and care of individuals. Similar terms include medical equipment and medical devices.

**Mission statement:**

A simple and concise written expression that states the reason why an organization exists.

**Monitoring**

Information is reviewed on a regular basis. The target of monitoring is to notice if something changes. Every month, for example, the district health management team's health information specialist reports on incidents of meningitis in at-risk communities.

**Multidisciplinary team**

multidisciplinary Including representatives of a range of professions, disciplines, or service areas.

**Near miss**

An incident that could have had undesirable outcomes but does not cause harm to the patient.

**No blame culture**

Accepts that mistakes can happen in the workplace, and employees are encouraged to disclose them so that they can be corrected quickly and without the prospect of being blamed for their conduct.

**Non-Formulary Medication**

Any medication that is not on the list of approved medications by the pharmacy and therapeutics committee in a hospital.

**Off-Label**

The use of a drug for an unapproved indication or in an unapproved age group, dosages, or route of administration. There are a number of circumstances where medicines may be prescribed or supplied for the purposes for which they are not licensed e.g., children.

**Oral antiemetic**

These are anti-nausea drugs that can help to reduce feelings of nausea or vomiting.

**Organizational chart**

An organizational chart is a diagram that illustrates an organization's internal structure by detailing the roles, responsibilities, relationships among individuals within an entity and lines of authority.

**Observation**

The period of time when a patient is closely monitored by a caregiver (or caregivers).

**Orientation**

The introductory process by which staff become familiar with all aspects of the work environment and their responsibilities.

**Patient**

Is a person that enters the hospital for treatment, for whom the hospital takes responsibility for treatment and care.

**Patient assessment**

The process of gathering information from patient either verbally, or through examination in order to evaluate patients' health status and needs.

**Patient safety**

The freedom from any injuries during the course of medical care.

**Patient Satisfaction**

Is the extent to which patients are happy **with the** services received from a hospital, physician, or healthcare provider. This is measured by obtaining reports or ratings from

patients about these services.

**Palliative care**

Treatments and support services that aim to relieve pain and suffering rather than cure illness. Palliative care may include surgery or radiotherapy to reduce or shrink tumors compressing vital structures and thus improve quality of life. Palliative care includes attending to the patient's psychological and spiritual needs as well as supporting the dying patient and his or her family.

**Pharmaceutical Care**

A pharmaceutical practice that is patient-centered in which the pharmacist accepts responsibility for a patient's medication management issues and is held accountable for this commitment.

**Policy**

A written document that lists the rules, expected performances, and responsibilities of health care staff with an organization.

**Preparedness plan**

The steps you take to make sure you are safe before, during and after an emergency or natural disaster.

**Protocol**

A set of rules that explains proper behavior and procedures to be followed in formal situations.

**Performance qualification**

Establishing confidence through appropriate testing that the finished product or process produced by a specified process meets all release requirements for functionality and safety and that procedures are effective and reproducible.

**Quality**

The extent to which the health care services provided for individuals, and public are up to the expected and desired outcomes, and are consistent to with the current professional knowledge.

**Quality teams**

The group of individuals within a practice charged with carrying out improvement efforts. The team meets regularly to review performance data, identify areas in need of improvement, and carry out and monitor improvement efforts.

**Risk assessment**

A systematic process of identifying hazards and evaluating any associated risks within a workplace, then implementing reasonable control measures to remove or reduce them.

**Root cause**

The underlying reason for the occurrence of a problem.

**Scope of services**

A scope of services is the services provided to patients within the capability of the organization to meet the healthcare needs of the patient. Includes the types and ages of patients served, the hours of operation, staffing, the types of services provided, and the goals or plans to improve quality of service.

**Screening**

Routine testing is performed for patients with no symptoms, and additional testing may be performed if a screening reveals a potential abnormality.

**Specimen**

Individual, item, or part considered typical of a group, class, or whole

**Stakeholder**

A person or group with a vested interest in a particular clinical decision and the evidence that supports that decision, including: Patients, caregivers, and patient advocacy organizations. Clinicians and their professional associations.

**Strategic plan**

Outlining the actionable steps needed to reach specific goals.

**Surveillance**

A watch kept over a person or group

**Time out**

Time-out A brief period of time, just before performing a surgical or other procedure, during which any unanswered questions or confusion about the patient, procedure, or site are resolved by the entire surgical or procedural team. Even if the procedure is being performed by a single person, a brief pause to confirm the correct patient, procedure, and site is appropriate.

**Transfer process**

Move the patient to a different place, region, or situation independently or with assistance.

**Triage**

The process of rapidly examining sick or injured people, such as after an accident or a battle, in order to treat those in the most serious condition first.

**Urgent**

Urgent acuity classification used in triage systems to indicate that the patient's condition is potentially life-threatening and necessitates prompt assessment and possible intervention.

**Utilization**

The use of a specified healthcare service. Overuse occurs when a health care service is provided under circumstances in which its potential for harm exceeds the possible benefits. Underuse is the failure to use a necessary health care service when it would have produced a favorable outcome for a patient.

**Values**

The beliefs and philosophy within an organization that establish the basis for the operation and provides guidelines for daily behavior.

**Verification**

The process of checking the validity and completeness of a clinical or other credential from the source that issued the credential.

