Accreditation Standards for Hospitals in Lebanon

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International Review Team

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SECTION I

Preamble

Accreditation, quality and continuous improvement have become an intrinsic part of the discourse and activities of health services (Greenfield & Braithwaite, 2008). Accreditation is deemed to be very helpful in maintaining the improvement in quality in terms of patient care by establishing an optimal achievement of goals in meeting standards for health care organizations and reducing health care costs by focusing on increased efficiency and effectiveness of services (Shaw, 2004). Additionally, accreditation maintains safety of patients and staff enhances the developing of information systems and assists management bodies in the planning and the provision of services creates an accountable and transparent organization, assists the organization in having evidence based decision and attends to the need of the population that is served through the health care organizations (El-Jardali, 2007). Besides, it establishes a comparative database of health care organizations which can meet selected structure, process, and outcome standards or criteria, provides education and consultation to health professionals, managers and health care organizations on quality improvement strategies and "best practices" in health care and strengthens the public's confidence in the quality of health care provided(Shaw, 2004). In an era of continuous improvement in the health care delivery process, a strong foundation for the continuous improvement of accreditation is needed (Smits et al, 2014).

For this reason, and as a part of its normative and regulatory role in supporting, financing and supervising the whole process (Ammar et al, 2007), the Lebanese Ministry of Public Health (MoPH) introduced the accreditation system using a phased approach to ensure a smooth transition for hospitals in 2000 (Haj-Ali et al, 2014). The development and the implementation of the accreditation policy in Lebanon was made possible because of the legislation that was passed in June 22nd 1962 and amended by the legislate decree #139 of September 16, 1983 (El-Jardali, 2007). Furthermore, Lebanon became one of the first countries in the Eastern Mediterranean Region (EMR) to have a policy on accreditation (Shaw, 2015) and to implement a comprehensive accreditation system (Haj-Ali et al, 2014). The Lebanese hospital accreditation system has undergone seven phases in the implementation of accreditation.

For the purpose of improving and updating the current hospital practices, the Ministry of Public Health has initiated the revision of the Hospital Accreditation System in Lebanon aiming to revise and develop new Lebanese hospital accreditation standards according to latest evidence and international best practices and also to comply with International Society for Quality in Healthcare (ISQua) requirements.

This was established through a signed agreement with the French National Authority for Health HAS (Haute Autorité de Santé) and in collaboration with the Ecole Supérieure des Affaires (ESA) Business School in Beirut.

In the framework of this collaboration, Dr. Fadi El-Jardali and Dr. Ali Elhaj have been appointed by MOPH through ESA as coordinators for the revision of the Lebanese standards of accreditation. To fulfill this task, they collaborated with national experts to review the standards prepared jointly by them and the CTAH (HAS).

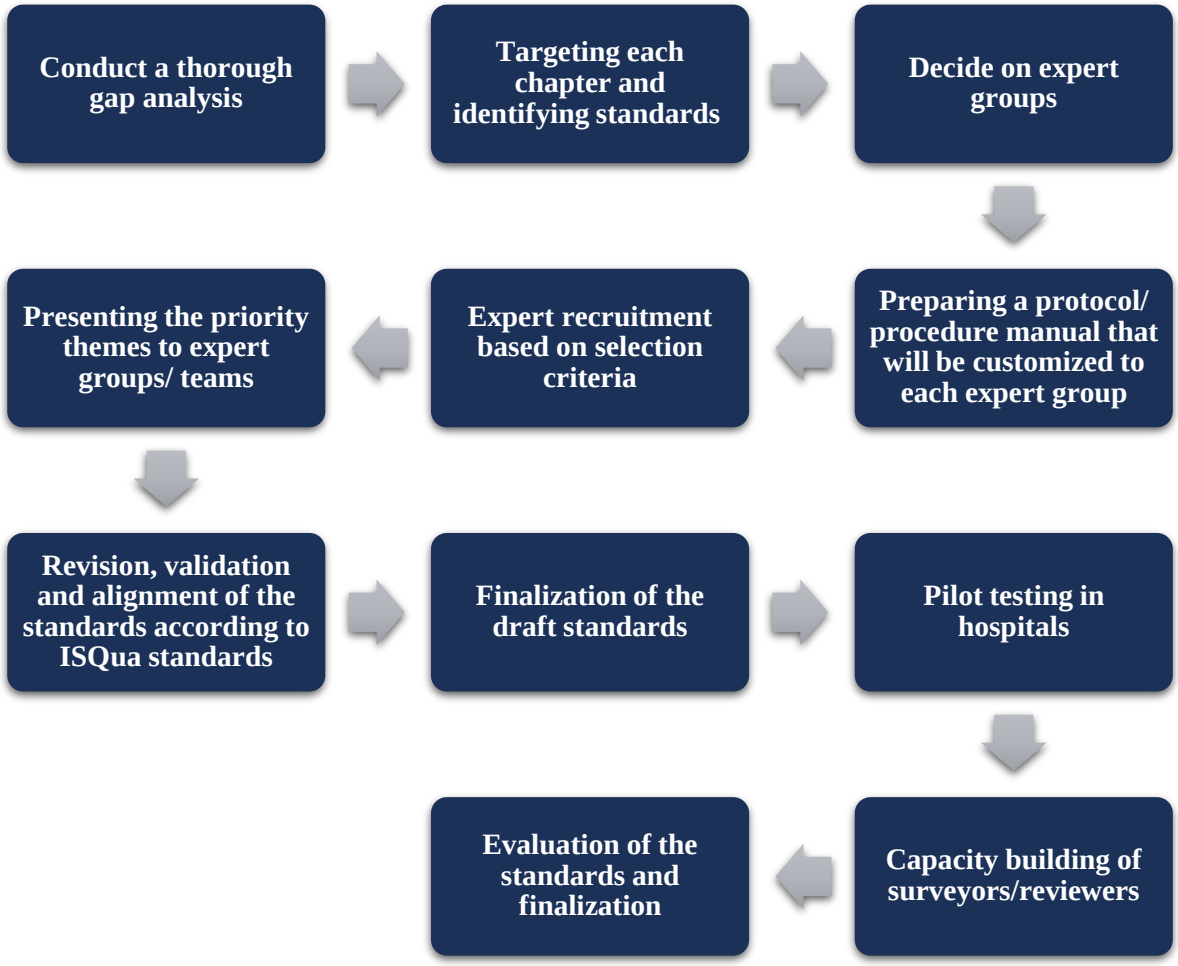
The fundamental intent of the new system is to determine the level of compliance with the new standards by all aspects of the healthcare system, and assure the functional documented existence of structure (organizational parameters), and process (methods of practices), in order to achieve optimum clinical measurable outcomes (consequences and results) for the patient.

Mapping out the patient experience and the functionality of the hospital system (pre, during, and post) accreditation, will ensure the level of consistency and continuity in meeting the standards, thereby guaranteeing continuous systematic improvement, continuous efficacy in delivering patient care and continuous readiness for future accreditation.

Abiding by a standard-based systems approach for quality evaluation, the accreditation standards cover the structure, process and outcome of the system. Moreover, the standards will be piloted and finalized based on a standardized process.

Standard Development Methodology

Building on the gap analysis of the international and regional accreditation systems and the ISQua priority themes, the new hospital accreditation standards were developed.



Flow Chart 1 Standard Development Process

Expert Consultation Process

The standards were revised through three rounds of expert and stakeholder consultation processes using evidence-based standard evaluation tools. 62 national experts were allocated to different chapters for the revision of the standards, based on their professional knowledge, training and experience. The standard evaluation phases included the application of an evidence-based tool 1 and tool 2 with defined criteria including clarity, importance, specificity and inclusiveness in phase one, and feasibility, surveyability and risk assessment in phase two. Both standard evaluation tools have been piloted and revised accordingly.

After the dissemination of each tool, the received data was analyzed, standards were revised, validated and aligned according to ISQua standards and the revisions were shared with the experts. The two phases of consensus were followed by 16 face-to-face expert subgroup meetings during the month of

January 2017. The purpose of those meetings was to update the experts on the process and to discuss the revisions of their assigned chapters. Additional comments and feedback were provided during the face to face consultation meetings. All additional comments were integrated into the accreditation standards included in this document.

Values

The hospital accreditation system has adopted seven core values in the approach taken to develop the standards. The values are:

1. Patient safety and protection from harm
2. Continuous quality improvement
3. Efficiency enhancement
4. Teamwork
5. Dignity and respect
6. Customer focus
7. Transparency

Chapters

- Hospital management
  - Governance and Leadership (GL)
  - Human Capital (HC)
  - Information Management (IM)
  - Facility management and safety (FMS)
- Quality and Risk Management
  - Medication management and safety (MM)
  - Infection prevention and control (IPC)
  - Quality management and Patient safety (QMPS)
- Patient Centered Care
  - Access and continuity of care (ACC)
  - Patient and family rights and education (PFR)
  - Patient services
    - Anesthetics and surgical care (ASC)
    - Oncology services (ONCO)
    - Medical imaging (MI)

- Emergency services (ES)
- Obstetric and Child Health (OS)
- Critical care (CC)
- Laboratory services (LAB)
- Blood bank and Transfusion (BB)
- Other Services (OTHER):
    - Burn care
    - Dietary services
    - Social care services
    - Physiotherapy services
    - Mental health services

Chapter Composition

Each chapter is composed of an introductory chapter followed by the set of standards and its risk score. Each standard has been supported by a corresponding set of guiding measures that clarify further the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

COR (Critical Organization Requirements) standards

The COR standards the minimum required standards that a hospital should meet to be accredited, the “make it or break it” standards. Those standards are essential to ensure patient safety and include the international patient safety goals. The COR standards are incorporated from different themes and were selected based on a risk assessment that involves identifying a numerical risk score based on the likelihood that the identified risk will actually happen or materialize and the consequences on the organization if the risk does materialize or happen.

Intents

In the composition of the chapters of Lebanese accreditation standards, after the introduction of each chapter, there is a need to develop Intents for further explaining the rationale of the guiding measures in order to:

1- Better clarify their aim and purpose,
2- Remove any grey zone in their understanding, harmonize their correct perception by professionals
3- Highlight their reasons for being and relevance for the continuous improvement of quality and safety of care
4- Stress on the importance of the chapters and the guiding measures (COR, Hospital Management, Quality and risk management, Patient centered care, Critical care, Governing Body etc.)
5- Sometimes, suggest adding international standardized tools for benchmarking

In summary, the intents aim at highlighting the spirit of the guiding measures which, in redundancy focus on the core values of the chapters (Patient safety and protection from harm, Continuous quality improvement, Efficiency enhancement, Teamwork, Dignity and respect, Customer focus, Transparency).

Finally, it is important to note that only guiding measures are applicable whereas the intents objective is to bring more information to the professionals

SECTION II

Standards

Hospital Management

Governance and Leadership (GL)

Introduction

The **Governance and Leadership** chapter is designed to achieve excellence in governance and leadership practices at the following levels:

Level 1 Governing Body: represents the shareholders or the board members having the highest authority.

Level 2 Chief Executive: The chief executive (e.g. chief executive officer [CEO] or hospital director) is responsible to manage the organization on a daily basis.

Level 3 Executive Management: represents the senior officers of different disciplines, such as the senior nursing officer, chief medical officer, senior administrator etc.
Hospital committees consist of professional staff committees formed; this could be committees from the same discipline or multidisciplinary committees.

Level 4 Department/Unit/Service Leaders: represents the managers of departments, units or services.

Other Themes: Ethics, safety, education, research, community needs assessment.

The **Governance and Leadership** chapter targets the following sections:

- Governing body roles and responsibilities
- Chief executive roles and authority
- Executive management structure, role, responsibility and authority
- Department/Unit/Services Leaders
- Hospital scope of service
- Dissemination of information to Ministry of Public Health
- Resource allocation
- Human based research
- Clinical and non-clinical contracts
- Department/unit/service roles and responsibilities
- Hospital-wide ethical framework
- Community needs assessment

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
4	**GL 1. Organizational structure, roles, responsibilities and authorities are delineated, documented and implemented.** **The governing body represents the shareholders or the board members who hold the highest authority. The by-laws in the hospital should set the structure and power of the governing body including the number and names of members, the election process, responsibilities, authority and frequency of meetings. The list of members should be displayed** **The governing body practices its responsibilities and is evaluated based on pre-defined criteria at least every two years. This evaluation should be documented with clear evidence of improvements based on the results.**
	Guiding measures:
	1.1. Governing body members are identified by names and responsibilities.
	1.2. Responsibilities and authorities are described and documented in by-laws.
	1.3. By-laws are implemented.
	1.4. Evaluation methods and criteria to monitor and improve the governing function are specific and documented
	1.5. Governing body performance is reviewed and documented at least every two years.
6	**GL 2. The governing body oversees and approves the vision and mission statements, values, strategic and operational plans, policies and procedures and capital and operation budgets.** **The strategic plan is a long-term plan that builds on the needs, mission and vision to guide the hospital in achieving high priority objectives.** **It should be developed on the needs of the hospitals. The needs can be identified through SWOT analysis and/or PEST analysis and/or corporate social responsibility. The objectives of the strategic plan should be clearly linked to the needs-assessment and the hospital's mission and vision.** **Based on the strategic plan, a capital and operation budget are developed, and resources are allocated which are similarly approved by the governing body. The capital and operational budgets are yearly plans for expenditure.**

	The hospital should develop clear processes to carry on audits. The processes should include the person(s) responsible for the audit, time period of audit, tools used during the audit, process for reporting the results to the governing body and department heads and plans for next steps after the audit. **The governing body should oversee and support the development of the mission and vision, strategic plan and operational budgets as well as the auditing processes.**
COR	Guiding Measures:
	2.1 The governing body oversees and supports the development of the vision and mission statement, values and the overall strategic plan.
	2.2 The governing body approves the hospital's strategic plan and it is related strategic actions/operational plans.
	2.3 The strategic plan identifies goals, objectives and key performance indicators that are consistent with the hospital's vision and mission.
	2.4 The strategic plan takes into consideration the SWOT (strengths, weaknesses, opportunities and threats) analysis, PEST (political, economic, social, and technological) analysis and/or corporate social responsibility.
	2.5 The governing body approves the hospital's capital and operational budgets.
	2.6 The governing body oversees and evaluates the resource allocated to the strategic plan.
	2.7 Evidence of internal audit process that is reviewed by the governing body with a clear scope.
6	**GL 3. The governing body oversees and approves the development of quality and patient safety programs and/or plans.** **The involvement of the governing body in the oversight and approval of quality and patient safety programs and/or plans and continuous discussion on quality and patient safety should be a top priority to improve the quality of care in the hospital by safeguarding top-level dedication to quality and patient safety.** **The governing body have a critical role in raising a culture of quality and patient safety in the hospital, therefore, the need for the approval of the governing body on the hospital's quality and patient safety program and/or plans.** **As per the hospital's policies, at least twice yearly (the hospital may choose to report more frequently), the results of the quality and patient safety programs/plans should be reported to the governing body for decision making. The reports may include but not limited to the**

	following: the objectives achieved, the challenges, areas pending, and critical adverse events.
COR	Guiding measures:
	3.1. The governing body oversees and approves the hospital's quality and patient safety program and/or plans.
	3.2. The governing body receives, at least twice per year, reports on the quality of care and patient safety including critical adverse events.
	3.3. Decisions taken on patient safety and quality including improvements made are documented.
	3.4. Quality of care and patient safety are regularly present on the meeting agenda of the governing body.
4	**GL 4. The chief executive's role and authority are delineated and documented.** - **The chief executive is appointed by the government body and should have a clear job description, in line with the strategy of the hospital. He ensures that the hospital is performing efficiently and should lead strategic development initiatives but at times but also deal with day-to-day operations.** - **Some of his responsibilities include overseeing the development of the strategic and operational plan, responding to external inspecting agencies, promoting quality in the hospital, and ensuring patient safety.** - **The process of evaluating the chief executive is a collaborative process between the chief executive and governing body that is based on pre-identified criteria and secures continuous improvement at the hospital.**
	Guiding measures:
	4.1. The chief executive is appointed by the governing body with defined objectives and job description coherent with the strategies defined by the board.
	4.2. The chief executive has the appropriate education, experience and training as defined in the job description.
	4.3. The chief executive oversees the development of both the strategic and operational plans and ensures the hospital's compliance with laws and regulations
	4.4. The chief executive responds to external inspecting agencies' (i.e. external auditor, Ministry of Public Health, National social security fund) reports.
	4.5. Annual review of the chief executive's performance conducted by the governing body based on a delineated process.
4	**GL 5. The executive management's structure, role, responsibility and authority are delineated and documented.** **The hospital's executive management has a critical role in the operational aspect of the hospital and in ensuring that the hospital**

	provides high-quality patient care. All hospital executive management members should have clear roles and responsibilities that are agreed upon prior to the assignment of the members. The list of members should be displayed **The executive management team should develop operational plans on a yearly basis and follow up on its implementation with clear reviewing documentation of achieved objectives.** **As well, all hospital-wide policies and procedures should be developed by the executive management, the members can get support from frontline healthcare workers or specialists for the development of the policies. The policies should be approved, signed, accessible to staff and implemented.**
	Guiding measures:
	5.1. The hospital's executive management members are defined by name and function.
	5.2. Members of the executive management have the appropriate education, experience and training.
	5.3. Evidence of a multidisciplinary (be at least 4 executives; the chief executive officer or a board of director representative, medical, nursing, quality and finance officers) professional background of the hospital executive management members.
	5.4. Annual review of the performance of the hospital executive management based on a defined set of responsibilities and accountabilities.
	5.5. The executive management implements through documented operational plans the hospital's vision, mission and strategic plan.
	5.6. The implementation and progress of the operational plans are regularly monitored
	5.7. The executive management develop hospital-wide programs, policies and procedures
	5.8. There is a process to ensure that policies and procedures are documented, disseminated, up to date, implemented and available for use by all hospital staff.
	5.9. The executive management develops, ensures implementation and evaluates the patient flow plan (admission, transfer, & discharge) in the hospital.
	5.10. Executive management develops and implements operational and capital budgets.
	5.11. The executive management evaluates the performance of the hospital on annual basis based on achievement reports and indicators in accordance to the strategic plan.
3	**GL 6. The hospital's scope of services required to meet the needs of the patients is clearly identified and documented.**

	Availability of a clear scope of services helps direct the patient to the hospital that provides the services that the patient needs at the right time. **The scope of services should include the list of services provided by the hospital; for example, adult critical care services, intervention radiology, pain management, and pediatric medical/surgical.** **Depending on the patients, the community needs and the strategic plan, the scope of services at the hospital should be identified/modified/revised. For example, if the hospital's population served has a high rate of smoking, the hospital may decide to develop a smoking cessation program.** **Client feedback survey (such as satisfaction survey or complaint reports) can reflect a need to integrate additional services at the hospital.** **Based on recurrent feedback on the same services, the hospital may decide to develop direct and systematic referral processes to hospitals providing neonatal care.** **The scope of services needs to be readily available to the community and patients, this can be through the website, and/or brochures, and/or banners in the hospital.**
	Guiding measures:
	6.1. The executive management in collaboration with the department/service heads ensures that the strategic goals are aligned with the scope of services.
	6.2. The scope of services is described and documented reflecting the needs of the community.
	6.3. There is a collaborative process to ensure effective sharing of operational information among departments/units/services.
	6.4. The executive management receives and acts upon input/feedback from the clients, families and community regarding the services provided.
	6.5. Information on the scope of hospital services is available to the community.
3	**GL 7. There is a communication plan to disseminate information to Ministry of Public Health and stakeholders.** **The communication plan should play an important role in ensuring that patient, staff, and stakeholders understand the mission, vision, and objectives of the hospital and act effectively to achieve them.** **It should aim to deliver the right messages to the right audiences at the right time and ensures that information is shared with recipients in a timely manner.**
	Guiding measures:

	7.1. The executive management communicates the vision mission and values to the public.
	7.2. The internal and external communication plan is established and evaluated by the hospital executive management, for effectiveness and timely dissemination of information.
4	**GL 8. Executive management develops hospital-wide quality management and patient safety programs and/or plans.** **Involvement of executive management in quality improvement and patient safety is a high priority when it comes to institutionalized and sustainable quality improvement and patient safety initiatives.** **The quality and patient safety program/plans should ensure that the safety of the patient is secured and there is continuous quality improvement at the hospital. The executive management develops the quality improvement and patient safety plan/ programs that integrate areas of high priority and/or high risk.** **To ensure a proper evaluation the management should accompany the plans and/or programs with key performance indicators that are reported to the governing body and key stakeholders**.
	Guiding measures:
	8.1. Executive management develops and implements a uniform process to monitor and evaluate at least once a year, the quality improvement and patient safety plans.
	8.2. Executive management approves and monitors the implementation of a systematic process of identifying and analyzing actual or potential risks and safety issues.
	8.3. The hospital has a dashboard that identifies and prioritizes the key performance areas and indicators to be measured.
	8.4. The executive management reports twice a year to the governing body on the results of the patient safety and quality improvement programs including approved key performance indicators.
	8.5. Hospital executive management members are trained on continuous quality improvement programs.
	8.6. The executive management, after the approval of the governing board, communicates to stakeholders the essential key performance indicators related to quality management and patient safety, when required.
5	**GL 9. Resource allocation and purchasing decisions support quality of care and safety in the hospital and are aligned with the strategic plan.** **Inefficient allocation and purchasing of resources pertain significant unnecessary cost on the hospital, especially where resources are scarce. Therefore, an allocation and purchase of resources based on need should support the hospital in providing high-quality care. This can be achieved by aligning each objective in the strategic plan with**

	specific resource needs. Resources include human resources, capital resources, and financial resources. **The purchase of new technology needs to undergo a process that secures the quality and safety of the technology, such as a pilot testing phase and calibration.** **It is critical that all suppliers are evaluated to ensure that the supplies that are purchased abide by the quality and safety needs.**
	Guiding measures:
	9.1. The resource allocation and infrastructure needed to achieve the goals and objectives of the strategic plan are included in the operational plan.
	9.2. Executive management establishes a process to monitor and evaluate purchases including new technologies taking into consideration quality and safety requirements.
	9.3. Executive management identifies critical resources and prepares plans to monitor their availability and safe use.
	9.4. There is a process of evaluating suppliers based on hospital policies.
5	**GL 10. The hospital has medical committees that are chaired by the medical staff director. [HC-22]** **The committees provide a platform for members to indulge in group problem solving and decision making for better quality of care. The medical committees should have a crucial role in decision-making and reviewing and supervising the processes in the hospital.** **The members of the committees should be selected to ensure a balanced and multidisciplinary team.** **The terms of reference includes but not limited to the purpose of the committee, the functions, the structure and working methods including reporting structure, meeting frequency, chair and committee members names, roles and responsibilities of the members, policies that may apply, obligations, date of assignment, date of committee members' reassignment and process review, etc..**
	Guiding measures:
	10.1. The hospital has the following, but not limited to, medical committees including the head of departments: 10.1.1. Mortality and morbidity committee 10.1.2. Medical review committee 10.1.3. Medical Record Committee 10.1.4. Credentialing Committee 10.1.5. Occupational health and safety committee
	10.2. Terms of reference of the medical committees are delineated and documented.

4	**GL 11. Hospital executive management approves and ensures the monitoring of human-based research in the hospital, when applicable.** **Any research proposal that will include human subjects at the hospital should be reviewed by a research review board prior to implementation at the center.** **Securing patient confidentiality, privacy, safety, and well-being are critical aspects that the hospital needs to respect when it comes to human-based research.** **Review boards aim to protect the rights and privacy of human subjects recruited for a research study by ensuring that ethical principles are followed.**
	Guiding measures:
	11.1. Hospital executive management identifies responsible entities (i.e. Institutional Review Board) that review and monitor the compliance of human-based research with bylaws, policies and procedures.
	11.2. There is a delineated process to identify unfavorable incidents from trial and research.
	11.3. Hospital executive management ensures the protection of patients from adverse events resulting from approved research.
	11.4. Evidence of continuous patient safety and care after adverse events from research or trials.
	11.5. Outcomes from clinical trials and research are continuously evaluated and proper measures are implemented.
4	**GL 12. Hospital executive management manages clinical and non-clinical contracts.** **Clinical and non-clinical contracts entail all services at the hospital that include but not limited to medical services, administrative services, sterilization, outpatient care, laundry, housekeeping, pest control, and waste management.** **Hospital executive management should list all clinical and non-clinical services needing contracts and identify the scope of service accordingly.** **Documented policies and procedure should support the hospital executive management and department/unit/service heads/managers in reviewing, selecting and monitoring the contracts. Monitoring of contracts can be assigned to department/unit/service heads/managers with clear reporting and communication pathway with the hospital executive management.** **The hospital needs to ensure that if any contract is revised or renegotiated, the safety of the patient is not affected, and the same quality of care is maintained.**
	Guiding measures:
	12.1. Hospital executive management, in collaboration with department/unit/service heads/managers, follows specific policies and procedures in reviewing, selecting and monitoring clinical and non-clinical contracts.

	12.2. Patient safety is maintained when contracts are renegotiated or changed.
	12.3. Hospital executive management has a process in place to evaluate clinical and nonclinical contracts (including renting of outpatient clinics).
5	**GL 13. Departments/units/services are managed by qualified heads/managers with delineated roles and responsibilities.** **Departments/units/services managers/heads have a vital role in leading their development and enhancement to provide high-quality tailor services.** **Qualified heads and managers should guide the department/unit/service to serve their purpose to the best possible extent.** **The hospital should identify the education qualifications, skills and training of heads and managers to be able to fulfill their roles and responsibilities. And also evaluate them based on a pre-identified criterion.**
	Guiding measures:
	13.1. The department/unit/service heads are identified by name and department/unit/service.
	13.2. Qualification, training, education and experience of the department/unit/service head match the position description.
	13.3. The roles and responsibilities of department/unit/service heads/managers are specific and documented in a job description.
	13.4. Department/unit/service heads' performance is evaluated every two years.
4	**GL 14. Department/unit/service leaders participate in quality and patient safety programs and/or plans.** **The commitment of leaders to quality improvement and patient safety is critical when it comes to the implementation of initiatives and activities.** **There is a need to prioritize quality and patient safety activities within each area and raise those priorities to the executive management.** **Those should be then be integrated within the hospital-wide quality and patient safety plans and programs which should be monitored and evaluated based on a pre-identified criterion at the departmental level and reported to the executive management**.
	Guiding measures:
	14.1. Improvement needs are assessed, prioritized and properly coordinated based on a participatory approach.
	14.2. Department/unit/service leaders implement, monitor and evaluate the implementation of patient safety programs and/or plans at the departmental/unit/service level.

4	**GL 15. Governing body approves and monitors the overarching ethical framework.** **As the hospital is a high-risk area with a possibility that hospital staff, providers, patients, and families might face ethical issues, the Governing body should constitute and monitor an ethical framework that supports a culture of ethical practice and provides overall guidance for staff and providers in case of any arising conflict/concern.**
	Guiding measures:
	15.1 The hospital has a multidisciplinary committee with a delineated term of references that address clinical ethical conflicts and concerns.
	15.2 The ethics framework implemented, monitored, evaluated and documented.
	15.3 The committee supports departments/units/services in the implementation of ethics and ethical conduct activities.
3	**GL 16. The hospital has an ethics framework that defines processes to address clinical ethical conflicts and concerns.** **The ethical framework is a critical component to ensure a culture of ethical in the hospital. The processes that guide the implementation of the framework should include the management of ethical concerns, conflict of interest, disclosure of ownership and scope of services and billing and finances of hospital services.**
	Guiding measures:
	16.1. The ethics framework provides guidance in identifying and managing ethical concerns.
	16.2. The ethics framework requires the disclosure of the hospital's conflict of interest and ownership and the scope of services.
	16.3. The ethics framework includes a process by which staff can report on ethical concerns without compromising their career.
	16.4. Hospital billing services are properly controlled and audited against services provided.
	16.5. Evidence on timely responsiveness of ethical concerns.
4	**GL 17. Community healthcare needs assessment is used in developing corresponding services.** **The hospital should assess the Community healthcare needs in order to be able to reflect them in the strategic plan and develop it scope of services.** **This allows provide guidance and tackle high priority needs in the community and also identify partners and stakeholders to properly deliver healthcare services.**
	Guiding measures:

	17.1.	Community healthcare needs assessment is done in collaboration with the community leaders and stakeholders and documented.
	17.2.	The community needs assessment report is used to plan the scope of services and strategic plan of the organization.
	17.3.	Community needs assessment is shared with the governing body and relevant internal and external stakeholders.
	17.4.	Hospital executive management members identify partnerships with community leaders, organizations and primary healthcare centers, when applicable, to adequately deliver and coordinate healthcare services.

Human Capital (HC)

Introduction

The **Human Capital** chapter focuses on developing the capacity of human resources (clinical and non-clinical staff), including the knowledge, skills and motivation of the individuals responsible for delivering health services in order to provide safe and high-quality services. The standards are aimed at providing safe and effective patient care taking into consideration the hospital's strategic human resources plan. The chapter addresses all care issues including patient access and receiving care, transfers and discharge from the facility. This chapter ensures that the care is provided in a coordinated and multidisciplinary approach.

The **Human Capital** chapter targets the following sections:

- Hospital strategic human resources plan
- Staff satisfaction and retention
- Occupational health and safety program
- Work-life balance
- Staff education, skills and knowledge

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk score	Standard and Guiding measures
5	**HC 1. The hospital has a human resources plan.** **A human resources plan supports the identification of the current human resource (HR) situation in a hospital and future should be based on projected expansions (bed capacity, departments, services…). Human resources planning have to follow the administration's future strategies for expansion by identifying HR needs, recruitment, development, allocation, and utilization of human resources in an organization. All aspects of employment from start to finish have to be clear, standardized and fair to ensure a safe, productive and attractive working environment while ensuring that the right type of personnel for the right job at the right time.** **The human resources plan should be revised on an annual basis or upon any major planned or unplanned circumstances (mass exodus, national economic crisis…)**
	Guiding measures:
	1.1 A human resources plan is developed and documented.
	1.2 The human resources plan includes the overall number and type of human capital needed to meet the needs of the patients.
	1.3 The human resources plan includes but not limited to: 1.3.1 A uniform process for recruitment of employees 1.3.2 A uniform process for evaluating employees. 1.3.3 A uniform process for reappointing employees 1.3.4 Strategy for staff retention 1.3.5 Employee orientation 1.3.6 Pre-employment medical examination procedure 1.3.7 Grievance procedures 1.3.8 Termination procedures 1.3.9 Remuneration scales 1.3.10 Policy for confidentiality (commercial, patient and staff specific) 1.3.11 A policy for department acuity 1.3.12 A policy for unexpected staff events 1.3.13 Staff negligence and malpractice
	1.4 Evidence of annual evaluation and revision of the human resources plan
3	**HC 2. Department/service/unit leaders develop and document a staffing plan.** **Similar to how the hospital has an institution-wide staffing plan; each unit/department/service must develop a plan to asses and identify its**

	current and future staff needs in a systematic way, which is regularly revised according to needs and demands. **As such a staffing plan answers the following questions, what are the services provided? How many people are needed to provide the services? What are the skills and qualifications needed to provide the services effectively?** **The aim of having such plans, being developed and regularly updated is ensuring all services are providing efficient, effective, high quality care focused on patient safety and satisfaction.**
	Guiding measures:
	2.1 Each department/services/unit has a documented staffing plan.
	2.2 The staffing plan contains: 2.2.1 Number of staff needed 2.2.2 Type of staff needed 2.2.3 Qualification of staff
	2.3 Evidence of annual evaluation and revision of the staffing plan.
4	**HC 3. Hospital department /service/unit leaders delineate and document staff qualifications.** **All staff members' qualifications (education, knowledge and skills...) should at first align with the documented requirements in the respective job description for each position and second, be kept in the unit/department/ service records.** **The number of staff in each unit must follow the predefined staffing plan and their required qualifications should follow the hospital's overall mission, bed capacity and each service's patient volume**
	Guiding measures:
	3.1 Staff qualifications (i.e. education, knowledge and skills) are defined and documented.
	3.2 Staff qualifications and number align with the hospital's mission and patient volume.
5	**HC 4. All staff members (clinical and non-clinical including medical staff members) have a delineated job description and contracts.** **Job descriptions provide staff, managers and leaders with a clear understanding of the scope of work and responsibilities that each staff member (clinical and non-clinical including medical staff members) should undertake. Job descriptions also have a critical role to standardize staff evaluations based on the pre-designated job description allowing more accurate performance assessment whether for improvements or career advancement.** **All staff members including (part-time, full time, temporary and/or voluntary) have an up-to-date job description that includes the job brief, responsibilities/duties and required skills and qualifications. All job descriptions are signed and revised every 3 years.** **The hospital delineates the privileges of all independent healthcare providers based on their qualifications and job descriptions. All employees of medical and non-medical fields must sign on their job**

	description accepting responsibilities for their expected roles, services, limitations and responsibilities.
	Guiding measures:
	4.1 All staff members including (part-time, full time, temporary and/or voluntary) have job descriptions
	4.2 Staff required education level, experience, language/literacy, lines of reporting, roles and responsibilities are delineated in the job description.
	4.3 Individual healthcare providers who can practice independently have delineated privileges.
	4.4 The job description is signed and documented in the staff members' personnel file.
	4.5 Evidence of job description revision at least every 3 years.
5	**HC 5. The hospital has a standardized process to ensure the competency of clinical staff (those who provide direct patient care i.e. nursing, paramedical staff), excluding independent healthcare providers that can practice without supervision, and nonclinical staff (support staff who provide indirect patient care i.e. administrators, food services).** **It is critical to ensure that the staff qualifications and competences align with the position, job requirements and responsibilities. A standardized process is utilized by the senior staff leaders starting from pre-employment and throughout the 3 months' probation period allows the staff to implement their skills while being evaluated and supervised by the hospital. Yearly staff evaluations are important in 2 folds. First, is to assess any deficiencies in training and competences and subsequently directed to the required training courses. Second, is identifying high performing staff members who would be ideal for hierarchy progression. These yearly evaluations are kept in the workers employee file.**
	Guiding measures:
	5.1 The hospital has a uniform process to align clinical and nonclinical staff qualifications with the position.
	5.2 Evidence of initial clinical and nonclinical staff qualification evaluation performed by department/service/unit leaders during the 3 month probation period.
	5.3 Evidence of at least yearly clinical and nonclinical staff evaluation of each staff member.
	5.4 Evaluations of clinical and nonclinical staff are kept in the personnel file.
	5.5 Defined operational mechanism and management structure is in place to provide medical education in the hospital.
5	**HC 6. Each staff member has personnel file.** **Personnel files provide the hospital with a structured and systematic approach to standardize and store staff related information (CV, qualifications, job description…). Such organized, easy to access data allows the administration to quickly allocate personnel in case of need,**

	manage staff assessments, development and competences to maintain and improve a high-quality care.
	Guiding measures:
	6.1 The personnel file is uniform amongst all staff.
	6.2 The personnel file contains the following, but not limited to: 6.2.1 Staff qualification 6.2.2 Full curriculum vitae 6.2.3 Signed Job description 6.2.4 Working history 6.2.5 Performance appraisal 6.2.6 Orientation, continuing education, and training records. 6.2.7 Disciplinary actions 6.2.8 Attendance documentation 6.2.9 Confirmation of recruitment/appointment 6.2.10 Contractual agreement 6.2.11 Confidentiality agreement
4	**HC 7. All new employees (clinical and nonclinical) and healthcare professionals undergo an orientation phase.** **The staff orientation phase is essential for any new employee in all fields of work in a hospital. It helps a smooth and safe initiation into the workplace helping achieve more retention of new graduates while increasing clinical leadership skills in more senior staff members and overall staff satisfaction.** **The orientation phase ensures that the staff are aware of the general policies and procedures, especially emergency procedures (that may occur at any point in time) for all workers (including infection control, emergency preparedness, fire drill etc.), ethical framework, and their roles and responsibilities. Clinical and non-clinical workers should undergo unit/department/service specific orientations related to each worker's definite job description.** **The hospital needs to indicate within its policies the specific orientation period that each clinical, nonclinical and contract workers will undergo and has to be part of the employee file.**
	Guiding measure:
	7.1 The orientation phase for clinical, nonclinical and contract workers, covers the general hospital, the department/services/unit and their roles and responsibilities
	7.2 The orientation phase for volunteers, students and trainees, covers the general hospital and roles and responsibilities.
	7.3 The orientation is signed and documented in the clinical and nonclinical new employee's personnel file.
4	**HC 8. Staff satisfaction surveys are conducted** **There is a link between staff satisfaction and patient satisfaction, retention of staff, better quality of care and higher staff productivity. Therefore, conducting staff satisfaction surveys is critical to ensure that**

	processes at the hospital are modified to ensure staff are satisfied and thus retained. These surveys should follow a preset time interval (yearly or shorter in high stress units) and may include sections on the work itself, job reward, hospital management, work condition, practicing environment. Their data aid in highlighting areas for improvement and help the administration implement the required changes. **Documented evidence of improvement based on staff satisfaction is needed.**
	Guiding measures: 8.1 Evidence of yearly staff satisfaction survey conduction. 8.2 Results of staff satisfaction surveys are analyzed and improvements are documented and implemented accordingly.
6	**HC 9. Designated staff requiring training on resuscitation is delineated in hospital policies and procedures.** **High-quality resuscitation is vital for the survival of the patient. Adequate training on resuscitation practices critically affects the quality of resuscitation practices and the outcome on the patient. The hospital determines which certifications must be attained by all clinical staff to satisfy the risks and needs of the patient population and unit (i.e. all healthcare professionals should be able to recognize cardiac arrest and be certified in BLS).The staff that are designated to be trained on resuscitation, are identified in the hospital policies and if required, trained in more advanced resuscitative certifications based on their specific area of work (pediatric vs. adult, ATLS or ACLS …). These certifications must be, renewed to ensure staff competency and knowledge is up to date and be in staff member's employee files.**
COR	Guiding measures: 9.1 There is a policy identifying the staff that should attain resuscitative certifications and/or training and level of certification/training (i.e. Basic cardiac life support, advanced cardiac life support in adult, pediatric, neonatal). 9.2 The resuscitative certifications and/or training are valid and renewed accordingly. 9.3 Certifications and/or training are placed in personnel files.
6	**HC 10. Occupational health and safety program is developed and implemented.** **If patient safety is a pillar of healthcare, occupational safety for healthcare workers should not be any less important. The hospital needs to develop occupational health and safety policies and procedures, educate and train all staff achieving not only a higher quality of clinical care but also improving staff experience, safety and productivity. These policies are developed by a multidisciplinary committee, based on local laws/regulations and international guidelines (for e.g. OSHA, CDC, ILO etc.), encompassing members from all aspects of healthcare (medical, nursing, safety, infection control,**

	quality…), the hospital's administration (senior management, human resources…), and engineering (biomedical, infrastructure…). **Occupational health starts upon employment, by a full assessment by a member of the medical team (i.e. hospital employee's physician) to assess the medical needs of the new employee and getting all immunizations up to date, this data is kept in the employee's file, with set calendar dates for checkups and future immunization tests and boosters as per evidence based guidelines. The hospital staff are exposed to various and sometimes life-threatening hazards (physical, chemical, biological, psychosocial, ergonomic, and infrastructural…) during their presence in the work environment or while performing a certain task, depending on the service provided and the unit they are members of. The committee ensures that all potentially harmful situations or actions that could endanger the staff's physical and mental health are managed by policies and procedures (from a simple needle capping procedure training to equipment malfunction and nuclear/radiation exposure…).** **These policies, procedures should be evaluated regularly or when an issue arises by a set of indicators, identified by the committee to monitor the efficacy of the program in general or a specific action/environment targeting a high level of health and safety of staff. These indicators are checked at least on yearly basis and used to update or amend any part of the occupational health and safety program**.
COR	Guiding measures:
	10.1 The hospital has an occupational health and safety program that is managed by an occupational health and safety officer/coordinator and coordinated with quality management and patient safety program, risk management program, infection control program, medical administration and human resources.
	10.2 The hospital has a multidisciplinary occupational health and safety committee.
	10.3 The occupational health and safety program includes but is not limited to: 10.3.1 Pre-employment medical examination 10.3.2 Immunization program with evidence of results recorded
	10.4 Policies and procedures exist for at least the following: 10.4.1 Manual handling 10.4.2 No recapping of needles 10.4.3 Documented process for completing accidents and incident forms 10.4.4 Precautions during pregnancy 10.4.5 Guidelines on risk management in the event of e.g.: equipment failure, unsafe electrical appliances.

	10.4.6 Appropriate indications for barrier equipment (e.g. gowns, gloves, masks, eye protection) 10.4.7 Blood exposure 10.4.8 Spills management (e.g. chemicals, blood) 10.4.9 Employee illness 10.4.10 Radiation safety
	10.5 Evidence of continuous monitoring of occupational health-related indicators.
	10.6 Evidence of yearly evaluation and revision of the occupational health and safety program based on the indicators.
5	**HC 11. There is evidence of accident and incident reporting and a resolution procedure that includes:** **Reporting on accidents and incidents is a vital step to ensure that the same accident or incident is not repeated, if done properly. The hospital needs to have a just and systematic accident and incident reporting system (As part of the hospital's risk management/quality improvement program) that aims to objectively assess the reports and implement corrective procedures at the individual and system level in order to provide the best possible care.** **The first step, after establishing the accident and incident reporting and resolution procedure, is to raise the awareness of the staff to the availability of the procedure and train the staff to utilize the reporting system. The hospital needs to develop a decision tree/procedure that supports the hospital in taking systematic and objective decisions once an incident or accident is reported.** **Documented evidence for improvements is required.**
	Guiding measures:
	11.1 Type of accident/incident
	11.2 Action provided for accident/incident
	11.3 Evidence of Occupational Health & Safety data which includes: 11.3.1 Type of accident/incident 11.3.2 Cause of accident/incident 11.3.3 Time of day of accident/incident 11.3.4 Department where accident/incident occurred 11.3.5 Length of employment at the hospital (if applicable) 11.3.6 Analysis of all of the above using an evident appropriate tool.
	11.4 Evidence of planned intervention to prevent reoccurrence
6	**HC 12. The hospital ensures that all staff is safe from the radiation hazards. [FMS-8]** **Radiation can create potentially hazardous situations for both staff and patients if not handled properly. The hospital needs to develop a radiation safety policy that is approved, diffused, used as basis for education and training before being implemented and later on audited.**

	Several aspects of radiation safety should be well delineated within the policy. Most important, is the occupational exposure limits to radiation and maximum permissible occupational doses, ensuring protective shielding (aprons, glass radiation shields…) and dosimeters for all employees exposed to radiation. By policy, the dosimeters should be tested on regular basis, and according to results decisions to maintain safety of employees. **Another important aspect of the radiation policy is safeguarding radioactive and nuclear materials, labeling and handling requirements, area and room positioning, and radioactive packaging. The policy should note the staff that is allowed to handle nuclear and radioactive, and are well trained and educated on safe practices.**
COR	Guiding measures:
	12.1 A radiation safety policy is developed and implemented.
	12.2 Radio-active materials are properly labeled, and safely and securely stored and discarded.
	12.3 Nuclear materials are handled safely by qualified staff as per hospital's policies and procedures.
	12.4 The availability of lead aprons and gonad/thyroid shields to cover patients and staff needs is ensured at all times.
	12.5 Testing of the personal radiation dosimeters is conducted every 3 months, results are evaluated and actions are taken when test results exceed permissible levels.
	12.6 Training on radiation hazards is documented
5	**HC 13. Patients and staff are protected from unnecessary laser beams exposure, when applicable. [FMS-9]** **Laser beams can be used for many medical purposes such as kidney stone removal, removal of tumors, eye surgery etc. However, if the laser is not properly maintained, monitored, and operated, it can lead to serious injury at the level of the patient and the provider. Therefore, the need for the availability of safety equipment, warning signs and safe environmental measures for laser utilization. It is important to train the staff in contact with laser beams on the safety measures for the utilization of laser**
	Guiding measures:
	13.1 Staff is provided with protective eye goggles.
	13.2 Warning signs are available in areas where laser is used.
	13.3 Rooms, where the laser procedures are performed, is free from refractive surfaces as per hospital's policies and procedures and/or manufacturers' recommendations.
5	**HC 14. Staff (clinical and non-clinical) is educated, trained and evaluated for their role in attaining a safe and effective patient care facility. [FMS-25]** **Staff education on safe and effective patient care facility is critical when it comes to ensuring that the facility services are maintained and supportive of patient safety. On an annual basis all staff are trained on hospital-wide general facility procedures, or specific, department-based**

	procedures that are required to be known, especially in case of emergencies; such as fire response, medical gases and hazardous materials, wastes disposal and medical technology/utility systems operation. The training needs to be documented in the staff personnel file and competency testing performed to ensure that the staff have attained the objectives of the training and are able to respond and act appropriately
	Guiding measures:
	14.1 Education is provided annually on comprehensive facility management and safety programs.
	14.2 The staff's knowledge about their roles in different facility management and safety programs is tested. 14.2.1 Staff demonstrates/describe their role in response to fire, actions taken to eliminate or minimize fire and properly report. 14.2.2 Staff demonstrates/describe their role in disposing medical gases and hazardous materials and wastes. 14.2.3 Staff is trained to operate medical technology/utility systems
	14.3 Testing, results of the competency testing, and training are properly documented.
5	**HC 15. Violence prevention plan is implemented, evaluated and integrated into the occupational health and safety program. [OTHER-17]** **The National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty". A comprehensive violence prevention plan includes the following, management commitment and employee participation [i.e. members involved in the development of the plan, regularity of meetings etc.], worksite analysis and violence hazard identification, workplace violence hazard prevention and control, violence safety and training and recordkeeping and program evaluation.** **In case of occurrence of violence, the hospital needs to have policies and procedures to support the process of reporting and management including the availability of resources to aid staff that were affected by the violence.**
	Guiding measures:
	15.1 The hospital develops, implements and documents a violence prevention plan.
	15.2 Evidence of proactive assessment of areas with possible workplace violence and develops plans accordingly.
	15.3 The hospital implements a Zero-tolerance policy for forms of violence or aggressive behavior whether verbal, physical, or sexual.
	15.4 Support resources are available for staff enduring work violence.

5	**HC 16. Staff is regularly educated and trained on techniques to prevent and respond to violent and/or aggressive patient and family acts. [OTHER-18]** **In addition to the importance of establishing violence prevention plans, any occurrence of violence towards health care workers by a patient and/or family member can lead to a myriad of minor to serious physical and psychological effects. All such acts must be reported and documented. All Health care workers, but especially ones in high risk units (emergency rooms, psychiatric wards…) must be educated and trained, not only in prevention, but also in the early identification, management and resolution of these violent acts.**
	Guiding measures:
	16.1 There is a policy and process to report violent and/or aggressive patient and family acts.
	16.2 Staff is regularly educated and trained on techniques to prevent and manage violent and/or aggressive patient and family acts.
	16.3 Violent and/or aggressive patient and family acts are documented.
4	**HC 17. The hospital ensures a work-life balance of its staff.** **Healthcare professionals' burnout is a serious condition affecting all levels of medical and non-medical workers and has been shown to affect the quality and safety of care delivered. A main cause of burnout is a disturbance in work-life balance affecting healthcare workers at the physical, psychological and behavioral level. The hospital needs policies and staff education encouraging staff satisfaction, workload fairness, staff voicing complaints, occupational health and safety, sources of pressure, coping and interpersonal support.**
	Guiding measures:
	17.1 The workload is assigned, divided and reviewed in a way to ensure patient and staff safety.
	17.2 A policy is in place to guide staff member to express concerns and complaints.
	17.3 Evidence of staff education and training related to occupational health and safety and hospital's policies regarding workplace safety.
5	**HC 18. Staff education, skills and knowledge are defined and supported by the hospital executive management.** **Continuous education should be key when it comes to maintaining and improving patient services. Commitment from the hospital executive management is critical to maintain continuous education by supporting it through planning, budgeting and encouragement of staff to indwell in the training and education.** **This comes in line with the hospital's mission, quality improvement plan and other measures implemented at the hospital. Education sessions can be provided in an individual or group format, and can be at scheduled time intervals or upon any updates/policy changes.**

	The educational program is revised and updated on a yearly basis and staff attendance is documented in personnel files.
	Guiding measures:
	18.1 There is a policy for providing continuous education to staff
	18.2 Staff educational planning depends on the hospital's mission, services, medical technology and volume and mix of patients.
	18.3 The hospital ensures proper education on quality improvement processes related to quality and patient safety.
	18.4 Staff attendance to educational activities is documented in the personnel file.
	18.5 The educational program is revised and updated on a yearly basis.
5	**HC 19. The maintenance/advancement of the staff's knowledge and skills is ensured via ongoing in-service education and training.** **Based on each department/unit/service's data from previous or ongoing quality and safety improvement plans/incidents, targeted educational and training programs are set up as an essential part for reaching set goals in high level, quality patient care and safety. These training programs established by each department and revised yearly, can be done in house or utilizing out of hospital resources or training centers (i.e. simulation centers…). Staff need to have a structured yearly training program with a set number of hours needed (e.g. 30 hrs. for nursing). They must have the necessary time and resources to attend such courses and their attendance recorded and kept in their employment files.**
	Guiding measures:
	19.1 The hospital ensures the proper utilization of data and information resources including the results of quality and safety measures guides the staff education and training program
	19.2 Each department conducts an annual assessment of the continuing education requirements of staff
	19.3 The staff has time and resources to be involved in education and training opportunities.
	19.4 Staff attendance to educational activities is documented in the personnel file.
	19.5 The educational program is revised and updated annually.
	19.6 Agreement with external educational institutions with clear responsibilities of each party is documented.
	19.7 Structured nursing education program allocates a minimum of 30 hours annually, per nurse.
5	**HC 20. The organization ensures that the management and the staff receive proper education related to Information Management and use.** **Key personnel in both higher management and leaders of each department/unit receive data from several sources (quality improvement plans, quality indicators, audits both internal and external, financial revenue…) concerning the functioning of every department as a unit or the hospital as a whole. This data and**

	information are key tools to improve the services provided to the patients. Staff and management need to be trained on the means to integrate the data and information in improving the services and basing their decisions on evidence. Staff needing training and education on information management utilization is delineated. All education provided is documented in personnel files.
	Guiding measures
	20.1 Education sessions and training are provided to the relevant decision-makers and staff.
	20.2 The education is consistent with the roles and responsibilities of the staff.
	20.3 Evidence that education related to process improvements using indicators, data collection and analysis, decision making based on data and information, and data privacy and confidentiality is given to the relevant staff.
5	**HC 21. Organization, function and responsibilities of medical staff are defined and documented.** **Medical staff is an essential element of the hospital body which includes physicians, dentists and professions licensed to practice independently without supervision. The medical director provides guidance and leadership to the medical staff at the hospital, in addition to overseeing and defining the function and responsibilities of the medical staff. The hospital assigns a medical director that is qualified by education and training for this position. The medical director works within a delineated and documented job description, describing the role and responsibilities among which is implementing the hospital's bylaws with the help of the others heads of departments, divisions and services**
	Guiding measures:
	21.1 Medical staff organization, functions and responsibilities are defined and documented in bylaws.
	21.2 A qualified medical staff director manages the hospital medical staff.
	21.3 The medical staff director has a delineated and documented job description.
	21.4 The medical staff director and heads of medical department ensure the implementation of the medical staff bylaws.
5	**HC 22. The hospital has medical committees that are chaired by the medical staff director or as delegated. [GL-10]** **Committees are the operating structures of the hospital. Among the responsibilities of the medical staff director is ensuring the establishment of the different medical committees of which some are obligatory and others essential to help in the decision-making, reviewing and supervising the programs/plans/processes in the hospital. The members of each committee are carefully selected to**

	ensure a balanced and multidisciplinary team with complimentary qualifications in relation to the purpose of each committee. The terms of reference for each committee includes but not limited to, the purpose of the committee, the functions, the structure and working methods including reporting structure, meeting frequency, chair and committee members names, roles and responsibilities of the members, policies that may apply, obligations, date of assignment, date of committee members' reassignment and process review.
	Guiding measures
	22.1. The hospital has the following, but not limited to, medical committees including the head of departments: 22.1.1. Mortality and morbidity committee 22.1.2. Medical review committee 22.1.3. Medical Record Committee 22.1.4. Credentialing Committee 22.1.5. Occupational health and safety committee
	22.2. Terms of reference of the medical committees are delineated and documented.
6	**HC 23. A standardized process for medical staff (i.e. all physicians, dentists and professions licensed to practice independently without supervision) credentialing is delineated.** **Employing qualified staff is vital to provide high quality, safe care. While this is crucial, it is critical to validate the competency of healthcare providers via standardized process/procedure. Credentialing is the process of verifying qualifications to ensure current competence to grant privileges.** **The term credentialing should involve verification of education, training, experience, and licensure to provide services prior to the employment or appointment of the medical staff.**
COR	Guiding measures:
	23.1 There is a standardized process to manage medical staff credentialing.
	23.2 Medical staff allowed by laws and regulations to work independently are listed.
	23.3 Qualifications (i.e. education, licensure, registration) and credentials mandated by the law and the hospital are verified from the original source and kept in the medical staff's file (with reference from the ministry of health and the Lebanese order of physicians).
5	**HC 24. There is a process to appoint medical staff.** **The hospital has a process to appoint medical staff which includes reviewing the credentials and attaining approval from the governing body. The process must be in line with the hospital's bylaws and**

	nation's regulations (delineating the required credentials, privileges) and documented for all medical staff appointments. Unsupervised care is only allowed for fully credentialed medical staff. Meanwhile, supervised care is allowed under strict privileges limitations and documented method and frequency of supervision.
	Guiding measures:
	24.1 Medical staff appointment is suggested by the credentialing committee and approved by the governing body.
	24.2 Medical staff appointment is in line with laws and regulations.
	24.3 Medical staff can only provide unsupervised care if all credentials are verified, otherwise, medical staff can provide supervised care once licensure and/or registration have been verified.
	24.4 Supervision method and frequency are documented in the personnel file, as per applicable laws and regulations.
6	**HC 25. Medical staff has defined clinical privileges (with the collaboration of the Lebanese order of physicians).** **The hospital must have strict policies about clinical privileges and regulations of services as a manner of controlling the skill-set and competencies of staff, to ensure safe delivery of care. All medical staff working in a hospital are only allowed to provide care for which they have clinical privileges. These privileges must be clearly described, evaluated and updated for every medical staff on a regular basis. In specific cases temporary privileges are given on emergency basis.**
COR	Guiding measures:
	25.1 There is a policy and procedure to describe clinical privileges.
	25.2 There is a policy to grant temporary or emergency privileges.
	25.3 Medical staff provides services only within their hospital clinical privilege.
	25.4 Clinical privileges are regularly evaluated (at least every 3 years) and updated.
	25.5 Clinical privileges are provided for the medical staff and for any regulated health professional.
6	**HC 26. The performance of medical staff is continuously monitored and evaluated.** **To maintain clinical privileging, thus continuous provision of quality care, every medical staff's performance must be evaluated every 3 years (or as defined according to the requirements and complexity of the service). The evaluation is based on pre-defined criteria and process, several sources of information (satisfaction surveys, complication/medical error rates, mortality/morbidity rates, amount of continuous education etc.) done by multiple healthcare providers that are in close collaboration with the medical staff. All decisions taken based on these performance evaluations (extension of privileges, withdrawal, request for further training, supervised provision of service…) must be shared with the member of the medical staff,**

	documented in the personnel file, and any decision on privileges shared with all concerned.
COR	Guiding measures:
	26.1 There is an ongoing standardized process (i.e. using multisource feedback) to evaluate the performance of medical staff.
	26.2 The department/service/unit leaders in collaboration with the medical director evaluate periodically, at least every 3 years, the performance of the medical staff.
	26.3 Actions taken after performance evaluation are documented in the personnel file.
5	**HC 27. There is a process to reappoint and renew the medical staff's privileges.** **Reappointment and renewal of medical staff privileges process is implemented to ensure that the credentials and qualifications of the medical staff are still intact. This includes that all services provided by the medical staff and performance evaluation reports are cleared by privileging, the credentials of the staff remain valid, and the health of the staff permits them to provide care.**
	Guiding measures:
	27.1 Evidence that medical staff privileges are reassessed and renewed at least every 3 years.
	27.2 Evidence of medical staff reappointment and/or privilege renewal.
5	**HC 28. A standardized process for allied healthcare workers (i.e. psychologist, pharmacist, physiotherapist; excluding medical staff) credentialing is delineated.** **Similar to medical staff; allied healthcare workers, identified in hospital policies, including psychologists, pharmacists, and physiotherapist must be credentialed in a standardized process. For each of the allied healthcare workers, a list of qualifications and credentials must be clear and stated for any new employee. The validity and credibility of the qualifications (diplomas, licensure, registrations…) must be checked and verified from the issuing institution, to provide adequate safe care avoiding any legal implications. The process should include verifications of the validity of the required qualifications by law. Once verified these documents are kept in the personnel file.**
	Guiding measures:
	28.1 There is a standardized process to manage credentialing of allied healthcare workers (i.e. psychologist, pharmacist, physiotherapist) credentialing.
	28.2 Qualifications (i.e. education, licensure, registration) and credentials mandated by the law and the hospital are verified from the original source for all staff members, including full time, part time, visitor and locum, from the original source and kept in the personnel file.
	28.3 Qualifications and credentials are documented and kept in the staff's medical file.

Information Management (IM)

Introduction

The **Information Management** chapter relates to the practice of acquiring, analyzing and protecting medical information vital to providing quality patient care.
Information planning, handling and reporting requirements to ensure security, integrity and usefulness of data elements and information are addressed as well as the manpower and policies needed to for the management of patient medical data/records and administrative documents.

The **Information Management** chapter targets the following sections:

- Privacy, confidentiality, security and integrity of information
- List of standardized diagnosis codes, procedure codes, and approved symbols, abbreviations and definitions
- Health information system consistent with quality and patient safety
- Information in the medical records is comprehensive to facilitate the continuity and coordination of care
- Medical records are centralized and completed in an organized manner
- Retention and release of medical records follow policies

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
4	**IM 1. Internal and external needs assessment is performed while planning and developing the health information system.** **The development of a health information system should first assess the current internal practices (including information need, flows, reporting, etc.) within the hospital and then scale it up to external factors/requirement that should be considered within the health information system.** **Internal and external needs assessment can be done formally through meetings, or informally through issues/needs that are brought up to management. The hospital needs to take into consideration any requirements assigned by an external regulating body (i.e. Ministry of Public Health…).**
	Guiding measures:
	1.1 The hospital assesses the needs of the clinical and the managerial services while planning and developing the processes.
	1.2 External organization (Ministry of health, accrediting bodies, etc...) requirements/needs are considered during the planning phase of the information system.
5	**IM 2. The hospital ensures privacy, confidentiality, security and integrity of information.** **To ensure a proper diagnosis and treatment, healthcare professionals need to base their clinical decisions on information retrieved from the patient.** **For this reason reliability of information and its protection are key elements in the patient-physician relationship as it guarantees patients' privacy. Thus, only authorized staff should have access to the data and information of the patient.** **Moreover, the hospital should monitor any breach to confidentiality and avoid any reoccurrence to this breach, and have a valid plan B for any loss of information in case of disaster.**
	Guiding measures:
	2.1 A written process that complies with applicable laws and regulations is in place to protect the confidentiality, security, and integrity of data and information.
	2.2 Appropriate levels of security and confidentiality for data and information with its corresponding measures are identified and documented via a process.
	2.3 Access to different categories of data and information is limited only to the authorized staff.

	2.4 Monitoring compliance is ensured via a specified process by a delineated safety coordinator. 2.4.1 Incidents related to breaching confidentiality are reported, analyzed and actions are taken accordingly. 2.4.2 Measures to protect data and information in case of disasters are tested, evaluated and improvements are made accordingly. 2.4.3 The hospital has a system to avoid redundancy
5	**IM 3. The hospital abides by a list of standardized diagnosis and procedure codes.** **Standardized diagnosis and procedure are translated into codes that are used in healthcare to group diseases and describe a patient's medical condition and the provided therapy.** **Coding allows creating a uniform a standardized and common language among healthcare providers.** **The hospital should define the medical staff and committees that will implement, adapt and approve the diagnosis and procedures codes in line with the national standards.** **Utilization of the codes should also be monitored to check for compliance, deviation or non-compliance.**
	Guiding measures:
	3.1 The medical staff and other organizational structures (medical review committee and pharmacy and therapeutic committee) are involved in developing and approving the list based on national standards.
	3.2 The list of standardized diagnosis and procedure codes is reviewed periodically by the medical staff executive committee.
	3.3 The use of standardized diagnosis and procedure codes are monitored.
5	**IM 4. The hospital abides by a list of standardized symbols, and definitions.** **The use of standardized symbols and definitions should facilitate communication of information.** **The hospital should define the medical staff and committees that will develop and approve the list of symbols and definitions in line with the national standards.** **Utilization of the symbols is monitored to check for compliance, deviation or non-compliance and report them.**
	Guiding measures:
	4.1 The medical staff and other organizational structures (medical review committee and pharmacy and therapeutic committee) are involved in developing and approving the list based on national standards.
	4.2 The list of standardized symbols and definitions is monitored and reviewed periodically by the medical staff executive committee.
	4.3 The use of non-approved symbols and definitions is reported to the medical staff executive committee and documented actions are implemented.
4	**IM 5. The hospital implements a health information system consistent with quality and patient safety.**

	The health information system should help enhancing the quality and safety of the provided health care services as it works on integrating data from various processes and services, increases adherence to guidelines, improving surveillance, and decreasing medication errors. **The implementation of a health information system should be previously planned and tested to ensure the process before its implementation and further evaluated to identify strengths and areas of improvement for the system regarding patient safety.** **The health information system should also allow extraction of data to set indicators of performance that could be defined either by the hospital or required by national authorities (MoPH) to whom those indicators could be reported.**
	Guiding measures:
	5.1 The health information technology needs are anticipated while planning for the information management processes.
	5.2 Clinical and managerial staff, as well as the information technology stakeholders' opinions and concerns, are integrated into the process of selecting and using the health information technology system.
	5.3 The health information technology system is tested before being implemented.
	5.4 The organization evaluates the health information system based on principles of effectiveness and ability to maintain patient safety.
	5.5 The hospital creates and maintains through its information system, sets of indicators on quality and patient safety, performance, utilization and health status which are defined by and reported to the ministry of public health when required.
4	**IM 6. The operation of the management information system is maintained at the period of expected and unexpected downtime.** **With the increased reliance on the health information systems, a downtime may have negative effect on the processes of care if the hospital is not prepared to deal with it.** **Thus, it should assess the risk of occurrence, the impact of downtime, and consequently develop a plan for a backup process for data/information** **The staff should be trained to deal with the downtime to safeguard a regular patient care processes ensuring that the patients' information and services are safe and not affected by the downtime.** **The challenges and areas for improvement of this procedure should be documented**.
	Guiding measures:
	6.1 The organization has an implemented process for data and information backup.
	6.2 Hospital staff is informed and trained on the procedures and forms to be filled during downtime period.
	6.3 Patient's information is documented during the downtime period.

	6.4 The downtime system is tested for its effectiveness, reports are evaluated to identify the deficiencies and improvements are made accordingly.
6	**IM 7. The organization ensures adequate information is present in the medical records to facilitate the continuity and coordination of care.** **The medical record should contain all the relevant data of the patient's stay in line with the hospital's policy.** **This documentation starts with identification and should also include diagnosis, treatment and major landmarks of the stay.** **Filling should be done according to a standardized coding system.**
COR	Guiding measures:
	7.1 The medical record contains information necessary to identify the patient based on the patient identification policy.
	7.2 Information relevant to the patient's diagnosis is present in the medical record using standardized diagnosis codes when indicated.
	7.3 Proper documentation is in place to justify the treatment, its course and outcomes.
5	**IM 8. The medical record for patients admitted to the emergency department contains information related to the time of admission/discharge, treatment course, and patient condition.** **In case of an admission to the hospital through emergency department, the medical record should contain all the relevant information room concerning his stay.** **Thus, should be documented with the time of admission, triage results, treatment course, and recommendations for patient and healthcare providers, patient condition upon transfer to another department, discharge (when the patient is discharged) and follow up instruction and recommendations.**
	Guiding measures:
	8.1 Information related to the time of admission and the time of discharge is in place.
	8.2 Information related to triage results are documented.
	8.3 The treatment course and the recommendations after its termination are documented in the medical record.
	8.4 Patient's condition is mentioned upon discharge in the medical record.
	8.5 Medical record upon discharge contains follow-up instructions.
4	**IM 9. The hospital identifies those who are authorized to access and make entries in the medical records.** **The hospital should have a policy to regulate the authorization of individuals to access a medical record.** **The implementation of the policy should preview evidence of a proper training of staff member on how to make an entry on a medical record.** **The process should also preview identification of internal or external *(hacking)* breaches and consequent corrective measures**
	Guiding measures:

	9.1 There is a policy in place to identify the authorized individuals who are eligible to access the information and those who can make entries by an official stamp (in the absence of stamp, the name should be written clearly), written signature and initials, or by computer entry if present.
	9.2 The author, date and time of each entry are identified.
	9.3 There is evidence that the authorized individuals receive training on proper documentation and order entries.
	9.4 A process is in place specifying the proper correction of entries.
3	**IM 10. Medical records are available in one central place and filed in an organized manner.** **The hospital should have a process to keep the medical records available in an organized manner and easily accessible, at any time in by only authorized persons.** **The records should also contain inside of them sections for medical notes and orders, nursing notes, parameters, laboratory, imagery, procedures, surgical interventions, discharge summary, etc,,**
	Guiding measures:
	10.1 There is a process to ensure that past and current medical records are available and easily accessible by the authorized staff when needed at any time
	10.2 Medical records are organized into sections (for example, doctors' order, nursing notes, lab tests, etc...).
	10.3 The sections and information inside sections are organized in a chronological order.
4	**IM 11. A discharge summary is present in the records of all discharged patients** **Discharge summaries are critical in the continuity of care and documentation of the patients' stay at the hospital.** **They should be filled in a manner that highlights the main diagnosis, medical, any intervention or procedure as well as the patient's condition and instructions upon discharge.**
	Guiding measures:
	11.1 The discharge summary contains: reason for admission, diagnoses, course of treatment, medication list, list of implantable medical devices used and their identification, name of responsible doctors, summary of surgeries or procedures done, patient's condition at the time of discharge, medication to be taken at home and special considerations.
4	**IM 12. Retention of medical records follows specific policy.** **The hospital should abide by the laws and regulations and reflect those laws within the hospital's policies.** **If laws and regulations on medical record retention do not exist, the hospital should develop its own policy** **The policy could include where the medical records will be retained, the time frame to retain them, how they will be discarded, and contingency plan if the medical records were lost or deteriorated before the discarding timeframe.**
	Guiding measures:

	12.1 The retention of medical records abides by applicable laws and regulations and based on hospital's policies and procedures.
	12.2 The information inside the medical record is discarded appropriately when the retention period is complete.
	12.3 A process for safe storage of medical records to protect from loss and deterioration
4	**IM 13. The release of medical records follows specific applicable laws and hospital's policies.** **The hospital should abide by the laws and regulations on the release of medical records and reflect those laws within the hospital's policies.** **If laws and regulations on release of medical records do not exist, the hospital should develop its own policy** **The hospital's policy should include the information that can be released, the person responsible to approve the release and the process to access to info and release it.** **It is the hospital's responsibility to ensure that the information is released only to the properly authorized person.**
	Guiding measures:
	13.1 The hospital has a process to release medical records for patient care purposes (Inpatient, outpatient and Emergency department) as well as for non-patient care purposes (e.g., research, utilization management, quality improvement, morbidity and mortality, and governmental requests).
	13.2 The approval for the release of medical records for non-patient care purposes is in place.
4	**IM 14. Medical records are checked for its completeness.** **The hospital should define policies and procedures to reviewing medical records regularly, at least on a quarterly basis, by a multidisciplinary team regarding the quality and consistency of filling content.** **The results of the review should also be shared and analyzed to decide on corrective actions and improvement plans.**
	Guiding measures:
	14.1 Medical records of the discharged and/or active patients are reviewed at least quarterly or as per applicable laws and regulations and based on hospital's policies and procedures.
	14.2 Reviewing of the medical records' content is multidisciplinary involving physicians, nurses and other authorized staff.
	14.3 Medical Records are reviewed for their timeliness, legibility, completeness and content as required by laws and regulations and based on hospital's policies and procedures.
	14.4 The results of the checking process are analyzed and corrective actions are taken accordingly.

Facility Management and Safety (FMS)

Introduction

The **Facility Management and Safety** chapter addresses the hospital and facility structures, safety measures for staff, patients and resources as well as the management plans and programs. Staff orientation and involvement in safety planning, orientation and drills are specified. Leadership support and commitment is highlighted as one of the key elements in the implementation of the FMS chapter

The chapter also addresses Leadership and Planning, Safety and Security, Hazardous Materials, Disaster Preparedness, Fire Safety Medical Technology, Utility Systems, Facility Management Program Monitoring, and Staff Education.

The **Facility Management and Safety** chapter targets the following sections:

- Facility management and safety program(s) development
- Hospital plans and budgets for upgrading or replacing key systems, buildings, or components.
- Program to ensure a safe physical facility through inspection and planning
- Program to provide security for patients, families, staff and visitors.
- Radiation hazards safety
- Emergency management program to respond to emergencies, epidemics, internal and external disasters, and bomb threats
- Fire and non-fire emergencies prevention, early detection, and suppression
- Medical technology inspection, testing, and maintenance
- Staff attainment of safe and effective patient care facility

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk score	Standard and Guiding measures
5	**FMS 1. The hospital complies with laws and regulations regarding facility management.** **Hospital infrastructure and clinical operations byproducts and wastes are subject to a number of nationally applicable laws and regulations (e.g. on radiation safety, medical waste, oxygen generators, fire safety) that should be known, implemented and verified by the hospital's facility management departments and the executive management.**
	Guiding measures:
	1.1 The executive management and the involved professionals know the applicable laws and regulations and other requirements related to hospital's facility and hospital's policies and procedure.
	1.2 The applicable laws and regulations regarding facility management are implemented by the hospital's executive management.
5	**FMS 2. Facility management and safety program(s) is (are) developed by the hospital executive management.** **The department(s) involved in Facility Management and Safety (FMS) need to elaborate detailed programs relative to all areas of FMS. These programs should describe the existing systems, as well as their preventive maintenance plan and servicing, their risk management plan with response to certain potential faults or extreme cases that could arise.**
	Guiding measures:
	2.1 The documented and the approved program(s) address(es),but not limited to, the following areas: 2.1.1 Safety of the building 2.1.2 Security 2.1.3 Radiations 2.1.4 Hazardous materials 2.1.5 Fire safety 2.1.6 Medical technology 2.1.7 Utility systems
	2.2 The program(s) is (are) up-to-date and fully implemented.
	2.3 The program(s) involve(s) regular testing, inspection and maintenance in all areas from (2.1.1) to (2.1.7).
	2.4 The hospital has a process in place to update/upgrade the existing program(s) at least annually or when necessary or replace it (them)
	2.5 Policies, procedures and performance will be reviewed to identify opportunities for improvement
	2.6 The hospital executive management ensures the compliance of the independent entities (when present) with the components of the program(s) mentioned from (2.1.1) to (2.1.7).

	2.7 If one or more of the above mentioned program measures is (are) outsourced, the qualification of the third party shall be carried out in respect to contract/agreement in place showing responsibility of parties
	2.8 Requirements for programs dealing with extreme and urgent situations are in place.
	2.9 The hospital has a medical device ageing management plan to monitor, service, and if necessary replace components to prevent obsolete equipment.
3	**FMS 3. A safety committee is in place to provide oversight of the facility management and safety program.** **Facility management and safety handles a complex environment involving multiple departments and users from different disciplines. Therefore, a multidisciplinary safety committee constituted from the involved departments and user representatives should oversee the FMS program, raise and discuss any concerns, report any incidents/problems, as well as identify any risks or hazards in the hospital infrastructure or equipment.**
	Guiding measures:
	3.1 The safety committee is multidisciplinary involving representatives from relevant departments such as safety, security, housekeeping, infection control, risk management, biomedical engineering, laboratory, medical staff (including staff from the emergency department), nursing, radiation safety, maintenance, and quality management.
	3.2 The committee performs regular and as needed safety tours for identifying risks and hazards related to the facility and evaluating the staff knowledge, as per policies and procedures.
	3.3 The results of the tour are evaluated and corrective and preventive actions are taken accordingly.
4	**FMS 4. One or more individuals oversee(s) facility management and safety program(s) during its planning and implementation.** **Depending on the hospital capacity and infrastructure, FMS can be managed by one or more individuals, in one or more specialized departments.** **These individuals need to have the necessary technical background and experience, in addition to management skills/experience, in order to oversee and guide the application of the FMS program in its different aspects (maintenance, risk management, education and training, project management).**
	Guiding measures:
	4.1 The individuals are qualified by education, training and experience.
	4.2 Evidence of training and experience of the individual(s) is documented.

	4.3 Planning and implementation of the program includes, but not limited to, the following: 4.3.1 All aspects of the program, such as developing plans and providing recommendations for space, technology, and resources. 4.3.2 Implementing the program. 4.3.3 Educating staff and new orientees. 4.3.4 Testing and monitoring the program. 4.3.5 Periodically reviewing and revising the program. 4.3.6 Providing annual reports to the governing body on the effectiveness of the program
5	**FMS 5. The hospital plans and budgets for upgrading or replacing key systems, buildings, or components based on facility inspection and hospital's policies and procedures to ensure safety and security of the facility.** **Systems maintenance (including replacement of obsolete or dysfunctional systems or facilities) is key to ensure safe continuity of operations and prevent disruptions and other risks (physical, safety, and even legal risks) for the hospital staff, patients, visitors and operations. Therefore, maintenance and replacement costs should always be provisioned in yearly budget planning and in supplier or outsourced contracts when maintenance cannot be entirely provided internally.**
	Guiding measures:
	5.1 The plan for budgeting meets applicable laws and regulation and hospital's policies and procedures.
	5.2 Resources are provided by the hospital to ensure safety and security.
5	**FMS 6. The hospital plans and implements a program to ensure a safe physical facility through inspection and planning.** **Physical safety in the hospital facilities is one important aspect of FMS and needs to be ensured by design and through regular rounding from the responsible department/staff.** **Important physical safety measures/systems include those important for patient safety (nurse call system on bedside and in patient toilets, bed barriers for patient fall prevention, absence of elevated steps between room and toilet entrance, non-slippery ground, distance of bed from toilets, appropriate lighting etc.), personnel and visitor safety (stairs and corridor handles, proper internal and external lighting, waiting rooms for patients and families, etc.) and facility safety (surveillance cameras with recording capacity installed in main areas of the hospital and in parking, fire alarm system and components, emergency exits, proper warning and directive signs, etc.)**

	Patient areas of the hospitals should be accessible to vulnerable individuals and individuals with special needs.
	Guiding measures:
	6.1 Current inspections of the hospital's physical facilities are documented by the responsible department/staff
	6.2 The program includes assessing safety and security of patients and staff during times of construction, renovation or demolition, and implementing strategies to reduce risks in collaboration with the infection prevention and control team.
	6.3 The hospital designs the work area to ensure safety through the following: 6.3.1 Natural surveillance through use of equipment and attendance by safeguards to minimize/eliminate risks related to the physical environment. 6.3.2 Continuous maintenance of grounds and machines/equipment. 6.3.3 Installation of proper internal and external lighting. 6.3.4 Allocation of specific rest rooms for staff. 6.3.5 Ensuring a well-lit, safe, and a protected staff parking. 6.3.6 Proper establishment of waiting areas in terms of furniture and placement of doorways.
	6.4 Safety measures and equipment are available to ensure safety of patients and staff
	6.5 Special parking spots, wheel chairs, handrails in the corridors and stairs are present to ensure safe hospital environment to the vulnerable and individuals with special needs.
	6.6 Warning and directive signs are present throughout the hospital to ensure safety.
4	**FMS 7. The hospital plans and implements a program to provide security for patients, family caregivers, staff and visitors.** **Security services are needed to ensure physical safety of personnel, physicians, patients and visitors, through restricting access, identifying and handling potential threats from individuals. They are in charge to ensure that hospital accessibility policies (e.g. visiting hours, number of patient visitors/accompaniment and related conditions) are respected through their presence and regular rounding in the hospital premises.**
	Guiding measures:
	7.1 The hospital ensures a secure environment through monitoring and inspecting security areas.
	7.2 Staff and other individuals entering the hospital's identified restrictive areas are properly identified.
	7.3 The security risk areas are identified, documented and continuously monitored to prevent the access of the public.

6	**FMS 8. The hospital ensures that all staff is safe from the radiation hazards. [HC-12]** **Radiation safety concerns all hospitals equipped with X-Ray emitting equipment (Conventional radiology equipment, CT-Scanners, Interventional radiology equipment, etc.) and nuclear medicine devices.** **Exposure of personnel, visitors and patients to dangerous radiation/radioactive levels can lead to carcinogenic effects, and therefore all preventive measures (lead walls, lead aprons, gonad/thyroid shields, dose minimization, etc.) should be applied by the hospital in compliance with the national regulations on radiation safety and recommendations of the Lebanese Atomic Energy Commission.** **Regular measurements of personal radiation dosimeter levels for all concerned workers is important to quantify their exposure, and radiation leak tests are important to perform during facility radiation safety audits.** **Training on the different risks related to X-Ray radiation and handling radioactive and nuclear materials is performed to all concerned personnel, and documented.**
COR	Guiding measures:
	8.1 A radiation safety policy is developed and implemented.
	8.2 Radio-active materials are properly labelled, and safely and securely stored and discarded.
	8.3 Nuclear materials are handled safely by qualified staff as per hospital's policies and procedures.
	8.4 The availability of lead aprons and gonad/thyroid shields to cover patients and staff needs is ensured at all times.
	8.5 Testing of the personal radiation dosimeters is conducted every 3 months, results are evaluated and actions are taken when test results exceed permissible levels.
	8.6 Training on radiation hazards is documented
5	**FMS 9. Patients and staff are protected from unnecessary laser beams exposure, when applicable. [HC-13]** **There are several types of surgeries which could use lasers in the operating room. In this case, laser-safe eye protection with appropriate wavelength and optical density must be worn by all health care workers in the room, as exposure to high level lasers may cause depigmentation, severe burns and possible damage to underlying organs. The design and construction of the interventional room should ensure that laser beams are not reflected inside and outside the room.**
	Guiding measures:
	9.1 Staff is provided with protective eye goggles.
	9.2 Warning signs are available in areas where laser is used.

	9.3 Rooms where the laser procedures are performed, is free from refractive surfaces as per hospital's policies and procedures and/or manufactures' recommendations.
4	**FMS 10. The hospital has a program in place for the inventory, handling, storage, and use of hazardous materials.** **Hazardous materials are substances that could harm human health or the environment if not handled the right way. There are many different kinds of hazardous materials, including: chemicals (such as some disinfectants and cleaning agents), drugs (such as chemotherapy agents), radioactive material that is used for x-rays or radiation treatments, biological material that may carry harmful germs, or medical gases used for anesthesia.** **These materials need to be stored in certain conditions so as to prevent certain risks (flammability, contamination, etc.) and some require official licensing or auditing from the relevant authorities.** **Documented training about storage, handling of hazardous materials, in addition to post-exposure signs/symptoms and treatments should be performed to all concerned staff.** **Material Safety Data Sheets (MSDS) containing necessary safety hazards for each material and how to deal with a contamination situation should be available in storage areas, concerned departments where these materials can be used and in the Emergency Department and regularly updated.**
	Guiding measures:
	10.1 The program establishes and implements: 10.1.1 Safe handling, storage and use of hazardous materials and wastes. 10.1.2 Proper protective equipment and procedures and the proper use of spill kits. 10.1.3 Proper labelling of hazardous materials and wastes. 10.1.4 Documentation requirements, including any permits, licenses, or other regulatory requirements.
	10.2 Evidence of staff education and training on signs and symptoms of exposure to hazardous materials and the appropriate treatment according to Material Safety Data Sheets (MSDS).
6	**FMS 11. A program for control and disposal of hazardous materials and wastes is in place.** **Spills of and exposures to hazardous materials need to be promptly reported to the risk management/ patient safety team so that an investigation could be performed regarding the incident and the risk factors involved.** **Procedures regarding safe handling, spill containment should be accessible to concerned staff at all times. When possible spill kits**

	should be available so as to standardize and improve accessibility to proper protective equipment and all items used for spill control. Finally, hazardous wastes raise an environmental impact issue that need to be managed in a professional way so as to lower the involved risks. **Training on the aforementioned themes needs to be performed to all concerned staff.**
COR	Guiding measures:
	11.1. The hospital has a reporting and investigation mechanism for spills, exposures, and other incidents.
	11.2. The hospital ensures proper management of spills and exposures, including the use of proper protective equipment.
	11.3. Current Information related to safe handling, spill-handling procedures and procedures for managing exposures of hazardous material are accessible at all times.
	11.4 Evidence of staff training on dealing with hazardous wastes.
6	**FMS 12. An emergency management program is developed, maintained and tested to respond to emergencies, epidemics, internal and external disasters, and bomb threats** **An emergency management plan is an integrated planning approach to any realistic internal or external threats to an organization including natural disasters, terrorist attacks, and any other incidents that could threaten the operational capacity of a hospital, such as a high influx of patients or an epidemic outbreak. Such a plan should address the following themes: determination of the types of disasters with their likelihood and consequences, the pre-disaster planning phase including elaboration of procedures/training/simulation, disaster procedure activation and communication, disaster team and chain of command with defined roles and responsibilities, hospital capacity increase options, triaging of patients and zoning according to patients' condition.**
COR	Guiding measures:
	12.1 A process exists to properly identify the impact of each type of disasters on care and services.
	12.2 The program identifies the response to emergencies including the following: 12.2.1 Determining the type, likelihood, and consequences of hazards, threats, and events. 12.2.2 Determining the hospital's role in such events. 12.2.3 Communication strategies for events. 12.2.4 Managing of resources during events, including alternative sources. 12.2.5 Managing of clinical activities during an event, including alternative care sites. 12.2.6 Identification and assignment of staff roles and responsibilities during an event

	12.2.7 Managing emergencies when personal responsibilities of staff induce conflicts with the hospital's responsibility for providing patient care.
	12.3 The program is tested annually, outcomes are evaluated and improvements are made accordingly.
5	**FMS 13. The hospital develops and implements a program for prevention, early detection, and suppression in response to fire and non-fire emergencies.** **A hospital fire emergency program should be elaborated, implemented and regularly tested in order to ensure a prompt response to risk of fire in the hospital.** **This program should identify the risk of fire in the different areas of the hospital, distribution smoke detectors and fire extinguishers as well as distribute and display the proper instructions.** **Upon notification of a fire risk or occurrence, the program should specify the steps and responsibilities regarding the incident management, including fire and smoke containment and the evacuation procedure through safe fire exits.**
	Guiding measures:
	13.1 The hospital has a program to ensure that inhabitants inside the facility are safe from fire, smoke or other non-fire emergencies.
	13.2 Fire risk is assessed and documented.
	13.3 The hospital ensures the early detection of fire and smoke.
	13.4 The program/strategy/plan includes fire and smoke containment.
	13.5 Safe fire exits are not obstructed or locked, and clearly illuminated with exist signs as per hospitals' policies and procedures.
	13.6 "No smoking" policy is strictly implemented inside the hospital and applied to all staff, patients and visitors.
5	**FMS 14. Fire and safety program is tested on regular basis, including any devices related to early fire detection/suppression.** **Regular technical verification of the correct functioning of the fire alarm system (smoke detectors, control panel, notification devices, and other components) needs to be implemented and documented.** **Fire drills should also be implemented in order to familiarize and reinforce proper practices (including proper use of the fire extinguishers), evacuation procedure and routes whenever a fire alarm sounds. Fire drills are required at least annually for most facilities.**
	Guiding measures:
	14.1 Evidence that fire drills are conducted regularly through different time periods, in all departments and to all staff on regular basis, corrective action are documented and improvements are made accordingly.
	14.2 Staff demonstrates the proper actions taken in case of fire including the use of different kinds of fire extinguishers.

	14.3	Inspection, testing, and maintenance of equipment and fire detection/suppression systems are done on regular basis and properly documented, corrective actions are documented and improvements are made accordingly.
6	**FMS 15.**	**The hospital develops and implements a program for inspecting, testing, and maintaining medical devices and equipment and documenting the results.** **Medical equipment should have a complete maintenance history, showing all episodes of preventive and corrective maintenance since its acquisition.** **Preventive maintenance and calibration lower the probability of equipment faults and optimizes costs and equipment availability and needs to be determined according to the equipment's age, condition and to the manufacturer's recommendations.** **Given the relatively high number of medical equipment in most hospitals, planning and management of the preventive maintenance activity of medical equipment should be done using an information system containing the inventory of all of the equipment, and if possible permitting direct documentation in the system of maintenance actions and associated internal and external reports.** **In order to derive best results for equipment performance and safety, training should be done for each type of equipment both to the biomedical engineering team and the concerned users. The latter need to promptly report any faults, misuse or adverse clinical events related to the equipment performance.**
COR	Guiding measures:	
	15.1	Hospital executive management develops policies and procedure to ensure the quality and safety involving medical devices and equipment usage.
	15.2	The hospital shall have an organized list of approved medical devices based on the medical devices registered at the Ministry of Public Health.
	15.3	Hospital has a standardized procurement process for medical equipment.
	15.4	Hospital has an information system to manage the inventory and the maintenance activities of medical technology
	15.5	Inspection and testing of a medical technology is performed and according to its age, use, and manufacturers' recommendations and after the introduction of new equipment.
	15.6	Preventive maintenance and calibration are conducted based on the manufactures recommendation and properly documented.
	15.7	Equipment maintenance and repairs are documented at all times.
	15.8	Evidence that staff is trained and qualified for the medical technology services being provided.

	15.9 Evidence that staff is trained to report medical errors and near misses related to the use of medical devices.
	15.10 Evidence that hospital staff is trained to safely operate medical equipment.
6	**FMS 16. The hospital has a process in place that handles expired/outdated and damaged implantable medical devices** **Implantable medical devices (IMD) are implantable biomedical devices placed in the human body during surgery or other clinical intervention to serve a specific function. Commonly used IMDs include artificial joints, breast implants, bone, muscle, and joint fusion hardware, implanted vascular access devices, vascular stents and pacemakers.** **As these devices are mostly invasive, and some controlling vital functions, any errors or malfunctions can induce severe clinical adverse events. Hence, such devices should be monitored and any errors, near misses and adverse events should be promptly reported to the hospital patient safety department and to all relevant entities as per national regulations.** **While the use of expired/outdated IMDs is still controversial, especially in the context of countries with limited resources, the hospital needs to ensure a process to identify expired/outdated IMDs and decide about criteria for disposal or limited use, in compliance with ethical frameworks and national regulations.**
COR	Guiding measures:
	16.1 The hospital identifies expired/outdated or damaged implantable medical devices through a specific process.
	16.2 The hospital abides by a process for the disposal of the expired/ outdated implantable medical devices.
	16.3 The hospital has a process to identify, monitor and report medical errors and near misses related to implantable medical devices
5	**FMS 17. A system for monitoring and acting on medical technology hazard notices, recalls, reportable incidents, problems and failures, exists.** **Medical equipment problems need to be systematically documented including all investigations and interventions performed, in order to identify recurrent failures or incidents/trends/ suboptimal performance, and engage accordingly appropriate actions to prevent patient safety incidents.** **When safety incidents related to equipment happen, they need to be promptly reported to the risk management/patient safety department(s) for investigation and recommendations. Critical equipment (such as respirators, anesthesia machines, patient monitors, etc.) should have back-ups in the event of prolonged downtime of failed equipment, to prevent shortages that may affect patient safety and quality of care.**
	Guiding measures:

	17.1	Investigating and following-up on equipment failures follows a specific process.
	17.2	History record for the maintenance schedule, failure incidence, and repairs done, is in place.
	17.3	Reporting death, serious injuries or any incident related to medical technology follows a certain process.
	17.4	A back-up for critical equipment exists in periods of prolonged downtime as per hospital's policies and procedures.
4	**FMS 18.**	**The hospital develops and implements a program for effective and efficient operation of the utility system.** **Utility systems (such as electricity, water, chillers, steam boilers, etc.) are critical to ensure normal operations in the hospital. Therefore, regular inspection of these systems and all of their components is important to ensure they are functioning properly. A maintenance program including daily inspection of certain components and weekly or monthly inspection and maintenance for other components should be rigorously planned and implemented by the facility management team. The frequency of inspection and maintenance depends on the utility system's age and condition, as well on its criticality. Sufficient capacity in terms of technicians should be available in order to perform the inspection, preventive and corrective maintenance. Availability of a Building Management System integrated with major utilities can provide instantaneous monitoring and alerts to the maintenance team in case of faults or incidents.** **In the event of a fault or incident, and especially in urgent situations, access to the map distribution of the utility systems, as well as the clear labeling of their components, controls and connections, can become of major importance, highlighting the need for clear system labeling and availability at all times of the system inventory, status and map distribution.**
	Guiding measures:	
	18.1	The hospital has inventory for its utility systems and their respective map distribution.
	18.2	Utility systems and components are inspected, tested, maintained and improved when necessary.
	18.3	All the operational components of the utility systems are identified through documented inspections and maintenance.
	18.4	The documented intervals for inspecting, testing and maintaining all operating components of the utility systems on the inventory are based on specific criteria.
	18.5	Utility system controls are properly labelled.
	18.6	The hospital has adequate number of qualified staff to manage the utility system.

6	**FMS 19.**	**Clean water and electrical power are available at all times and alternative resources of water and power supply exist in period of system disruption, contamination or failure.** **Backup sources for main electrical current (for example fuel powered hospital generators backed up by Uninterrupted Power Supply system) and water (artesian wells and/or backup reservoirs) are required to ensure continuous supply of power and water to hospital services.** **These alternative sources should be tested regularly, with a frequency to be set with regards to the frequency of the power or water supply failure.** **In the hospital context, a significant number of critical departments (ER, ICU, Operating Rooms, Dialysis, etc.) and support departments (Pharmacy, Laboratory, Medical Imaging, etc.) are completely dependent on the availability of the electric current to ensure patient and material safety.** **In case of major power failure or fuel shortage for generators, such pre-designated critical areas and services should be given priority in matter of power and water supply.** **A minimal stock of fuel should be stocked in the hospital to ensure continuity of service ideally up to a week in case of general fuel shortage. Installation of solar powered energy with or without batteries could minimize to a certain extent reliance on fuel, and contribute to ensure power to most critical areas during the shortage period.**
COR	Guiding measures:	
	19.1	Clean water and electrical power are available 24 hours per day, 7 days per week.
	19.2	A back up electrical system is in place and tested regularly.
	19.3	Areas and services which are at the greatest risk are identified in case of power failure and water interruption or contamination.
	19.4	Alternative resources of water/electrical power are tested at least bi-annually or more frequently if required by local laws and regulations, manufacturers' recommendations, or conditions of the source of water/electricity and the results of the testing are properly documented.
	19.5	The hospital ensures the availability of necessary amount of on-site fuel to operate the emergency source of power in case it is fuel-dependent.
5	**FMS 20.**	**Water quality is monitored by designated individuals or authorities.** **Water fed into the hospital through pipelines need to run through a number of different filters in addition to chlorination before being used in hospital departments.**

	Physicochemical and microbiological analysis of water used in the hospital is required at least quarterly to prevent contamination of patients and personnel by pathogens and chemical agents (e.g. mercury, chlorine, nitrate), documented and any discrepancy with regulatory requirements identified and corrected. **As for dialysis water, monthly testing for chemical contaminants (TDS, total chlorine, endotoxin) and microbiological contaminants is performed as per regulatory requirements to prevent any adverse patient outcomes from waterborne pathogens and endotoxins.**
	Guiding measures:
	20.1 Monitoring water quality, including the water used in renal dialysis, is done at least quarterly or more frequently based on local laws and regulations, conditions of the sources for water, and the results of the testing are properly documented.
	20.2 Evidence of a double reverse osmosis system and an endotoxin-retentive filter.
	20.3 Evidence that water fed into the hospital through pipelines is disinfected by chemical or heat.
	20.4 Evidence of regular testing of dialysis water quality for bacterial and chemical contaminants (TDS, total chlorine, endotoxin monthly)
	20.5 The outcomes of testing water quality are evaluated and actions are taken accordingly.
6	**FMS 21. The hospital develops and implements a program for operating the medical gas system.** **Provision of medical gases, such as oxygen (O2), carbon dioxide (CO2), nitrous oxyde (N2O) and compressed medical air, needs to be continuous since its disruption can lead to clinical adverse events or prevent clinical activities.** **Therefore, testing medical gas (regarding criteria such as purity, static pressure and pressure variation with increased flow) is conducted regularly and properly documented. Existence of sufficient stock for the different medical gases should be verified including secondary oxygen cylinder ramps for the medical oxygen system. In case of oxygen concentrators, initial and regular certification should be performed according to regulatory standards.** **Emergency shut-off valves should be available in all units, because in the event of a fire, it is important to shut off the oxygen supply to an area on fire.** **FMS technicians in addition to concerned staff in clinical wards need to be trained on closing the shut-off valves when needed.**
COR	Guiding measures:
	21.1 Testing medical gas is conducted regularly and properly documented.

	21.2 The hospital ensures that the central station for medical gases is safe and secure.
	21.3 Emergency shut-off valves are available in all units of patient care.
	21.4 Trained staff is/are responsible for closing the shut-off valves when needed.
5	**FMS 22. A plan for heating, ventilating and air conditioning is in place.** **Heating, Ventilation, and Air Conditioning (HVAC) systems in the hospital allows for optimal conditions of temperature and humidity for patients rooms and other critical departments (OR, stock rooms, pharmacy, etc.) , in addition to ensuring proper air flow direction, circulation and pressure gradients to minimize contamination between isolated and clean areas .** **Inspection and regular controls of the HVAC system performance needs to be available at all times in designated units and departments.**
	Guiding measures:
	22.1 A preventive maintenance plan is performed periodically for heating, ventilating and air conditioning.
	22.2 Proper air flow design is ensured in the operating rooms, isolations rooms and central sterilization department.
	22.3 Control of temperature is ensured at all times in all units and departments
	22.4 Control of humidity is ensured at all times in designated units and departments.
3	**FMS 23. The hospital ensures the design of a proper sewage handling and disposal.** **Discharging wastewater generated from the hospital into the municipal sewage system needs to be done after adequate pretreatment to minimize the risk of environmental contamination with hazardous and infectious waste, and this process needs to be elaborated in a hospital procedure.** **This pretreatment could include acid–base neutralization, filtering to remove sediments, or autoclaving samples from highly infectious patients.**
	Guiding measures:
	23.1 Sewage is handled and disposed in a safe and sanitary manner, as per hospital policies and procedures.
4	**FMS 24. The hospital implements a program for managing laundry services.** **Instructions about correct washing processes according to the laundry equipment's manufacturer's recommendation need to be communicated to laundry staff, in order to prevent faults with the machines.** **Laundry equipment are regularly inspected and tested to prevent faults and downtimes, and water density regular measure recommended to optimize equipment performance.**

	Guiding measures:
	24.1 Policies and procedures are in place to ensure proper implementation of the program.
	24.2 Laundry equipment are regularly inspected and tested.
	24.3 Proper linen handling is ensured by all staff.
	24.4 The washing process must be clearly documented and follow the manufacturers' instruction for specific washing loads.
	24.5 Clean and disinfected linen transport vehicles are covered during transport of linen.
5	**FMS 25. Staff is educated, trained and evaluated for their role in attaining a safe and effective patient care facility.** ***[HC-14]*** **Staff knowledge about a number of facility management themes such as fire safety, medical gases, waste management, and correct manipulation of equipment and utility systems is important in order to optimize their response to a number of emergency situations in addition to improving the maintenance and preventing incidents and faults with these systems.** **Hence, targeted FMS training should be delivered to concerned hospital staff regarding these aforementioned themes, and testing/competency tests performed to ensure the information is well assimilated.**
	Guiding measures:
	25.1 Education is provided annually on comprehensive facility management and safety programs.
	25.2 The staff's knowledge about their roles in different facility management and safety programs is tested. 25.2.1 Staff demonstrate/describe their role in response to fire, actions taken to eliminate or minimize fire and properly report. 25.2.2 Staff demonstrate/describe their role in disposing medical gases and hazardous materials and wastes. 25.2.3 Staff is trained to operate medical technology/utility systems.
	25.3 Testing, results of the testing, and training are properly documented.
5	**FMS 26. Indicators of the facility management programs are collected and analyzed.** **FMS processes are critical for the hospital operations and need to be monitored regularly in order to recognize early trends or performance problems.** **Indicators for performance monitoring could include a list of outcome indicators (such as maintenance costs as percentage of asset value, mean maintenance response time per issue criticity, equipments/systems with more than X repeated faults/year, fire**

	false alarm rate, etc.), and a list of process indicators (such as on-time preventive maintenance according to schedule). **Discussion of indicator results ought to be done at the leadership level of the department and also quarterly at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:
	26.1 Monitoring indicators are collected, analyzed, outcomes are evaluated and corrective actions are taken accordingly.
	26.2 Medical technology, equipment, and systems are upgraded or replaced based on the monitored indicators.
	26.3 Reports on monitoring indicators are properly communicated with the hospital executive management on quarterly basis.

Medication Management and Safety (MM)

Introduction

The standards in the **Medication Management** chapter provide a safe and effective approach for the medication management process and aim at reducing medication errors and near misses. They address the steps from planning, selecting, storing, preparing to administering medications and monitoring their clinical effects/side effects.

The **Medication Management** chapter targets the following sections:

- Planning medication management processes
- Selecting medications
- Storing medication
- Ordering and transcribing
- Preparing and dispensing
- Administering medication
- Monitoring of the medication effects
- Evaluating the medication management processes

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding Measures
6	**MM 1. The hospital plans each step of the medication management process.** **Medication management is important in assessing medication consumption and adherence for patients with chronic illnesses, in order to avoid multiple prescriptions. It is based on the patient – practitioner relationship, which aids in decision making and involves the patient in the medication process.** **The medication management process used by health organizations to ensure safe use of medicines, including: selecting, prescribing, preparing, dispensing, administering and monitoring of medicines.** **The medication management process begins with a decision on appropriate medication and recording the medication order.** **Healthcare practitioners performing these tasks include, but not limited to, physicians, pharmacists, and nurses.** **Due to the high risk of error in the medication management process, it is critical to integrate a medication management system within the risk management policies.**
COR	Guiding measures:
	1.1 The medication management system has clear policies and procedures regarding selection and procurement, storage, ordering, transcribing, preparing, dispensing and administration of medications, and monitoring for medication-related adverse events.
	1.2 There is a written/electronic information system that supports safe medication management processes.
	1.3 Risk management policies dictate medication management system.
5	**MM 2. Medication management is well aligned with applicable laws and regulations and headed by a qualified and registered pharmacist.** **Issuing medicines is mainly done by pharmacists – dispensing medicines to patients or their care givers. This requires ensuring the right medicine is selected or manufactured, labelled clearly; and the medicine issue is recorded.** **Administering the medicine requires that nurses follow a process to ensure accurate and safe administration – ensuring the right medicine is used by the right patient.** **The pharmacy and therapeutic committee is composed of actively practicing physicians, other prescribers, pharmacists, nurses, administrators, quality-improvement managers, and other health care professionals and staff who participate in the medication management process. The pharmacy and therapeutic committee should serve in an evaluative, educational, and advisory capacity to the medical staff and organizational administration in all matters pertaining to the use of medications.**

		The committee should be responsible for overseeing policies and procedures related to all aspects of medication use within an institution, should be responsible to the medical staff, and its recommendations are subject to approval by the organized medical staff as well as the administrative approval process. The committee's organization and authority should be outlined in the organization's medical staff bylaws, medical staff rules and regulations, and other organizational policies as appropriate. Medication errors, including those made in prescribing, dispensing, and administration are a common and preventable cause of patient harm. **The hospital should orient new staff about the medication management system and its processes and train the staff on how to report medication errors and near misses.**
	Guiding measures:	
	2.1	A registered and qualified pharmacist heads the pharmacy department with specified and regularly updated authorities and responsibilities delineated.
	2.2	A clear hospital structure depicts all the services and the healthcare professionals involved in the medication management processes.
	2.3	Provision of information and access to policies and procedures for those involved in medication use is maintained at all times.
	2.4	The pharmacy and therapeutic committee has delineated roles and responsibilities which are reviewed and evaluated on regular basis.
	2.5	The hospital performs orientation to the new staff about the medication management system and its processes, trains the staff how to report medication errors and near misses.
	2.6	The hospital evaluates the effectiveness of the training activities related to medication management.
6	**MM 3.**	**The hospital has a process to manage and ensure proper antimicrobial prescription and limit overuse and misuse of antimicrobials [IPC-28]** **The misuse of antimicrobials leads to adverse health effects and causes anti-microbial resistance. Managing the varied problems associated with antimicrobial resistance will require a coordinated response. Proper antimicrobial prescription is achieved by selecting the correct dose, duration and route of consumption.** **The Centers for Disease Control and Prevention (CDC), as well as other organizations and experts, recommends various steps that health care practitioners and facilities can pursue to ensure proper prescription and limit overuse and misuse of antimicrobials, such as adopting an antibiotic stewardship program; improving diagnosis, tracking and prescribing practices; optimizing therapeutic regimens; and preventing infection transmission.**

		The hospital should educate patients about the proper use of antimicrobials with proper documentation in the medical record, upon discharge. **Education can be, not limited to, implementing campaigns among medical professionals and organizations regarding antimicrobial overuse and misuse. Such campaigns can raise awareness about the proper use of antimicrobials and alleviate the overall overuse.**
COR	Guiding measures:	
	3.1	Certain antimicrobials are prescribed according to evidence-based practice.
	3.2	Antimicrobial prescriptions are reevaluated every 72 hours.
	3.3	The hospital evaluates or ensures at least once a year, the implementation of the recommendations and the pertinence of the prescriptions.
	3.4	The hospital educates the patients about the proper use of antimicrobials with proper documentation in the medical record, upon discharge.
	3.5	The hospital guides the physicians and the healthcare workers to restrict the overuse/misuse of antimicrobials through setting specific policies.
	3.6	The hospital has indicators to measure antimicrobial prescriptions.
5	**MM 4.**	**Clinical pharmacists are involved in direct patient care to optimize medication therapy, as per hospital policies and procedures and applicable laws when available.** **Clinical pharmacists play a vital role in health care, since they enhance the quality of treatment and health services delivered to the patients by improving the prescription quality. Also, clinical pharmacists help nurses and providers in further education related to medication management which assists in the increasing the quality, safety and efficiency of care.** **Integration of clinical pharmacists within the hospital practices supports an interdisciplinary approach in medication therapy that optimizes safe and effective medication use.**
	Guiding measures:	
	4.1	Policies and procedures are in place for clinical pharmacists to provide direct patient care to the greatest extent possible in both inpatient and outpatient settings.
	4.2	Critical areas are identified where clinical pharmacy specialists should be available during interdisciplinary rounds to intercept preventable medication adverse events, provide medication therapy monitoring and assessment, medication counseling and other patient care activities that are documented in the medical record, when needed.
	4.3	Clinical pharmacists actively work as a part of the hospital to develop and implement policies and procedures that provide safe and effective medication use for the patients.

6	**MM 5. There is a set of policies for managing high-alert/high-risk and control narcotics and controlled medications.** **High-alert or high-risk medications are medicines that can cause serious harm on one's health if misused. Patients consuming drugs, as well as their providers, should be careful when it comes to the uptake of high-risk medicines since the difference between their efficacy and potency is minor. So, even a minimal increase in their consumption imposes a high risk for fatal consequences.** **Policies for managing high-alert/high-risk and control narcotics and controlled medications should be in place in order to improve medication safety and the quality of health care and patient management.** **Narcotic substances can be from plant origin such as cannabis and opium or synthetic like methadone. These drugs can be very helpful and beneficial for many patients with severe and chronic conditions; however, if not properly prescribed they can have harmful health effects and can lead to addiction.** **Narcotics substances should be managed and controlled by abiding to the applicable laws and regulations.**
COR	Guiding measures:
	5.1 There is a list of high-alert/high-risk medications that is updated on regular basis.
	5.2 The policy identifies the individuals involved in managing the high-alert/high-risk medications.
	5.3 Access to the high-alert/high-risk medications is limited to the authorized staff based on hospital policies.
	5.4 Information about high-alert/high-risk medications is available at all times.
	5.5 Managing controlled and narcotics substances abide by the applicable laws and regulations.
Selecting medications	
5	**MM 6. The hospital develops a process for selecting, procuring stocked medications and securing its availability in times where medications are not stocked or when the pharmacy is closed.** **The hospital should create a process for medications that are not stocked or available to the hospital when the pharmacy is closed. The process should mention the people who are authorized to take actions in this situation.** **The selection and procurement of drugs depends on certain drugs; their dosages and available financial resources. The process includes estimating the quantity needed, estimating the prices of different dosages, etc.**
	Guiding measures:
	6.1 An on-call pharmacist is available and responds to requests on a timely basis when the pharmacy is closed.

	6.2	A list of staff authorized to access pharmacy is in place when the pharmacy is closed.
	6.3	The hospital provides a list of medications that is accessible by non-pharmaceutical authorized staff when the pharmacy is closed.
	6.4	The pharmacy provides access to specifically authorized staff to limited emergency medications.
	6.5	Evaluation and improvement of the dispensing system, when the pharmacy is closed, is done on regular basis.
	6.6	A plan is in place to replenish the acute shortage of medications.
4	**MM 7.**	**The hospital has an organized medication list.** **The hospital should have a list process of creating the most accurate list possible of all medication. The hospital's medication list, including hazardous and look-alike-sound alike medications, is reviewed and updated periodically and as needed based on pre-set criteria, via a process of selecting, approving and purchasing non-formulary medications. Hospitals must develop a list of hazardous drugs with hospital wide procedures for receiving, compounding, dispensing, administering, and disposing of these hazardous drugs. Keeping an organized medication list and showing it to practitioners is highly important, since it provides them with significant information that assists in the enhancement of patients' health and prevention of potential adverse health effects.** **Drug product shortages can adversely affect drug therapy, compromise or delay medical procedures, and result in medication errors. Thus, strategic planning is required for managing drug product shortages and informing related practitioners to prescribe an alternative.**
	Guiding measures:	
	7.1	The hospital's medication list (formulary), including hazardous and look-alike-sound alike medications, is reviewed and updated periodically and as needed based on pre-set criteria, via a process of selecting, approving and purchasing non-formulary medications.
	7.2	A process is in place to inform all healthcare professionals involved in medication use about any changes in the medication list including drug shortage.
	7.3	Once presented and approved by the pharmacy and therapeutics committee, the newly introduced medications are monitored and evaluated, based on hospital policies, for their usage and their adverse effects using a standardized tool.
	Safe and Proper Storage	
5	**MM 8.**	**The hospital has a process for storing medications in a safe and proper manner.** **The hospital should have a process for properly storing medication.** **Careful arrangement of medication storage in the pharmacy and**

		throughout the hospital can help reduce the risk of medication errors. **Storage areas should be monitored for expired medications and appropriate temperatures. Separate medication storage areas exist for look-alike and sound-alike, same medications with different dosages or concentration and high alert/high-risk medications with special warning signs. Access to secured medication areas are limited to authorized personnel.**
	Guiding measures:	
	8.1	Storage areas of controlled medications meet the applicable laws and regulations.
	8.2	Medications are stored in a secured area with access to the authorized staff.
	8.3	Medications are stored under appropriate conditions to ensure drug stability including refrigerated medications and medications stored in the clinical service areas.
	8.4	Content, warning signs and expiry dates are properly labeled on the stored medications.
	8.5	Separate medication storage areas exist for look-alike and sound-alike, same medications with different dosages or concentration and high alert/high-risk medications with special warning signs.
	8.6	The pharmacy staff performs regular inspection of the medication storage areas.
5	**MM 9.**	**Storing medications that require special handling follows a specific process.** **Medications with special handling should be well stored in designated areas that comply with the standards of medication storage. Also, a dedicated staff member(s) will be assigned for handling those drugs in order to avoid any hazard.** **A process should exist for handling and storing chemotherapy and anesthetic agents, radioactive, and investigational medications. Sample medications should also be handled based on a process. An automated system and method for storing, dispensing, and inventorying medications and for analyzing inventory data to detect diversion would be considered useful according to research.**
	Guiding measures:	
	9.1	Storing medications has a well-established and implemented process.
	9.2	A process exists for handling and storing sample medications.
	9.3	The pharmaceutical staff follows regulations and instructions for storing chemotherapy and anesthetic agents to prevent adverse effects.
	9.4	The hospital implements a process for storing radioactive and investigational medications.
	9.5	The process is evaluated and improvements are made accordingly.

6	**MM 10. Emergency medications are accessible and secured outside the pharmacy area.** **Emergency medications are the use of drugs for treating patients that require urgent and direct medication. It is important to have a specialized practitioner that provides right emergency medication and right dosages of drugs to improve patients' health in critical conditions.** **A process should be in place in order to ensure that emergency medications are accessed by authorized staff, and that all medications are secured and protected from theft or loss.** **The hospital should also identify a process to ensure that emergency medications are being periodically inspected and checked for expiry and damage.**
COR	Guiding measures:
	10.1 Emergency medications are secured and protected from theft or loss.
	10.2 Emergency medications are accessed by authorized staff.
	10.3 The list of emergency medications is reviewed and updated regularly by the healthcare professionals involved in medication management.
	10.4 A process exists for inspecting the emergency medications periodically, identifying the expired or damaged medications and replacing them, based on hospital's policies and procedures.
6	**MM 11. The hospital has a process in place that handles expired/outdated and damaged medications.** **The hospital should have a process to identify expired/outdated or damaged medications. Expired and damaged medications should be properly handled and disposed by specialized staff members in order to avoid any undesired results and to ensure safety.** **Applicable laws and regulations of disposing, controlled substances and hazardous drugs should be in place in order not to pose a threat to both the health care system and to the environment.** **A process is in place for informing healthcare providers involved in medication management about the expired/outdated medications.**
COR	Guiding measures:
	11.1 The hospital identifies expired/outdated or damaged medications through a specific process.
	11.2 The hospital follows applicable laws and regulations of disposing, controlled substances and hazardous drugs.
	11.3 The hospital abides by a process for the disposal of the expired/ outdated medications.
	11.4 There is a process for informing healthcare providers involved in medication management about the expired/outdated medications.
	Ordering and transcribing
6	**MM 12. Safe prescribing and ordering of medications is guided by policies and procedures with emphasis on elderly, newborns, special care units and specific conditions.**

	The hospital should develop and implements a uniform and safe process for prescribing, ordering and transcribing of medications. **The process should provide a patient's medication history to pharmacists, consumers, and health care providers, while protecting patient privacy.** **The hospital should have a policy regarding pharmacist verification of the medication order prior to dispensing medications on the medical administration record** **Periodic reviews to monitor medication errors and near misses should be conducted regularly in order to make necessary improvements.**
COR	Guiding measures:
	12.1 A safe process for prescribing, ordering and transcribing of medications is established and implemented in the hospital.
	12.2 A policy about non-formulary order processing is in place.
	12.3 Pharmacist verification of the medication order for completeness and appropriate review is conducted regularly, based on hospital policies, prior to dispensing medications on the medical administration record.
	12.4 Prescribing and transcribing of the medications is recorded on the medical record.
	12.5 The hospital performs periodic reviews to monitor medication errors and near misses and make necessary improvements.
6	**MM 13. Accurate and complete information about patient's medications follows a specific process.** **Preventing harm from medications, or adverse drug events, should remain a top patient safety across the continuum of care for patients.** **Medication reconciliation process should be performed during admission, and discharge, and the documented medication list must be shared with the healthcare providers, the pharmacy and patient. This process is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions.**
COR	Guiding measures:
	13.1 A policy is in place to manage medication reconciliation.
	13.2 Medication reconciliation process is performed during admission, and discharge, and the documented medication list is shared with the healthcare providers, the pharmacy and patient**.**
	13.3 Monitoring and evaluating the process are done to ensure compliance and necessary improvements are made accordingly.
	13.4 The medication's name and the time of administration of the medications, upon admission, are documented in the medical record.
6	**MM 14. Elements of complete order or prescription are identified.**

	Ordering or prescription errors are failures in the prescribing process that lead to or have the potential to lead to harm to the patient and are committed by credentialed providers, including physicians, nurse practitioners, physician assistants, privileged pharmacists, and others. Common ordering errors include omission, incomplete and unclear orders, wrong drug, wrong time, wrong dose, wrong dosage form, patient allergy, and wrong patient. **Prescription and medication orders can be handwritten, typed, preprinted, verbal, or entered into a computer program and submitted to the pharmacy by the care givers, computer, or other electronic means.** **A process should be in place for managing verbal and telephone orders in a safe way including security and control criteria. Verbal or telephonic medication orders should be reserved only for situations in which it is impossible or impractical for the prescriber to write the order or enter it into the computer.** **The hospital should implement a process for monitoring the accuracy and completeness of the orders. Although requirements might slightly vary for what information to be contained on a prescription, in general, it must contain the following information: the name of the patient, drug name, drug strength, drug dosage form, quantity prescribed directions for use, and the name, address, and signature of the prescriber.**
COR	Guiding measures:
	14.1 Elements of complete orders are: 14.1.1 The data for identifying the patient (i.e. Patient triple name, date of birth, and patient's medical record number). 14.1.2 The essential elements of all orders or prescriptions (date and time, medication name, dosage, route of administration, frequency of administration, any special instructions for holding or adjusting dosage, and physician's signature). 14.1.3 Whether or when indications for use are required on a PRN (Pro Re Nata, or "as needed") or other medication orders. 14.1.4 The weight-based or otherwise adjusted orders.
	14.2 The order or prescription is free of unapproved abbreviations and dose designations.
	14.3 A process is in place for stopping any illegible prescriptions and orders.
	14.4 There is a process for managing special orders such as emergency, standing, or automatic stop orders.
	14.5 The hospital implements a process for monitoring the accuracy and completeness of the orders.
	14.6 Audits on medication orders are done periodically to ensure compliance and improvements are made accordingly.

	14.7	There is a policy for managing verbal and telephone orders in a safe way including security and control criteria.
	14.8	All patients should have allergy information accessible at all times to the pharmacist prior to verifying or dispensing any medication order.
	14.9	Independent dual verification is performed by physicians for calculating the weight-dependent medication dosages for the newborns and specific drugs, and properly documented.
	Preparing and dispensing	
6	**MM 15.**	**A licensed pharmacist ensures the accuracy and the appropriateness of the prescriptions and medication orders.** **Prior to dispensing the prescription or medication order, the pharmacist's responsibility is to evaluate the prescription or medication order for appropriateness. This includes ensuring the correct drug, dose and dosage form, frequency, route of administration, duration of therapy, and indication. Additionally, the patient's profile is evaluated for therapeutic duplication, drug allergies, drug interactions, laboratory data, etc. this process will help ensure that the benefits of the therapy are maximized and the potential for harm is minimized.**
COR	Guiding measures:	
	15.1	A health record containing information specific to each patient (i.e. allergies, diagnosis, patient's weight, age, pregnancy and lactation status, drug duplication, according to patient's age, to liver and renal insufficiency) along with patient's medication profile are available at all times to ensure and enhance the reviewing process of medication orders before dispensing and administration.
	15.2	A process is in place to manage communication between pharmacists, nurses and prescribers regarding the appropriateness of the order.
	15.3	The pharmacist reviews prescription and medication orders within the hospital prior to dispensing and administering medications, according to hospital policies.
	15.4	An online drug information source is available and accessible to review medication interactions, drug information and minimum and maximum doses of high-alert/ high-risk medications.
	15.5	Drug information books/references are present in order to conduct a thorough medication review in case of downtime.
	15.6	Orders containing high-alert/ high-risk medications, chemotherapy and medication containing dosages are reviewed independently by qualified personnel throughout the process.
5	**MM 16.**	**The hospital prepares and dispenses medications in a safe and appropriate environment.**

		It is important to dispense medications in a safe and appropriate environment to avoid drawbacks and unnecessary injuries. Factors associated with dispensing errors may be communication failures, problems related to package labels, work overload, the physical structure of the working environment, distraction and interruption, the use of incorrect and outdated information sources and the lack of patient knowledge and education about the drugs they use, etc. **Implementing safe, organized, and efficient drug-dispensing systems is essential for controlling costs and assuring that the medical prescription is safely followed as requested within the appropriate deadline. An appropriate dispensing system is an important ally for the prevention or reduction of medication errors by helping to minimize dispensing error opportunities in a pharmacy. At present there are various types of dispensing systems for medical prescriptions within a hospital.** **Preparing and dispensing radioactive and chemotherapy medications should follow a specific process and be handled by qualified staff.**
	Guiding measures:	
	16.1	Preparation and dispensing of medications follow specific local laws and regulations.
	16.2	The hospital performs regular cleaning according to safety measures of the medications' preparation areas.
	16.3	The hospital meets the infection control criteria while preparing and dispensing medications.
	16.4	Medication preparation areas are maintained with appropriate lighting, temperature, humidity and ventilation.
	16.5	Qualified staff prepares chemotherapy medications in a separate preparation area with a 100 percent externally-vented biohazard hood using protective equipment and verified by pharmacist.
	16.6	Preparing and dispensing radioactive medications follow a specific process.
	16.7	Preparing sterile products and intravenous mixtures, when applicable, is done by qualified staff under aseptic technique and verified by pharmacist.
	16.8	Preparing compounding and extemporaneous formulation, when applicable, follows a specific process.
	16.9	Staff is trained on preparation of medications under sterile conditions.
	16.10	The pharmaceutical staff maintains current record for compounded and repackaged medications, when applicable.
	16.11	Safe recycling of returned (un-used) sterile preparations follows international guidelines.

5	**MM 17. The hospital ensures the implementation of dispensing medication process.** **The dispensing process includes receiving and validating prescription, understanding and interpreting prescription, preparing and labeling, making a final check, recording action taken, and delivering the medicine to the designated patient. Regular detection of medication errors provides a platform to implement corrective measure in the medication management system.**
	Guiding measures:
	17.1 All medications are labeled in a standardized format before dispensing and administration.
	17.2 Dispensing of medications is done in a timely manner**.**
	17.3 Pharmacist visually inspects medications prepared in the pharmacy and verifies the medication order against the prescription or order.
	17.4 Dispensing is done for a period that does not exceed 24 hours and a process exists for dispensing emergency medications.
	17.5 The dispensing process is evaluated regularly to detect errors and make improvements accordingly.
5	**MM 18. The hospital ensures proper, safe and timely transportation of medications.** **Proper, safe and timely transportation of medication is essential to provide timely delivery of medications and to increase patients' health and enhance healthcare services. Unsafe and untimely transportation may cause contamination of medications, delayed care delivery, and delayed medication uptake.** **Any authorized staff member, who is involved in the transportation of medication, accepts responsibility for the safekeeping of those medications whilst in their possession. A process should be in place to manage items requiring refrigeration, dangerous and toxic medication, and returned medications.**
	Guiding measures:
	18.1 A process is in place to ensure safe and timely delivery of medications from the point of preparation till the point of administration.
	18.2 Transporting refrigerated medications follows a specific process.
	18.3 The hospital applies safety and security measures during the transport of dangerous and toxic medications including biologically-derived products and drugs that contain radioactive materials.
	18.4 A process is in place to manage the returned medications.
	18.5 The transportation process is evaluated periodically to detect errors and make the improvements accordingly.
	Administration
5	**MM 19. The hospital identifies the authorized staff permitted by laws and regulations to administer medications.** **Drugs must be prepared and administered in accordance to laws and regulations. The hospital's medical staff must approve policies and**

	procedures for medication administration, consistent with the requirements. Authorized people must have a clear job description stating medication administration.
	Guiding measures:
	19.1 There is a clear job description for the staff authorized to administer medications.
	19.2 Those who are permitted by licensure, laws and regulations can administer medications.
	19.3 A process exists to set limits related to time, high alerts, and special population consideration, on the administration of medication when indicated.
6	**MM 20. Verification of medications against the order or prescription process precedes the administration of medications.** **The hospital should have a standardized timing for medication administration.** **Appropriate timing of medication administration must consider the complex nature and variability among medications; the indications for which they are prescribed; the clinical situations in which they are administered; and the needs of the patients receiving them.** **Verification of the medication's expiry date and inspection of the medication for loss of integrity or stability is done before medication is being administered. Verification is done by authorized staff based on the** **Right medication, right dose, right time, right route, and right patient.** **Double checking on the high-alert/high-risk medication before administration is performed by nurses in order to prevent medication errors.**
COR	Guiding measures:
	20.1 The hospital has a standardized timing for medication administration.
	20.2 Verification of the medication's expiry date and inspection of the medication for loss of integrity or stability is done before medication is being administered.
	20.3 Staff verifies the medication using the 5 rights (right medication, right dose, right time, right route, and right patient).
	20.4 Nurses perform independent double checking on the high-alert/high-risk medication before administration.
	20.5 Administered medications are properly documented in the medical record.
	20.6 Traceability of administration of medications is verified with a legible time, name and signature of the person having administered the medications.

5	**MM 21. Proper education is given primarily to patients and family caregivers (when needed) about medications before they are being administered and upon discharge.** **Proper patient-caregiver communication can help patients more confidently manage and take their medications. Authorized staff must give information on the medications given before the initial dose and when the dose is adjusted. The authorized staff educate patients and families, before leaving the hospital, about ways to ensure compliance and prevent medication adverse for the home medications. They should also ensure that the patients and their families understand the information given and respond to their questions and concerns through proper documentation.**	
	Guiding measures:	
	21.1	The authorized staff gives information on the medications given before the initial dose and when the dose is adjusted.
	21.2	The authorized staff educate patients and families, before leaving the hospital, about ways to ensure compliance and prevent medication adverse events (adverse drug reaction or medication errors) for the home medications.
	21.3	The authorized staff ensures patients and families understand the information given and respond to their questions and concerns through proper documentation.
	21.4	The information given is properly documented in the medical record.
5	**MM 22. The hospital develops and implements a process for managing self-administered medications and medications brought from home.** **The hospital has a process for identifying patients who perform self-administration of medications. In such cases, patients are responsible for the storage and use of these medications. The hospital should provide the healthcare professionals involved in medication use with information about medication brought by the patient or from outside the hospital.**	
	Guiding measures:	
	22.1	The hospital has a process for identifying patients who perform self-administration of medications.
	22.2	The hospital establishes and implements a process of proper identification and safe storage, and monitoring the side effects of medications and medications brought by the patient or from outside the hospital by a licensed pharmacist as per hospital policy.
	22.3	The hospital provides the healthcare professionals involved in medication use with information about medication brought by the patient or from outside the hospital.
	22.4	Sample medications are not allowed to be administered in the hospital setting.
	22.5	Medications brought from home are not allowed to be administered unless prescribed by the treating physician.

Monitoring	
6	**MM 23. Patients are monitored for medications' effects following medication administration.** **An essential component of the medication process related to the administration of medications to ensure adequate patient monitoring and detection of occurring undesirable side effects following medication administration.** **There should be a process to monitor patients before, during, and after medication administration. Nurses should assesse vital signs, lab values, ability to swallow, and patients' self- report of health.** **The hospital should have a procedure in place to report and increase compliance with reporting adverse events in order to ensure quality improvement and accountability responses. A consistent approach to adverse event reporting should be identified in which health care professionals and/or health care institutions provide factual and timely reports of adverse events to the relevant authorities.**
COR	Guiding measures:
	23.1 The hospital maintains the availability and accessibility of returning patient's information regarding previous adverse effects.
	23.2 The hospital has a process for monitoring the side/clinical effects of administered medications on the patient.
	23.3 The hospital has a procedure in place to report adverse events.
	23.4 The trained staff abides by policies and procedures to ensure the documentation of the medication's side/clinical effects and adverse drug reaction on the medical record.
	23.5 The hospital identifies the adverse effects of medications that should be recorded in the medical record and those that should be reported to the hospital in a timely manner.
	23.6 The hospital has a process to perform analysis (i.e. root-cause analysis) of the reported medications adverse events.
	23.7 A process is developed to increase compliance with reporting the adverse effects of medications.
	23.8 Evidence of improvements is done to mitigate the adverse effects of medications.
6	**MM 24. The hospital has a process to identify, monitor and report medication errors and near misses.** **Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer is referred to as medication error.** **Identifying, monitoring and reporting medication errors and near misses are important in ensuring patient safety. Healthcare workers are expected to learn from errors and near misses in order correct faults and improve safety. A process for reporting must be identified**

	by the hospital in addition to the staff involved in the review of medication errors and near misses. **A root cause analysis method, in which a secondary analysis of data from a previously existing investigation is performed, must be conducted for future improvement of the medication processes and identification of factors that contributing to error occurrence.**
COR	Guiding measures:
	24.1 Audits on the medical records are performed on regular basis, at least yearly.
	24.2 The hospital has a policy in place to handle medication errors.
	24.3 The hospital has a process for reporting and acting on medication errors and near misses on time.
	24.4 The hospital identifies the staff involved in the review of medication errors and near misses.
	24.5 The hospital regularly reviews the incidents of medication errors and near misses using root cause analysis, for the future improvement of the medication processes.
	24.6 The staff is informed, on regular basis, about risk reduction strategies regarding medication errors and ways to report them.
Evaluation	
5	**MM 25. A quality improvement program is set by pharmacy and therapeutics committee to evaluate the medication management system.** **A committee responsible for managing drug related issues for the hospital should be initiated to steer and evaluate the medication management system.** **The pharmacy and therapeutics committee is multidisciplinary and composed of healthcare providers who are involved in the use of medications, and they are responsible for determining the drug formulary of their institution.** **The pharmacy and therapeutics committee should regularly collect data to identify outcomes and areas for improvement and takes actions accordingly in addition to monitoring of the process and outcome indicators specific to medication management.**
	Guiding measures:
	25.1 Evaluation of the medication management system is conducted by the pharmacy and therapeutics committee and properly communicated with the hospital executive management regularly.
	25.2 The pharmacy and therapeutics committee performs regular monitoring of the process and outcome indicators specific to medication management.
	25.3 The pharmacy and therapeutics committee regularly collect data to identify outcomes and areas for improvement, and takes actions accordingly.

	25.4	The hospital performs quality control over outsourced components (i.e. devices, medication) of the medication management, when applicable.

Infection Prevention and Control (IPC)

Introduction

The **Infection Prevention and Control** chapter aims at reducing the risk of infection and ensuring patient and staff safety. The hospital has to collaboratively ensure the proper development, implementation and evaluation of the infection prevention and control plan that constitutes the focus of the standards.

The **Infection Prevention and Control** chapter targets the following sections:

- Establishing policies and procedures
- Ensuring staff education
- Reducing healthcare-associated infections
- Cleaning and sterilizing medical devices
- Managing wastes properly
- Ensuring sharp safety
- Providing food safety
- Complying with hand hygiene
- Maintaining clean physical environment
- Monitoring quality indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**IPC 1. The infection prevention and control program is managed by (a) qualified healthcare professional(s).** **Elaborating and managing an infection prevention and control program requires in addition to a general clinical expertise and a broad knowledge in infectious diseases, to be knowledgeable in domains such as epidemiology, biostatistics, data mining and analysis, in addition to specific skills such as a good sense of observation, critical thinking, investigational techniques and good communication skills.**
	Guiding measures:
	1.1 A job description of the head of the infection prevention and control program is in place with specific functions and responsibilities.
	1.2 The qualifications of the head/infection prevention and control practitioners are based on education (i.e. Master in Public Health, CIC certification) and/or training and years of experience.
5	**IPC 2. The policies and procedures related to Infection prevention and control are developed based on applicable local laws and regulations, up-to-date knowledge and latest evidence-based standards and practices.** **Given the international prevalence and burden of healthcare acquired infections it is important that such a process be controlled according to best practice in quality improvement (such as for example the PDCA cycle), and that procedures be elaborated according to local laws/regulations, the latest practice recommendations and evidence, in collaboration with relevant stakeholders in order to maximize adherence to recommendations.** **As knowledge in this domain is quickly advancing, these procedures should be reviewed at most every 3 years, be easily accessible to staff, regularly audited, and corrective actions identified and implemented in order to maintain the required quality system.**
	Guiding measures:
	2.1 Infection prevention and control policies and procedures are established in collaboration with all the relevant internal and external stakeholders when applicable.
	2.2 Access to the Infection prevention and control policies and procedures is ensured at all times.
	2.3 Policies and procedures are updated at least every 3 years and when needed, based on the latest practices (i.e. CDC, APIC), regulations and standards.

	2.4	Audits are performed to monitor compliance with policies and procedures, outcomes are evaluated and improvements are made accordingly.
	2.5	Relevant information is reported to the designated authority as per applicable laws and regulations.
	2.6	Infection prevention and Control policies and procedures specific to each department are in place.
5	**IPC 3. The infection prevention and control plan is supported by the hospital executive management and a documented annual resources planning should exist and regularly reviewed.** **Implementing and maintaining an efficient infection prevention and control program requires deployment of qualified resources that need to dedicate time for tasks such as regular surveillance of patients with multidrug resistant organisms, analysis and investigation of HAIs, auditing of prevention procedures and policies, elaboration of new procedures, training and education of staff, internal and external reporting, etc.** **Staffing for infection control cannot rely solely on bed numbers or patient census but rather must reflect the scope of the program, characteristics of the patient population and the workload involved. Using standard staffing methods such as the World Health Organization's Workload Indicators of Staffing Need (WISN) method can help indicate more precisely the number of required professionals.** **In addition to the dedicated staff for implementing the program, the IPC department should be authorized to deploy some resources (for example, environmental microbiology cultures) required in order to apply the program.** **Finally, access to certain reports and information in the hospital information system is required for efficient surveillance and evaluation by the IPC team. Surveillance being one of the most time consuming tasks of the IPC team, using methods to optimize data access can optimize the IPC time consumption and eventually the staffing.**	
	Guiding measures:	
	3.1	The hospital has an adequate number of healthcare workers and resources necessary to run the program.
	3.2	The hospital executive management provides access and facilitates the use of hospital information system by the Infection prevention and control team.
	3.3	The hospital executive management is accountable for ensuring that infection prevention and control systems are in place for monitoring the quality of clinical practice and for assuring that care is being delivered to patients safely and effectively by healthcare workers.

5	**IPC 4. The hospital has an infection prevention and control team/committee to collaborate and coordinate the Infection prevention and control plan.** **The elaboration and evaluation of the IPC program should be managed by a multidisciplinary team or committee representative of the main disciplines and departments involved (medical, nursing, IPC professionals, etc.).** **Inclusion of members of the executive committee should help to enforce the recommendations of the team and facilitate their practical implementation.**	
	Guiding measures:	
	4.1	The infection prevention and control team/committee is responsible for managing the Infection prevention and control plan.
	4.2	The infection prevention and control team/committee is multidisciplinary involving physicians, nurses, qualified Infection prevention and control professionals and others.
	4.3	The infection prevention and control team/committee meet regularly based on their term of reference.
	4.4	The hospital takes into consideration the input of the occupational health and safety program when developing the plan.
	4.5	Evaluation of the infection prevention and control plan is conducted, outcomes are analyzed and improvements are made accordingly.
5	**IPC 5. The hospital develops and updates an annual Infection prevention and control plan.** **The Infection Prevention and Control plan should be developed annually, based on an updated assessment of the different infectious risks and HAI prevalence, audit results, in addition to specific performance metrics and hospital priorities.**	
	Guiding measures:	
	5.1	Patient and healthcare workers safety measures are addressed in the annual plan.
	5.2	Healthcare workers and patient/caregiver/next of kin education measures are addressed in the annual plan.
	5.3	The hospital identifies the significant healthcare-associated infections, processes and devices associated with risk of infections as part of the annual plan.
	5.4	The plan is implemented and evaluated annually by the infection prevention and control team, changes are identified and improvements are made accordingly.
5	**IPC 6. The healthcare-associated infections are addressed by a hospital program to reduce the risk of infection among patients and healthcare workers.** **Prevention of healthcare-associated infections and mitigation of outbreaks of infectious diseases and organisms are among the most important themes that should be addressed by the IPC program. A**	

	data driven risk assessment approach is recommended in order to prioritize efforts and evaluate the results of potential interventions. Additionally, there exists a mechanism of communication to relevant stakeholders with regards to any outbreaks/healthcare associated infections.
	Guiding measures:
	6.1 The infection prevention and control program is based on risk assessment, applicable local laws and regulations, current scientific knowledge and practice guidelines.
	6.2 The program incorporates a system to investigate the outbreaks of infectious diseases, outcomes are evaluated and improvements are made accordingly.
	6.3 The hospital has a clear communication strategy to disseminate information related to healthcare-associated infections.
6	**IPC 7. The hospital has a comprehensive plan to manage outbreaks.** **Outbreaks of infectious diseases or organisms are among the most critical events that can occur in hospitals, since their consequences can be serious both on the concerned patients and on the hospital overall. A critical step is the early identification of the outbreak, when its control is still possible or relatively feasible. This would require a system that could reliably detect such outbreaks and a detailed methodology to confirm the outbreak occurrence and subsequently to analysis its transmission mechanisms and identify the necessary actions to limit and stop the outbreak.**
COR	Guiding measures:
	7.1 The hospital develops an outbreak rapid identification and response system applicable to laws and regulations to identify and respond to outbreaks.
	7.2 Policies and procedure to manage outbreaks are available and accessible.
	7.3 Policies and procedure to manage outbreaks are reviewed after each outbreak (if needed) to make the necessary improvements.
	7.4 The roles and the responsibilities of the healthcare workers involved in managing the outbreaks are identified through specific policies and procedures.
	7.5 Healthcare workers are properly trained to manage outbreaks.
	7.6 Outbreaks are communicated internally and externally to the designated authority via specific channels.
5	**IPC 8. The hospital has a surveillance program for the healthcare-associated infections.** **Ventilator Associated Pneumonia (VAP), Central Line Associated Bloodstream Infections (CLABSI), Catheter Associated Urinary Tract Infections (CAUTI) and Surgical Site Infections (SSI) figure among the most prevalent and clinically significant Healthcare Associated Infections (HAI). These HAIs have been thoroughly studied,**

		preventive interventions have been identified and their outcome well evaluated in the literature. Therefore, a regular measurement and surveillance of such HAIs should be a key to lower their incidence and to identify the impact of any preventive measured implemented. Direct feedback to concerned departments is important for awareness and for joint elaboration of relevant corrective and preventive actions.
	Guiding measures:	
	8.1	A surveillance system is in place to detect, track and investigate the sources of healthcare-associated infections.
	8.2	The infection prevention and control team/committee implement a surveillance program based on major Infection prevention and control risks identified in the hospital and its environment.
	8.3	Surveillance reports are generated on a quarterly basis and properly communicated with the relevant departments.
	8.4	Review of the surveillance reports is conducted by the related departments, outcomes are analyzed and improvements are made accordingly after consultation with the infection prevention and control team.
6	**IPC 9.**	**The hospital implements proper precaution practices and isolation measures to prevent transmission of contagious diseases to healthcare workers and visitors, and to protect the immunosuppressed population from acquiring infections.** **Standard and transmission-based precautions are the cornerstone for preventing and/or breaking the transmission chain for infectious diseases. These measures to be correctly implemented should also be accompanied by the availability of well-designed isolation rooms where such precautions can be ergonomically applied, and for which the cleaning process is well defined and regularly evaluated.**
COR	Guiding measures:	
	9.1	Policies and procedures exist regarding standard and transmission-based precautions.
	9.2	Isolation measures are applied to all patients having or suspected to have contagious diseases.
	9.3	Immunosuppressed patients are separated from patients with communicable diseases.
	9.4	Each isolation room is equipped with a hand hygiene basin and toilet.
	9.5	Rooms with negative pressure ventilation are routinely checked and monitored based on delineated criteria (i.e. American Institute for Architects guidelines for isolation rooms) to receive patients with airborne diseases.
	9.6	Transferring patients with Multi-Drug Resistant Organisms (MDRO) within the hospital or to other facilities follows a specific policy.
	9.7	Cleaning of the isolation rooms follows evidence-based guidelines for Infection prevention and control.

5	**IPC 10. The hospital implements a process for managing acute flow of patients with airborne infections.** **Airborne transmitted infections (such as tuberculosis, COVID19, etc.) cases are intended to be admitted to negative-pressure ventilated rooms in the hospital. However, in the event the number of incoming patients exceeds the capacity of such rooms, a process should be available to ensure minimal safety conditions within normal rooms, and concerned healthcare workers should be aware of such a process through an education session.**
	Guiding measures:
	10.1 The hospital has a process in place to manage patients with airborne infections in case where the negative pressure rooms are not available.
	10.2 Healthcare workers are educated, tested and audited to ensure compliance with the process, outcomes are evaluated and improvements are made accordingly.
5	**IPC 11. All healthcare workers are involved and educated about infection prevention and control measures and practices; patients, family caregiver and visitors are informed about such measures and practices.** **As IPC procedures concern all hospital staff, it should be important that continuous training be given to all staff regarding basic IPC measures so that this information stays up-to-date. Also, since new staff could be unfamiliar with hospital IPC procedures, thus potentially leading to breaches in the prevention measures and systems, IPC training should be included in the integration period of this staff.**
	Guiding measures**:**
	11.1 The hospital performs continuous training and education to healthcare workers on infection prevention and control, based on specific a training plan.
	11.2 Education is given to healthcare workers based on the significant trends and rates of infection.
	11.3 The infection prevention and control orientation program is in place where the newly involved healthcare professionals attend it upon hiring**.**
	11.4 Evaluating the effectiveness of the educational sessions for healthcare workers is performed and improvements are made accordingly.
	11.5 The hospital healthcare workers educate the patients and their families about the routine practices and the additional precautions used, in a clear and comprehensible way.
5	**IPC 12. A risk-based documented approach is adopted to reduce healthcare-associated infections.**

	A risk based and data driven approach needs to be adopted in order to decrease the risk of healthcare associated infections. In fact, each type of HAI comes with a specific prevalence level and morbidity/mortality profile. Therefore priorities should be identified, based on the specific risk profile of these HAIs in the hospital (as identified by surveillance data, indicator data and risk management tool reports), and on possible resources and priorities of the institution. A data driven risk assessment approach is recommended in order to prioritize efforts and evaluate the results of potential interventions.
	Guiding measures:
	12.1 The hospital identifies priorities for reducing the rates of infection based on data stemming from surveillance of infections associated with respiratory tract, urinary tract, invasive vascular devices, surgical site, emerging or reemerging infections in the community and epidemiologically significant microorganisms (multi-drug resistant organisms, Clostridium difficile).
	12.2 The hospital establishes strategies to reduce the risk of infection based on the organizational priorities and the trends and the rates of infections.
	12.3 Risk management tools (i.e. FMEA, RCA) regarding infection prevention and control are applied in the hospital.
	12.4 Risk assessment is conducted annually to identify the highest risk activities and properly documented.
	12.5 Risks are managed and mitigated through appropriate strategies education and change in practice.
5	**IPC 13. Evidence-based interventions are in place to prevent healthcare-associated infections.** **Care bundles include a set of evidence-based measures derived from years of continuous research in the IPC domain, that need to be implemented together, to show a significant improvement in patient care. Together they have a greater effect on the outcome than the isolated implementation of individual measures.** **Adherence to bundles (which can be measured by the corresponding infection rates, audits etc.) helps to deliver consistent and reliable patient care. The measures included in a bundle also have to be adapted to the local setting and suited to the patient care culture of the hospital. Adherence to the bundle should be recorded and evaluated to ensure compliance by all members of the involved healthcare team.**
	Guiding measures:
	13.1 The hospital abides by care bundles to prevent Ventilator Associated Pneumonia (VAP), surgical site infections, Catheter-Associated Urinary Tract Infections (CAUTI) and intravascular catheter-associated bloodstream infections.

	13.2 Indicators on care bundles to prevent Ventilator Associated Pneumonia (VAP), surgical site infections, Catheter-Associated Urinary Tract Infections (CAUTI) and intravascular catheter-associated bloodstream infections are collected, outcomes are analyzed and evaluated, and improvements are made accordingly.
6	**IPC 14. The hospital has a validated process for cleaning and sterilizing medical devices within manufacturers' recommendations.** **Cleaning and disinfection of medical device figure among the most critical IPC processes since they can prevent cross-contamination between patients by infectious organisms. Cleaning and disinfection methods should abide by IPC guidelines and by the medical device's manufacturer's recommendations. Such processes need to clearly defined and easily available for all concerned staff, and correct application regularly audited and measured.**
COR	Guiding measures:
	14.1 The standardized methods of cleaning and sterilizing the medical equipment abide by the Infection prevention and control principles and according to the manufacturer's method of cleaning/sterilization of medical devices.
	14.2 When applicable, the external service provider, based on a contract, abides by the hospital's validated process for cleaning and sterilizing medical devices, to measure the compliance.
6	**IPC 15. The hospital has a validated process for proper handling of laundry.** **Handling and cleaning of hospital laundry prevents cross-contamination and protects healthcare workers from carrying infectious organisms. The hospital should implement appropriate IPC measures for laundry handling at all important steps of the process. Specific attention should be given to the appropriate choice and dosage of cleaning products.**
COR	Guiding measures:
	15.1 Laundry department follows the infection prevention and control principles (e.g. CDC guidelines for laundry).
	15.2 When applicable, the external service provider, based on a contract, abides by the hospital's validated process for proper handling of laundry, to measure the compliance.
5	**IPC 16. A process is in place to manage expired supplies and reprocessed devices according to applicable laws and regulations.** **In a context of limited resources or product availability, reprocessing of medical devices could be possible under strict conditions that do not compromise the patient's safety, and according to recognized guidelines, standards or studies with sufficient level of evidence. The items for which reprocessing is possible should be identified as well as the exact conditions for reuse (including type and modalities of disinfection), and available evidence and rationale for safe reuse. Given the residual risk of cross-contamination, a strict traceability of reuse of these devices should be available (name of patient for**

	which the device was used, date and time of use, identity of healthcare professional having used it, etc.) for auditing and investigational uses.
	Guiding measures**:**
	16.1 The process specifies the following: 16.1.1 The type of devices that needs and can be reprocessed upon manufacturers' recommendations 16.1.2 The maximum time that the used device kept unclean 16.1.3 The maximum number of times the device can be reprocessed 16.1.4 The patients on whom the devices were used
	16.2 The hospital ensures that healthcare workers are competent and properly trained on policies and procedures for reprocessing the devices.
	16.3 A traceability system of the used devices is in place.
	16.4 In case of external service provider, the hospital ensures that a contract is in place to monitor the quality of the services.
	16.5 Risks associated with reprocessed devices are identified and improvements are made accordingly.
5	**IPC 17. The hospital abides by particular validated requirements to reprocess endoscopic devices.** **Endoscopic investigation and interventions hold a high risk of cross-contamination between patients, since endoscopes are often reused for multiple patients within hours or days. Most flexible endoscopes cannot be heat sterilized and are designed with multiple channels, which are difficult to clean and disinfect. Therefore inspection, cleaning and disinfection processes for endoscopes are of paramount importance and should be performed in accordance with recommendations from recognized IPC institutions (CDC, WHO, ECDC, etc.) as well as per the manufacturer's specific recommendations, so as not to induce technical defects or damages that could render inefficient or inadequate the cleaning and disinfection, thus increasing the risk of cross-contamination.** **Also, implementation of regular microbiological surveillance of endoscope reprocessing is appropriate to detect early colonization and biofilm formation in the endoscope and to audit the efficiency of this process.**
	Guiding measures**:**
	17.1 Healthcare workers are trained to inspect the devices for cracks, clean and disinfect it according to the relevant policies and procedures.
	17.2 Cleaning of the endoscopic devices is done in a separate room according to procedures and guidelines issued by the Infection prevention and control standards.
	17.3 Proper and appropriate storage of the devices is ensured to reduce the risk of infection.

	17.4 The hospital maintains a record of reprocessed devices.
4	**IPC 18. Collaboration exists between the infection prevention and control program and the occupational health and safety program.** **Infected personnel pose a risk of contamination and outbreak of infectious diseases within the healthcare institution. Therefore the occupational health and safety program should address these risks in collaboration with the infection prevention and control team. Policies such as pre-employment examination, preventive measures to reduce certain risks of infection, confinement post-infection, return to work, vaccination and regular testing should be elaborated in collaboration between the OHS and the IPC teams.**
	Guiding measures**:**
	18.1 Policies and procedures relevant to reducing the risk of infection are recognized and addressed by the occupational health and safety program.
	18.2 The hospital sets work restrictions in collaboration with occupation health and safety guidelines to protect healthcare workers, patients and visitors against transmission of infection.
	18.3 Evidence is in place to ensure that healthcare workers are lab tested and vaccinated on regular basis as per hospital policies and procedures.
5	**IPC 19. The hospital establishes and implements a process for proper and safe disposal of infectious wastes to reduce infection.** **Waste produced by clinical operations and holding infectious risk needs to be decontaminated before being treated. Therefore, proper triaging and processing of hospital waste need to abide by applicable laws and regulations. Also, disposal of body fluids and blood components need to done in a way that minimizes the infectious risk of these components before they join the wastewater collection system.**
	Guiding measures**:**
	19.1 The hospital complies with applicable local laws and regulations for handling, treating and disposing of the infectious wastes, and periodic audits are done by the ministry of environment.
	19.2 A contract is done with an agency to dispose medical waste or done in-house.
	19.3 The healthcare workers are trained on the handling and the disposing of infectious wastes, blood and blood components.
	19.4 Blood/body fluids spill kits are present in clinical areas.
	19.5 A policy is in place to manage the operations in the mortuary and the post-mortem area.
5	**IPC 20. The hospital reduces the risk of infection through proper handling and disposal of sharps.** **Handling of sharps and needles are potential sources of contamination for staff from infected patients, and should be disposed in special puncture-proof and leak proof containers. Any**

	sharp or needle injuries be evaluated and managed according to procedure to rule out any infectious risk from the patient, but also reported and analyzed as to identify the gaps in practice or in knowledge that can lead to better prevention of such incidents. Such types of incidents should be monitored as an OHS performance objective, and regular trainings and refreshers provided to concerned staff.
	Guiding measures**:**
	20.1 The hospital reduces the risk of sharps and needle-related injuries and infections through implementing evidence-based practices.
	20.2 Safely engineered (puncture-proof and leak-proof) devices are used as part of the hospital's occupational health and safety program to collect sharps and needles.
	20.3 Disposal of sharps and needles follows safe and appropriate disposal procedures.
	20.4 There is a system in place to report sharp and needle-related injuries.
	20.5 The hospital performs root-cause analysis of the reported sharp and needle injuries, as per hospital policies and procedures.
	20.6 The hospital abides by proper and safe injection practices.
	20.7 The hospital trains the healthcare workers on proper and safe handling of needles and sharps.
	20.8 An evaluation process is in place to identify the effectiveness of the intervention done to reduce the sharp and needle-associated injuries.
5	**IPC 21. The hospital abides by food safety standards to reduce the risk of food-borne diseases.** ***[OTHER – 7]*** **Due to highly susceptible and frail populations among hospitalized patients, such as the elderly, outbreaks of nosocomial food-borne infections can add to the morbidity of these patients. Food-borne bacteria can multiply rapidly if food is not maintained at certain appropriate temperatures for refrigeration and hot holding, and if there are delays between food preparation and distribution. Also, dishwashers need to reach thermal disinfection temperatures to sufficiently reduce the pathogens.** **Most nosocomial food-borne pathogens are spread by the fecal-oral route. The primary source of outbreaks may be contaminated food/water, and infected/colonized patients, visitors, staff, or food handler. Therefore, food handlers must be aware of high standards of personal hygiene and perform hand hygiene and sanitation appropriately and in the right indicated moments.** **These and other potential hazards need to be addressed in a systematic way by the hospital in order to prevent and control such risks related to food-borne infections. Hazard Analysis Critical Control Point (HACCP) is recognized as an effective food safety assurance system and can be used to attain standards specific to**

	food safety such as Food Code (US food standards by FDA) and Codex Alimentarius (International Food Standards by FAO/WHO). Regular inspections and audits by the IPC team should be performed to monitor the implementation of this program.
	Guiding measures**:**
	21.1 The hospital abides by Hazard Analysis and Critical Control Points (HACCP) to ensure clean and appropriate environment for safe food handling.
	21.2 Preparation of food is done using proper sanitation measures and under appropriate room temperatures, and audits are conducted to test the compliance.
	21.3 Sanitation measures are implemented in the kitchen.
5	**IPC 22. The hospital follows measures to reduce the risk of infection during renovation, demolition and reconstruction, as per hospital policies and procedure.** **Renovation, demolition and reconstruction projects raise concerns about contamination of workers, patients and personnel by aspergillus and other fungi, whose spores can be dispersed on dust or dirt particles when floors, walls, and ceilings are penetrated, and can remain suspended in the air for prolonged periods of times. Immuno-compromised persons are vulnerable to aspergillus and other fungal infections which can in some cases increase their risk of mortality.** **Therefore the IPC team needs to know beforehand of such projects in order to assess the associated risks and recommend actions that can be taken to enhance personnel, workers, patients and visitor safety, and verify their implementation.**
	Guiding measures**:**
	22.1. The Infection prevention and control team is consulted when renovation, demolition or reconstruction occurs.
	22.2. An infection control risk assessment (ICRA) is done and signed prior to renovation, demolition and reconstruction.
	22.3. Actions based on the infection control risk assessment are implemented
5	**IPC 23. The hospital ensures the correct usage and availability of personal protective equipment, soap and hand antiseptics.** **Use of appropriate Personal Protective Equipment (PPE) and hand hygiene are fundamental elements needed to apply standard and transmission-based precautions.** **Trainings regarding the correct use of PPE, as well as the indications and technique of hand hygiene should be provided to all concerned healthcare workers, as well to visitors when applicable. Availability of PPEs and hand hygiene solutions should be available in sufficient quantities at all times and in all points of care. However, requirements can adapt to scenarios of contingency and crisis based on a risk assessment and evidence-based approach.**

	Guiding measures:	
	23.1	Appropriate usage of the personal protective equipment is guided by policies and procedures that are addressed by the hospital's occupational health and safety program.
	23.2	Healthcare workers are competent and trained about using the appropriate personal protective equipment, when indicated.
	23.3	Visitors are informed about using the personal protective equipment to reduce the risk of infection.
	23.4	Personal protective equipment is available at any point of care, when indicated.
	23.5	The hand and surface disinfectants are available at each point of contact
	23.6	Hand disinfecting and hand washing facilities are equipped with antiseptic soap/ hand rub solutions, disposable towels and a foot-pedal bin.
6	**IPC 24.**	**The hospital ensures proper hand hygiene practices. [QMPS-18]** **Hand hygiene is one of the most important measures to apply in order to limit healthcare associated infections. Yet conformity of healthcare workers with hand hygiene remains very challenging for most hospitals.** **Trainings and refreshers about the indications and proper techniques of hand hygiene need to be accompanied by regular objective (with minimal observation bias) audits to monitor compliance.**
COR	Guiding measures:	
	24.1	Hand hygiene guidelines are up to date and are implemented.
	24.2	Healthcare workers comply with the guidelines related to hand hygiene.
	24.3	Healthcare workers and visitors have access to hand washing sinks or alcohol-based hand rubs at all times.
	24.4	Proper instruction is available to instruct the healthcare workers and visitors about the proper hand hygiene technique.
	24.5	Reminders showing the proper hand washing technique and usage of the alcohol-based hand rubs are posted throughout the hospital.
	24.6	Audits are done, within a year timeframe, to monitor the compliance with hand hygiene policy, outcomes are evaluated and improvements are made accordingly.
5	**IPC 25.**	**The central sterilization services abide by the Infection prevention and control measures.** **The Central Sterilization Service Department (CSSD) aims to ensure disinfection and sterilization of reusable material so as to eliminate the risk of cross-contamination by instruments and medical devices. The functional areas of the CSSD: decontamination, preparation and packaging, sterilization and sterile storage should be separated.**

	One-way flow of items between soiled and clean work areas and sterile storage gains to be implemented. **Policies and procedures for proper disinfection and sterilization of devices should be elaborated based on IPC recommendations, taking into consideration the manufacturer's recommendation of the device. CSSD workers should be well trained regarding these policies and procedures, as well on applying specific safety measures relative to the department.**
	Guiding measures:
	25.1 The healthcare workers of the central sterilization department are qualified, certified or received training on proper sterilization and disinfection.
	25.2 Areas, where items are decontaminated, are physically separated from areas where items are sterilized, packaged and stored.
	25.3 The hospital ensures that healthcare workers' safety measures are implemented in the central sterilization department.
5	**IPC 26. The hospital environment is clean and disinfected.** **Transmission to a patient of nosocomial pathogens existing in the close environment of another infected patient is one mode of contamination that needs to be seriously addressed through effective cleaning and disinfection of the contaminated physical environment.** **Procedures should be elaborated specifying the high, middle and low risk areas of the hospital and the associated cleaning products that should be used in each area, in addition to the case of cleaning infected patient rooms, and indications of room culturing.** **The IPC team needs to monitor and assess the environmental cleaning process, through observation audits and other techniques if necessary (e.g. microbiological cultures, ATP testing, etc.)**
	Guiding measures:
	26.1 There are policies and procedures for cleaning and disinfecting the physical environment.
	26.2 The hospital assesses the risk of infection and classifies the areas to be cleaned accordingly.
	26.3 The Infection prevention and control team is responsible for performing environmental microbiological cultures when necessary.
	26.4 In case of external provider, the hospital monitors the quality of the services provided to ensure compliance (i.e. second party audit and contract of how to abide by procedure) and adherence to the standards of practice.
4	**IPC 27. The Infection prevention and control process is part of the overall hospital's quality improvement and patient safety program.** **Quality indicators relative to the HAI prevention program need to be defined in order to monitor the rates of HAIs, results of which need to be analyzed in order to derive appropriate actions and later on measure their impact on the outcomes.**

		Such indicators gain to target the essential problematic areas according to the risk assessment method applied by the IPC team. Indicators can span all three categories: outcome, process and structure. **Examples of outcome indicators include rate of selected categories of HAIs, process indicators include the conformity rate of hand hygiene, and structure indicators could include the level of consumption of hydro-alcoholic solutions per department type and 1000 patient-days.**
	Guiding measures**:**	
	27.1	There is evidence that indicators related to the healthcare-associated infections are collected.
	27.2	Indicators related to the healthcare-associated infections are analyzed and monitored.
	27.3	Results of the indicators' management are communicated to the healthcare workers, physicians and hospital executive management on quarterly basis, and improvements are made accordingly.
6	**IPC 28.**	**The hospital has a process to manage and ensure proper antimicrobial prescription and limit overuse and misuse of antimicrobials.** ***[MM-3]*** **Overuse of broad spectrum antibiotics (BSA) is linked to the emergence and selection of multidrug resistant organisms. Therefore, restricting use of BSA needs to be ensured through the strict implementation of a prescription policy applicable to all hospital physicians.** **Awareness about antimicrobial correct indications and correct-indication level of prescriptions is important, and data about the pertinence of the antimicrobial prescriptions needs to be analyzed and shared with key stakeholders.**
COR	Guiding measures:	
	28.1	Certain antimicrobials are prescribed according to evidence-based practice.
	28.2	Antimicrobials prescription is reevaluated every 72 hours.
	28.3	The hospital evaluates or ensures at least once a year, the implementation of the recommendations and the pertinence of the prescriptions.
	28.4	The hospital educates the patients about the proper use of antimicrobials and with proper documentation in the medical record, upon discharge.
	28.5	The hospital guides the physicians and healthcare workers to restrict the overuse/misuse of antimicrobials through setting specific policies.
	28.6	The hospital has indicators to measure antimicrobial prescriptions

Quality Management and Patient Safety (QMPS)

Introduction

The **Quality Management and Patient Safety** chapter addresses the hospital's responsibility in ensuring quality at the level of patient care. To have an effective continuum in quality management and patient safety, the hospital should implement collect, analyses and communicate data related to quality improvement and patient safety. Moreover, adverse-events, near-misses and sentinel events are major events that may jeopardize patient safety, thus the hospital is required to have a mechanism to prevent and manage their occurrence.

The **Quality Management and Patient Safety** chapter targets the following sections:

- Quality management and patient safety plans/programs
- Risk management program
- Data collection, analysis and communication
- Sentinel, adverse and near-miss events
- Patient identification
- Handover communication
- Verbal and telephone orders
- Reporting of critical diagnostic test results
- Safeguard correct site, procedure and patient during surgery
- Procedure time out
- Fall prevention
- Hand hygiene
- Concentrated electrolyte control and management
- High alert medications management

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
4	**QMPS 1. Quality management and patient safety programs/plans are supported and implemented by designated qualified individuals.** **The quality and patient safety programs/plans ensure that the safety of patient care is secured and there is continuous quality improvement overseeing all areas of the healthcare facility. This plan/program should be developed by qualified personnel/team, in coordination with the executive management, addressing high priority/high risk issues, while going in line with the hospital's strategic plan. It is important that this program/plan's objectives are evaluated on a regular basis via meetings by a designated multidisciplinary quality and safety committee, selected key performance indicators and reports presented to the committee and governing body. The qualified personnel/team are responsible to oversee, facilitate the implementation and integration of the plan in various departments, help foster an organizational safety culture (using validated tools such as the AHRQ Patient Safety Culture survey) and guide the consequent improvement actions.**
	Guiding measures:
	1.1. The quality management and patient safety plans are revised annually and support the hospital-wide strategic plan.
	1.2. A qualified individual with relevant experience, education and training is designated to guide the quality management and patient safety plan
	1.3. The hospital has a multidisciplinary committee with a delineated term of references that address patient safety and quality improvement issues and supports in coordination with the quality management and patient safety coordinator/manager to implement plans in this regard.
	1.4. The quality management and patient safety committee support departments/units/services in the implementation of quality management and patient safety activities.
	1.5. Patient safety culture survey using a validated tool is conducted every 2 years and consequent improvements are implemented.
	1.6. Evidence of staff training on quality management and patient safety by qualified professionals is conducted and documented in the personnel files.
	1.7. On a regular (at least twice a year) basis, the quality management and patient safety coordinator/ manager reports key performance indicators to the hospital executive management.
5	**QMPS 2. Continuous quality improvement and patient safety is implemented.**

		Continuous Quality and safety improvement in health care is a structured organizational process that involves staff (clinical, non clinical, technical etc.), policies/procedures/processes, physical environment and products/materials, working together to implement the set quality and safety improvement objectives. Such objectives once planned, are implemented, evaluated and documented for traceability and assessment purposes. The hospital must have a defined and validated performance improvement approach, made known and acquired to staff, to improve clinical outcomes and patient experiences and reduce organizational costs. Examples of such tools include PDCA cycles, process maps, fishbone diagrams, run charts, etc. **The continuous quality improvement and patient safety approach should also be guided by risk management processes/data (proactive and reactive), which will help in placing effective strategies and improvement projects addressing hospital wide risks which can have an impact on the quality and safety of care, while setting priorities for each project according to the risk assessment. At least one hospital-wide improvement project's impact must be evaluated by the quality and safety committee per year, driving the implementation of the identified improvement objectives in a continuous manner.**
	Guiding measures:	
	2.1.	Quality improvement and patient safety improvements (i.e. people, policy and/or procedure and/or process, place, product, price) are planned, implemented evaluated and documented.
	2.2.	The hospital uses a defined and validated performance improvement approach.
	2.3.	Based on risk management processes, effective improvements are documented.
	2.4.	The quality and patient safety committee analyze the impact of at least one hospital-wide priority improvement project per year.
4	**QMPS 3.**	**Data is collected to support quality and patient safety.** **Data highly contributes to the improvement of patient safety and quality by identifying gaps and key causes in an objective manner, assessing quality of provided services etc. in order for safety improvement interventions will be developed. The hospital has a standardized, uniform manner of collecting data, by trained personnel; using evidence based key performance indicators set by the executive management in coordination with the quality and patient safety department. Such indicators should reflect the quality and safety of care provided and covers the structure, process and outcomes of the hospital's clinical, non-clinical, administrative and patient safety areas, collected on a regular basis.**

		The data collected must be validated using a defined process, upon which it is analyzed by the concerned stakeholders in coordination with quality and safety professionals, resulting in final conclusions and recommendations for improvement.
	Guiding measures:	
	3.1.	Data is collected by trained individuals.
	3.2.	There is a uniform process to collect data on quality and patient safety.
	3.3.	Hospital executive management defines a set of most recent evidence-based key performance indicators focusing on major clinical and management areas and patient safety.
	3.4.	The characteristics of indicators are documented which consist of; indicator definition, sample size, inclusion and exclusion criteria, target, methodology, frequency and result.
	3.5.	The indicators cover structure, process and outcome of clinical and non-clinical areas.
	3.6.	Quality and patient safety indicators are collected on a regular basis.
	3.7.	The hospital has a process to validate data which is described in the data collection policies and procedures.
	3.8.	Patient's confidentiality is preserved if quality and patient safety indicators to be provided to external institutions/databases, based on applicable laws.
4	**QMPS 4.**	**There is a process to analyze quality and patient safety data.** **For the institution to benefit from the collected data, the data must be validated and analyzed by qualified, experienced individuals with the relevant experience, using statistical tools and other established data analysis methods, including trending and benchmarking. Results of this analysis should be presented to the hospital executive management/governing body as part of the hospital-wide dashboard in addition to the concerned departments. This information is then used to assess any current areas for improvement, and help set subsequent quality and safety priorities/objectives. The hospital should be ready to provide data required by the Ministry of Public Health, or external organizations, as per applicable laws and regulations.**
	Guiding measures:	
	4.1.	Data is analyzed by qualified individuals with appropriate knowledge, experience and skills.
	4.2.	Data is analyzed using statistical tools and techniques, when appropriate.
	4.3.	Hospital-wide dashboard includes quantified quality and patient safety indicators.

	4.4.	Analyzed and validated data is communicated to Ministry of Public Health and/or external institutions when required by laws and regulations.
	4.5.	Data analysis results are reported to the hospital executive management and to the concerned departments/units and committees.
	4.6.	Hospital executive management uses the results of the data analysis to prioritize quality management and patient safety projects, develop the strategic and the operational plan and improvement processes.
	4.7.	Evidence of data trending and benchmarking is available for improvement purposes.
4	**QMPS 5.**	**A risk management program/strategy/plan is implemented.** **The risk management plan/program in hospitals plays a vital role in detecting, monitoring, mitigating and preventing risks from affecting the quality of care and services and causing harm; and goes hand-in hand with the hospital's quality and safety program/plan. It follows an established well defined risk management strategy of identifying and managing risks (identify, assess, treat, monitor and report risks) based on reactive and proactive risk assessment methodologies. Qualified personnel by education, experience and training must guide and facilitate the risk management program/plan, in addition aid in the training of staff on the risk management principles to aid in achieving the institution's risk management objectives in a collective manner.** **Actions integrated within the risk management program/strategy/plan should cover all areas of the institution (clinical, managerial, financial, occupational) and may be directed toward the patient (provision of adequate care, decision support), staff (training, availability of policies/protocols), organization and facility (improved leadership/guidance, proactive risk assessment), and toward therapeutic agents and equipment (regular audits, forcing functions). Results and improvements must be documented and communicated to the concerned personnel and executive management**.
	Guiding measures:	
	5.1.	The hospital has a multidisciplinary committee of qualified individuals with relevant experience, education and training, designated to guide the risk management program/strategy/plan and is defined by name and function.
	5.2.	A qualified individual with relevant experience, education and training is designated to guide the risk management program/strategy/plan
	5.3.	Hospital managerial, clinical and financial risks are identified and managed through risk management framework based on a

		proactive systematic framework consisting of; risk identification, risk analysis, risk evaluation and risk control.
	5.4.	Evidence of staff training on risk management.
	5.5.	Risk management results and improvements are documented
	5.6.	Risk management results and improvements are communicated to hospital executive management and relevant staff members.
6	**QMPS 6.**	**The hospital uses a defined and standardized process for identifying and managing Sentinel Events.** **A sentinel event is a patient safety related event that may result in death, permanent or severe temporary physical or psychological harm or life-saving intervention.** **It is vital that staff is aware what constitutes a sentinel event and what are the types of events that should be reported. Thus the hospital should have a defined list of such sentinel events, accompanied by a standardized process/policy to identify, analyze, and manage such events, made aware to all hospital staff.** **Due to the severity of such events, and to avoid the recurrence of further events, the hospital must have a clear policy with defined timeframes for the reporting (within 48 hrs.) and analysis (within 45 days) of such events to ensure prompt, timely actions. Analysis must include a multidisciplinary team in order for effective and valid improvement actions to be placed.** **Actions taken to address these events are documented, reported to and evaluated by the hospital executive and quality and patient safety committee. Evidence of this evaluation should be kept (meeting minutes, reports, indicator data, root cause analysis reports etc.)**
COR	Guiding measures:	
	6.1.	Sentinel events have been defined in hospital policies including a list of types of events that are considered sentinel and should be reported.
	6.2.	The hospital uses a standardized process for identifying and managing sentinel events.
	6.3.	There is a standardized process to report sentinel events to hospital executive management within 48 hours of the internal notification of the event.
	6.4.	A multidisciplinary team performs a root cause analysis of the sentinel event within 45 days from the date of the internal notification of the event
	6.5.	Evidence that the hospital executive management and quality management or patient safety committees implemented and evaluated the actions taken on the result of the root cause analysis.
	6.6.	Corrective and preventive action plans are implemented to prevent further sentinel events.

	6.7.	Quality management and patient safety committee reviews and updates the patient safety incident process and reports to hospital executive management annually.
6	**QMPS 7.**	**The hospital uses a defined process for identifying and managing Adverse Events.** **An *Adverse Event* is defined as any injury caused by medical management rather than by the underlying disease or condition of the patient and does imply harm (AHRQ).** **Such events and their types must be defined in a hospital policy, which also describes how and when they should be reported, in addition to the approach and/or tools used to analyze such events.** **Systematic approach to reporting and analyzing adverse events aids in fostering a culture of safety, where results of the analysis are fed-backed to the concerned stakeholders and relevant corrective, preventive improvement actions are documented, implemented and evaluated.**
COR	Guiding measures:	
	7.1.	Adverse events have been defined in hospital policies including a list of types of events that are considered adverse and should be reported
	7.2.	The hospital has a uniform process for reporting adverse events
	7.3.	Adverse events are analyzed using specific tools (i.e. Root cause analysis)
	7.4.	Corrective and preventive action plans are documented, implemented, and evaluated.
5	**QMPS 8.**	**The hospital uses a defined process for identifying and managing Near-Misses** **Near misses are incidents that did not cause patient harm, but could have if not for timely detection and interventions done by healthcare professionals.** **Using a defined process for identifying, reporting and analyzing near misses is vital in healthcare facilities as it ensures the improvement of quality and safety of the care provided to the patient and culture of the institution. As well as constituting an integral component of the organization's risk management program/plan. Thus all corrective, preventive improvement actions must be documented, implemented and evaluated, while being reported to the executive management and quality and safety committee.**
	Guiding measures:	
	8.1.	Near-Miss events have been defined in hospital policies including a list of types of events that are considered near-miss and should be reported
	8.2.	The hospital has a uniform process for reporting near-misses.
	8.3.	Evidence of near-misses analysis.
	8.4.	Corrective and preventive action plans are documented, implemented, and evaluated.

	8.5. Hospital executive management assures a process for the investigation of near-miss events
5	**QMPS 9. Prospective analysis is performed on patient safety-related issues.** **A prospective analysis, such as the failure mode and effects analysis (FMEA) is an essential component of the risk management strategy to proactively identify, mitigate or prevent safety risks of a certain process or department. It is a structured, analytical tool to help identify hazards in each step of the process and identify relevant preventive and corrective actions in a standardized documented manner.**
	Guiding measures:
	9.1. Prospective analysis (i.e. failure mode effect analysis) is done on at least one of the priority risk processes, annually.
	9.2. Evidence of result analysis and action plan and/or decisions taken.
	9.3. Evidence of documented and implemented improvements
4	**QMPS 10. There is a process to communicate patient-related information and variation of care to patients and family caregivers.** ***[PFR-13]*** **In the spirit of having patients at the center of their care and decision making, the hospital has a policy ensuring information relevant to the patients' care are regularly documented and transmitted to them or their family especially when there is a change from a pre-discussed plan. Disclosing patient information (which may include sensitive information such as serious diagnosis or prognosis) must only be done by designated, trained qualified staff, reflected by hospital policies/procedures. Evidence of training ins available in addition to patient/family support services/resources (e.g. psychological, spiritual etc.)**
	Guiding measures:
	10.1. The hospital has a documented policy and/or process that is implemented and regularly updated to disclose information to patient and family members
	10.2. Designated staff are trained on disclosing information to patients and family members
	10.3. Resources (i.e. psychological support) are available to support patients and family after information is disclosed, when needed.
	10.4. The variation of care to patient is documented in patient medical file.
6	**QMPS 11. The hospital has a standardized process to identify patients.** **As the international patient safety goal 1, correct patient identification should be the precursor to all other care acts, and it is imperative hospitals have a clearly defined procedure or policy describing how patients should be identified, when and what tools or criteria must be present to identify patients, in addition to accounting for situations with any patient-related vulnerabilities or status (for e.g. newborns, unconscious, mentally disabled). At least**

	two identifiers, which do not change throughout the patient's course of care or subsequent admissions, must be used to identify patients every time. For example, full name and date of birth or medical file number. Compliance to patient identification is measured, for e.g. through audits, observations, etc. and any misidentification incidents are to be reported, documented and corresponding corrective or improvement actions set and evaluated.
COR	Guiding measures:
	11.1. Patient identification measures are documented in policies and procedures that include but not limited to; patients with similar names, unconscious patients, newborn and mentally disabled patients.
	11.2. Patient identification by at least two identifiers (the patient's room number or location cannot be used for identification).
	11.3. Patient identification is conducted prior to treatments and procedures.
	11.4. Patient identification compliance rate is annually measured and documented.
	11.5. Patient identification incidents are documented and evaluated
	11.6. Improvements are documented and required policy and/or procedure and/or process changes are made to maintain the improvements.
6	**QMPS 12. The hospital has a standardized process for handover communication used between shifts, units and transfers.** **Hospitals have a standardized process for handover communication used between shifts, units and transfers. Due to the risk of miscommunication, it is vital standardized tools are used, which are also clear and legible. Examples include the SBAR or I-PASS tools. This is important for the effective and safe continuity of care among providers. Such tools aid the provider in communicating the patient's history, current situation, assessments, associated risks to address, pending tests/acts and recommendations to follow with every change of shift, unit or transfer. Compliance to handover communication must be monitored and evaluated periodically to account for any areas of improvement.**
COR	Guiding measures:
	12.1. There are standardized methods, tools or forms used by staff for handover communication (i.e. Situation, Background, Assessment, and Recommendation-SBAR).
	12.2. Care documented in patient medical records is clear, understandable and legible.
	12.3. Handover processes are regularly revised and improved when needed.
	12.4. Handover compliance rate is monitored periodically based on hospital policies and procedures.

6	**QMPS 13.**	**Verbal and telephone orders are carried out in a safe way for critical and lifesaving orders** **Verbal and telephone orders are those given by an authorized healthcare professional to a qualified staff member who has the approval to receive and record them based on local laws/regulations and hospital policy. The hospital has a policy to define which specific situations allow for verbal and telephone orders (for e.g. lifesaving emergencies or sterile conditions), the method of such communication in addition to who is authorized to give/receive such orders.** **To account for any poor verbal transmission/hearing or poor handwriting, such orders must be "repeated back" (in case of verbal orders) or "read-back" (in case of telephone orders) before the order is administered, to avoid any errors in communication. Both types of orders must be documented in the file and marked for a repeat or read back.**
COR	Guiding measures:	
	13.1.	The hospital has a policy to manage verbal and telephone orders.
	13.2.	Verbal and telephone orders are documented in the patient records
	13.3.	Verbal and telephone orders are read back by the healthcare personnel receiving the order.
	13.4.	Read back verbal and telephone orders are marked read back once documented.
	13.5.	The policy is annually evaluated and improvements are implemented and documented.
6	**QMPS 14.**	**Reporting of critical (life-threatening) diagnostic test results follow a delineated process.** **Reporting of critical (life-threatening) diagnostic test results in a timely, safe and effective manner is critical for safe patient care. Hence, there exists a clear policy/procedure specifying what diagnostic test result levels are considered critical/life threatening (for e.g. laboratory values, imaging results), how this result is communicated, by and to whom, and any escalation pathways if needed. Each defined critical level is defined by the concerned, qualified professionals as per international guidelines and internal/local epidemiological data, and is reviewed annually. Evidence of evaluating the process can be through review of files, data collection, audits, system tracer, observations etc. and any improvement actions identified and implemented**
COR	Guiding measures:	
	14.1.	The hospital has a process on reporting critical diagnostic test results.
	14.2.	Each diagnostic test has a defined critical level that is reviewed annually and when needed.
	14.3.	The treating physician is responsible for reporting and documenting any result to his patients or their family members.

	14.4. The hospital defines to whom the critical results are reported.
	14.5. The critical test results are reported using the verbal and telephone order policy in case of emergency.
	14.6. Evidence of process evaluation and improvement implementation.
6	**QMPS 15. The hospital implements standardized processes to safeguard correct-site, correct-procedure, and correct-patient surgery. *[ASC-11]*** **Wrong patient, procedure and site are never events and should not be accepted. Therefore, a standardized documented procedure starting from the patient's room until induction should be mandatory, with several safety steps. In the patient's room, a member of the surgical team who is familiar with the patient and surgery , should mark the limb or site of surgery, confirming it with the patient or legal guardian, associated documents and using an approved and standardized marker and method (i.e. : check with clear initials).** **Upon arrival to the operating area and then entering the operating room until the induction time, multiple steps and verifications checks should be implemented by several members of nursing, surgical and anesthetic personnel. A Final check before surgical start, "procedure time out" is obligatory.** **All these steps are documented in the patient's record.** **This process must be evaluated regularly, and this can be done using audits, observations, file reviews audits on the entire process must be conducted and any non-compliance documented with improvement projects and targets implemented and rechecked**.
COR	Guiding measures:
	15.1. The hospital has a standardized process that is implemented before induction of anesthesia in surgical procedures that consists of preoperative verification, site marking and procedure time-out.
	15.2. Preoperative verification is implemented using a checklist and consists of: 15.2.1. Patient identification 15.2.2. Patient consent form 15.2.3. The procedure being performed 15.2.4. The site and side on which the surgery is being performed 15.2.5. Laboratory test and images 15.2.6. Disclosure of any implants or prosthesis 15.2.7. Prophylactic antibiotic (if any) 15.2.8. Other concerns related to surgeon or anesthesiologist (i.e. allergies, blood loss, difficult airway)
	15.3. One of the individuals performing the procedure utilizes a standardized mark, as per hospital policies and procedures, to identify the surgical site to be operated.
	15.4. Patients and/or family member and/or next of kin are involved during site marking in the patient's room.

	15.5. Compliance rate to preoperative verification processes and timeout procedure is regularly (within a year timeframe) measured and documented.
	15.6. Evidence of process evaluation and improvement implementation.
6	**QMPS 16. A procedure time out process is implemented before the initiation of the surgery. *[ASC-13]*** **A "time out "procedure is the final step of the preoperative checklist before starting surgery. A final check for correct patient-procedure-site and implants. This step should be performed by all involved health care personnel (circulating nurse, anesthetist and surgeon).**
COR	Guiding measures
	16.1. Timeout is conducted in the location of the surgery, with the whole surgery team present (i.e. surgeon, nurse and anesthetist), immediately before starting the procedure and after the administration of anesthesia.
	16.2. The timeout is implemented to verify the patient and the surgery, and consists of: 16.2.1. Verifying the correct patient identification 16.2.2. Verifying the correct side and site of the procedure with site marking 16.2.3. Verifying the correct patient position 16.2.4. Verifying the availability of the correct implants/devices 16.2.5. Verifying that the preoperative verification checklist has been completed
	16.3. The timeout procedure is documented.
	16.4. Evidence of process evaluation and improvement implementation, when needed.
6	**QMPS 17. The hospital implements a process to prevent patient falls.** **As an international patient safety goal, the prevention of patient falls is central to ensuring safe patient care and reducing risks of further morbidities, length of stay and even mortality.** **There is a clear procedure/policy for the timely assessment and re-assessment of patient fall risks (based on standardized criteria, using evidence- based assessment tools such as the Morse fall risk assessment tool, John Hopkins assessment tool), preventive measures/precautions to be taken according to each patient's fall risk level and immediate actions/interventions required in the event of a fall. Measuring and documenting fall rates, at least annually, is important to assess and track the quality of fall prevention care given.**
COR	Guiding measures:
	17.1. Patients are assessed for the risk of fall upon admission.
	17.2. The hospital implements a process to reassess the patients for risk of falls based on a standardized criterion.
	17.3. Patient risk for fall assessment is documented in patient medical record.

	17.4.	The hospital implements evidence-based intervention for fall prevention on patients that have been assessed to be at risk for fall.
	17.5.	Fall rate is measured regularly (within a year timeframe) and documented.
6	**QMPS 18.**	**The hospital ensures proper hand hygiene practices. [IPC-24]** **Hand hygiene is one of the most important measures to apply in order to limit healthcare associated infections. Yet conformity of healthcare workers with hand hygiene remains very challenging for most hospitals.** **Trainings and refreshers about the indications and proper techniques of hand hygiene need to be accompanied by regular objective (with minimal observation bias) audits to monitor compliance.**
COR	Guiding measures:	
	18.1.	Hand hygiene guidelines are up to date and are implemented.
	18.2.	Healthcare workers comply with the guidelines related to hand hygiene.
	18.3.	Healthcare workers and visitors have access to hand washing sinks or alcohol-based hand rubs at all times where appropriate.
	18.4.	Proper instruction is available to instruct the healthcare workers and visitors about the proper hand hygiene technique.
	18.5.	Reminders showing the proper hand washing technique and usage of the alcohol-based hand rubs are posted throughout the hospital.
	18.6.	Audits are done, within a year timeframe, to monitor the compliance with hand hygiene policy, outcomes are evaluated and improvements are made accordingly.
6	**QMPS 19.**	**Effective control and management of "at risk" concentrated electrolytes solutions.** **The control and management of "At risk" concentrated electrolytes solutions is imperative to avoid any errors or adverse events affecting patient safety. There exists a clear process/policy specifying the "at risk" concentrated electrolyte solution types, storage location and conditions, how they are labeled, ordered, prepared, dispensed, administered and documented in the medical record, to address all the corresponding safety risks that could arise from their use (for e.g., one storage area, alert labeling, double verification of order and administration). Such electrolyte solutions must not be found in regular floor stocks, unless required, to avoid the risk of misuse. The control and management of such at risk solutions is done in collaboration with the Pharmacy or any qualified discipline. This policy and control and management are evaluated annually for any improvements to be implemented. Such evaluations can be done through observations, file reviews, audits, incident reporting etc.**
COR	Guiding measures:	

	19.1. There is a process to store, label, order, prepare, dispense, administer and document concentrated electrolyte solutions on the medical record.
	19.2. Concentrated electrolytes "at risk" are not found in floor stocks unless clinically needed.
	19.3. The control and management of concentrated electrolytes and solutions are annually evaluated and improvements are implemented and documented.
6	**QMPS 20. There is a set of policies for managing high-risk medical devices** **High-risk medical devices, such as pacemakers and artificial heart valves, are devices that help in sustaining human wellbeing, yet may present a potential risk of harm if misused or managed. For this reason, hospitals must have a list of such devices, accompanied with a set policy specifying the individuals authorized for access and management of such devices, diffused to relevant departments and updated on a regular basis.**
COR	Guiding measures:
	20.1. There is a list of high-risk medical devices that are updated on regular basis.
	20.2. The policy identifies the individuals involved in managing the high-risk medical devices
	20.3. Access to the high-risk medical devices is limited to the authorized staff.
6	**QMPS 21. There is a policy for managing high-alert medications.** **High-alert medications are medications that endure a high risk of causing adverse effects on patients if not managed correctly or safely. Examples include anticoagulants, chemotherapy agents, insulin and narcotics. The institution has a list of such medications in the hospital, and this list is made available to all users concerned and revised regularly by qualified professionals. There should be a clear policy addressing all the potential safety risks involved at each step from medication ordering, storage, labeling, dispensing, preparing, administering, monitoring and documenting in the patient's record. For example, access should be restricted to authorized staff, storage well designated, labels clear and highlighted and having a double independent verification upon preparation and administration to avoid any prescription, dispensing and administration errors. It is important to evaluate the compliance to this high-alert medication policy and address gaps in practice promptly and effectively.**
COR	Guiding measures:
	21.1. There is a list of high-alert medications that is updated on regular basis.
	21.2. The policy identifies the individuals involved in managing the high-alert medications.

21.3.	A process is present for each phase in managing the high-alert medications from storing, labeling, ordering, preparing, dispensing, administering and documenting on the medical record.
21.4.	Access to the high-alert medications is limited to the authorized staff.
21.5.	Compliance rate to the policy for managing high-alert medications is regularly (within a year timeframe) measured and documented.

Patient Centered Care

Access and Continuity of Care (ACC)

Introduction

The **Access and Continuity of Care** chapter aims to promote patient safety throughout the patient's continuum of care. This chapter addresses issues of discharge, transfer and referral. As such, the hospital is expected to define and communicate the services provided. Healthcare workers are also expected to screen patients in order to identify their healthcare needs and potential risks (i.e. functional limitation, nutritional status). This will ensure effective treatment of patients, based on the hospital's capacity.

The **Access and Continuity of Care** chapter targets the following sections:

- Access to care
- Patient screening
- Patient assessment
- Admission, registration and transfer
- Standardization of care
- Patient and family education
- Patient discharge, transfer and referral within/outside the organization

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
4	**ACC 1. Services provided at the hospital are defined, communicated and easily accessible to the patients.** **In order to ensure appropriate and timely care is provided, hospitals should identify all the services available at their own (or affiliated) premises, and establish a process to convey these services to the public.** **Hospitals should also ensure services are available for special needs patients (mobility impairment, hearing...) and translation services if needed.**
	Guiding measures:
	1.1. The services provided at the hospital are identified.
	1.2. The hospital has a delineated process to communicate its services to the patients, families and community.
	1.3. The hospital develops and implements a process to provide services to patients with special needs (i.e. hearing impairment) or language barriers.
6	**ACC 2. Critical patients at the emergency room are given priority and stabilized prior to indicate transfer.** **Emergency room triage procedures should follow evidence-based literature and in line with the hospital's other policies and services available. The triage protocols should be documented and taught to qualified triage health care workers (triage nurse, emergency room physician …). They ensure that all documentation related to the triage process, diagnostic tests and therapies done in the emergency department are in the patient's file prior to transfer to another service / hospital or discharge. All triage protocols should follow the laws and regulations, guaranteeing first line treatment and stabilization in life threatening conditions, until transfer.**
COR	Guiding measures:
	2.1. The hospital has a documented and implemented evidence-based triage, based on hospital policy and procedure.
	2.2. Triage staff is trained on the prioritization criteria and triage process (i.e. Australasian Triage Scale (ATS), Canadian Triage and Acuity Scale (CTAS), National Triage Scale Based Manchester Triage Scale, Emergency Severity Index (ESI))
	2.3. Patient full triage assessment is documented in patient's medical record.
	2.4. Treatment for life-saving conditions is provided regardless of ability to pay, as per laws and regulations, and documented for patients prior to transfer.

	2.5. Documented stabilization treatment and diagnostic tests are transferred with the patient to receiving unit/organization.
5	**ACC 3. Patients are screened to identify their health care needs.** **All patients regardless of the major complaint should be screened for their health care needs to assess if the hospital is capable of providing such care. This screening process should be well documented in policy and applied to all patients. The results of the diagnostic and necessary screening test should be delivered in a timely fashion and in accordance with an established process (i.e.: critical values reporting…) to the medical team managing the patient. They decide based on these results and the hospital's capacity and services if the patient should be admitted, transferred or discharged.**
	Guiding measures:
	3.1. The hospital has a policy and/or procedure on patient screening prior to admission.
	3.2. Screening results are used to determine the patient health care needs and its alignment with the hospital mission and services.
	3.3. Patients are transferred if the hospital cannot provide the necessary services and the appropriate setting for care.
	3.4. The test results are delivered to the healthcare professional in charge of the patient through a specific process, to determine if the patient will be transferred, referred or admitted.
5	**ACC 4. Upon admission, patient preventive, palliative, curative, and rehabilitative needs are assessed.** **A detailed, thorough care plan should be completed before admission. All the patient's needs should be discussed with the patient and his family, documented with all suggested management plans. The care plan should be revisited and adjusted routinely and when needed according to the patient's changing health status.**
	Guiding measures:
	4.1 Preventive, palliative, curative, and rehabilitative needs are assessed upon admission in collaboration with the patient and family.
	4.2 Patient care needs are prioritized and documented.
	4.3 Care is planned to meet patient's needs.
5	**ACC 5. Functional limitations (i.e. risk for fall) are assessed upon admission.** **Patient safety, possible risks and functional limitations (risk for fall, swallow, psychosis …) are assessed upon admission and whenever the patient's condition requires it due to a change in his overall status. Such assessments have to follow a hospital procedure that is well documented and implemented by the relevant health care personnel. Once risks are identified, a predetermined interventions to mitigate such risk are put in place and their implementation is documented in the patient's record (bed rails, warning signs, special diet, …)**

	Guiding measures	
	5.1	The hospital has a policy and/or procedure to assess functional limitation
	5.2	The assessment is performed, when needed and documented by qualified individuals.
	5.3	Targeted interventions are implemented and documented.
5	**ACC 6.**	**Nutritional status and other special needs are assessed upon admission.** **The nutritional status and needs of patients are assessed by qualified personnel (nutritionist) for predetermined. According to the patient's health condition and in collaboration with the medical team, a nutritional plan is set to meet the current needs of the patient. Such plan is documented in the records and reassessed routinely or when needed to remain relevant with the patient's needs and health status**
	Guiding measures	
	6.1	The hospital has a policy and/or procedure to screen for nutritional status
	6.2	The hospital has a policy to assess nutritional status.
	6.3	The assessment is performed, when needed and documented by qualified individuals.
	6.4	Targeted interventions are implemented and documented.
6	**ACC 7.**	**Pain is assessed upon admission and interventions are implemented accordingly.** **Pain control is an essential element in patient care. Hospitals should establish policies where each admitted patient is screened for pain regardless of initial complaint.** **In such cases, a dedicated pain team or, if not established, a qualified personnel in pain management should assess the pain and discuss with the patient or legal guardian all the possible management protocols.** **A pain management plan is documented in the patient's record with defined targets that should be reassessed routinely.**
COR	Guiding measures:	
	7.1	The hospital has a policy and/or procedure to screen for pain.
	7.2	The hospital has a policy and/or procedure to assess pain.
	7.3	The assessment is performed, when needed and documented by qualified individuals.
	7.4	Targeted interventions are implemented and documented.
5	**ACC 8.**	**The patient's initial assessment is documented in the medical record.** **Documented Patients assessment is an essential part of medical management and the patients' medical records. All assessments (medical, nursing, specialty…) should be completed within a set time frame depending on the patient status.** **Upon admissions, the medical team, after the initial assessment should, in collaboration with the patient and his family, elaborate a management care plan. Such plan, documents the proposed**

		investigative, diagnostic and therapeutic care procedures while setting outcome goals and therapeutic targets with a tentative discharge date. **All care plans, must be regularly updated based on patient's status, treatment results and change in outcomes.**
	Guiding measures:	
	8.1	The hospital has a policy for patient initial medical and nursing assessment.
	8.2	Nursing assessment is completed and documented within 12hours from admission or earlier (before end of shift), as per patient condition.
	8.3	Medical assessment is completed and documented within 24hours from admission or earlier, as per patient condition.
	8.4	Further discipline assessment (nutritional assessments, functional needs) is assessed when necessary, within 48 hours from request.
	8.5	A multidisciplinary plan of care is completed and documented within 24hours from admission by engaging the patient and family.
	8.6	Assessments performed at the hospital 30 days prior to admission, due to a previous hospital admission, can be used and updated.
	8.7	A plan of care contains the proposed care and desired/measurable outcomes when applicable.
	8.8	The plan of care is developed and documented in the medical record in collaboration between the patient and/or the family and/or next of kin and continuously updated as needed.
	8.9	The care plan sets an expected discharge date within 24 hours of admission.
5	**ACC 9.**	**Patient admission, registration and transfer policies and/or procedures and/or processes, are delineated.** **Patients flow into, intra and from the hospital must be standardized and controlled by procedures.** **Policies should cover all types of admissions (elective, through emergency and emergency only hospitalizations)**
	Guiding measures:	
	9.1	There is a standardized outpatient registration process and inpatient admission process.
	9.2	There is a delineated process to admit emergency patients.
	9.3	There is a delineated process to manage patients for observation in the emergency room.
	9.4	There is a developed and implemented policy and procedure to transfer patients within the hospital and to other institutions.
6	**ACC 10.**	**There is a clear continuity of patient's care plan throughout their hospital stay.** **Patient care is a complex management undertaking involving several health care personnel encompassing both nursing and medical teams, from different medical and non-medical specialties, and nearly always changing between multiple shifts from the same specialty.**

		To ensure continuity of care, all relevant information must be transmitted between all the different teams, written documented handovers between shifts for nursing staff and for the different medical teams of the same or different specialties. **The Hospital must provide all health care personnel the different tools to assist in a more standardize efficient handover and transfer of care.** **All patients must be under the care of a leading physician, relevant to their admission complaint, and who has the ultimate responsibility for their care.** **Any transfer of care between physicians must follow a well-documented policy, ensuring acceptance by the receiving physician for both management and the transfer of accountability. A detailed transfer note from the sending team describing the status of the patient with an updated care plan from the receiving team has to be in the patients' records.**
COR	Guiding measures:	
	10.1	There is a process for ensuring continuity of care during transitions and handoffs between shifts and between different departments/units/services.
	10.2	Each patient has a qualified (licensed, credentialed and relevant) attending physician responsible for the patient's care.
	10.3	Transfer of responsibility and accountability among physicians is delineated in policies and procedures.
	10.4	The hospital has tools to support the continuity of care (i.e. care plans, information technology, handoff checklist, discharge summary, guidelines).
	10.5	There is a collaborative care arrangement with mental health specialist for urgent in-hospital mental health consultation
5	**ACC 11.**	**Patient assessment is an ongoing process that begins before the patient is admitted and continues throughout hospitalization** **The hospital has policies and procedures dictating patients' continuous medical and nursing assessment. Policies determine the intervals of assessment depending on the unit where the patient is (Critical vs Regular floor). These daily Follow up notes should be in the medical records.**
	Guiding measure:	
	11.1	The hospital has defined intervals to reassess patients (i.e. after treatment, in case of complications).
	11.2	Patient medical reassessment is performed every 24hrs (including weekends and holidays).
	11.3	Nursing reassessment is performed every shift.
	11.4	Reassessment is documented in the patient's medical record.
5	**ACC 12.**	**Patient flow strategies are developed and implemented throughout the hospital to ensure patient safety and minimize delays in patient care**

	Patients flow and bed management are allocated to a specific heath care worker who should liaise with both medical and nursing administrations , ensuring regular or ad hoc meetings in case of bed shortage whether in the emergency rooms or the hospital with backed up patients admissions. Written policies and procedures should elaborate all possible solutions and strategies either to facilitate the hospital's bed capacity and patients admissions from emergency room or ton how to increase the ER's bed capacity and if needed ensure transfer of stabilized patients to another institution.
	Guiding measures:
	12.1 Patient flow strategies are developed and implemented.
	12.2 The hospital develops and implements policies and/or procedures to manage patients at the emergency room if no bed is available (i.e. bed cleaning or bed capacity planning).
	12.3 Patient flow strategies are reviewed and updated every 2 years.
5	**ACC 13. Clinical guidelines on common diagnosis are developed and/or adapted and implemented.** **To achieve a standardized care for common pathologies allowing efficiency and best possible care, each specialty must have clinical management guidelines for at least 5 of their most common diagnoses (STEMI, heart failure, stroke...).** **These guidelines should follow international, national and evidence based medicine while being in line with the hospital's logistical capabilities. These guidelines must be approved by all the relevant medical staff, disseminated to all the concerned medical, nursing and paramedical personnel.** **A regular audit ensures the guidelines are accurately implemented and updated when needed and on regular basis. Patients falling under the management criteria for these guidelines must have them documented in their medical records**
	Guiding measures:
	13.1. Clinical guidelines emphasize every year on at least five of the hospital common diagnosis and are identified, adapted, and shared among the concerned staff.
	13.2. National and/or evidence-based clinical guidelines are implemented, when applicable.
	13.3. Implementation protocols/pathways of the guidelines are documented and disseminated.
	13.4. Implementation is monitored and guidelines are assessed for their appropriateness
	13.5. Clinical guidelines /pathways are updated when applicable.
	13.6. Clinical protocols/pathways are documented in the patient's record.
5	**ACC 14. There is defined criteria to admit, discharge and/or transfer patients to specialized (i.e. psychiatric units) or intensive care (i.e. neurologic intensive care unit, intensive care unit, pediatric intensive care unit, coronary care unit, recovery room, neonatal care unit) units.**

	Any admissions into or discharge from a specialized or critical unit whether from/to the emergency room or regular floor, must follow a documented criteria based checklist ensuring a standardized protocol. The transfer decision is based on predefined criteria and implemented by a multidisciplinary team whose members differ according to the status/age/diagnosis of the patient. Medical and nursing staff must be taught and trained on the application of these transfer guidelines with regular audit on the proper application and if needed modification and updating.
	Guiding measures:
	14.1. A multidisciplinary team (including staff from the intensive care/ specialized units) develops criteria for patient admission/discharge/transfer to and from specialized/intensive care units.
	14.2. The criteria for patient admission/discharge/transfer to and from specialized/intensive care units are documented and processes are implemented.
	14.3. Staff is trained on the implementation of the criteria.
5	**ACC 15. Patients and family caregivers are provided with education on the patient's care.** **Patients and/or their family members when needed, have to be an integral part of the treatment decision and overall care. A critical part of such collaboration is patient/care giver education. Information concerning the different aspects of treatment (medications, side effects, drug-drug interactions ...), daily care (pain management, diet, rehabilitation...).** **In cases where decisions affecting a patient's life (Do not resuscitate, Do not intubate…) must be always taken after a thorough explanation and a multidisciplinary family meetings while following the laws, hospital's internal regulations concerning this subject. Such education must be documented and kept in the patient's file.**
	Guiding measures:
	15.1 Patients and family caregivers are educated on the following, when relevant: 15.1.1. Safe medication use 15.1.2. Medication side effects and medication interaction. 15.1.3. Safe medical device use. 15.1.4. Adequate diet. 15.1.5. Pain management 15.1.6. Rehabilitation techniques. 15.1.7. Do not resuscitate orders.
	15.2 Education is documented and provided during the patient's stay at the hospital.
5	**ACC 16. Discharge is done to meet the patient's need for the continuity of care.**

	Patients discharge planning should starts soon after admission and be documented in the care plan, updated throughout the patients' stay according to their status. The discharge plan is decided in collaboration with the patients and their family while taking into consideration their care needs after discharge (home nursing care, physical rehabilitation…). **A detailed discharge summary is a critical document, signed by the managing physician and given to the patient upon the discharge. This summary contains all the pertinent information from the time of admission, through the hospital's stay with all the relevant and significant findings, diagnostic and therapeutic procedures. The summary also notes the patients' status upon discharge, if they need further care in another institution or can be discharged home. The summary contains the post discharge care plan that was explained to the patients and /or their care givers. A copy of the discharge summary is signed and kept in the patient's medical records.**
	Guiding measures:
	16.1 Discharge is planned upon admission and updated along the care continuum.
	16.2 A documented discharge plan is developed and implemented for patients approved to leave the hospital.
	16.3 Upon admission patient's need for support services and/or medical services is identified.
	16.4 The patient and/or family and/or next of kin take part in developing the discharge planning.
	16.5 A discharge summary of the patient's care and condition is developed and signed by the most responsible physician, containing: 16.5.1 Reason for admission 16.5.2 Patient history 16.5.3 Significant findings 16.5.4 Patient diagnosis 16.5.5 A brief summary of care provided (procedures and treatments performed, and medications administered). 16.5.6 Patient condition at discharge 16.5.7 Care instructions (i.e. diet, medication use, medical device use, rehabilitation technique, pain management and seeking urgent care). 16.5.8 Follow-up instructions and care
	16.6 A detailed discharge summary is given to the patient.
	16.7 A copy of the discharge summary is added to the patient's medical record.
5	**ACC 17. Transfer/referral is done to meet the patient's need for the continuity of care.** **If the patient's discharge condition requires a transfer to another institution or a specialized care facility (rehabilitation center, elderly**

	care facility, palliative care facility, post spinal cord injury center…), such transfer has to be documented in the patient's care plan after discussion in a multidisciplinary meeting with the patient or care givers. Such decision should be based on the patients' overall status, medical needs, social situation and the receiving facility's services. A detailed discharge summary detailing the patient's stay from admission to discharge is given to the patient, focusing on the required care plan after discharge and what is require from the receiving institution. Patient safety during transfer has to follow a preset protocol and discussed when the discharge decision is taken and updated on the day of discharge. The hospital has to ensure the safest transfer conditions based on the patient's status and medical needs (oxygen, specialized medical or paramedical personnel...) such conditions have to be relayed to the team or organization responsible for transportation (red cross, army ambulance services, private ambulance services …)
	Guiding measures:
	17.1 Transfer/referral is planned upon admission and updated along the care continuum, when needed.
	17.2 Upon admission, patient's need for support services and/or medical services is identified.
	17.3 The patient and/or family and/or next of kin take part in developing the transfer/referral planning.
	17.4 A transfer/referral summary of the patient's care and condition is developed and signed by the most responsible physician, containing: 17.4.1 Reason for admission 17.4.2 Patient history 17.4.3 Significant findings 17.4.4 Patient diagnosis 17.4.5 A brief summary of care provided (procedures, tests, treatments performed, and medications administered). 17.4.6 Patient condition at discharge 17.4.7 Care instructions (i.e. diet, medication use, medical device use, rehabilitation technique, pain management and seeking urgent care). 17.4.8 Follow-up instructions and care
	17.5 A detailed transfer/referral summary is given to the patient.
	17.6 A copy of the transfer/referral summary is added to the patient's medical record.
	17.7 The hospital has a policy and/or procedure to ensure patient safety during transfer/referral.
5	**ACC 18. Patient's leave against medical advice is guided by a delineated process.** **Every attempt should be taken to prevent a patient's leave against medical advice. The care team should do all efforts to understanding**

	and document the reason for the AMA and the ensuing possible risks which should have been thoroughly explained to the patient. If the patient is deemed a risk for himself or the population (suicide attempt, sexually transmitted disease…), the law allows the sharing of patient's information with the relevant authorities. All these situations and required actions are well documented and delineated in policies and procedures that help the health care workers manage such stressful situation with the least risk for the patient. A patient signed detailed AMA has to be kept in the medical records and if not possible due to patient refusal, policy should determine who needs to document the incident and be kept in the patient's records.
	Guiding measures:
	18.1. The hospital has policies and/or procedures and/or processes to guide notified/non-notified patient's leave against medical advice.
	18.2. Evidence of informing the patient about the risks following inadvisable leave.
	18.3. Patients discharged against medical advice who are a threat to themselves or to the public (i.e. with infectious diseases) are reported to relevant authorities, as required by laws and regulations.
	18.4. Against medical advice decision and reason are documented in patient's medical record

Patient and Family Rights and Education (PFR)

Introduction

The **Patient and Family Rights and Education** chapter focuses on providing care while ensuring that the patient's rights are preserved. The chapter tackles safeguarding patient's spiritual, cultural and psychological beliefs and privacy, confidentiality and dignity. The chapter also sheds light on the patient and family's right to choose the treatment path. This is complemented by assuring that the patient has received adequate education regarding their diagnosis and treatment.

The **Patient and Family Rights and Education** chapter targets the following sections:

- Spiritual, cultural and psychological beliefs assessment
- Privacy, confidentiality and dignity
- Protection of patient's belongings
- Physical and verbal assault
- Patient education
- Patient and/or family and/or next of kin's right to refuse/discontinue treatment and/or resuscitation and/or withdraw life support
- Pain management
- End of life care
- Safe seclusion and restraint
- Feedback and complaint process
- Informed consent
- Organ donation
- Human-based research
- Patient education

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**PFR 1. The patient's privacy, confidentiality and dignity are preserved.** **The hospital ensures through policies, personnel training, digital and physical security that the patient's data are kept confidential with clear guidelines on granting information access. All efforts, through architectural design, physical separations and health care workers interactions, should be done during the patient's stay to ensure protection of the patient's privacy and dignity. Systematic preemptive policies and immediate action are in place to look for or tackle any active breaches in the patient's privacy protection.**
	Guiding measures:
	1.1. Hospital executive management develops policies that ensure confidentiality, privacy and dignity throughout the patient care.
	1.2. Patient's privacy is maintained throughout the patient's care (i.e. tests, treatments, physical assessments, transportation within and outside hospital).
	1.3. Patient's confidentiality is maintained throughout the hospital medical record and information technology system
	1.4. Facility and unit design respect patient confidentiality and privacy.
	1.5. Hospital executive management monitors breaks in patient privacy and confidentiality and addresses gaps in a proactive manner.
4	**PFR 2. Patient's belonging in the hospital are protected against theft or loss.** **The staff informs the patients if possible, or their family members, what to do with their valuables (jewelry, phones etc.) and what is the hospital's responsibility towards them, either during their emergency room stay or upon their inpatient admission to the hospital or during any applicable outpatient procedure. In case the patient is incapacitated, whether planned (sedation) or urgent (sudden deterioration or transfer to higher level of care), or away from his/her possessions; the hospital has preset procedures and chain of custody protocols on where and who has to safe keep these possessions, who to return them to (for e.g. death, intubated etc.) and how to document this process.**
	Guiding measures:
	2.1. The hospital has a policy and procedure that states its responsibility towards patient's possessions.
	2.2. The hospital has a policy on protecting the patient's belongings in cases where patients are incapable (i.e. confused, elderly, children, comatose) of protecting them against theft or loss.
	2.3. Patients and/or family and/or next of kin are informed regarding the policies on possessions.

5	**PFR 3. Patients are protected from physical or verbal assault.** **Hospitals need to ensure security for their patients and health care workers while they are on the premises. Health care workers (HCW) need to be trained on detecting signs of assault especially for the fragile groups of patients (children and elderly). In assault cases (expressed or detected), policies and procedures are in place for accurate and proper examination by qualified personnel (i.e. sexual assault), documentation, protection and if needed reporting in accordance with the current laws.**
	Guiding measures
	3.1. There is a policy and procedure to protect patients in the hospital from physical and verbal assault.
	3.2. Patients suspected to be victims of physical and verbal assault are assessed and assessment is documented in medical record
	3.3. Documented interventions are provided to patients subjected to assault.
	3.4. Documented protection from further assault.
5	**PFR 4. Patients are well informed about their condition.** **The Lebanese law related to patients' rights and informed consent (Law 574 Feb 2004) protects their right to access and keep private all information related to their health condition. Health care workers have to be knowledgeable of when and which information can be withheld from the patients in accordance with the law (article 3). A comprehensive care plan has to be routinely established, updated, documented and communicated with patients being in the center of the health care decision making.**
	Guiding measures:
	4.1. The hospital has a process on providing patients with information on their health condition.
	4.2. The hospital has a process on providing the patient with information on financial implications of care.
	4.3. The hospital has a policy on providing family or next of kin with information on patient's medical condition in case it is medically inadvisable to inform the patients themselves.
	4.4. Patients are provided with information on their condition and plan of care, as per hospital policies and procedure including: 4.4.1. Their diagnosis 4.4.2. Test results 4.4.3. Proposed treatments 4.4.4. Alternative treatments 4.4.5. Benefits, harms and possible complications of treatments 4.4.6. Expected outcome of care 4.4.7. Patient's physician 4.4.8. Possible results of non-treatment
	4.5. The hospital has a process in case the patient request further information regarding their condition and treatment.

	4.6. Patients have the right to decide on the information that will be provided to the family, when applicable.
	4.7. Information disclosure to patient and/or family is documented in the patient's medical record, as per hospital policies and procedure.
5	**PFR 5. The patient and/or family caregivers and/or next of kin have the right to refuse/discontinue treatment and/or resuscitation.** **In accordance with Article 7 of the 574 law, hospitals must inform patients and their designated health care proxies (family member, next of kin...) of the rights to refuse or withhold care (treatment, resuscitation …) at any time during their hospitalization, in addition to the outcome of these decisions. The hospital ensures presence of procedures and qualified healthcare workers HCW to discuss implement and document such cases and decisions made in the medical record.**
	Guiding measures:
	5.1. The hospital has policies and procedures regarding sustaining/discontinuing from providing treatment.
	5.2. The hospital has policies and procedures regarding sustaining from providing resuscitation.
	5.3. The hospital has policies and procedures to assess the rights of family and/or next of kin to be provided with information, make the decision of refusing/discontinuing treatment and/or resuscitation on behalf of the patient.
	5.4. Patients and/or families and/or next of kin are informed about the patient's right to refuse/discontinue treatment.
	5.5. Patients and/or families and/or next of kin are informed about the patient's right to refuse/discontinue resuscitation.
	5.6. Patients and/or families and/or next of kin are informed about the outcomes of their own decisions on refusing/discontinuing treatment and/or resuscitation and/or life support.
	5.7. Patients and family decision is documented in the patient's medical record.
5	**PFR 6. Patient's rights to pain assessment and management.** **In line with a zero-pain healthcare culture, hospitals put in place procedures where HCW are trained and encouraged to continuously assess and anticipate a patient's pains and management needs by providing various evidence based assessment tools such as the numeric rating scale (NRS), visual analog scale (VAS), pain assessment in advanced dementia scale (PAINAD) in adults, or neonatal/infant pain scale (NIPS) for pediatric patients, including specific tools (ex: CPOT) adapted to pain measurement in unconscious patients (intubated, sedated, …) A qualified multidisciplinary pain management team is necessary to establish pain management protocols and be consulted in complex cases.**
	Guiding measures:
	6.1. The hospital has policy and procedures for pain assessment and management.

	6.2.	Patient's right to pain assessment and management is supported
	6.3.	Healthcare providers are qualified by training and/or experience to assess, support and manage pain.
	6.4.	The hospital uses different pain assessment tools adapted to patient needs and comprehension (psychological, mental and emotional state).
	6.5.	Pain management interventions are documented in patient's medical record.
5	**PFR 7.**	**Patient's rights to end of life care are met.** **End of life care must be provided by qualified members with multidisciplinary specialties (pain specialists, physicians with experience in palliative care, psychologists, grief counselors, religious chaplain etc.) to meet the needs of patients, families and even health care providers. For e.g an end of life/palliative care team of assigned disciplines can be established and consulted when necessary.**
	Guiding measures:	
	7.1.	There is a multidisciplinary approach to ensure that the patient's need for end of life care is met.
	7.2.	All healthcare providers involved in the care of patients have documented training on providing end of life care to provide psychological support to patients and family.
5	**PFR 8.**	**Seclusion and restraint are used in a safe manner.** ***[OTHER-15]*** **Such behavioral management interventions should be used as a last resort to control a behavioral emergency. Indications for seclusion/restraint must be clearly defined in hospital policy/procedure, diffused appropriately and documented in the file when occurring. Such interventions should not be sustained longer than they should, and thus must be reassessed daily.**
	Guiding measures:	
	8.1.	The hospital has a policy and procedure for the use of seclusion and restraint.
	8.2.	The use of seclusion and restraint are justified and documented in patient records.
	8.3.	The need for seclusion and restraint is valid for a predefined limited time and its need is reassessed every 24 hours.
5	**PFR 9.**	**Patient experience surveys are conducted regularly.** **Regular patient experience surveys need to be conducted by qualified personnel (ex: Quality department analysts). Results and identified action plans are discussed on the concerned department level and on the hospital executive management level with set targets for improvement that are followed up by concerned department heads and by the quality department.**
	Guiding measures:	
	9.1.	Evidence of regular patient satisfaction survey.
	9.2.	Evidence of documented result analysis and action plans.

	9.3. Results are communicated to hospital executive management and staff.
	9.4. Improvements are documented and implemented.
4	**PFR 10. The feedback and complaint process is explained to patients and families.** **Patient and families have a right to voice their feedback/complaints, and should be informed about the means to undertake it. Hospitals have a dedicated procedure on how to deal with patient complaints, and must facilitate this process. For ex. Having a dedicated patient affairs/complaints office with whose patients and families have a clear, easy and well-established two way path to communicate complaints and receive feedback for actions taken. These complaints are dealt with through preset procedures developed by a multi-departmental committee that meets cyclically or when needed to analyze them and set appropriate improvement actions.**
	Guiding measures:
	10.1. The hospital has a committee designated to manage in collaboration with the hospital executive management, patient complaints and communicate improvements and solutions to patients and families.
	10.2. There is a policy and procedures to deal with patient's and families' feedback and complaints.
	10.3. Patients and families are informed about means to voice their concerns.
	10.4. Evidence on improvements based on patient and family feedback.
5	**PFR 11. The hospital ensures that patients receive information about their rights and responsibilities.** **Patients and health care workers must have access to the hospital's statement on the patients' rights and responsibilities (Hospitals can customize their own statement while abiding by the Law 574). Statement should be easily accessible for patients and staff, and be in both digital (website) and physical forms. Hospitals designate by procedure when and which qualified personnel should inform and explain the statement to the patients and their families.**
	Guiding measures:
	11.1. There is a process to inform patients about their rights and responsibilities.
	11.2. Patients and families are explained about their rights and responsibilities as per hospital policies.
	11.3. Patient rights and responsibility statement is posted in the patient's room.
	11.4. Patient rights and responsibility statement is available for staff at all times.

6	**PFR 12.**	**Patient informed consent is obtained prior to surgery, invasive procedures and high-risk treatments designated by the hospital, as per applicable laws and regulations**. **All invasive procedures and high-risk treatments (chemotherapy, transfusions...) need to have a prior signed consent. The consent form must be standardized with room for customization according to the procedure and in a language understood by the patient or the signee (Arabic and English/French).A well-defined procedure determines when consent is needed, who among the HCW is allowed to take it and who besides the patient if needed has authority to sign on his/her behalf. A qualified medical personnel well versed in the procedure (benefits, alternatives, risks, complications...) must make sure the patient or the pre-designated proxy have understood the information in the consent before signing it.**
COR	Guiding measures:	
	12.1.	The hospital has a policy and procedure for obtaining informed consent prior to specific and listed procedures and treatments, including but not limited to anesthesia, blood and blood products, procedural sedation
	12.2.	The hospital has policies and procedures to assess the rights of family and/or next of kin to provide informed consent, as per applicable laws and regulations.
	12.3.	Qualified staff has documented training on obtaining informed consent.
	12.4.	The hospital has a standardized informed consent form in a language understandable to the patient and/or someone to translate the form.
	12.5.	Patients and families are informed when an informed consent would be necessary during the care process
	12.6.	The individual giving consent's name and relation to patient is documented on the consent form and kept in the patient's medical record.
4	**PFR 13.**	**There is a process to communicate patient-related information and variation of care to patients and family caregivers.** ***[QMPS-10]*** **In the spirit of having patients at the center of their care and decision making, the hospital has a policy ensuring information relevant to the patients' care are regularly documented and transmitted to them or their family especially when there is a change from a pre-discussed plan. Disclosing patient information (which may include sensitive information such as serious diagnosis or prognosis) must only be done by designated, trained qualified staff, reflected by hospital policies/procedures. Evidence of training ins available in addition to patient/family support services/resources (e.g psychological, spiritual etc.)**
	Guiding measures:	

	13.1. The hospital has a documented policy and/or process that is implemented and regularly updated to disclose information to patient and family members
	13.2. Designated staff are trained on disclosing information to patients and family members
	13.3. Resources (i.e. psychological support) are available to support patients and family after information is disclosed, when needed.
	13.4. The variation of care to patient is documented in patient medical file.
5	**PFR 14. Patients are informed about organ donation, if applicable, through shared decision-making process.** **The hospital has a documented policy concerning organ donation. The procedure designates which HCW can discuss organ donation with patients or their families either upon their request or if the situation calls for it. The HCW should provide all the necessary relevant documents and contact information in case organ donation (harvesting or transplant) is not available in the institution. In such a time sensitive process, a documented policy stating the members of the team responsible for intra-hospital and national coordination when needed.**
	Guiding measures:
	14.1. The hospital provides patients and families with an option of organ donation.
	14.2. The hospital provides support in coordination with the national team for patients and families requesting organ donation and informs patients and/or family and/or next of kin of outside resources if organ donation cannot be carried out in the hospital.
	14.3. Healthcare providers have document training to provide patients and/or family and/or next of kin with information on organ donation.
5	**PFR 15. The hospital implements organ procurement and transplantation, when applicable, in a safe manner.** **Organ procurement and transplantation is a highly ethical and potentially life-saving process and so must be conducted by authorized, trained qualified HCW, specified in a hospital policy/procedure and in accordance with local laws and regulations, to ensure appropriateness and avoid abuse. It is important that said staff is continuously trained to maintain qualified competencies and knowledge of required regulations/laws. It is imperative this process is regularly assessed via specific measurable indicators such as number of donors, causes for brain death, donor and family satisfaction, time on waiting list, survival rate, infection rate etc.**
	Guiding measures:
	15.1. The hospital has a designated hospital organ procurement unit that includes the following but not limited to: 15.1.1. An intensivist

	15.1.2. A neurologist, 15.1.3. A coroner 15.1.4. A minimum of two Organ Procurement Coordinators (OPC) clinical supervisors or health professionals from the Intensive Care Unit (ICU) and the Emergency Room (ER)
	15.2. Policies and procedures related to organ procurement, which are consistent with laws and regulations of NOD-Lb, are developed and implemented in the hospital.
	15.3. Authorized healthcare providers to receive and transplant organs are delineated in policies and procedures.
	15.4. Authorized healthcare providers to conduct transplantation receive continuous education and training.
	15.5. Informed consent is obtained from patient/family/caregiver and documented prior to performing organ transplantation, as per hospital policies and procedures.
	15.6. Organ procurement and transplantation specific indicators are collected and used for quality improvement purposes.
5	**PFR 16. Human-based research, when applicable, is conducted based on ethical guidelines.** **The hospital establishes its own Institutional review board (IRB) or seeks collaboration with other national Institutional review boards and its activities described in hospital policy/procedure, guided by the principles of the International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidelines. The board's internal organization, responsibilities and procedural work are documented. IRB meetings are documented and ensure all research projects abide by national laws and intra-hospital policies.**
	Guiding measures:
	16.1. Hospital executive management identifies responsible entities (i.e. Institutional Review Board) that review and monitor the compliance of human-based research with bylaws, policies and procedures.
	16.2. The hospital's research review board is identified in documents
	16.3. The responsibility of the review board/committee is written in document(s).
	16.4. The review board/committee reviews researches, weighs risk and benefits to subjects and ensures the privacy of subjects is maintained
	16.5. Human-based research is guided by policies and procedures.
	16.6. Evidence of informed consents obtained from patients before any research or trial.
	16.7. Evidence of institutional review board (IRB) approval on human-based research.
EDUCATION	
5	**PFR 17. Education related to patient's care is provided to patients and families.** **Patient's education is essential for their involvement in the care plan and for optimized clinical outcomes. Policies should encourage all**

	hospital departments to prepare easy to explain and understand educational material targeting the different steps in patient care. Education is available upon request from patient or families on a specific topic, and proactively offered throughout the hospital stay with emphasis on home education. These policies must document and designate the required training and experience among HCW to qualify for this task, and provide them if needed. Cyclic audits should focus on the quality, ease of communication and diversity of available education.
	Guiding measures:
	17.1. Policies and procedures supporting patient and family education are in place.
	17.2. Hospital executive management monitors and addresses gaps in patient and family education.
	17.3. Patients and family members education cover diagnosis, treatment and discharge, such as, but not limited to; 17.3.1. Primary illness and potential complications. 17.3.2. Treatment and procedures including radiological procedures. 17.3.3. Palliative and end-of-life care. 17.3.4. Medication use, side effects and medication interaction. 17.3.5. Infection control practices, with emphasis on basic hand washing. 17.3.6. Postpartum education. 17.3.7. Care of babies. 17.3.8. Financial implications of care choices 17.3.9. Informed consent
	17.4. Education is provided during the patient's hospital stay, when necessary.
	17.5. The role of the clinical staff, who are required by hospital policy to have a job description, (i.e. physicians, nurses, paramedical, etc...) regarding patient and family education is highlighted in a job description document/ documented responsibilities.
	17.6. All healthcare providers involved in the care of the patient are trained to provide education to patients and/or families.
5	**PFR 18. Education needs of the patients are assessed and documented.** **Educational material must be suitable to the targeted patients' group (age, education level…) provided in a language containing easy to understand medical jargon. HCW are trained to assess the capacities of the patients and their families to understand the information and adjust it in accordance to their needs. The procedures and policies must have in place post educational assessments and reemphasis by senior staff ensuring patients/family comprehension and address any gaps or misunderstanding.** **All these educational meetings must be documented by the caregivers keeping record of the material explained and given.**
	Guiding measures:

	18.1. The patients and/or families educational needs are assessed and documented based on the following, but not limited to: 18.1.1. Educational level 18.1.2. Emotional barriers and motivations 18.1.3. Physical and cognitive limitations 18.1.4. Language barriers 18.1.5. The appropriateness of the educational materials provided (i.e. age appropriate material)
	18.2. All healthcare providers involved in the care of the patient, plan the patient and/or family education based on the patient's needs and assessment findings.
	18.3. Evidence of documented patient and/or family education in medical record.
	18.4. Education is given to family member and/or next of kin in case the patient is unable or unsuitable to receive or comprehend the information (child, mentally disabled or comatose patients).
5	**PFR 19. Appropriate educational methods are used to ensure effective patient and family education.** **Patient education is a multidisciplinary task offered by several HCW from different medical and non-medical fields. Therefore, all care givers involved should be aware of the educational material given by others in order to prevent conflicting information and ensuring information are appropriate. Protocols are in place promoting a collective educational approach with all members discussing and agreeing on the care plan and the information given to the patients, and ensuring that the information provided is understood.**
	Guiding measures:
	19.1. Developmentally appropriate education is provided using language understandable by patient/family.
	19.2. Reinforcement of education is provided to patients and families, when necessary, and documented in the medical records.
	19.3. A process is in place to ensure that the education given is understood by patients and families.
	19.4. Education is offered to patient and family, when needed, using a collaborative approach between the patient's healthcare givers (i.e. nurse, physician, nutritionist, physiotherapist …).

Patient Services

Patient Services: Anesthesia and Surgical Care (ASC)

Introduction

The **Anesthesia and Surgical Care** chapter aims to ensure safety throughout the delivery of anesthesia to patients undergoing operative procedures, in addition to safeguarding a safe environment for surgeries. The standards are applicable on all hospital grounds were anesthesia and surgical care services are provided.

The **Anesthesia and Surgical Care** chapter targets the following sections:

- Anesthesia and surgical care staff qualification
- Anesthesia and surgical care policies and procedures
- Operating room environment
- Pre-sedation assessment, pre-anesthesia, pre-induction
- Patient monitory during and post-anesthesia
- Surgical report and care plan
- Time-out process
- Quality improvement indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk score	Standard and Guiding measures
4	**ASC 1. The operating room is operated by qualified staff.** **As in all specialized units, all staff should have the necessary and work-relevant qualifications achieved through education and experience. Staff should have scheduled routine operative care training for new policies, equipment and surgical procedures. All tasks and roles in the operating room have to be assigned in a detailed written job description for all operating room medical and nursing staff.**
	Guiding measures:
	1.1. The operating room is directed by a qualified staff with relevant experience, education and training.
	1.2. The nurse manager at the operating room has relevant experience, education and training in operative care.
	1.3. The nursing staff at the operating room receive ongoing operative care and equipment training
	1.4. Delineation of privileges and responsibilities of physicians and nurses working in operating room
5	**ASC 2. Policies and procedures to guide patient care in the operating room are delineated and documented.** **All the steps, personnel, and hardware involved in the entire surgical patient circuit (scheduling, admission, checklist…) with the possible risks related to operating room functioning (infection control, outbreaks...) and to surgical procedures and patient safety risk such as correct site, instrument retention…) have to be well defined, documented, with responsibilities clearly delineated.** **There should be a written process defining responsibilities for dissemination, implementation and auditing of all documentation related to the functioning of the operating room making sure they are regularly updated and easily accessible.**
	Guiding measures:
	2.1. Evidence of policies and procedures on, but not limited to: 2.1.1. Scheduling process and priorities, including the documentation of the list of surgeries and responsible physicians on the surgical board with weekly revisions 2.1.2. Surgical safety checklist 2.1.3. Handover process between units 2.1.4. Safeguarding correct-site, correct-procedure, and correct-patient surgery 2.1.5. Prevention of unintentional retention of instruments or sponges in surgical wounds 2.1.6. Infection control measures in the operating room 2.1.7. Caring for patients with infectious diseases

	2.1.8. Equipment maintenance 2.1.9. Laboratory specimens, chemicals and blood handling and storing. 2.1.10. Patient acceptance into operating room 2.1.11. Emergencies including (outbreak management in the operating room and management of patients with latex allergy).
	2.2. There is a process to ensure that policies and procedures are documented, disseminated, up to date, implemented and available for use by all operating room staff.
5	**ASC 3. There is a plan to ensure safe operating room environment.** **The operating room has clear procedures for infection control and safety covering air, water, rooms and equipment safety. Joined procedures with biomedical, engineering and sanitary departments defining the personnel responsible for infection control of the different equipment in the operating rooms and detailing specific time frames for cleaning and disinfecting. A documented record of the periodic checks and any necessary corrective action taken is available.**
	Guiding measures:
	3.1. There is a policy and procedure to clean and disinfect the operating room and machines.
	3.2. Proper air flow is ensured and documented periodically in the operating rooms, isolations rooms and central sterilization and supply department.
	3.3. Control of temperature and humidity is ensured and documented periodically at all times.
	3.4. Scrub sinks are available at the entry of the operating room.
	3.5. Water control is ensured and documented on regular basis.
	3.6. Standard precautions are implemented in the operating room.
6	**ASC 4. The anesthetic and sedation services in the hospital are under the direction of a qualified and certified anesthetist.** **The anesthesia department has documented job descriptions for the head of department and all members detailing their respective needed qualifications, experiences, roles and services. Among the responsibilities of the head of department is ensuring all activities and services are implemented in a standardized manner with well documented and updated procedures and policies.**
COR	Guiding measures:
	4.1. Qualification, training, education and experience of the anesthetic and sedation services match the position description.
	4.2. The roles and responsibilities of the anesthetic and sedation services head are specific and documented.
	4.3. The head supervises and enforces the implementation of policies and procedures related to anesthesia and sedation.
	4.4. The head ensures the implementation of standardized anesthesia and sedation services throughout the hospital.

6	**ASC 5. A uniform process guides procedural sedation (moderate and deep sedation) administration.** **Any sedation required for a procedure (endoscopy, imaging, Emergency room, small surgery …) has to follow a specific documented policy dictating all aspects of the anesthetic act. The policy should state who are the personnel needed, allowed, their required qualifications and expertise as well as the locations where such acts are permitted. Equipment needed for sedation in relation to the procedure itself or in case of an emergency and the patient should be set by protocol and present at the allowed areas.**
COR	Guiding measures:
	5.1. There is a uniform process for procedural sedation (moderate and deep sedation) administration
	5.2. Procedural sedation administration is guided by policies and procedures that include: 5.2.1. Staff qualifications required to administer procedural sedation, documented in personnel files. 5.2.2. Areas where procedural sedation can be administered 5.2.3. The equipment and supplies needed for procedural sedation administration. 5.2.4. Pre-anesthetic checkout procedure
	5.3. Areas, where procedural sedation is administered, contain equipment and supplies (appropriate for the age of the patient and type of procedure) needed for emergency.
	5.4. Availability of an individual with advanced life support training (certified advanced resuscitation such as ALS, ACLS…) during moderate and deep procedural sedation.
5	**ASC 6. The scope and content of a pre-sedation assessment and sedation monitoring form are delineated in hospital policies.** **All steps related to the procedural sedation act are documented, kept in the patient's file and conducted by qualified, expert health care workers. These steps include the pre-sedation assessment, intra-procedural monitoring, and recovery period. A standardized documented checklist and protocol with preset recovery criteria for discharge after procedure exists.**
	Guiding measures:
	6.1. A pre-sedation assessment on the patient is completed by a qualified practitioner by education and training, that includes but not limited to: 6.1.1. Airway problems that may influence sedation type 6.1.2. Risk of patient based on (history of the patient, allergies, age, weight, previous adverse response to anesthesia or sedation, current medications, substance abuse, vital signs) 6.1.3. Type and level of the sedation that will be administered
	6.2. The sedation monitoring form contains the following: 6.2.1. Vital signs 6.2.2. Ventilator status and Oxygen saturation

	6.2.3. Skin color 6.2.4. Level of consciousness and response to stimuli 6.2.5. ECG findings
	6.3. Patients are monitored during recovery period and until patient achieved baseline level of consciousness and normal hemodynamic parameters.
	6.4. The patient's pre-sedation assessment and sedation monitoring form are documented in the patient's record.
	6.5. The hospital has a recovery and discharge criteria for patients undergoing procedural sedation.
4	**ASC 7. Pre-anesthesia and pre-induction are guided by policies and procedures.** **Pre-anesthesia assessment is divided into 2 parts, Pre-admission (hours or days) prior to a surgery or procedure, and Pre-induction. Both parts should be well governed by policies and protocols dictating the qualified personnel and the checklists (for patient and equipment) needed for both to ensure standardized delivery of care. These documentations should be kept in the patient's file.**
	Guiding measures:
	7.1. The hospital has policies and procedures to guide pre-anesthesia and pre-induction.
	7.2. Pre-anesthesia (prior to admission or prior to procedure) and pre-induction assessments (immediately before the induction of anesthesia and focusing on physiological stability, readiness to for anesthesia and ensuring machine safety) are conducted prior to inpatient and outpatient surgery/procedure anesthesia administration by qualified individuals (i.e. anesthetist).
	7.3. Pre-anesthesia and pre-induction assessments are documented in patient records.
5	**ASC 8. The anesthesia care is documented.** **A thorough documentation during anesthesia is obligatory and much contain all relevant information related to the patient, procedure, anesthesia, and the identity of all health care personnel involved in the anesthetic procedure.**
	Guiding measures:
	8.1. The anesthesia care is documented in the patient's record, that includes but not limited to the following: 8.1.1. Age, sex, weight 8.1.2. Medical history 8.1.3. Medication history 8.1.4. Vital signs (pre-operative) 8.1.5. The anesthesia agent 8.1.6. Method of administration 8.1.7. Anesthesia dose 8.1.8. Allergies 8.1.9. Medication administered 8.1.10. Other concerns

	8.2. The anesthetist, nurse anesthetist and anesthesia assistants participating in the administration and monitoring of anesthesia are identified in the patient's anesthesia record.
4	**ASC 9. Patients undergoing sedation are informed of the risks, benefits and alternative to anesthesia prior to a procedure.** **A clear anesthetic consent is obligatory before any sedation and anesthetic procedure. A documented consent protocol should be clear to all health care workers, stating which health care personnel are qualified to obtain such consent, when and who besides the patient is allowed to sign on their behalf if they are unable. The medical officer should clearly explain to the patients or, if not possible, to their legal guardians all the risks and benefits of the anesthetic act, and if available any other alternatives. All possible post-operative pain management protocols should also be clearly explained and documented.**
	Guiding measures:
	9.1. Documented evidence that a qualified individual informed the patient and/or family members and/or guardian about the risks benefits and alternative to anesthesia and documents it.
	9.2. Documented evidence that a qualified individual informed the patient and/or family members and/or guardian about postoperative analgesia.
	9.3. An informed consent is obtained prior to sedation.
5	**ASC 10. The patient is monitored during and post-anesthesia.** **Patients monitoring during the anesthetic procedure and after should be guided by preset documentation and protocols ensuring all necessary data are obtained and documented in the patient's record. Post anesthesia recovery monitoring is guided by procedures, protocols and should be written down in the patient's record on clear standardized documents and checklists containing well defined discharge criteria.**
	Guiding measures:
	10.1. There is a policy and procedure for monitoring the patient's status during and post-anesthesia.
	10.2. There is a policy, procedure and criteria to discontinue monitoring services and discharge the patients from the post-anesthesia unit.
	10.3. The results of the patient monitoring are documented in the patient's record.
	10.4. Time arrival to and discharge from the recovery room is documented.
6	**ASC 11. The hospital implements standardized processes to safeguard correct-site, correct-procedure, and correct-patient surgery. *[QMPS-15]*** **Wrong patient, procedure and site are never events and should not be accepted. Therefore, a standardized documented procedure starting from the patient's room until induction should be mandatory, with several safety steps. In the patient's room, a member of the surgical team who is familiar with the patient and surgery , should mark the limb or site of surgery, confirming it with the patient or legal guardian,**

	associated documents and using an approved and standardized marker and method (i.e. : check with clear initials). Upon arrival to the operating area and then entering the operating room until the induction time, multiple steps and verifications checks should be implemented by several members of nursing, surgical and anesthetic personnel. A Final check before surgical start, "procedure time out" is obligatory. All these steps are documented in the patient's record. **This process must be evaluated regularly, and this can be done using audits, observations, file reviews audits on the entire process must be conducted and any non-compliance documented with improvement projects and targets implemented and rechecked.**
COR	Guiding measures:
	11.1. The hospital has a standardized process that is implemented before induction of anesthesia in surgical procedures that consists of preoperative verification, site marking and procedure time-out.
	11.2. Preoperative verification is implemented using a checklist and consists of: 11.2.1. Patient identification 11.2.2. Patient consent form 11.2.3. The procedure being performed 11.2.4. The site and side on which the surgery is being performed 11.2.5. Laboratory test and images 11.2.6. Disclosure of any implants or prosthesis 11.2.7. Prophylactic antibiotic (if any) 11.2.8. Other concerns related to surgeon or anesthesiologist (i.e. allergies, blood loss, difficult airway)
	11.3. One of the individuals performing the procedure utilizes a standardized mark, as per hospital policies and procedures, to identify the surgical site to be operated.
	11.4. Patients and/or family member and/or next of kin are involved during site marking in the patient's room.
	11.5. Compliance rate to preoperative verification processes and timeout procedure is regularly (within a year timeframe) measured and documented.
	11.6. Evidence of process evaluation and improvement implementation, when needed.
5	**ASC 12. Patients undergoing surgery have a medical assessment performed and a surgical care plan completed for stays of more than 24 hours.** **A preoperative assessment by the surgical team must be completed and in the patient's file prior to admission to surgery. Basic required documentation includes (history, physical exam…) and a signed informed surgical consent. A surgical care plan with type of surgery and post-operative care plan should be documented in the records prior to surgery and adjusted afterwards according to the patient's status**
	Guiding measures:

	12.1. Evidence of a complemented medical assessment by the responsible physician in the patient's medical record. That includes the following: 12.1.1. History and physical examination. 12.1.2. Pre-operative diagnosis. 12.1.3. Diagnostic tests (laboratory, radiology, etc.) as ordered. 12.1.4. Signed informed consent. 12.1.5. Planned procedure
	12.2. Evidence of a completed surgical care plan.
6	**ASC 13. A procedure time out process is implemented before the initiation of the surgery. *[QMPS-16]*** **A "time out "procedure is the final step of the preoperative checklist before starting surgery. A final check for correct patient-procedure-site and implants. This step should be performed by all involved health care personnel (circulating nurse, anesthetist and surgeon).**
COR	Guiding measures
	13.1. Timeout is conducted in the location of the surgery, with the whole surgery team present (i.e. surgeon, nurse and anesthetist), immediately before starting the procedure and after the administration of anesthesia.
	13.2. The timeout is implemented to verify the patient and the surgery, and consists of: 13.2.1. Verifying the correct patient identification 13.2.2. Verifying the correct side and site of the procedure with site marking 13.2.3. Verifying the correct patient position 13.2.4. Verifying the availability of the correct implants/devices 13.2.5. Verifying that the preoperative verification checklist has been completed
	13.3. The timeout procedure is documented.
	13.4. Evidence of process evaluation and improvement implementation, when needed.
4	**ASC 14. A surgical report is included in the patients' record.** **All performed surgeries must have an operative report detailing all the pertinent information in order to allow for complete transfer and handover of patient information for continuing the care process . A basic uniform operative report with different sections for all the necessary information required for all surgeries. The report must be available in the file prior to transfer to the floor with accessibility by necessary health care workers.**
	Guiding measures:
	14.1 A uniform operative report is completed which includes: 14.1.1. Pre-operative and Post-operative diagnosis 14.1.2. Name of the surgeon and assistant 14.1.3. Description of the surgery/procedure and findings 14.1.4. Prophylactic antibiotic treatment (if any)

	14.1.5. Operative complications (if any) 14.1.6. Amount of blood loss and amount of transfused blood(if any) 14.1.7. Labeled samples and surgical specimens sent for examination 14.1.8. Final count of tools used during surgery (i.e. needles, surgical instruments and gauzes) 14.1.9. Registry number of all implantable devices 14.1.10. Date, time and signature of physician
	14.2 The operative record is documented in the patient's record by the end of the surgery before transfer to floor.
4	**ASC 15. Patients undergoing surgery have a post-surgical care plan completed by the end of the surgery before transfer to floor.** **The post-surgery handling of the patient follow a uniform plan which is documented and updated following the patient's needs.**
	Guiding measures:
	15.1. There is a uniform post-surgical care plan.
	15.2. The post-surgical care plan is included in the patient's record.
	15.3. The post-surgical care plan is updated based on the patient's needs (based on the reassessment of the patient) throughout their hospital stay.
4	**ASC 16. Anesthesia services specific indicators are collected and used as part of the quality improvement for anesthesia services.** **Anesthesia services must periodically choose one or more indicator to assess quality of care. Data can be retrospectively or prospectively collected and analyzed with results used towards determining current status, planning improvement projects or assessing impact of previous projects. Results and action plans are communicated to the administration for study and assigning appropriate improvement plans accordingly.**
	Guiding measures:
	16.1. Indicator(s) is/are used to monitor progress for each quality improvement objective.
	16.2. Data is collected, analyzed, and interpreted to establish a baseline for indicators.
	16.3. Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	16.4. Results are properly communicated to the hospital executive management.
4	**ASC 17. Surgical care specific indicators are collected and used as part of the quality improvement for surgical care.** **Surgical care indicators either general across all specialties and surgeries or targeted indicators determined after multidisciplinary discussions (quality department, specific surgical specialty department, nursing …) should be routinely assessed, analyzed and leading to quality improvement projects which are later audited, at a preset time frame,**

	assessing their impact of those indicators. These quality indicators, improvement projects and their benefit should be overseen by the hospital management either directly or by a committee containing all relevant medical and non-medical members.
	Guiding measures:
	17.1. Indicator(s) is/are used to monitor progress for each quality improvement objective.
	17.2. Data is collected, analyzed, and interpreted to establish a baseline for indicators.
	17.3. Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	17.4. Results are properly communicated to the hospital executive management.

Patient Services: Oncology Services (ONCO)

Introduction

The **Oncology Services** chapter is an integral part in patient services. It requires specific and collaborative care including proper diagnosis, treatment and appropriate care transition. The standards, aimed at providing safe and effective patient care, target systemic therapy (hormonal, biological and cytotoxic) and radiotherapy.

The **Oncology Services** chapter targets the following sections:

- Building a qualified and competent staff
- Establishing policies and procedures
- Providing safe and effective services
- Managing medication in a safe manner
- Involving family in patient's care
- Monitoring quality indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
3	**ONCO 1. Patient-centered care in the oncology services department is ensured with adequate resources.** **In order to deliver care to Oncology patients, a multidisciplinary team as well as appropriate material resources, function as by implemented guidelines and defined protocols and procedures in order to ensure that the patient is at the center of their care, and all required needs are being addressed.**
	Guiding measures:
	1.1 The needed human and material resources are identified and properly communicated to the hospital executive management.
	1.2 Policies, procedures, guidelines and protocols related to oncology, are in place with evidence of proper implementation.
	1.3 A multidisciplinary assessment involving (such as physician, nurse, dietitian and social worker wherever needed) assessment for all cancer patients is followed and properly documented.
	1.4 A process is in place for multidisciplinary consultation for all "oncology" patients is in place and properly documented.
5	**ONCO 2. Policies and procedures to maintain safe hospital radiotherapy equipment are developed and implemented.** **It is important that the processing, maintenance of radiotherapies and disposal of radioactive wastes be done according to clearly defined policies, taking into account the safety of staff, patients and equipment.**
	Guiding measures:
	2.1 Quality control reviews are performed at least annually and properly documented.
	2.2 A process for selecting and prioritizing equipment is in place.
	2.3 Evidence of periodic radiotherapy equipment inspection, maintenance, update and calibration of dosimetry is in place.
	2.4 An equipment log is in place to record maintenance and downtime, identify and document upgrades and repairs.
	2.5 Protection of patients and staff in case of equipment failure or damage is ensured at all times.
	2.6 All safety requirements are ensured and documented when the services are contracted from external providers.
	2.7 Management of radioactive wastes is ensured via a specific process.
6	**ONCO 3. The staff in the oncology department is competent and qualified.** **As oncology is a highly specialized discipline with particularly higher safety risks to staff, patients and the environment, oncology staff are qualified and trained to handle all care processes and materials (Use of devices, oncology medications palliative and end of life care.**

COR	Guiding measures:	
	3.1	A qualified physician specialized in the oncology/radiation oncology field is responsible for managing the oncology department.
	3.2	The nurse manager and the nursing staff are qualified by education, training and experience in the field of oncology.
	3.3	Evidence of staff training on equipment and devices used in oncology services including infusion pumps used in cancer therapy medication administration and other equipment or devices.
	3.4	Staff is trained and educated about how to manage palliative (pain management) and end-of-life care.
5	**ONCO 4. The staff working in radiotherapy is qualified and competent.** **The Radiotherapy team is qualified and available, physicians and safety officers.** **Appropriate specialties and competencies are essential in the safe running of the radiotherapy and access to qualified staff and user manuals must be facilitated.**	
	Guiding measures:	
	4.1	Qualified radiation oncologists and medical physicists are available and accessible.
	4.2	A qualified radiation safety officer is in place.
	4.3	Evidence of staff training on radiotherapy equipment is in place.
	4.4	The instructions and user guides of the radiotherapy equipment are accessible at all times.
5	**ONCO 5. Safe and accurate handling of cancer therapy medications is ensured via a process.** **Management of cancer therapy medications is highly sensitive due to their cytotoxicity thus requires highly specialized resources. Therefore, staffs who handle them should be trained and identified. Areas of preparation and of storage in Oncology and Pharmacy should be defined and separated as by national laws, regulations and hospital policies. Spills should be properly managed and any incident reported and undergo a corrective plan.**	
	Guiding measures:	
	5.1	The staff responsible for acquiring, receiving, storing, preparing, administering, transporting, and disposing of cancer therapy medications and contaminated supplies is identified and well trained.
	5.2	Cancer therapy medications are stored away from preparation areas, and abide by specific regulations and instructions for preventing its adverse effects on the pharmaceutical staff (i.e. pharmacists and unit staff).
	5.3	Proper management of cancer therapy medication spills is ensured at all times.
	5.4	Incidents related to cancer medication therapy spills are documented, analyzed and corrective actions are taken accordingly.

	5.5	Cancer therapy medication is properly disposed by the pharmacy and oncology unit, as per national laws and regulations and hospital policies.
5	**ONCO 6. Cancer therapy medications are safely ordered.** **As therapies are classified as high-alert drugs with considerable risk of serious harm, additional safety barriers need to be placed to avoid any risk of error. Ordering of any cancer therapy medications should be Standardized and follow a pre-printed protocol. No verbal order is allowed and any change in the order should be properly managed and documented, use of dose calculator is ensured.**	
	Guiding measures:	
	6.1	A complete order for all cancer therapy medications is in place.
	6.2	Any changes in the order of cancer therapy medications is properly managed and communicated.
	6.3	There are no verbal or telephone orders for cancer therapy medications as per specific policy.
	6.4	Ordering of cancer therapy medications follows a standardized format (pre-printed protocol), as per hospital policies and procedure.
	6.5	Proper dose calculation of cancer therapy medications is ensured, and documented.
6	**ONCO 7. Preparing and dispensing of cancer therapy medications follows specific policies and procedures.** **The pathway of cancer therapy medication is well defined in order to ensure safety and security throughout. The process should include medical order, verification of order, transcribing labeling, dispensing and preparing (Hood, Laminar flow). The pharmacist holds a capital role in this process namely for conducting regular verification on it.**	
COR	Guiding measures:	
	7.1	Pharmacist verification of the medication order for completeness and appropriate review is conducted regularly, as per hospital policy prior to dispensing and transcribing medications on the medical administration record.
	7.2	Labeling and administering of cancer therapy medications follows a standardized format.
	7.3	Separate preparation areas with a 100 percent externally-vented biohazard (laminar airflow) hood using protective equipment are ensured.
	7.4	Safe dispensing of cancer therapy medications is ensured at all times.
4	**ONCO 8. The access to care in the oncology services is provided in a timely and coordinated manner.** **The access to Oncology department is possible at all times and is well defined by criteria for admission and discharge. Access of any patient to another department or facility should be possible in case the**	

	patient needs cannot be met in a satisfactory manner is possible if needed.	
	Guiding measures:	
	8.1	Admission and discharge criteria for the oncology department are followed.
	8.2	Timely response to oncological emergencies is ensured at all times, as per policies and procedures.
	8.3	Access to another facility is ensured in case the patient's needs are not met.
4	**ONCO 9. Patients and family caregivers are involved in the care provided.** **Involving the patient and his family in the plan of care should be ensured and documented. It implies providing and explaining information by qualified team members, obtaining a written consent on planned medications and procedures, discussing treatment options and respecting the choice of the patient and families according to their rights and responsibilities.**	
	Guiding measures:	
	9.1	Information are provided to patients and families in a timely manner, documented and verified to ensure proper understanding.
	9.2	The hospital has policies and procedures to assess the rights of family and/or next of kin to provide informed consent.
	9.3	Informed consent is signed before chemotherapy/each procedure by patients or his/her family/next of kin, when necessary.
	9.4	Patients and families are informed about their rights and responsibilities, and how to report any breach in their rights.
	9.5	Treatment options are discussed with patients and families and their choice is respected at all times.
5	**ONCO 10.Care plans are developed following patient assessment as hospital policies and procedures.** **Patients should be comprehensively assessed to be able to develop a plan of care. This should be conducted via standardized tools as per policies and procedures implemented by the hospital. The assessment approach includes, along with medication reconciliation, physical, psychological, potentially in-hospital risks, pain management and palliative care.**	
	Guiding measures:	
	10.1	A holistic approach is used during the assessment of the patients' physical and psychosocial health via a standardized tool.
	10.2	A medication reconciliation process is initiated at the time of admission.
	10.3	Patients are assessed for falls; proper measures are implemented and evaluated for patients who are identified at risk for fall.
	10.4	Patients who are at risk for pressure ulcer are assessed and monitored.
	10.5	Patients who are at risk for venous thromboembolism are assessed and monitored.

	10.6 Patients are assessed for pain and options for pain management are provided.
	10.7 Assessment for the patients' palliative care and end-of –life issues is performed when appropriate.
	10.8 Reassessment of the patient or any change in the patient's condition is properly documented in the medical record.
5	**ONCO 11. Care plans for cancer patients are properly implemented as hospital policies and procedures.** **The patient's individualized care plan implies an accurate identification, a documented medical report and an assessment of oral care.** **The hospital should ensure a round-the clock access to care/services and respond to any need of the oncology patients and of their families.**
	Guiding measures:
	11.1 At least 2 patient identifiers are used at accurately identify patients (patient's triple name and medical number) excluding patient's room number or location.
	11.2 The care plan is individualized and documented.
	11.3 A process for sharing information (i.e. medical report) for patients receiving cancer therapy at more than one hospital, when requested.
	11.4 Oral health for cancer patients is assessed and interventions are implemented when needed.
	11.5 Laboratory and diagnostic services are available twenty four hours a day, seven days per week and results are reported in a timely manner.
	11.6 Urgent medications are accessed by authorized staff twenty four hours a day, seven days per week.
	11.7 Consultation services are available and provided in a timely manner.
	11.8 Access to services needed by the oncology patients is ensured.
	11.9 Patient and family have access to psychological and support services, when needed.
5	**ONCO 12. The treatment plan for cancer patients should follow standard protocol and guidelines.** **Oncology Patients are assessed by standardized tools for diagnosis and treatment, through defining their staging, history and evolution and accordingly deciding on treatment protocols which are consistently implemented to avoid variation in practices among patients.**
	Guiding measures:
	12.1 Patient's stage of cancer is determined via a standardized process.
	12.2 Prior to treatment, a plan of care which includes patient's history is developed and regularly updated.

	12.3 Treatment protocols are consistently followed.
6	**ONCO 13. Accurate and safe administration of medications and cancer therapies are ensured.** **Cancer therapy medications and radiation therapy should be managed administered and provided according to hospital guidelines and standards of practice. Accuracy and safety implies also a proper communication of critical patient information and parameters. Any side effects gone unnoticed can lead to serious consequences, and thus must be closely assessed and managed.**
COR	Guiding measures:
	13.1 The staff follows hospital's guidelines for managing cytotoxic medications spills.
	13.2 Administration of cancer therapy medications and the provision of radiation therapy services follow standards of practice.
	13.3 Critical patient information is identified and properly communicated to the staff via a specific policy.
	13.4 Height, weight and relevant clinical parameters of the patients are properly documented.
	13.5 Side effects of the cytotoxic medications are assessed, monitored and managed properly.
6	**ONCO 14. Accurate and safe delivering of radiotherapy is ensured, when applicable.** **Radiotherapy providing and treatment plan follow standards of practice specified by policies and procedures to ensure safety and accuracy. Also, there should be a periodic review of the plan of treatment by a radiation oncologist.**
COR	Guiding measures:
	14.1 Imaging, planning, and treatment of radiotherapy follow specific policies and procedures.
	14.2 Patients with implanted electronic device are identified and monitored during radiotherapy.
	14.3 Radiotherapy treatment prescription/orders are complete.
	14.4 Verification/change in the radiotherapy treatment plan is verified based on hospital policies and procedures.
	14.5 Radiotherapy treatment plan is peer reviewed by a radiation oncologist, periodically.
6	**ONCO 15. Accurate and safe administration of systemic therapies is ensured.** **Before any administration of any systemic therapy, there should be a clear and documented review and checking of parameters of the patient, double checking medication dose and rate, and proper management of devices for central venous injection.** **This ensures safety and precision of high risk medication administration.**
COR	Guiding measures:

	15.1	Revision of patient's height, weight and relevant clinical parameters is performed before each cycle or when clinically indicated.
	15.2	Administration of systemic therapies is properly documented.
	15.3	Dose and rate of administration of systemic therapies are double checked before administration via an infusion pump.
	15.4	Management of central venous access device follows specific guidelines.
6	**ONCO 16.**	**The transfer to another service or setting is appropriately planned.** **The need to transfer any patient to another service should follow a previously prepared plan according to clinical guidelines responding to patient's needs, but also taking into consideration the approval of the patient. A review of the transfer plan should be continuously performed and corrective measures should taken accordingly.**
COR	Guiding measures:	
	16.1	A transfer plan is in place and properly documented.
	16.2	Transfer of care follows specific clinical guidelines.
	16.3	Patients' decision whether to end or limit services, transfer to another service, or transition home is respected
	16.4	Patient's information is properly communicated during care transition.
	16.5	Transfer plan is evaluated and corrective actions are taken when required.
4	**ONCO 17.**	**Oncology services specific indicators are collected and used as part of the quality improvement in the oncology services department.** **Oncology department holds several areas where organizational performance and clinical quality can be subject to improvement, and where adverse events can be prevented. Therefore, it is important to define and prioritize the key improvement objectives for this department, based on observations, audit surveys and benchmarking.** **Indicators should be easy to identify, comprehensive, set with adapted targets, in order to monitor the progress of the quality improvement plan.** ***(Examples of such indicators include rate of central catheter devices complications, survival rate at 5 years for a number of preselected cancer types…)*** **Discussion of indicator results should be done at the leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:	
	17.1	Indicator(s) is used to monitor progress for each quality improvement objective.
	17.2	Data (e.g. waiting time, treatment-related toxicity outcomes, disease control and survival outcomes, patient-reported outcomes, peer review rates for radiotherapy treatment plans) is collected, analyzed, and interpreted to establish a baseline for indicators.

	17.3	Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	17.4	Results are properly communicated to the hospital executive management.

Patient Services: Medical Imaging (MI)

Introduction

The **Medical Imaging** chapter covers investigations of patients that provide imaging information for the diagnosis, prevention, and treatment of disease or assessment of health. The chapter's scope includes the arrangements for requisition, patient identification, choice of appropriate techniques, patient information, patient consent, patient preparation, performance of imaging procedures, interpretation, reporting, and advice regarding the result, in addition to the consideration of safety and ethics in diagnostic imaging services.

The standards have been developed to deal with all aspects of imaging services, from control of services, facility and environment, imaging processes and procedures, equipment, documentation of records and control of risk and safety.

The **Medical imaging** chapter targets the following sections:

- Select, operation and maintenance of the medical imaging equipment follow policies and procedures
- Staff qualification
- Results reporting
- Safe environment in the medical imaging department
- Medical imaging quality control program

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**MI 1. Medical imaging services cover the patient's scope of service offered by the institution and healthcare professionals.** **As medical imaging is a key element for medical diagnosis, the scope of services and their availability should cover the needs of clinical departments, whether in-house or in collaboration with other imaging centers. Accessibility to imaging exams, their timeliness (including those requested urgently) and necessary patient preparation are key components that need to be well defined and clearly shared with clinical units in order to set correct expectations and prevent unnecessary delays in the diagnostic process.**
	Guiding measures:
	1.1 Policies and procedures related to medical imaging are developed and implemented in the hospital.
	1.2 Information related to medical imaging services about service volumes, waiting times, client experience and medical professional needs, are collected on an annual basis, results are analyzed and improvements are made accordingly.
	1.3 Medical imaging services are provided in coordination with other centers or medical professionals performing this service, when necessary.
	1.4 Rules of functioning should be defined in agreement with clinical units and other imaging units (including outsourced units), when necessary.
	1.5 Resources needed to deliver timely access to the medical imaging services are identified.
	1.6 The medical imaging department is run by qualified and registered radiologists.
	1.7 The roles and responsibilities of chief technicians are clearly described in job description and as per hospital policies and procedures.
5	**MI 2. The hospital ensures a proper physical environment for the imaging services providers.** **Department's infrastructure takes into consideration ease of patient accessibility and safety, the efficient separation of spaces into waiting areas, procedure areas and screening areas in order to ensure patient confidentiality and adequate technical and environmental conditions for the safe provision of imaging services for patients, staff and equipment.**
	Guiding measures:
	2.1 There is a separate space area for the patients to wait in and for the providers to perform medical imaging procedures.

	2.2	Confidentiality and security are ensured by providing a space area for screening patients prior to medical imaging examinations.
	2.3	Warning signs are put on the entrance of the medical rooms to restrict access when it is in use.
	2.4	The hospital ensures proper temperature, humidity, and ventilation inside the department.
	2.5	Wheelchairs, walkers and crutches are present and accessible to the patients undergoing imaging procedures.
	2.6	A backup electrical system for the medical imaging department is in place and tested regularly.
5	**MI 3.**	**Specific policies and procedures are in place to properly select and operate the medical imaging equipment.** **Initial orientation of new employees on these procedures and efficient communication to staff about procedure updates and new procedures are key to ensure the standardized application of required standards of care. These procedures should also be accessible for easy consultation and for regular update as needed.**
	Guiding measures:	
	3.1	Staff has an up-to-date manual for operating medical imaging equipment.
	3.2	Evidence that staff is trained on the medical imaging equipment before using it.
	3.3	Evidence that new staff is oriented to the policy and procedure manual of the medical imaging department.
	3.4	Staff is informed about any updates in the policy and procedure manual of the medical imaging.
	3.5	Previous policies and procedures related to medical imaging are retained according to the hospital policy of record retention.
5	**MI 4.**	**Qualified staff performs medical imaging examinations using delineated policies and procedures.** **These procedures delineate the management of the risks related to the imaging examination and ensure standardized implementation: patient and examination site identification, allergies, nephrotoxicity secondary to contrast media administration, risks related to patient sedation and radiopharmaceuticals, etc.**
	Guiding measures:	
	4.1	The staff properly identifies patients (two identifiers), nature of the medical imaging examination, and the site (in case of interventional procedure) before conducting it, and document appropriately.
	4.2	A process is defined to manage patients who need an imaging examination.
	4.3	Policies and procedures for administering medications such as contrast media, sedatives and radiopharmaceuticals are followed.
	4.4	Qualified and trained staff (in advanced resuscitation) monitors patients receiving contrast media, sedatives and radiopharmaceuticals during and after the procedure.

	4.5 Treating, documenting, and reporting adverse reactions follow specific policies and procedures.
5	**MI 5. Specific policies and procedures are in place to ensure maintenance of the medical imaging equipment.** **There should be documented evidence of adequately planned and executed preventive maintenance plan and a detailed history of maintenance actions for equipment.**
	Guiding measures:
	5.1 Evidence of an annual program for preventive maintenance of equipment.
	5.2 Preventive maintenance records are retained for at least 2 years.
	5.3 Evidence of an equipment corrective maintenance and actions log.
6	**MI 6. Cleaning and reprocessing diagnostic devices and equipment are performed according to specific policies and procedures.** **The contamination risk of diagnostic machines, devices and accessories (such as ultrasound machines, interventional radiology suite and accessories, endoscopes, mobile x-ray machines, aprons and markers, injectors, etc.) need to be well evaluated and managed according to its criticality relative to its degree of invasiveness (Spaulding Classification or its equivalent). Therefore clear instructions for cleaning, disinfection and reprocessing of devices should be explained and trained to imaging staff, following the hospital's infection control procedures while adhering to the manufacturer's recommendations, to avoid any cross contamination and machine damage risks.**
COR	Guiding measures:
	6.1 In case of external medical imaging service provider, the hospital ensures that a contract is in place to monitor the quality of the services provided.
	6.2 Containing and transporting contaminated devices and equipment for reprocessing internally and externally, follows specific policies and procedures.
	6.3 The hospital ensures that staff is competent and properly trained on policies and procedures for reprocessing the diagnostic devices.
	6.4 Selecting appropriate cleaning, disinfecting, and reprocessing methods follows hospital's policy and procedures for cleaning, disinfecting and reprocessing diagnostic equipment.
	6.5 The clean devices are stored separately according to manufacturer's instructions.
	6.6 The hospital maintains a record for reprocessed devices related to the medical imaging department.
4	**MI 7. Requests for medical imaging services are managed appropriately.** **As the imaging services may not be familiar with the patient's case, status or needs, medical imaging requests (written or electronic) are the standardized method of communicating complete and relevant patient information to the medical imaging services, and should be relayed prior to imaging the patient and interpreting the report. This is**

	to avoid risks of errors such as identification, optimize quality of interpretation, in addition to avoiding unnecessary exposure to radiation. A list of available imaging exams should be available to select from. Requests should be made according to the patient's clinical status and needs in addition to the medical level of urgency to which the medical imaging department must respond accordingly in due time. This clinical information needs to be well documented in the request.
	Guiding measures:
	7.1 Resources for selecting appropriate medical imaging examinations are provided to the medical team.
	7.2 A complete signed and validated prescription or electronic request that identifies the patient, appropriate medical team member, date of the request, level of urgency, relevant clinical information, type of procedure, and special instructions, is maintained.
	7.3 In case of emergency, the staff collects information identified in the request and ensures a written or electronic request is filled by the medical team prior to interpreting the results of medical imaging examination.
	7.4 Staff in the medical imaging department respond to "STAT" orders within the hospital's specified timeframe.
6	**MI 8. Screening patients is conducted before performing medical imaging examinations.** **It is critical that patients are screened for all possible clinical factors that may increase the risk of harm if not appropriately addressed prior to undergoing the medical imaging exam and being exposed to radiation or contrast media. This can be done in a form of a standardized screening checklist for each patient including relevant criteria to check, in addition to required information to be provided to the patient or family.**
COR	Guiding measures:
	8.1 Screening patients for allergies, magnetic resonance imaging contraindications, coagulation profile and medical conditions prior to the administration of contrast media, implant devices and materials inside the body is done before medical imaging examination.
	8.2 Information is given to patients and families before obtaining an informed consent regarding the performing medical imaging examination.
	8.3 Staff asks female patients with childbearing age about any potential pregnancy before procedures involving radiation.
5	**MI 9. Results are reported to the appropriate medical team following interpretation.** **The hospital specifies through a policy or procedure the required timeframe for reporting medical imaging exam results. It should account for the level of urgency of the exam in addition to handling any critical findings that should be reported immediately to the**

	medical team, while meeting the needs of units, especially critical care or emergency units. Also, medical images need to be collected in a way facilitating comparison of previous to current findings, in order to assess patient evolution. Data regarding the reported timeframes should be collected and evaluated regularly compared to the set hospital policy or procedure in order to put in place any necessary corrective actions.
	Guiding measures:
	9.1 Results of the medical imaging examination are interpreted in a timely manner and reported immediately to the referring medical team in case of critical findings according to specific policies and procedures.
	9.2 Elements of the report include: patient identification, relevant information about the procedure, identification of the ordering physician, reporting date and time, identification of the reporting radiologist.
	9.3 Medical images and reports are stored appropriately.
	9.4 Time frame of emitting results meet the needs of units with special attention to emergencies and critical results.
	9.5 Data is collected regarding the timeframe for interpreting results, outcomes are analyzed and corrective actions are taken accordingly.
5	**MI 10. The hospital ensures a safe environment in the medical imaging department.** **Ensuring a safe environment involves ensuring the safety of equipment, staff and patients at all times and reporting any sentinel/adverse events and near misses in a timely manner to ensure appropriate improvement actions. Equipment must be periodically inspected, maintained and calibrated, as per hospital and manufacturer recommendations, and evidence of this should exist. Regularly inspecting that staff is not exposed to unsafe levels of radiation is done via adopting technical protocols that can minimize emission of radiation, providing radiation protection, testing their efficacy, and checking level of exposure using dosimeters. These tests and results must be documented and evaluated for any necessary corrective actions. The department must have the resources (human, knowledge and equipment) to be able to respond to any medical emergency with patients occurring in the department.**
	Guiding measures:
	10.1 A safety plan is in place that indicates the periodic inspection, maintenance, and calibration of all equipment, the provision and regular testing of radiation protection aprons and thyroid and gonad shields for staff and patients.
	10.2 Monitoring of the staff radiation exposure is performed at least quarterly using the radiation dosimeters; data are properly collected and recorded.

	10.3	Evidence of staff training on responding to medical emergencies (i.e. patient arrest) at the medical imaging department.
	10.4	Fall prevention and precautions measures are properly implemented in the medical imaging department.
	10.5	Sentinel events, near misses, and adverse events in the medical imaging department are identified, reported to quality management and patient safety committee and documented in a timely manner.
	10.6	The results of the reports related to sentinel events, near misses, and adverse events are analyzed, and corrective actions are taken accordingly.
4	**MI 11. A quality control program for medical imaging services is in place.** **It is important that the equipment and report results are accurate and reliable in order to provide optimal images for reading and correct diagnosis. Thus the department has a procedure describing the method and frequency of quality control done on imaging equipment and quality control audits on a sample of reports to ensure accuracy and reliability. Results of the quality control are documented. Any internal bias or discrepancies should be accounted for by external validation sources or a peer radiologist (latter) with identified corrective actions taken accordingly.**	
	Guiding measures:	
	11.1	Quality control procedures for testing the accuracy of the equipment are conducted and recorded, problems are identified and corrective actions are taken accordingly.
	11.2	Quality control procedures including peer review for testing the validity of a sample of the medical imaging reports by internal and external sources are performed, results are compared and corrective actions are taken when needed.
	11.3	If the result is different / there are discrepancies in the results then random sampling is conducted and another radiologist is consulted.
	11.4	The hospital has the right to send reports to another external institution in case of discrepancy.
	11.5	Repeat/reject analysis is conducted and recorded, problems are identified and corrective actions are taken accordingly as part of the quality control program in the medical imaging department.
3	**MI 12. Medical imaging specific indicators are collected and used as part of the quality improvement in the medical imaging department.** **Assessing the quality of services provided is an ongoing process in the imaging department.** **Department objectives relative to the quality of services must be measurable, with a target and be benchmarked with reference data in order to compare and assess progress, and evaluated regularly.** **Performance indicators should include a list of outcome indicators from various sources of information to help evaluate the quality of services and any opportunities of improvement such as such as turnaround times stratified by level of urgency, patient satisfaction**	

	rate, utilization rate of machines, audits or quality control checks etc.) Which could reflect department performance and are benchmarkable. Discussion of indicator results should be done at leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with timely feedback of results and action plan to concerned teams.
	Guiding measures:
	12.1 Information and feedback from staff, service providers, and hospital leaders about the quality of the medical imaging services are collected to guide quality improvement initiatives and identify areas of improvement.
	12.2 A mechanism to ensure appropriate use of medical imaging services is in place.
	12.3 Measurable objectives for quality improvement initiatives and timeframe in which they will be reached, are set.
	12.4 Indicator(s) is used to monitor progress for each quality improvement objective.
	12.5 Data related to the appropriateness of examinations, the accuracy of the interpretations, and the incidence of complications and adverse events are collected, analyzed, and interpreted to establish a baseline for indicators.
	12.6 Indicator data is evaluated for to determine the effectiveness of the quality improvement activities.
	12.7 Results are properly communicated to the executive management.

Patient Services: Emergency Services (ES)

Introduction

The **Emergency Services** chapter is characterized by the ability to deal with emergency cases. The hospital must be equipped with competent staff and an effective triage system to ensure safe and collaborative practices. The urgency of the patients' clinical condition mandates the timely assessment and provision of the appropriate treatment.

The **Emergency Services** chapter targets the following section:

- Establishing appropriate ambulance services
- Building a qualified and competent team
- Establishing effective triage system
- Providing safe and effective services
- Monitoring quality indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**ES 1. The hospital-owned ambulance services, when available are properly managed, to provide safe and effective care.** **In order to make sure that the patients are safely transported to/from the hospital, a series of hospital defined criteria should be defined and met prior to transportation and during it. Those criteria start from initial risk stratification, proper communication and ensuring the required and qualified resources (personnel qualifications, equipment, medications, safety protocols/policies etc.) satisfying the patient's currents needs and possible risks during transport, ensuring a safe and secure arrival.**
	Guiding measures:
	1.1 The patient needs are assessed prior to transport.
	1.2 Proper communication channels are ensured between the hospital and the ambulance services.
	1.3 Safe measures are ensured by the ambulance services during patient transportation including having a licensed driver and safety belts.
	1.4 Infection control guidelines are implemented while transferring patients.
	1.5 A qualified healthcare professional certified in advanced resuscitation or critical care is always available when transporting high-risk patients.
	1.6 Criteria for identification of high-risk patient population such as patients with myocardial infarction or patients having cerebrovascular accidents, definition and knowledge of care pathways are followed by the first encounters.
	1.7 Transportation of high-risk patients to and from the hospital follows a specific procedure.
5	**ES 2. The hospital-owned ambulances, when available are properly equipped and maintained.** **The ambulances should always be ready to respond to any call for adult or pediatric urgent cases timely and efficiently. The equipment and supplies should be checked and maintained and this process documented to avoid any failure that would endanger the patient's safety.**
	Guiding measures:
	2.1 The ambulances have adequate equipment and supplies including those for pediatric patients, and ready to transport patients twenty-four hours per day, seven days per week.
	2.2 Evidence of daily checking of the materials list.

	2.3	Equipment in the ambulances is cleaned and disinfected after the transfer of patients and properly documented.
	2.4	Maintenance of the ambulances and their equipment is conducted on regular basis and properly documented.
5	**ES 3.**	**Transfer of care of patients to a hospital is ensured via a specific process.** **To ensure safety and continuity of care, upon and after transfer, communication with the receiving hospital should be done prior to patient transfer, using a standardized communication tool, including all the necessary patient needed to allow the receiving hospital team to be prepared. Effective communication requires that the information sent be complete and accurate, and that the receiving hospital acknowledges receipt of information.**
	Guiding measures:	
	3.1	Standardized patient information is communicated effectively via a communication tool and properly documented.
	3.2	Communication with the receiving hospital is done to ensure the availability of the resources needed.
	3.3	Summary of the patient's condition, treatments and interventions done are provided by the transporting team to the receiving hospital.
6	**ES 4.**	**Patient-centered care in the emergency department is ensured with adequate resources.** **The Emergency Department offers designated spaces and required materials and medications to deal with all kinds of emergencies, namely the need for isolation and resuscitation for adult and pediatric care. As well, administrative and healthcare professional ratio in the ER should be adjusted to properly handle any increase in the flow of patients, in addition to considering patient acuity and changes in required level of care that could happen suddenly and rapidly at any time.**
COR	Guiding measures:	
	4.1	Registration of emergency patients is ensured by a registration clerk.
	4.2	Rooms are divided to ensure patient privacy and security.
	4.3	Process related to proper and regular checking of medications and supplies, and refilling them is in place.
	4.4	Emergency and advanced resuscitation equipment exist in areas where sedation procedures are conducted.
	4.5	Specific pediatric pathways are available.
	4.6	Patient safety is considered when the workload is assigned to the healthcare workers.
	4.7	The workload of the healthcare workers is adjusted based on the patients' flow in the emergency department.
5	**ES 5.**	**The flow of patients is managed in the emergency department.**

		Emergency department should ensure a permanent access to care 24/7. Intra and inter hospital transfer and transport policies or procedures exist to help standardize safe transfer of patients within and between hospitals. These should clarify how and when patients are moved from the ER to other departments, on what clinical criteria, and with what resources, in order to ensure safe transfer but also a continuous fluid access to ER care. Management flow, transfer from with and from outside the hospital should be coordinated by a defined process with an overlook from hospital executive management.
	Guiding measures:	
	5.1	The hospital executive management oversees and manages the patients flow through the hospital.
	5.2	Overcrowding, flow and transfer of patients inside the hospital are managed according to established protocols/policies.
	5.3	Access to the emergency department is provided twenty-four hours per day and seven days per week.
	5.4	Processes and procedures are followed to coordinate the transfer of patients inside the hospital and between the hospitals.
6	**ES 6.**	**Healthcare workers of the emergency department are qualified and competent.** **The Emergency department should be run by healthcare specialists, able to manage the flow of patients with any kind of emergency regardless of age and emergency type of the disease, medical or surgical, traumatic et.. Thus, physicians and nurses in each team should hold recognized qualifications (ATLS, ACLS, PALS, ATNC, TNCC, etc.) enabling them to meet all requirement of care for all types of cases.**
COR	Guiding measures:	
	6.1	The head of the emergency department is an emergency medicine specialist physician who is qualified by education, appropriate training, and experience with valid certification in managing and resuscitating emergency and trauma patients.
	6.2	At least one physician in each team is certified by an accredited training body in the Advanced Management of Trauma care patients, such as Advanced Trauma Life Support (ATLS), and Advanced Trauma Care (ATC).
	6.3	At least one nurse in each team is certified by an accredited training body in the management of trauma care patients, such as Advanced Trauma Care for registered Nurses (ATCN), Trauma Nursing Core Course (TNCC), and Advanced Trauma Nursing Course (ATNC).
	6.4	A qualified emergency physician covers the emergency department twenty-four hours per day, seven days per week and needs to be physically present on site.
	6.5	The healthcare workers involved in patient care are certified with advanced life support as appropriate to the age of patients

	(Advanced Trauma Life Support, Pediatric Advanced Life Support, Advanced Neonatal Life Support, Advanced Cardiovascular Life Support …).
4	**ES 7. Consultation services in the emergency department are provided via a specific process.** **A significant part of patient encounters in the emergency department require consultancy of a specialized physician (orthopedic, infectious diseases, urology, gynecology, etc.) in order to identify the diagnosis and care plan. Therefore, the hospital should define a policy for offering a permanent consultation service in the emergency department. Procedures should define and document this process which include the way of communication with the consultant, how consultancy is delivered and documented and the possibility of consulting doctors outside the hospital.**
	Guiding measures:
	7.1 A policy and procedure for managing consultation services that is originated from the emergency department is in place.
	7.2 Consultations services and ways of communication are identified.
	7.3 A process is in place when consulting physicians outside the hospital.
	7.4 The consultation services are available twenty-four-hours a day, seven days per week and overseen by an attending physician.
	7.5 A process exists for documenting consultations is in place.
6	**ES 8. Patients are prioritized in the emergency department via an effective triage process based on specific policies and procedures.** **All patients should be handled in the emergency department as soon as they arrive. A standardized process of triage (for example based on international triaging methods such as ESI, CTAS, CIMU, etc.) should define the priorities and rapidly identify the needs of each patient in order to deliver the proper care in a timely manner. Documented surveillance and reassessment should be conducted by the healthcare team to follow up on the patients' condition, taking into consideration their acuity and risk of deterioration.**
COR	Guiding measures:
	8.1 Trained nurses in triage systems conduct and document triage assessment in a timely manner via a standardized assessment tool.
	8.2 A standardized tool for pediatric patients during the triage is in place and properly documented.
	8.3 Patients present in the waiting areas are provided with names of the healthcare workers.
	8.4 Reassessment is done when there is a change in the patients' condition.
	8.5 There is a process that identifies patients' needs and prioritizes services accordingly.
	8.6 Patients in the emergency department are monitored for any deterioration in their medical condition and are reassessed appropriately.

	8.7 Healthcare workers assess the patients received, and document their assessment in a timely manner.
5	**ES 9. The emergency department has policies, procedures, clinical guidelines and pathways that ensure patients' care.** **Patients in ER should be handled and treated according the evidence based medicine recommendations and guidelines. There should be specific protocols and procedures for the management of specific medico legal conditions as per local legal requirements. Procedures which define the patients' flow in and out of the ER should also exist, including criteria to admit and to discharge from ER.**
	Guiding measures:
	9.1 Policies and procedures include, but not limited to, the following: 9.1.1 Management of medico-legal cases such as alcohol and narcotic abuse and criminal acts. 9.1.2 Management of suspected victims of abuse, neglect, and domestic violence. 9.1.3 Management of suicidal patients. 9.1.4 Care of trauma patients. 9.1.5 Patient transfer from emergency department to inpatient areas or to another hospital. 9.1.6 Admission and discharge process.
5	**ES 10. Care plan is developed following patient assessment.** **A care plan for patients in emergency department should be developed in a multidisciplinary way and based on the logic of assessment and reassessment of all the patient's clinical condition and risks, which can help identify adapted interventions to potentially improve the patient's clinical status and/or prevent unwanted outcomes.** **Initial assessment should be performed upon admission of the patient, same as reconciliation of medications.** **The patient's assessment gains to be performed using standardized methods and tools (systematic clinical exam, vitals and physiological parameters, screening of the risk of acquiring some hospital conditions, such as developing pressure ulcers, in-hospital falls, venous thrombo-embolism, delirium, etc.) In order to arrange for any necessary preventive measures.** **Based upon the assessment, adequate interventions are identified and planned by the clinical staff, and both the assessment and the interventions are documented in the patient's care plan. When patient prognosis is not favorable despite the clinical interventions undertaken, an assessment for palliative care is conducted and discussed with the patient's family.**
	Guiding measures:
	10.1 A comprehensive approach is used during the physical and psychosocial assessment of patients via a standardized tool.
	10.2 A medication reconciliation process is initiated at the time of admission.

	10.3 Patients are assessed for falls, proper measures are implemented and evaluated for patients who are identified at risk for fall.
	10.4 Patients who are at risk for suicide are assessed and monitored.
	10.5 Patients who are at risk of developing pressure ulcer are assessed and monitored
	10.6 Patients who are at risk for developing venous thromboembolism are assessed and monitored.
	10.7 Patients' are assessed for pain and options for pain management are provided.
	10.8 The assessment for the patients' palliative care and end-of-life issues is being performed when appropriate.
	10.9 Patients are reassessed and results are documented in the medical record if there is any change in the patient's condition.
6	**ES 11. Patients receive safe and effective care in the emergency department.** **Emergency department offers a permanent access to care for all kind of patients, adults and babies and thus should ensure in a timely manner the required logistics for care provision, such as medications, laboratory services for diagnosis and therapeutic procedures for urgent situations.** **Standardization of practice is important to ensure conformity to guidelines and reduce variation in care. This should be implemented through the elaboration and diffusion to the ER team of protocols and procedures relative to the most common pathologies encountered in the ER.** **Also, procedures should be elaborated to cover in particular a number of critical themes, including: patient identification, clinical assessment, vitals surveillance, isolation of infectious patients, pain management and palliative care. The care plan should be documented in the medical record.**
COR	Guiding measures:
	11.1 The healthcare workers provide services to patients following an individualized and documented plan of care and properly document it in the medical record.
	11.2 Proper patient identification using an armband is conducted before providing any service or performing any procedure.
	11.3 All patients receive same standards of care through consistent with evidence-based treatment protocols.
	11.4 The healthcare workers working in the emergency department identify, isolate and manage patients having or suspected to have infectious diseases.
	11.5 Laboratory and diagnostic services are available twenty-four hours a day, seven days per week and results are reported in a timely manner.
	11.6 Urgent medications are accessed by authorized healthcare workers twenty-four hours a day, seven days per week.

	11.7	The healthcare workers monitor patients who received narcotics or sedative agents.
	11.8	Information related to pediatric medications is accessible at all times, and healthcare workers ensure the proper and safe administration of weight-based pediatric dosages.
	11.9	Information related to patients and their care is effectively communicated and documented during care transition.
5	**ES 12.**	**Emergency department specific indicators are collected and used as part of the quality improvement in the Emergency services department.** **Emergency department processes hold several priority areas where organizational performance and clinical quality can be subject to improvement, and where adverse events can be prevented. Therefore, it is important to define and prioritize the key improvement objectives for this department, based on observations, audit surveys and benchmarking.** **Indicators should be set with adapted targets, in order to monitor the progress of the quality improvement plan.** **Such indicators should include a list of outcome indicators (such as readmission rates to ER within 10 days, mean patient turnaround time by triaging level, etc.) that could reflect clinical and organizational performance and are benchmarkable.** **Discussion of indicator results can be done at the leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:	
	12.1	Indicator(s) is used to monitor progress for each quality improvement objective.
	12.2	Data are collected, analyzed, and interpreted to establish a baseline for indicators.
	12.3	Indicator data is evaluated to determine the effectiveness of the quality improvement activities.
	12.4	Results are properly communicated to the hospital executive management.

Patient Services: Obstetrics and Child Health (OS)

Introduction

The **Obstetrics and Child Health** chapter is an integral part in patient services. It tackles the process of pre-delivery until the baby and mother are provided care at another setting. It requires specific and collaborative care from multidisciplinary healthcare providers to ensure safe health care for the mother and baby.

The **Obstetrics and Child Health** chapter targets the following sections:

- Obstetrics and nursery services staff qualification
- Patient care plan
- Pre-delivery preparation
- Post-delivery care
- Breastfeeding policy in line with the baby friendly hospital initiative
- Safe nursery services
- Quality improvement indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
4	**OS 1. The hospital has qualified and competent staff in the obstetrics department.** **Pre-delivery care, delivery and post-delivery care is a highly specialized, delicate process that needs to be safely ensured, requiring the presence and availability of a competent and trained multidisciplinary team: Specialized doctors, nurses and midwives. Due to the unplanned nature of some deliveries, emergencies should be covered by specialists of neonatology/pediatrics and anesthesiology in a previewed, easily accessible set up for any need for urgent caesarian section and eventual neonatology care.**
	Guiding measures:
	1.1 The director, nurse manager, nurses and midwives of the obstetrics services are qualified by education, training and experience.
	1.2 A qualified obstetrician certified in advanced resuscitation is physically present in the delivery room during all deliveries.
	1.3 A pediatrician on call is always available in case of emergencies.
	1.4 A qualified certified pediatrician/neonatologist attends all cesarean section deliveries before 36 weeks, all high-risk pregnancies or if the baby is diagnosed with a medical condition.
	1.5 A qualified anesthetist is available in case a defined threshold of birth is reached.
	1.6 An operating room for cesarean sections close to the delivery rooms is in place.
5	**OS 2. Care plan is developed and documented using a comprehensive manner.** **Assessment of patient individual needs and identification of high-risk deliveries should be conducted in a standardized manner and reported to the staff members as well as the patient and family. Standardization of assessment should be in the form of specific documented tools or policies/procedures specifying how pre, per and post-natal assessment is conducted and how and when results should be communicated with the patient and the staff involved.**
	Guiding measures:
	2.1 Patient's physical and psychological health is assessed using a holistic approach and a standardized assessment approach.
	2.2 Accurate and complete medication information is communicated during care transition and follows the medication reconciliation policy.
	2.3 Processes for identifying and management for women who are at risk for intrapartum and postpartum bleed and pain are followed.

	2.4	Reporting of and response to abnormal test results and reports are done in a timely manner.
	2.5	Results of the assessment are communicated to the patients and the other staff.
	2.6	Plan of care is developed and documented in a comprehensive and individualized manner.
4	**OS 3.**	**The patient is prepared for Cesarean section (C-section) or vaginal birth.** **Choice and justification of type of labor is standardized and deployed in a multidisciplinary collaborative and thoroughly documented manner. The care plan should be deployed and individualized to each patient.**
	Guiding measures:	
	3.1	Policies and procedures for women at labor are developed and implemented in a collaborative manner including obstetricians, pediatricians, anesthesiologists, delivery room nurses and midwives, and other staff as needed.
	3.2	Justification criteria for C-section are delineated.
	3.3	The hospital has a process for immediate C-section
	3.4	A partogram and care plan is developed and documented for each patient that includes fetal health assessments, plans of action, and clinical actions taken during the stages of labor that follows a structured approach.
6	**OS 4.**	**Safe and accurate management of medications including oxytocin, prostaglandin, epidurals, and general anesthetic, is ensured at all times.** **The medications that administered in the process of delivery are of a delicate use and might have side-effects on the patient and on the fetus. Thus they should be safely prepared and administered according to standard operating procedures and their potential effects closely monitored. Epidural anesthetics must be carefully administered by a by a qualified professional in order to minimize complications.**
COR	Guiding measures:	
	4.1	Policies and procedures are available for safe oxytocin and prostaglandin administration.
	4.2	The fetal heart rate is monitored and documented during oxytocin and prostaglandin administration.
	4.3	A qualified team member administers the epidural anesthesia following anesthesia policies and procedures.
6	**OS 5.**	**Care for the mother and the baby is ensured following labor and birth.** **Specific testing and care are performed by qualified staff to the baby and mother starting immediately after delivery until criteria of discharge from post-partum unit are met. They are meant to make sure that the newborn is well in shape and does not require specific advanced care. As well post C-section women can develop post-**

	operative complications, thus should be observed and monitored before being cleared. This is why defined criteria should be applied to decide upon the discharge. Education and information should be given to the mother regarding the possible events or complications that are noted in the post-delivery phase.
COR	Guiding measures:
	5.1 APGAR test performed on the baby at 1 and 5 mins after childbirth, before transfer to recovery room.
	5.2 The mother who underwent C-section is observed by staff during her transfer from the operating room to the recovery room.
	5.3 The baby is transferred from the operating room, after delivery, to the nursery department accompanied by a qualified staff.
	5.4 A documented postpartum monitoring for the mother and newborn assessment are to be performed after delivery
	5.5 Skin-to-skin contact is supported.
	5.6 Patient is provided with education about the following but not limited to; uterus involution, lochia, episiotomy, breastfeeding, baby care, pain, baby blues.
	5.7 Criteria are applied when determining whether the mother and baby are fit for discharge from the postpartum unit.
6	**OS 6. A written breastfeeding policy is in place and properly implemented, as per applicable laws and regulations.** **The hospital should develop and apply a breastfeeding friendly policy aiming at encouraging and educating lactating women about breastfeeding. In addition the hospital should ensure that the staff is trained and adheres to it for the best benefit of the newborn. This should be performed via documented audits, observations, knowledge and competency testing.**
COR	Guiding measures:
	6.1 The hospital has a breastfeeding policy.
	6.2 Evidence of staff training and education about the breastfeeding policy.
	6.3 Regular monitoring and reassessment of staff adherence to the breastfeeding policy is ensured.
	6.4 Pregnant women are informed about the benefits and the management of breastfeeding.
	6.5 No artificial teats or pacifiers are given to breastfeeding infants.
	6.6 The hospital encourages breastfeeding on demand.
	6.7 The hospital implements rooming-in policy (mothers and infants are allowed to remain together 24 hours a day).
	6.8 Evidence of mother training on proper breastfeeding and maintenance of lactation.
	6.9 No drink or food other than breast milk is given to newborns unless medically indicated and documented in medical record.

4	**OS 7.**	**Obstetrics services specific indicators are collected and used as part of the quality improvement in the Obstetrics services department.** **Obstetrics hold several priority areas where organizational performance and clinical quality can be subject to improvement, and where adverse events and suboptimal results are generally observed but can be largely prevented.** **Therefore, it is important to define and prioritize the key improvement objectives for this process, based on observation, audit and benchmark.** **Once improvement objectives are identified, indicators should be set with adapted targets, in order to monitor the progress of the quality improvement plan.** **Such indicators should include a list of outcome indicators (such as first C-section, rate of artificial inductions for births before 39 weeks, rate of APGAR 4 and 5 births at 5 min, etc.) that could reflect clinical performance and are benchmarkable.** **Discussion of indicator results should be done at leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with timely feedback of results and action plan to concerned teams.**
	Guiding measures:	
	7.1	Indicator(s) is used to monitor progress for each quality improvement objective.
	7.2	Data is collected, analyzed, and interpreted to establish a baseline for indicators
	7.3	Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	7.4	Results are properly communicated to the hospital executive management.
6	**OS 8.**	**The nursery department follows specific measures to ensure the safety of the newborns.** **The security and safety of newborns in the nursery department require a trained staff regarding resuscitation and newborn care as well as standardized policies and procedures concerning infection control and newborn identification and fall prevention. The Area should limited to authorized staff as per the hospital's policies.**
COR	Guiding measures:	
	8.1	Evidence of policies and procedures to guide the nursery department
	8.2	Evidence of policies and procedures on infection control principles for the nursery department.
	8.3	A registered/qualified nurse and/or midwife is always present in the nursery department.
	8.4	The access to the nursery department is limited to authorized persons only for the security of newborns which is delineated in policies and procedures.

8.5	There is documented and implemented fall risk assessment and prevention program for newborns.
8.6	Documented evidence that staff providing newborn care received training and are certified from an accredited body in Neonatal resuscitation such Neonatal Resuscitation Program, and Neonatal Advanced Life Support.

Patient Services: Critical Care (CC)

Introduction

Critical care is a multidisciplinary care that involves critically ill patients suffering from one or more organ failure. The care provided is not limited to adult, neonatal and pediatric intensive care units or post anesthesia care unit (PACU); it goes further to include services that target the entire hospital such as rapid response teams and code teams. The standards are aimed at providing safe and effective patient care; taking into consideration the specialized settings present in these units such as the mechanical ventilation and the cardiac monitor.

The **Critical Care** chapter targets the following sections:

- Building a qualified and competent team
- Safeguarding equipment and supplies
- Providing safe and effective services
- Involving the family in patient care
- Monitoring of quality indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**CC 1. The hospital ensures the availability of resources (human, financial, structural, informational, or technological) to provide safe and high-quality patient-centered care services.** **Availability of critical care services is vital for the management of patients with a high risk of deterioration. Such services require resources in adequate quantity and skill set to be able to ensure provision of highly specialized and safe care. Therefore, human resources need to always be available according to a safe ratio, with the appropriate qualifications and competencies, and the size of the critical care unit should correlate with the hospital needs and capacity. Equipment needed for patient surveillance/monitoring and care should also be in adequate number and functionality relative to the capacity and specific population of patients.** **Critical patients need to be managed in a holistic multidisciplinary and patient-centered approach given their complex needs and the risks entailed by their stay in critical care. Such risks include the loss of mobility, malnutrition, delirium, and compromised respiratory function, potential adverse effects occurring from the administration of high alert medications and combination of medications, as well as any potential social and psychological impacts on the patient.** **Respecting the patient's rights and dignity is essential in all care services, especially in critical care settings, since critical patients may have a compromised ability to communicate their concerns and interact with their surroundings. Structure of the critical units should be designed to take into account patient privacy, effective monitoring, safety, ergonomic factors and infection risks.** **Communication with the patient's family regarding the patient status, care plan, including palliative care and end-of-life options should be consistently provided, and their concerns discussed with the medical staff.**
	Guiding measures:
	1.1 The hospital executive management identifies the required resources.
	1.2 Medical staff of the critical care units is physically available 24 hours per day, 7 days per week to manage critically ill patients.
	1.3 Care of patients is provided equally to all critical care patients using a multidisciplinary approach **(**includes but is not limited to: an intensivist or physician trained in critical care areas, nurse, clinical pharmacist, respiratory therapist, dietitian, social worker, physiotherapist, and the consultant of the primary service under

	which the patient was first admitted) and documented in the medical record.
	1.4 Confidentiality, privacy and safety are taken into consideration in designing the units.
	1.5 Access to information related to palliative care and end-of-life care is ensured at all times.
5	**CC 2. The hospital has qualified and competent staff in its critical care units.** **Staff in critical care services should have adequate skillsets to be able to ensure the provision of highly specialized and safe care. These skillsets are acquired by education, training and experience. Moreover, competencies regarding the basic critical care procedures should be regularly tested and documented to ensure the required level of care is met at all times, by all hospital caregivers, with eventual corrective actions being implemented accordingly.** **An ongoing continuous education program should be in place in the critical units in order to constantly update the staff on clinical knowledge, recommendations of best practice and evidence based care. These trainings should be validated by knowledge tests to ensure transmission of information.** **Advanced resuscitation certifications from recognized accreditation bodies aid in the provision of standardized best-practice care for critical patients, aiming to ensure high quality and safety of care.**
	Guiding measures:
	2.1 The chief of department and the nurse manager of each critical unit are qualified by education, training and experience.
	2.2 The critical unit's staff are qualified by education and training.
	2.3 There is an ongoing and documented competency assessment to ensure the effectiveness of the training and education given to nursing staff on the following clinical needs: 2.3.1 Fundamental critical care support. 2.3.2 Identification of symptoms and signs of patient deterioration and escalation of care 2.3.3 Infection control principles. 2.3.4 Blood transfusion. 2.3.5 Use of the defibrillator. 2.3.6 Care of patients with tracheostomies. 2.3.7 IV therapy. 2.3.8 Pressure ulcer prevention and care. 2.3.9 Knowledge of dosage range, side effects and complications of commonly used high alert medications in critical care including vasopressors, narcotics and controlled medications. 2.3.10 Recognizing critical ECG changes including arrhythmias. 2.3.11 Using pulse oximetry. 2.3.12 Assisting physician in placing central lines or arterial lines. 2.3.13 Assessing Glasgow Coma Scale (GCS).

	2.3.14 Care of patients on ventilators. 2.3.15 Reading central venous pressure (CVP) and swan Ganz monitoring. 2.3.16 Care of Endo-Tracheal Tubes. 2.3.17 Sedation and delirium management. 2.3.18 Central venous catheters. 2.3.19 Ventriculostomy 2.3.20 Enteral and parenteral feeding 2.3.21 Infusion pumps.
	2.4 Training and education are given on : 2.4.1 Working respectfully and effectively with patients and families with diverse cultural backgrounds, religious beliefs, and care needs. 2.4.2 The organization's ethical decision-making framework. 2.4.3 The hospital information system and other technology used in delivering care, if present 2.4.4 Pain management. 2.4.5 Care of the dying patients. 2.4.6 End of life decisions. 2.4.7 Communicating bad news.
	2.5 The effectiveness of the training and education is evaluated by competency testing, outcomes are analyzed and corrective actions are taken accordingly.
	2.6 Staff in the critical care areas has appropriate training certification from accredited body in advanced resuscitation depending on age such as (ALS, ACLS, APLS, PALS, NRC, NRP, NELS)
6	**CC 3. Equipment and supplies are available in the critical care units to ensure patient safety.** **Availability of specific equipment and supplies is important to ensure life-saving interventions for critical patients. These include equipment for continuous monitoring, mechanical ventilation (invasive and non-invasive), continuous infusion pumps, portable ventilators and monitors for patient transfer, as well as medications commonly used in critical settings. The equipment and supplies should be readily available at all times, in order to respond to urgent clinical needs, and therefore should be checked for availability and correct functionality at least on a daily basis and as needed.** **Care of such equipment and their accessories by staff should be in line with manufacturer's requirements in order to prevent malfunction, while adhering to infection control procedures and policies, in order to prevent cross contamination between patients. Such policies include disinfection of equipment or accessories, replacement of single use items and reprocessing of multiple use items.** **Given the elevated level of risk of patients residing in the critical care units, it is important that there is a round-the clock access to**

	diagnostic tests, and that they are performed in a prompt and timely manner. This includes the possibility of performing some of these diagnostic tests at the patient's bedside in the critical care unit. Examples include bedside imaging exams (portable x-ray machines, ultrasound machines etc.) and laboratory point of care tests, such as blood gas machines.
COR	Guiding measures:
	3.1 Isolation rooms are in place with at least one negative pressure room.
	3.2 The equipment related to the critical care units are present, and not limited to the following: 3.2.1 Ventilators. 3.2.2 Suction apparatus. 3.2.3 Airway sets. 3.2.4 Crash cart that includes a defibrillator and all emergency supplies and medications. 3.2.5 ECG monitor, pulse oximetry and vital signs monitoring devices. 3.2.6 Automated blood pressure monitoring machine. 3.2.7 Intravenous infusion and blood transfusion pumps. 3.2.8 Portable monitoring equipment for patient transfer.
	3.3 Daily checking of the availability and the functionality of the equipment is ensured.
	3.4 The disinfection and cleaning of the equipment are performed on daily basis and as needed.
	3.5 The availability of the laboratory and imaging services is ensured in the critical care units.
5	**CC 4. Outreach services within the hospital are provided by the critical care units and managed properly.** **Hospitalized patients in regular clinical wards may experience an acute deterioration or cardio-respiratory arrest at any moment, therefore the hospital must be able to provide access to critical care services and resources (human, structural, equipment) in a timely and standardized manner, 24 hours a day, 7 days a week.** **In order to respond efficiently to such medical emergencies, it is important to have a designated medical emergency team (rapid response or code blue teams) with clearly defined roles and responsibilities, who are called upon based on a set of standardized criteria. Such criteria should be evidence-based and appropriately communicated throughout the hospital.** **The rapid response team and code blue teams must be comprised of qualified, competent individuals with the appropriate education, training and experience in managing critical care patients and meeting the needs of the medical emergency, in a timely, multi-disciplinary manner. The roles of these individuals as well as the rapid response process should be clearly defined in a dedicated**

	procedure, and its implementation regularly evaluated to ensure the required level of response is given.
	Guiding measures:
	4.1 A clear role of the code team is defined and properly communicated in the hospital.
	4.2 Offering outreach services, such as a rapid response, medical emergency team or other organizational teams are provided with the standardized criteria to determine whether critical care services are required.
5	**CC 5. The access to service for current and potential patients and referring hospitals is ensured in a timely manner.** **It is of paramount importance that patients who are in need of critical care services are provided timely and efficient access to care. That being said, critical care units are highly specialized in terms of skill set, set up, equipment and staff resources; thus a set of standardized criteria to admit patients to such units must be in place in order to ensure all patients are being provided the appropriate level of care, safely, and ensure efficient resource utilization. Furthermore, standardized discharge criteria must also be in place to reduce the risk of discharging patients from the critical care unit pre-maturely, which can increase the risk of deterioration on regular wards; in addition, reducing the need to keep patients in a higher level of care unnecessarily.** **In case any of the patient's needs could not be met, the hospital should be able to facilitate the access to other facilities which can provide the required level of care, in a timely fashion. To ensure safe continuity of care in cases of admission, discharge or transfer to other facilities, a handover system must be in place.**
	Guiding measures:
	5.1 Standardized criteria for admitting and discharging patients to and from the critical care units are in place.
	5.2 Access to referring hospitals is facilitated in case where potential patients' needs are not met.
6	**CC 6. The admission and discharge criteria in the critical care units are in place and properly coordinated.** **The standardized admission and discharge criteria for critical care units are documented and communicated to the medical and nursing staff. The decision to admit or discharge a patient from such units is made in accordance with the critical care physician.** **As the stay in critical care units can be potentially complex and prolonged, when patients are discharged to a lower equity ward, a documented summary of the patients' stay is made available for the medical and nursing staff of the lower equity ward. This is important for the safe continuity of care in the receiving wards.**
COR	Guiding measures:

	6.1	The decision to admit or discharge patients from the critical care units is determined by the critical care physician.
	6.2	A documented summary of all the critical care stay is available at the time of discharge to a lower equity level.
6	**CC 7.**	**There is an effective way of communicating information related to patient care in the critical care unit and with the regular floors.** **When transferring care of any patient, especially a critical care patient, from one shift to another, or between critical units and the regular wards, the transfer of patient medical information also must occur. This is in order for receiving teams to be aware of the patient's status, plan of care and needs, thus ensuring safe continuity of care and the safety of the patient.** **This transfer of information and care, or handover, between units or wards must occur in a standardized, documented manner, in order to ensure that all the required information is being relayed in a consistent and traceable approach, every time. A hospital policy exists for the documented handover between staff from shift to shift, for each category of personnel, and between the critical care unit and the regular ward staff.** **Handover should include but is not limited to: patient clinical diagnosis, evolution during hospital stay, performed procedures, current clinical status, specific needs and risks, current care plan, any pending matters and any special issues to pay attention to.** **It is important that handover is done effectively with every transfer of care instance. Therefore, the effectiveness of this process should be assessed (audits, observations etc.) where the outcome of the evaluation be analyzed and any corrective actions put in place.**
COR	Guiding measures:	
	7.1	At the end of each shift, a document evidence of handover process between the critical care physicians of the same floor is in place as per hospital's policy
	7.2	At the end of each shift, a document evidence of handover process between the critical care nurses of the same floor is in place as per hospital's policy.
	7.3	At the end of each shift, a document evidence of handover process between the critical care nurses and the unit nurses at the time of transfer as per hospital's policy.
	7.4	There is a documented evidence of handover process between the critical care physician and the unit physician at the time of transfer to a regular floor that includes documented plan of care, medications and other special care requirements as per hospital's policy.
	7.5	Evaluation of the handover processes is conducted and corrective actions are taken accordingly.
3	**CC 8.**	**Patients and family caregivers are involved in the care provided.**

		In the delivery of patient-centered care, patients and their family caregivers must be involved in the care and decision making process. Both have the right to ask or be provided with information in a timely manner, including the clinical risks relative to the patient's case and the potential medical options and relative consequences and risks. Additionally, it is important that the patient and family have understood the information that was provided and that this process is documented for traceability and educational purposes. **Part of involving patients and their family caregivers in the care provided includes informing them of their rights and responsibilities, and the institution should inform them how to report any breach in their rights.** **The hospital/institution must have guidelines or a policy in place for the informed consent of patients and/or their family caregivers/decision makers. The guideline/policy should address who is qualified to provide informed consent, when should it be acquired and address any exceptional cases.** **Furthermore, any ethical aspects related to the patient's care must be addressed proactively by the healthcare team, in concurrence with the patient and/or family caregivers/decision makers. A policy addressing this issue must be in place. For example, such issues may be referred to an ethical committee or qualified parties to address these issues thoroughly.**
	Guiding measures:	
	8.1	Information is provided to patients and families in a timely manner, documented and verified to ensure proper understanding.
	8.2	The ability of the patients to provide informed consent is assessed based on institutional guidelines.
	8.3	Informed consent is signed before each surgery, anesthetics, blood and blood products, procedures by patients or his/her substitute decision-maker when necessary, as per the hospital's policy.
	8.4	A policy exists for proactively identifying, managing and addressing ethics-related issues.
	8.5	Patients and families are informed about their rights and responsibilities, and how to report any breach is their rights.
5	**CC 9.**	**A care plan is developed and documented using a comprehensive manner.** **The care plan for critical patients should be multidisciplinary (medical, nursing, dietetic, physiotherapy, etc.) and is based on the logic of assessment and reassessment of all the patient's clinical condition and risks, which can help identify adapted interventions to potentially improve the patient's clinical status and/or prevent unwanted outcomes.**

		The patient's assessment gains to be performed using standardized methods and tools (for example incorporating a systematic clinical exam, vitals and physiological parameters, as well as a screening of the risk of acquiring some hospital conditions, such as developing pressure ulcers, in-hospital falls, venous thromboembolism, delirium, etc.) **It is recommended that the patient's assessment would be regularly performed in a multidisciplinary approach. For example, a daily round with the concerned healthcare team members, such as the physician/intensivist, nurse in charge, pharmacist, inhalation therapist, in addition to other allied health professionals such as nutritionist, physiotherapist, if available and possible.** **Initial assessment is performed upon admission of the patient to critical care, and reassessment is daily (per shift for certain criteria) and according to patient needs.** **Based upon the assessment, adequate interventions are identified and planned by the clinical staff, and both the assessment and the interventions are documented in the patient's care plan. When patient prognosis is not favorable despite the clinical interventions undertaken, an assessment for palliative care is conducted and discussed with the patient's family.**
	Guiding measures:	
	9.1	All the healthcare providers involved in the patient's care follow policies and procedures for assessment and reassessment of patients including the time frame required for completing the initial assessment and the frequency of reassessments.
	9.2	Patient's physical and psychological health is assessed using a holistic approach and a standardized assessment tool.
	9.3	Accurate and complete medication information is communicated during care transition and follows the medication reconciliation policy.
	9.4	A process is in place to reduce the risk of harm resulting from falls.
	9.5	Patient at risk of developing pressure ulcers are assessed and intervention to reduce the pressures ulcers are implemented.
	9.6	Patients at risk for developing venous thromboembolism (Deep Vein Thrombosis and pulmonary embolism) are identified and managed.
	9.7	An assessment regarding palliative care and end-of-life care issues is conducted when appropriate in collaboration with the family.
	9.8	Results of the assessment are communicated with the patients and the other staff and properly documented in the medical record.

5	**CC 10.**	**Staff ensures the proper and appropriate implementation of the care plan.** **The care plan for critical patients should be multidisciplinary (medical, nursing, dietetic, physiotherapy, etc.) and is based on the logic of assessment and reassessment of all the patient's clinical condition and risks, which can help identify adapted interventions to potentially improve the patient's clinical status and/or prevent unwanted outcomes.** **The patient's assessment gains to be performed using standardized methods and tools (for example incorporating a systematic clinical exam, vitals and physiological parameters, as well as a screening of the risk of acquiring some hospital conditions, such as developing pressure ulcers, in-hospital falls, venous thromboembolism, delirium, etc.)** **It is recommended that the patient's assessment would be regularly performed in a multidisciplinary approach. For example, a daily round with the concerned healthcare team members, such as the physician/intensivist, nurse in charge, pharmacist, inhalation therapist, in addition to other allied health professionals such as nutritionist, physiotherapist, if available and possible.** **Initial assessment is performed upon admission of the patient to critical care, and reassessment is daily (per shift for certain criteria) and according to patient needs.** **Based upon the assessment, adequate interventions are identified and planned by the clinical staff, and both the assessment and the interventions are documented in the patient's care plan. When patient prognosis is not favorable despite the clinical interventions undertaken, an assessment for palliative care is conducted and discussed with the patient's family.**
	Guiding measures:	
	10.1	The care plan is individualized and documented.
	10.2	The rounds are conducted on daily basis by a collaborative team.
	10.3	At least 2 patient identifiers are used to accurately identify patients (patient's triple name and medical number) excluding patient's room number or location.
	10.4	Any change in the patient's health condition is properly documented.
	10.5	The patient and family caregivers access to psychological and support services are continuously insured.
5	**CC 11.**	**Standardized care is ensured to all patients in all settings by following evidence-based guidelines, best practices and treatment protocols to improve the quality of care.** **Clinical practice is subject to regular updates stemming from evidence based knowledge and recommendations of new clinical guidelines. Therefore, it is important that the critical care team be**

	familiar with the process of reviewing practice guidelines in order to update its practice in every aspect of clinical care. **Furthermore, standardization of practice is important to ensure conformity to guidelines and reduce variation in care. This can be implemented through the elaboration of protocols and procedures, their diffusion via thorough training sessions and evaluation of the effectiveness of trainings using knowledge and competency testing for concerned staff. These protocols and procedures should include but are not limited to the following themes: respiratory care management, cardiovascular stabilization, care of sedated patients, patient clinical assessment, vitals surveillance, pain management and palliative care.** **When designing standardized tools for patient evaluation, planification and provision of care, the hospital can incorporate relevant recommendations from clinical guidelines within these standardized tools. This approach could render them decision support tools for the user, and help implement these guidelines in practice in a standardized manner.** **Finally, critical patients are at risk for hospital acquired infections (HAIs) such as ventilator associated pneumonia (VAP), central line associated bloodstream infections (CLABSI) and catheter associated urinary tract infections (CAUTI). Strict application of hand hygiene, in addition to evidence based bundles of care for the prevention of HAIs may help reduce this additional burden to the patients and potentially improve their clinical outcomes.**
	Guiding measures:
	11.1 There is a process for selection and review of evidence-based guidelines.
	11.2 Protocols and procedures are in place to reduce the unnecessary variation in the services provided.
	11.3 The patient circulation, respiration and oxygenation follow specific policies and procedures.
	11.4 Evidence-based criteria for intubation, weaning off ventilator and extubation are in place.
	11.5 Standardized tools are used to assess regularly and manage the patient's level of pain.
	11.6 Patient's sedation follows a standardized protocol where spontaneous awakening trials are implemented.
	11.7 There is a standardized protocol for managing hyper/hypoglycemia in critical care settings.
	11.8 The need to use restraints is assessed on daily basis.
	11.9 Ventilator-associated pneumonia, central line infection, and catheter-associated urinary tract infection care bundles are implemented, when required.
	11.10 Infection control standards are strictly applied in the critical care units.

	11.11 A process for palliative and end-of-life care is followed when required.
5	**CC 12. The transfer to another service or setting is appropriately planned.** **Transition to another level of care or to another hospital setting is performed to meet the needs of the patient as per the clinical assessment. In cases where the patient willingly refuses to continue the treatment plan or demands to be transferred to another hospital, the medical team should inform the patient and/or family about the possible risks that could occur from this decision. If the patient/family still refuses, the medical team must obtain a documented acceptance from the patient to act against medical advice, before proceeding.** **Any transition involves risks related to suboptimal continuity of care and to physical intra or inter-hospital transport. Therefore proper handover between sending and receiving teams is of utmost importance and should be performed in a standardized, comprehensive and documented manner. Also, the intra and inter-hospital transport procedure should be well defined, including the identification of the adequate human and material resources that should be available to ensure a safe transfer. Regular evaluation of the transfer procedure is important to ensure its correct application, and any incident / adverse event related to it gains to be thoroughly investigated.**
	Guiding measures:
	12.1 A transition plan is in place and properly documented.
	12.2 Transfer of care follows specific clinical guidelines.
	12.3 The patient's decision whether to end or limit services, transfer to another service or home is respected.
	12.4 Patient's information is properly communicated during care transition.
	12.5 The transition plan is evaluated and corrective actions are taken when required.
4	**CC 13. Critical care specific indicators are collected and used as part of the quality improvement in the critical care areas.** **Critical care processes hold several priority areas where organizational performance and clinical quality can be subject to improvement, and where adverse events and suboptimal results are generally observed, but can be largely prevented. Therefore, it is important to define and prioritize the key improvement objectives for a critical department, based on observations, audit surveys and benchmarking.** **Once improvement objectives are identified, indicators should be set with adapted targets, in order to monitor the progress of the quality improvement plan. Such indicators should include a list of outcome indicators (such as standardized mortality rate, acquired infection rates such as VAP, CLABSI, CAUTI, acquired pressure ulcers**

	rate, etc.) that could reflect clinical performance and are bench markable. **Discussion of indicator results ought to be done at the leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:
	13.1 There is a quality improvement plan that addresses priority areas and set indicators accordingly.
	13.2 Indicator(s) is used to monitor progress for each quality improvement objective.
	13.3 Data is collected, analyzed, and interpreted to establish a baseline for indicators.
	13.4 Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	13.5 Results are properly communicated to the hospital executive management and staff.

Patient Services: Laboratory Services (LAB)

Introduction

The **Laboratory Services** chapter emphasizes the need to provide and maintain high quality of care and safe laboratory services from the time of specimen collection to the time of result reporting. Quality control process, data and results reporting are also reflected as part of these chapter requirements as well as in relation to medical staff functions.

The **Laboratory Services** chapter targets the following sections:

- Laboratory services meet the needs of patients
- Staff qualifications
- Staff training and education
- Infection control plan
- Environmental conditions and equipment in the laboratory department
- Samples collection and transportation
- Results reporting
- Records management and maintenance
- Safety and quality control program

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
5	**LAB 1. The laboratory services are available to meet the needs of the patients.** **The laboratory is responsible to ensure that patient needs are met, in terms of availability of required tests and access to services 24/7, even if this requires an agreement with external services to provide any lacking tests.**
	Guiding measures:
	1.1 Laboratory services (e.g., hematology and biochemistry) are available twenty-four hours per day, seven days per week.
	1.2 A clear organizational structure with clear responsibilities of laboratory services is in place.
	1.3 The laboratory department establishes an agreement with external laboratory organizations with clear requirements and responsibilities, when necessary.
5	**LAB 2. The laboratory services are provided by qualified staff.** **As in all specialized units, all staff should have the necessary work relevant qualifications, achieved through education and experience. Staff should have routine laboratory training for new policies, equipment and technical procedures to maintain staff competencies. The Laboratory director is responsible to ensure that the appropriate skills and competencies are available to provide optimal services and that this is evaluated regularly to satisfy current and any changing needs.**
	Guiding measures:
	2.1 Staff is qualified by training, education and experience providing laboratory services.
	2.2 The head of the laboratory department shall be a full-time physician or pharmacist specialized in laboratory medicine.
	2.3 The laboratory director oversees the activities carried in and outside the laboratory department.
	2.4 The laboratory director provides leadership, management and administrative coordination of functions and evaluation of staff requirement and adjusts them accordingly.
	2.5 Conditions to maintain staff competencies are defined.
5	**LAB 3. The staff complies with the hospital designated standards of practice.** **Standards of practice are meant to guide the professional practice of staff, including technical and non-technical aspects, quality assurance and education, in addition, serve as a standard against which staff performance will be compared to for safe, effective and reliable services. Compliance to such standards can be ensured**

		through audits, observations and competency testing. The hospital develops laboratory standards of practice based on local and international requirements and recommendations, legal regulations, and must be revised in response to any updates. These should be easily accessible for the staff, either via electronic or paper form.
	Guiding measures:	
	3.1	The laboratory has a licensure certificate as per applicable laws and regulations.
	3.2	The staff is informed about any changes or updates to the applicable laws, regulations, and standards of practice.
	3.3	A process exists on how to develop and to approve the standards of practice related to the laboratory services.
	3.4	Standards of practice related to the laboratory services are updated at least every 3 years.
	3.5	The staff has access to the on-force standards of practice and instructions on how to implement them.
	3.6	Compliance with applicable laws, regulations, and standards of practice is monitored and improvements through instructions or training activities are made accordingly.
5	**LAB 4.**	**The staff receives proper training and education on the hospital's laboratory services.** **All laboratory staff should be familiar with the policies, procedures and services offered by the laboratory. This first begins upon the initial recruitment during orientation session, and then subsequently through regular training sessions targeting the required standards of practice. To ensure training effectiveness, the goals and outcomes must be clearly defined prior, and that post-training evaluations are carried out. This can include onsite observations of staff practices, evaluating performance indicators, conducting competency and knowledge tests and audits.**
	Guiding measures:	
	4.1	Orientation to the laboratory services is given to the new staff.
	4.2	Evidence of staff training on new equipment and already existing equipment.
	4.3	Staff is trained and educated about how to work with patients and families by respecting their cultural backgrounds, religious beliefs, and care needs.
	4.4	Competencies of the staff are assessed on regular basis, gaps in training or competencies are identified, assessed and additional training is received accordingly.
	4.5	Training efficiency is checked.
	4.6	Staff performance is assessed on a regular basis
4	**LAB 5.**	**The design of the laboratory department respects safety, privacy and confidentiality.**

		Laboratory design should take into consideration the safety and privacy of patients, staff and specimens in the regular workflow. The pre-analytical, analytical and post-analytical steps of services must comprise of sufficient space for tasks and storage, privacy in specimen collection, and include appropriate safe storage conditions for reagents, samples and records, as per local regulations and international recommendations.
	Guiding measures:	
	5.1	Access to the laboratory department is limited to the authorized staff.
	5.2	Patients with visual, hearing or mobility disabilities can safely access the laboratory services.
	5.3	There is a sufficient space to carry out the laboratory services according to laws and regulations.
	5.4	There is proper, safe, and adequate storage space for reagents, supplies, consumables samples and records.
	5.5	The laboratory's sample collection areas are separated from the reception and waiting areas.
5	**LAB 6.**	**The laboratory department has an infection control plan as part of the hospital's infection prevention and control plan.** **The hospital's infection control should include hospital wide policies, in addition to taking into consideration specialized departments as the laboratory. The laboratory's infection control procedures and policies take into account basic principles (such as standard precautions, hand washing, prevention of specimen contamination, cleaning…) Recommendations, application of personal protective equipment when necessary, in addition to ensuring the safety of specimens and staff during sample processing, disposal and storage. Regular trainings and audits should be conducted and communicated to the laboratory staff. Evidence of corrective actions should exist. In addition, there should be evidence of the qualification and assessment of waste elimination suppliers.**
	Guiding measures:	
	6.1	The laboratory department implements policies and procedures related to the infection control and safety plan in compliance with hospital's infection control plan.
	6.2	Evidence of staff training about proper hand washing is in place.
	6.3	Audits are conducted on regular basis, outcomes are analyzed and corrective actions are taken accordingly.
	6.4	Results of the audits are properly communicated to the relevant departments.
	6.5	The staff ensures the proper collection, containment and disposal of wastes
	6.6	Suppliers of waste elimination are qualified and assessed on regular basis.

5	**LAB 7.**	**The environmental conditions in the laboratory department are appropriately maintained** **It is important that the laboratory environment is maintained to ensure the safety and functionality of equipment and specimens at all times. Temperatures of storage areas/units (for example refrigerators) should be measured and recorded daily using a temperature control chart. Any deviation from set temperature ranges should be detected via an alert system (alarms) in order for staff to take appropriate actions promptly with regards to the viability of stored items. To ensure the continuity of laboratory services and safety of specimens/ reagents, vital equipment must be connected to a power supply 24/7 (such as storage units, critical test machines), in addition to having emergency backup equipment, at least for essential tests. Such back-ups should be tested regularly and tests recorded.**
	Guiding measures:	
	7.1	Staff regularly monitor and record the storage temperature in the laboratory department.
	7.2	The critical equipment is continuously attached to an uninterrupted power supply.
	7.3	An alert system about changes in the refrigerator(s) temperature or malfunction is in place and regularly tested.
	7.4	The laboratory director/supervisor ensures that emergency backup equipment is present and regularly tested
	7.5	Equipment is used according to manufacturers' recommendation.
6	**LAB 8.**	**The equipment in the laboratory department is maintained and inspected.** **The continuity of laboratory services depends on the reliable functionality of its equipment. Thus, selection, assessment, maintenance and inspection of appropriate, qualified equipment should follow a specific process or policy, taking into consideration manufacturers' recommendations. This process is done by qualified disciplines (for e.g. laboratory with biomedical engineering). Therefore, any issue or malfunction that arises must be addressed promptly as to not disrupt the laboratory activity. Damaged equipment should be clearly indicated and separated from functional ones.**
COR	Guiding measures:	
	8.1	A process for selecting appropriate laboratory equipment is in place.
	8.2	Qualification of the equipment is assessed before being used.
	8.3	Maintenance and inspection of equipment follow the manufacturers' recommendations and the current standards of practice specific to the laboratory services.
	8.4	Problems in the equipment are identified, investigated and fixed in a timely manner.

	8.5	Damaged equipment is labeled as "out of order", isolated and a statement about the problem is in place.
5	**LAB 9. The reagent and the supplies of the laboratory services are appropriately purchased, labeled and used.** **The appropriate quantity and quality of reagents and supplies are essential for laboratory services. Inventories for all reagents and supplies exist and checked regularly to avoid shortages and prevent expiry before use. Upon reception of supplies and reagents, the specifications, quantity, physical condition, storage conditions and expiry should be verified, clearly indicated and controlled before storage/use. Pre-defined conditions exist for the use of expired reagents that must be tested prior to use.**	
	Guiding measures:	
	9.1	Inventory control system is present to maintain a sufficient number of reagents and supplies.
	9.2	Reception control protocol for reagent and supplies of the laboratory services is implemented.
	9.3	Reagents and solutions are labeled with content, concentration/titer preparation/reconstitution date, expiration date and storage requirements.
	9.4	The use of expired reagents is restricted to exceptional conditions that require testing their suitability for use.
5	**LAB 10. The staff in the laboratory department follows the standards of practices in preparing reagents and supplies and reprocessing glassware and non-disposable plastic ware.** **Laboratory standards of practice specify how reagents and supplies are prepared and that staff are familiar with their respective material safety data sheet: where to locate it and how to implement it. This aspect should be included in the staff training. The laboratory's water supply is important to ensure that equipment run properly and reagents (thus tests) are processed correctly. Thus the quality of the water supply is verified and monitored according to manufacturer's recommendations, where evidence of this monitoring exists.**	
	Guiding measures:	
	10.1	The staff prepares reagents and supplies under sterile conditions and use high purity water (ultrapure water) during the preparation.
	10.2	Staff is educated about how to implement the Material Safety Data Sheet in the laboratory department.
	10.3	Monitoring of the water supply is done to ensure compliance with the manufacturers' recommendation.
5	**LAB 11. Requests for the laboratory services are managed appropriately.** **Ensuring sufficient traceability in the laboratory requests process contributes to enabling controls and accountability regarding this**	

		process, including turnaround time of normal and urgent requests by type of exam and according to clinical department (for example, critical care units versus regular floors). It can also contribute to preventing a number of unwanted events such as the loss of specimens, omission or delay in executing the exam, errors in understanding the type of exam requested, and errors or delays in communication of results.
	Guiding measures:	
	11.1	Standardized request forms comply with the standards of practice and complete with information related to the patient, the treating and requesting physician, sample(s) (date and time collected), the required test(s) and the staff involved in collecting samples, are in place.
	11.2	There is a policy for handling urgent requests.
	11.3	Verbal requests follow specific policy.
	11.4	Any deviation from initial request is reviewed.
	11.5	Turnaround times are established in agreement with the relevant clinical departments.
	11.6	Turnaround times are communicated, implemented and monitored by samples.
	11.7	Turnaround times are improved regarding fixed targets.
5	**LAB 12. Samples are appropriately collected.**	**Incorrect sample collection and identification are among the most dangerous and hard to detect errors that can affect the clinical care process and potentially impact the patient's safety and the care outcomes.** **Therefore strict procedures should be in place to ensure the prevention of such errors and to handle samples where there is missing or unclear information.**
	Guiding measures:	
	12.1	The staff uses at least two identifiers, as per hospital policies, before performing the procedure.
	12.2	The staff prepares the patient, identify the sample needed, collect the sample, safely dispose of the materials used to collect the sample and maintain the patient's confidentiality throughout the process.
	12.3	The staff ensures that samples are traceable to the patients.
	12.4	Actions are defined in case of non-conforming results.
5	**LAB 13. Samples are transported in a safe and timely manner.**	**Transport of biological samples holds a number of risks that need to be addressed in order to ensure sample integrity and exploitability, including the risk of specimen spill and cross-contamination.** **Upon arrival to the laboratory, specimens need to be checked for conformity before being accepted and processed or rejected. Such criteria should be well defined and communicated to staff.**

		Traceability upon reception is paramount in order to track the samples in the analytical chain, and specimens need to be stored in correct conditions and for a required minimal amount of time, should any additional testing or control be required.
	Guiding measures:	
	13.1	Policies and procedure are in place for safe and confidential transport of samples to and from the laboratory department.
	13.2	Recording the samples received, their date and time and the individual responsible for receiving them follow a specific process.
	13.3	The samples are accepted or rejected according to established criteria.
	13.4	Each sample has a unique identification number.
	13.5	Handling leaking samples follows specific policy.
	13.6	Samples are stored appropriately based on the sample type and examination requirements.
	13.7	The retention of samples follows a specific policy.
	13.8	The temperature of handling and storing samples is controlled.
6	**LAB 14. The quality of the examination is evaluated, and results are reported in an accurate and timely manner.** **Lack of quality control of laboratory machines and processes can impact large series of results and thus potentially many patients. Some of these controls precede any processing of a series of samples, and other controls should be done after the sample result is obtained, and before release. Finally, regular external quality control for some frequent exams should ensure the lab results are reliable and conform to international standards. Deviations should be assessed and identified problems corrected and recorded, and communicated to staff in order to accommodate sample processing.**	
COR	Guiding measures:	
	14.1	Quality control procedures for testing the validity of the laboratory tests by external sources are performed, results are compared and corrective actions are taken when needed.
	14.2	Internal and external quality control programs are developed and implemented.
	14.3	Quality control results are recorded, with the identified problems and the actions taken for solving the problem.
	14.4 14.5	Laboratory staff is informed about the results. A standardized format for reporting results exists.
	14.6	The policy regarding the correction of the reports is implemented.
	14.7	Releasing the results follows a specific policy.
	14.8	A policy exists for reporting critical results.
	14.9	The reported results mention the use of suboptimal specimen.
	14.10	Results are interpreted appropriately by the laboratory director, when applicable.

5	**LAB 15. The laboratory department has a system for Point-of-Care-Testing where applicable.** **While the main advantage of point-of-care (POC) testing (for example, ABGs or POC CBC) is the shorter time it takes to obtain a result, it can also be performed by people who have not had formal laboratory training. This includes nurses, doctors, paramedics and testing by patients themselves. Also, POC testing environment is generally less controlled than laboratory conditions and the results can be at higher risk of external interference than laboratory processes, which can lead to inaccuracies. Hence, POC testing should follow specific policies and procedures in matter of sample extraction, processing and in matter of equipment maintenance and quality control in order to ensure results reliability.**
	Guiding measures:
	15.1. Policies and procedures are in place to specify the process of having Point-Of-Care-Testing devices/methods.
	15.2. Proper staff training and competency testing follow specific policies and procedures.
	15.3. The maintenance and quality management of the devices/methods is addressed via policies and procedures.
	15.4. A Point-Of-Care-Testing coordinator is in place.
5	**LAB 16. Maintenance, protection and accessibility of records and information are ensured through a laboratory information system.** **The Laboratory Information System (LIS) is the foundation of the laboratory's operations and quality improvement process. It ensures the implementation of the laboratory workflow while permitting to enforce the application of quality control procedures. Therefore, regular maintenance and testing of the LIS should be undertaken to guarantee information continuity and integrity. As the LIS is an integral part of the laboratory services workflow, and includes confidential patient information, results and records must be protected and in case of loss/damage. The laboratory should ensure an alternative method of recording results or retrieving records in case of system interruption.**
	Guiding measures:
	16.1. An accurate and complete policy and procedure manual is available to all the staff working in the laboratory department which is regularly reviewed and approved at defined intervals by the laboratory director or a person designated for this task, as per hospital policies and procedures.
	16.2. Accurate and complete data entry on the laboratory information system is ensured at all times.
	16.3. Regular testing and preventive maintenance are performed on regular basis.

	16.4. The laboratory information system is protected from loss, destruction or tampering of information, and unauthorized access.
	16.5. The continuity of information is ensured in case of system interruption.
5	**LAB 17. Accurate, up-to-date and secure records are maintained all times.** **Patient records are important confidential documents compromising a segment of the patient file that should be easily retrieved if needed, but also stored in a secure location away from any unauthorized access, and safe storage conditions.**
	Guiding measures:
	17.1 A comprehensive record for each patient is in place.
	17.2 Conditions of archiving records are specified.
	17.3 Records are easily retrieved.
	17.4 Security and confidentiality of the records are maintained at all times.
	17.5 Disposal of archived records follows a specific policy.
5	**LAB 18. The laboratory department has a safety program in place.** **The laboratory safety program is an extension of the hospital safety plan and infection control program/plan. The program includes policies, procedures, trainings, audits, competency testing etc. addressing personnel safety, specimen handling safety, equipment and environmental safety. Such practices should be evaluated regularly and corrective actions taken and recorded.**
	Guiding measures:
	18.1 The laboratory safety program is developed, monitored and maintained by the safety officer.
	18.2 The program includes training, education, monitoring and evaluation.
	18.3 Accessibility to the safety manual is ensured at all times.
	18.4 Compliance with the safety program is monitored and actions are taken accordingly.
	18.5 The staff wears the appropriate personal protective equipment according to the hospital policies and procedures.
	18.6 Safety practices are ensured while exposing, handling, examining, or disposing of biological and chemical materials.
	18.7 Adverse and sentinels events are identified reported, recorded in a timely manner and actions are taken accordingly to reduce the risk of those incidents.
4	**LAB 19. Laboratory-specific indicators are collected and used as part of the quality improvement in the laboratory services department.** **Laboratory processes hold several priority areas where organizational performance and quality can be subject to improvement, and where adverse events and suboptimal results are generally observed but can be largely prevented. Therefore, it is important to define and prioritize the key performance indicators**

		and improvement objectives for such a department, based on observation, audits and benchmarking. **Once improvement objectives are identified, indicators should be set with adapted targets, in order to monitor the progress of the quality improvement plan.** **Such indicators should include a list of outcome indicators along the different steps of the laboratory process (pre-analytical, analytical and post-analytical) such as the turn-around time for certain common exams in normal and urgent priority levels, the specimen rejection rate by type and by requesting department, as well as the conformity to the critical results reporting procedure criteria.** **Discussion of indicator results should be done at leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with timely feedback of results and action plan to concerned teams.**
	Guiding measures:	
	19.1	Measurable objectives for quality improvement initiatives and the time frame, in which they will be reached, are set.
	19.2	Data related to tracks wait times and average response times for elective, urgent, and emergent requests for laboratory services are collected, analyzed, and interpreted to establish a baseline for indicators.
	19.3	Indicator data is evaluated to determine the effectiveness of the quality improvement activities.
	19.4	Results are properly communicated to the hospital executive management.
	19.5	Measurable objectives for quality improvement initiatives and timeframe in which they will be reached, are regularly updated.

Patient Services: Blood Bank and Transfusion Services (BB)

Introduction

The **Blood Bank and Transfusion Services** strive to improve the quality and safety of collecting, processing, testing, transfusion and distribution of blood and blood products.

The standards address the entire transfusion chain from donor to recipient, encompassing the selection of blood donors, safe blood collection, testing of donated blood for transfusion and blood group serology, preparation, storage, issue and transportation of blood components for appropriate clinical use and lastly safe administration of blood to the recipients.

For hospitals that do not have a transfusion service and do not carry all the steps of the transfusion chain, they should at a minimum be compliant to the standards of storage and distribution activities; they should also establish a cooperation (memorandum of understanding) with a transfusion center with a blood bank license from the MOPH that performs all the transfusion-related activities and supplies the hospital with blood components.

Standards that are <u>Not Applicable</u> for hospitals that only have blood storage and distribution activities are standards 8, 9, 11, 17 and 20.

The **Blood Bank and Transfusion Services** chapter targets the following sections:

- Access to transfusion services
- Staff training and education
- Standard operating procedures
- Physical environment
- Blood and blood components storage equipment
- Blood Collection
- Receiving and sending blood and blood products
- Blood components and blood products transfusion
- Sentinel, adverse, and near miss events management

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk score	Standard and Guiding measures
5	**BB 1. Access to transfusion services is provided in a timely manner.** **Transfusion services ranging from collecting, processing, testing and transfusing are critical, lifesaving services which are required to be available whenever needed, and that the response is performed promptly, according to defined hospital policy and current laws/regulations. It is important that the hospital ensures the required human and material resources to allow the blood bank to ensure continuity of service in a consistent manner, and be able to manage urgent blood requests.**
	Guiding measures:
	1.1 The response time for elective, urgent and emergent transfusion services are set and tracked based on hospital's policies and applicable laws and regulations.
	1.2 Resources (human capital, machinery and location) to provide timely access to transfusion services (i.e. distribution of blood components) are identified.
	1.3 A policy is in place for distributing uncross matched tests in emergency situations.
	1.4 When the blood bank is closed, an emergency procedure is in place in case of urgent need for blood products.
5	**BB 2. The staff receives proper training, education on the hospital's transfusion services.** **Given the risks inherent to the blood bank processes and their potential impact on the patients, it is of paramount importance that all blood bank staff should be qualified and familiar with the policies, procedures and services offered by the blood bank, in addition to hospital wide policies such as infection control, hygiene, quality improvement and safety. This first begins on initial recruitment, during, and then subsequently through regular training and educational sessions targeting the required standards of practice, equipment, handling patients and adverse events. To ensure training effectiveness, the goals and outcomes should be clearly defined priory, and post-training evaluations be carried out. This can include onsite observations of staff practices, evaluating performance indicators, conducting competency and knowledge tests in addition to regular audits.**
	Guiding measures:
	2.1 Evidence that orientation to transfusion services is given to the new staff regarding standard operating procedures, ethics issues, information systems and confidentiality, sanitation, workplace health and safety, infection control and hygiene, and quality

		improvement and safety activities, including preventing sentinel events, adverse events, and near misses.
	2.2	The head of the Blood Transfusion services department shall be a full-time physician specialized in laboratory medicine or hematologist with a permit from the Ministry of Public Health. In a hospital with only storage and distribution activities, laboratory director is responsible for these activities.
	2.3	Evidence of staff training on new equipment and already existing equipment.
	2.4	Staff is trained and educated about how to work with patients and families respecting their cultural backgrounds, religious beliefs, and care needs.
	2.5	Access to ongoing professional development, training and educational activities is ensured.
	2.6	Competencies of the staff are assessed and maintained on regular basis.
	2.7	Gaps in training or competencies are identified, assessed and additional training is received accordingly.
	2.8	A current and complete record on qualifications, trainings, and competencies, is in place.
5	**BB 3. Standard operating procedures are developed and implemented.** **Standard operating procedures (SOPs) are important documents which ensure consistency in any activity, by providing clear instructions on how to carry out specific activities or procedures, mandatory by all blood bank staff. Critical services such as storage, distribution, collection, preparation, testing, prescription and transfusion should be performed in a standardized manner, guided by the SOPs, which are easily accessible to staff. Compliance to such standards should be ensured through audits, observations and competency testing.**	
	Guiding measures:	
	3.1	Standard operating procedures for storage, distribution and blood collection, blood components' preparation, testing (where applicable) are available

	3.2 Standard operating procedures related to storage, distribution and blood collection, blood components' preparation, testing (where applicable) are updated every two years or more often, if required. Policies and procedures should at least include but not limited to the following: 3.2.1 Blood and blood products are provided according to physician's orders 3.2.2 Screening for communicable diseases (if applicable) 3.2.3 Safe collection of blood from blood donors (if applicable) 3.2.4 Safe storage of blood and blood products 3.2.5 Acceptable cross-matching procedures 3.2.6 Unit label which includes: recipient identity, unit number and compatibility status 3.2.7 Identification and follow up of recipients with antibodies, this should include at a minimum consultation with the blood transfusion services director or laboratory director when only blood storage and distribution services are available
	3.3 The staff has access to the standard operating procedures and the instructions on how to implement them.
	3.4 The staff is informed about any changes or updates in the standard operating procedures.
	3.5 Compliance with standard operating procedures is monitored and improvements related to the instructions or training activities are made accordingly.
5	**BB 4. The physical environment ensures safe, effective and efficient transfusion services according to applicable laws and regulations.** **The physical environment should be designed to ensure that the blood bank staff, its equipment, and patients operate in a safe and effective manner, as applicable by laws and hospital policies. The safety of the blood components should be ensured by restricting access to authorized staff, and having adequate space to process and store, while complying with the hospital's infection control and waste management policies in addition to the Blood Bank's SOPs.**
	Guiding measures:
	4.1 There is a sufficient space to carry out the storage, distribution and blood collection, blood components' preparation, testing (where applicable) according to applicable laws and regulations.
	4.2 Access to the blood component storage area is limited to the authorized staff.
	4.3 Clean work areas are maintained at all times.
	4.4 Handling, examining and disposing of biological materials follows biologic safety procedures.
	4.5 Safety of patients and staff is ensured by following hospital's policies and procedures on infection prevention and control.

	4.6	Access to hand washing facilities is ensured and evidence of staff training on hand washing procedure is in place.
	4.7	Disposing of the waste materials complies with applicable laws and regulations.
5	**BB 5.**	**Equipment is properly maintained and inspected.** **The continuity of blood bank services and the safety of blood products depend on the reliable functionality of its equipment (e.g centrifuges). Thus, selection, assessment, maintenance and inspection of appropriate, qualified equipment should follow a specific process or policy, taking into consideration manufacturers' recommendations and is documented. Therefore, the daily and regular quality control checks in addition to any issue or malfunction (e.g equipment alarm, calibration problems in measurement equipment, etc.) that may arise should be addressed promptly as to not disrupt services or compromise the safety of the process.**
	Guiding measures:	
	5.1	Preventive maintenance schedule for existing equipment is properly followed.
	5.2	The staff maintains, inspect, validate, and calibrate the equipment according to the standards operating procedures that comply with manufacturer's recommendation and properly document it.
	5.3	Information on the day-to-day operation of equipment, according to the manufacturer's instructions including the quality control results and the criteria for acceptable ranges is maintained via a record.
	5.4	Problems with the equipment are identified, investigated and corrective actions are taken accordingly.
4	**BB 6.**	**Blood and blood components storage devices are properly used and maintained.** **Correct and safe storage conditions are one of the critical blood bank services as there are various storage conditions for the different blood components. In addition, some components could be stored for a period of time before being transfused. Thus to ensure no adverse effects related to sub-optimal storage conditions occur with patients, storage facilities/equipment must have a continuous power supply, continuous daily monitoring of temperature (refrigerator circular chart recorders, digital thermometers attached to the fridge/freezer) with a connected alarm system to alert the staff of any deviation, so as prompt action is taken to not compromise the integrity of the blood and blood components.**
	Guiding measures:	
	6.1	Preventive maintenance schedule for blood and blood components storage equipment is properly followed.
	6.2	There is a continuous temperature monitoring system attached to the equipment used for storing blood and blood components.

	6.3	Staff regularly monitor and record the conditions for blood and blood components storage equipment.
	6.4	The equipment is continuously attached to an uninterrupted power supply.
	6.5	Alert system, to alert the staff about changes in the temperature or malfunctions in storage compartments, is in place and regularly tested.
5	**BB 7.**	**Blood components and blood products are properly stored under appropriate environmental conditions.** **Various blood components require different storage conditions as per standards of practice and guidelines. Each component (red blood cells, platelets and plasma) should have the required storage temperature indicated on it in order to avoid errors. Additionally the source of component and various types of components should be clearly labeled and stored separately.**
	Guiding measures:	
	7.1	Each type of blood component and blood product is stored at a specific temperature and accordingly labeled.
	7.2	Evidence that storage temperature for each blood component is properly documented.
	7.3	Red Blood Cells are stored at 1-6 degrees Celsius unless there are specific requirements for freezing are identified.
	7.4	The standard operating procedures are followed regarding storing freezing and thawing plasma
	7.5	Platelets and pooled platelets and apheresis platelets are stored at 20-24 degrees Celsius with gentle agitation up to 5 days.
	7.6	Separation of blood components from donor samples, recipient samples, tissues for transplantation, and reagents is ensured at all times.
5	**BB 8.**	**The hospital manages blood donation via a specific process (if applicable).** **There should be a well-defined policy with regards to blood donation which specifies how donors are identified, what information is given to them about the process, questionnaire screening as per MOPH regulations, reporting and communication with the donor of significant findings and training requirements for staff to handle any complications during the blood withdrawal.**
	Guiding measures:	
	8.1	The donors are identified and educated about the donation process and the possible complications.
	8.2	Screening process for donation is based on the nationally standardized questionnaire as per the list of donor selection criteria approved by MOPH and available online
	8.3	The staff ensures that the national questionnaire is properly filled and signed by the donor before blood collection.

	8.4 The donor is notified of the significant findings that are detected by screening and laboratory tests.
	8.5 Evidence that staff is trained and competent to deal with adverse events related to blood withdrawal.
4	**BB 9. The standard operating procedures for autologous donation are followed when collecting blood (if applicable).** **Autologous donation holds a number of advantages for the patient, but must follow specific, strict well-defined criteria and protocols set by the SOP. When such forms of donation are permissible, associated risks, exclusion and inclusion criteria explained, education and an informed consent should be obtained by the patient or family/next of kin.**
	Guiding measures:
	9.1. The standards operating procedures for autologous donations are set and updated by the medical director of the blood bank.
	9.2. Requesting, collecting, and using autologous blood follow the standard operating procedures.
	9.3. Exclusion and inclusion criteria for autologous donation are in place.
	9.4. Prescription from the attending physician of the donor-recipient patients and the approval of the appropriately designated person are ensured before collecting the autologous blood.
	9.5. An informed consent is obtained from patient and/or family and/or next of kin after patients are educated about the benefits and the risks of autologous blood donation.
6	**BB 10. The blood components are uniquely identified via a proper labeling system.** **Identification errors in blood transfusion can lead to serious and even fatal outcomes for the patient. Therefore, it is crucial that blood component identification information is clearly indicated on the outer packaging that cannot be damaged upon storage nor handling. The labeled requirements are used for the proper identification, storage and traceability of the component at every step and no component can be stored nor used if it is not labeled.**
COR	Guiding measures:
	10.1. The staff labels the blood bags using an appropriate labeling system.
	10.2. After the staff performed all the required tests, labeling is done taking into consideration the following requirements: identification of the collecting facility, product name, unit number, ABO/Rh, expiration date and time.
	10.3. New label is created in case of any changes, modifications or transformations of the blood components.
	10.4. An expiration date for each blood components is set.
5	**BB 11. Preparing blood components and blood products follow the standard operating procedures.**

	The following blood bank activities should follow the SOPs set by the hospital, according to the national laws/regulations and guidelines provided by the MOPH. This is to ensure that practices are standardized and avoid any variation in practices that could cause errors, risks and blood wastage.
	Guiding measures:
	11.1 Preparation of blood components follows national laws/regulations and guidelines.(List of blood components and good transfusion practice guidelines published on the website of the MOPH)
	11.2 Sterility and integrity of the blood components and blood products are maintained following standards operating procedures
5	**BB 12. A system for receiving or sending blood and blood products to and from outside facilities is properly implemented** **In order to ensure safety of products, and avoid the misuse of blood/blood components between facilities, blood bank facilities should have a clearly defined procedure/policy specifying when and how units should be released, conditions of acceptance/rejection and those subsequent appropriate actions are taken in case any unit is rejected. Evidence of each transaction (to or from) must be available**
	Guiding measures:
	12.1 Preset criteria for accepting or rejecting the blood components received from outside facilities are in place
	12.2 A procedure for requesting or releasing blood, via a prescription, from or to outside facilities is in place and properly documented.
	12.3 The staff verifies upon each reception of blood component from an outside facility the acceptance criteria (expiration date, integrity of the bag)
	12.4 Actions are defined and taken in case the acceptance criteria are not met.
5	**BB 13. Blood components and blood products are safely packed and transported within the facility.** **Transportation is a key step for any transfer of specimens or blood components, before its use. Thus a thorough check of the bags must be done according to set criteria and documented each time, prior to transfer. Set conditions of transfer should also defined (container specifications, temperature required, personnel) including identity of the transporter, type and quantity of products delivered and timing of the transfer.**
	Guiding measures:
	13.1 The staff visually inspects each blood bag before delivery, check the integrity of the bag (leakage, abnormalities), checks expiration date and documents the inspection
	13.2 Transporting blood and blood components within the facility follows standard operating procedures that guarantee the safety of the personnel and the integrity and quality of the bag.

5	**BB 14. Requests for blood components and blood products are carried out in a timely manner.** **As the first step of the blood transfusion process, it is important that requests are collected in a standardized manner/ tool, requiring the correct identification of the recipient using two accepted identifiers (e.g. full name, medical file number) every time. This request should be cross checked with the identity of the recipient samples sent; where in order to ensure correct match of request with samples, independent recipient samples withdrawn by independent personnel are labeled with correct patient label to be sent to the blood bank.**
	Guiding measures:
	14.1 There are standard operating procedures for: 14.1.1 Handling requests for blood components and blood products 14.1.2 Proper identification of the recipients before blood collection using two identifiers 14.1.3 Proper collection and labeling of recipient samples
5	**BB 15. Blood components and blood products are distributed in a safe manner.** **One of the most critical aspects in safe transfusion services is ensuring the correct identification and match of the recipient, and donor, respectively. This should be performed at every step in the transfusion services workflow. Cross checks between requests, patient labels and the blood/blood component bags identification should be performed with evidence of verification. Moreover, to avoid mistaking a rejected bag for release, such units must be segregated from the rest, well labeled, identified in a designated area for units to be discarded.**
	Guiding measures:
	15.1 A process is in place for distributing blood and blood products to ensure: 15.1.1 Identification of the recipient. 15.1.2 Identification of the donor unit. 15.1.3 Confirmation that the donor's ABO/Rhesus is identical or compatible.
	15.2 The staff safely stores the blood components that don't meet the releasing criteria, in an isolated and identified location until they are distributed for appropriate disposal.
6	**BB 16. Selection and distribution of blood components and blood products for transfusion follow specific process.** **After requesting, the appropriate selection of the blood components must follow the facility's SOP consistently. Testing recipient samples, cross matching with donors', selecting the donor unit should all be documented standardized steps. SOP should also specify conditions of selection of units in case of pediatric, infant and neonate recipients with regards to compatibility and component specifications for the infant and mother (if possible). Transfusions' ultimate goal is to**

	improve patient outcomes, and thus SOP should specify in which restricted cases some routine screening steps could be overlooked in case of life-threatening cases.
COR	Guiding measures:
	16.1 The staff takes a blood sample within 72 hours after transfusion in case where 16.1.1 The recipient is pregnant within the last three months, 16.1.2 The recipient's history is uncertain or not available, or 16.1.3 The recipient has evidence of transfusing red cells or any component containing red cells within the last three months.
	16.2 Testing recipient's blood is performed according to standard operating procedures.
	16.3 Cross-matching the donor's and recipient's blood is done before distribution of red blood cells components according to standard operating procedures.
	16.4 Standard operating procedures for selecting and handling component for infants are followed.
	16.5 Specific standard operating procedures for releasing blood components without testing it for infectious diseases or compatibility are followed in case where delaying transfusion can be life-threatening to the recipient.
6	**BB 17. Diseases transmitted through blood /platelets transfusion are prevented by proper testing the donor blood sample (if applicable).** **Every donor sample should be screened for a specific set of transmissible blood/platelet diseases as applied by the local laws/regulations, and evidence of this screening is available, and that all test negative prior to releasing the unit (except in certain life threatening cases defined in the SOP).**
COR	Guiding measures:
	17.1 Policies and procedures for testing and screening the blood samples are implemented as per applicable laws and regulations against the following but not limited to: 17.1.1 HBsAg 17.1.2 Anti-HBc 17.1.3 Anti-HCV 17.1.4 Anti-HIV-1/2 P24Ag 17.1.5 Syphilis Testing (VDRL/RPR)
5	**BB 18. Transfusing blood components and blood products follows standard operating procedures.** **Upon the release of the blood component and safe transfer to the recipient's location, pre-transfusion identification verification must be thoroughly performed between prescription, blood unit bag, blood request form and the recipient's identity (using at least two identifiers). These steps should be performed with two personnel double checking the information. Upon transfusion, no other**

	medication should be administered, staff must verify patient identity immediately before start of transfusion, and duration of transfusion should be as per SOP and blood component guidelines (for e.g. maximum of 4 hrs. for red blood cells, maximum of 1 hr. for platelets etc.). **The staff must monitor the progression of the transfusion at set time intervals at minimum, and note and report any adverse event related to the transfusion in order to facilitate prompt corrective actions.**
	Guiding measures:
	18.1 Administering blood components and blood products follow standard operating procedures.
	18.2 Proper patient identification using two identifiers is ensured before transfusing blood components and blood products.
	18.3 The staff ensures and documents that: 18.3.1 Blood components or blood products matches the compatibility label/tag. 18.3.2 Blood components or blood products matches the identifying information of the recipient.
	18.4 Transfusion of blood components and blood products is done using a sterile, pyrogen-free administration set.
	18.5 The staff ensures that no drugs or medications are added to blood components and blood products during transfusion.
	18.6 The transfusion of red blood cells components is completed within 4 hours maximum.
	18.7 The staff monitors the recipients for complication during and after the transfusion.
	18.8 Any sign or symptom that is associated with a transfusion-related adverse event is reported, investigated and corrective actions are taken and documented.
5	**BB 19. A current, accessible record of each transfusion is maintained.** **Every transfusion act should be completely documented with the details of the act including recipient information, blood type, component type, date and time, who transfused the patient and if any complications or adverse events occurred and what was the corrective/immediate action taken. This can be located in a specific standardized transfusion data collection form/tool to be archived in the medical record. The hospital should specify conditions of retaining medical records, duration and contents.**
	Guiding measures:
	19.1 The medical record is updated to include the type of blood component and/or blood product transfused, the date and time of transfusion, the identity of the team member who provided the transfusion, and all transfusion-related adverse reactions.
	19.2 Retaining medical records follows specific policies.
4	**BB 20. Blood transfusion specific indicators are collected and used as part of the quality control program.**

	Blood transfusion services have several areas where organizational performance and clinical quality can be subject to improvement, and where adverse events can be prevented. Therefore, it is important to define and prioritize the key improvement objectives for this department, based on observations, audit surveys and benchmarking, as part of the hospital-wide quality improvement program. **Indicators should be set with adapted targets, in order to monitor the quality and safety of services and the progress of the quality improvement plan and target the various phases of transfusion services. (*Examples include turn- around time for urgent vs. elective transfusion requests, percentage of blood component wastage, cross-match/transfusion ratio etc...).*** **Discussion of indicator results are done at the leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:
	20.1 Measurable objectives for quality improvement initiatives and the timeframe in which they will be reached, are set.
	20.2 Indicator(s) is used to monitor progress for each quality improvement objective.
	20.3 Data related to waiting times and average response times for elective, urgent, and emergent requests for laboratory services are collected, analyzed, and interpreted to establish a baseline for indicators.
	20.4 Indicator data is evaluated to determine the effectiveness of the quality improvement activities.
	20.5 Results are properly communicated to the hospital executive management.
	20.6 Quality control, assurance and safety standard operating developed, implemented and documented.
5	**BB 21. There is a system for managing all sentinel events, adverse events, and near misses.** **With any occurrence of a sentinel event, adverse event or near miss, the hospital must have a defined system and process for the detection, reporting, analyzing and feedback of this event. It should be clear who can report, to whom, how and what events can be reported. Such events must be investigated to determine the root causes, and set appropriate corrective/improvement actions. Such feedbacks and reporting of such events are documented and discussed in concerned departments (such as the Blood bank and Quality and Patient Safety Departments), and committees such as the Transfusion committee or Quality and Safety Committee.**
	Guiding measures:
	21.1 Sentinel events, adverse events, and near misses are identified, evaluated, followed-up, and reported to blood transfusion

		committees or any committee based on hospital policies, procedures, laws and regulations.
	21.2	Access to the information that identifies transfusion-related adverse events is ensured at all times.
	21.3	Reporting all sentinel events, adverse events, and near misses related to blood or blood products is done immediately.
	21.4	The cause of the sentinel event, adverse event, or near miss is determined following proper investigations and corrective actions to prevent recurrence are taken and documented.
	21.5	A copy of the investigation report and recommendations for future transfusions are retained in specific records based on hospital's policies and procedures.
4	**BB 22.**	**There is evidence of a hospital committee with defined terms of reference, reporting lines and minutes of meetings to review hemovigilance data** **Transfusion services performance and hemovigilance should be monitored and evaluated by a Transfusion/Hemovigilance Committee with defined members, objectives and scope. Quality indicator data and adverse events related to the donor, recipient and facility operations are to be reported and discussed in this committee, where final improvement actions/projects or corrective actions are set. Every meeting is documented using minutes of meetings which ensure the traceability of matters addressed, activities and improvement actions agreed upon. This record is used to evaluate the performance and effectiveness of the committee in improving transfusion services.**
	Guiding measures:	
	22.1	There is evidence that the committee meets at least -quarterly
	22.2	Data collected regarding recipient and donor adverse reactions is collated, analyzed and reported to the blood transfusion committee
	22.3	Annual activity report and hemovigilance data shall be reported to be the MOPH using the national hemovigilance questionnaire LCBT-HV-008 on the website of the ministry

Patient Services: Other Services (OTHER)

Introduction

The **Other Services** chapter is an integral part in patient services. It tackles burn care, dietary services, social care, physiotherapy and mental health services. It requires specific and collaborative care from multidisciplinary healthcare providers to ensure safe health care for patients.

The **Other Services** chapter targets the following sections:

- Burn care
  - Burn care policies and procedures
  - Burn care assessment
  - Pain assessment
  - Quality improvement indicators
- Dietary Services
  - Dietary services staff qualifications
  - Dietary services policies and procedures
  - Nutritional status assessment
  - Food safety
  - Quality improvement indicators
- Social Care
  - Social services policies and procedures
  - Psychosocial assessment
- Physiotherapy
  - Physiotherapy staff qualification
  - Physiotherapy assessment
- Mental Health
  - Mental outpatient department
  - Safe physical environment in the mental health department
  - Mental health staff qualification
  - Inpatient care plan
  - Violence prevention
  - Quality improvement indicators

Each standard was supported by a corresponding set of guiding measures that further clarify the standard. The guiding measures aim to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

Standards

Risk Score	Standard and Guiding measures
	Burn Care
4	**OTHER 1. Burn care is guided by policies and procedures and provided by qualified staff.** **Similar to all specialized units, the burn care center should be staffed with qualified medical and nursing personnel trained in the assessment, management of burns and the general care of critical patients. With such critical patients, standardized care based on documented and regularly taught policies and procedures (burn assessment, complications of burns, fluid resuscitations, burn dressing, and infection control) is critical to achieve the best quality of care.** **Comparable to the training of all critical care unit personnel, burn care center should must receive regular training sessions on all aspects of critical care patients' management, and audited regularly or when the need arises.**
	Guiding measures
	1.1. Staff providing burn care is qualified by documented education and training in wound and burn care and advanced resuscitation (i.e. ALS, ACLS).
	1.2. Evidence of policies and procedures to guide patient burn care.
	1.3. In case burn care is not provided, clear policies and procedures are available to transfer patients to other organization
	1.4. Evidence of policies and procedures for infection control for patients with burns.
	1.5. Evidence that staff received training and education on the following but not limited to: 1.5.1. Measuring vital signs 1.5.2. Use of pulse oximeter. 1.5.3. Principles of infection control. 1.5.4. Use of the defibrillator. 1.5.5. Knowledge of the dosage, side effects, and complications of commonly used high -alert medications.
5	**OTHER 2. The hospital provides burn care tailored to the patient's needs.** **The process of receiving, assessing, establishing a care plan and management strategies should involve a predetermined multidisciplinary team (medical team, critical care and plastics, specialized nursing staff, physiotherapy) and documented in the patient's records.** **Based on the patient's initial status (degree and severity of burns, overall status, age, co morbidities …), the managing team**

	establishes and documents an initial care plan, which is updated and tailored according to the patient's needs throughout the stay. Critical patients must be in a high level care unit (ICU, intermediate care unit...) with high level monitoring documents in the patients' electronic and physical records.
	Guiding measures
	2.1. Patients undergo an initial documented burn assessment upon admission by a qualified medical staff member (i.e. registered nurse).
	2.2. Burn care plan is developed and documented in patient's medical record.
	2.3. Interventions are documented and revised based on the patient's condition.
	2.4. The hospital provides burn care tailored to the patient's needs.
	2.5. Evidence that the patient is continuously monitored.
3	**OTHER 3. Pain is assessed and interventions are implemented accordingly.** **Burn patients suffer significant pain from the burns and from the management therapies and surgeries. By procedure the hospital's pain team or assigned qualified professionals should be consulted for initial pain assessment, and reassessment after set timeframes, interventions or when necessary. Pain assessment and the response to treatments should be documented in the patient's record.**
	Guiding measures:
	3.1. The hospital has a policy and/or procedure to assess pain.
	3.2. The assessment is performed and documented by qualified individuals.
	3.3. Targeted interventions are implemented and documented.
	3.4. Pain is reassessed and documented after intervention(s) are implemented.
4	**OTHER 4. Burn care specific indicators are collected and used as part of the quality improvement plan.** **The burn care center must choose quality indicators that specifically reflect clinical care, quality and safety of burn care provided". Certain outcome indicator examples include skin and neuromuscular function, sensory and pain, satisfaction etc.** **Data collection, analysis and results are compared to preset targets in order to assess the efficiency and needed improvements of current practices. Results, proposed changes or improvements to current management strategies are relayed to the hospital's executive administration.**
	Guiding measures:
	4.1. Indicator(s) is used to monitor progress for each quality improvement objective.
	4.2. Data is collected, analyzed, and interpreted to establish a baseline for indicators

	4.3. Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	4.4. Results are properly communicated to the hospital executive management.
Dietary services	
4	**OTHER 5. The hospital has qualified and competent staff dietary department.** **Staff that holds the Dietary department staff should be qualified and trained is part of the Infection prevention and control committee.**
	Guiding measures:
	5.1. The director, nutritionist and dietician, are qualified by education, training and experience.
	5.2. The person responsible for the dietary services is on the infection prevention and control committee
5	**OTHER 6. Hospital provides adequate dietary services.** **Dietary services policies and procedures should encompass the whole process of food management, from reception to delivery, considering isolation, hygiene and employees safety.** **Nutritional status assessment should identify patient's needs, initially and throughout the stay according to customized dietary plan, documented in the medical record.**
	Guiding measures:
	6.1. Evidence of policies and procedures to guide dietary services, including but not limited to: 6.1.1. Receiving or purchase of food 6.1.2. Preparation and handling of raw/processed food 6.1.3. Storage of prepared food and leftovers 6.1.4. Distribution of food 6.1.5. Patient snacks and late trays 6.1.6. Preparation of enteral feedings 6.1.7. Employee safety 6.1.8. Employee health and hygiene 6.1.9. Infection Control 6.1.10. Preparation of isolation trays 6.1.11. Cleaning of the department (if not provided by a centralized housekeeping department) 6.1.12. Sanitation of chopping boards.
	6.2. Evidence of criteria to identify patients at nutritional risk during an initial nutritional assessment.
	6.3. Patients undergo an initial documented nutritional assessment upon admission by a qualified medical staff member (i.e. registered nurse).
	6.4. Patient plan of care is documented in the medical record
	6.5. Evidence of comprehensive nutritional assessment by a licensed dietitian for patients at nutritional risk.
	6.6. Patient dietary plan is documented in patient's medical record.

	6.7.	Evidence of dietary plan reassessment and revision (if needed) at regular intervals by a dietitian during the patient's stay at the hospital.
	6.8.	Patient's food order is based on the patient's nutritional status and needs.
5	**OTHER 7.**	**The hospital abides by food safety standards to reduce the risk of food-borne diseases.** ***[IPC-21]*** **Due to highly susceptible and frail populations among hospitalized patients, such as the elderly, outbreaks of nosocomial food-borne infections can add to the morbidity of these patients. Food-borne bacteria can multiply rapidly if food is not maintained at certain appropriate temperatures for refrigeration and hot holding, and if there are delays between food preparation and distribution. Also, dishwashers need to reach thermal disinfection temperatures to sufficiently reduce the pathogens.** **Most nosocomial food-borne pathogens are spread by the fecal-oral route. The primary source of outbreaks may be contaminated food/water, and infected/colonized patients, visitors, staff, or food handler. Therefore, food handlers must be aware of high standards of personal hygiene and perform hand hygiene and sanitation appropriately and in the right indicated moments.** **These and other potential hazards need to be addressed in a systematic way by the hospital in order to prevent and control such risks related to food-borne infections. Hazard Analysis Critical Control Point (HACCP) is recognized as an effective food safety assurance system and can be used to attain standards specific to food safety such as Food Code (US food standards by FDA) and Codex Alimentarius (International Food Standards by FAO/WHO). Regular inspections and audits by the IPC team should be performed to monitor the implementation of this program.**
	Guiding measures**:**	
	7.1.	The hospital abides by Hazard Analysis and Critical Control points (HACCP) to ensure clean and appropriate environment for safe food handling.
	7.2.	Preparation of food is done using proper sanitation measures and under appropriate room temperatures, and audits are conducted to test the compliance.
	7.3.	Sanitation measures are implemented in the kitchen.
4	**OTHER 8.**	**Dietary services specific indicators are collected and used as part of the quality improvement plan.** **Dietary services hold several priority areas where organizational performance and quality can be subject to improvement, and where adverse events and suboptimal results are generally observed but can be largely prevented. Therefore, it is important to define and prioritize the key performance indicators and improvement objectives for such a department, based on observation, audits and benchmarking.**

		Once improvement objectives are identified, indicators should be set with adapted targets, in order to monitor the progress of the quality improvement plan. **Discussion of indicator results should be done at leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with timely feedback of results and action plan to concerned teams.**
	Guiding measures:	
	8.1.	Indicator(s) is used to monitor progress for each quality improvement objective.
	8.2.	Data is collected, analyzed, and interpreted to establish a baseline for indicators
	8.3.	Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	8.4.	Results are properly communicated to the hospital executive management.
Social Care		
3	**OTHER 9.**	**The hospital provides social care services** **In case the hospital offers Social services, those services should be guided by policies and procedures. Otherwise there should be a policy of referral Social care and should be provided by a qualified, educated and trained team.** **Psychosocial assessment as well as a plan of care should also be performed according to identified criteria and be kept in the patient's record.**
	Guiding measures:	
	9.1.	Evidence of policies and procedures to guide social care services.
	9.2.	The hospital social care services are provided by qualified social care worker/professional.
	9.3.	In case the hospital does not have social care services, there is a delineated policy to refer patients.
	9.4.	Staff providing social care services are qualified by education and training in social care.
	9.5.	Evidence of criteria to identify patients at psychosocial risk during an initial psychosocial assessment.
	9.6.	Patients undergo an initial documented psychosocial assessment upon admission by a qualified medical staff member (i.e. registered nurse).
	9.7.	Evidence of comprehensive psychosocial assessment by social worker for patients at psychosocial risk based on the initial psychosocial assessment.
	9.8.	Psychosocial assessment and plan of care are documented in patient's medical record.
Physiotherapy		

4	**OTHER 10. The hospital provides physiotherapy services.** **The hospital's physiotherapy department is an essential paramedical division for both surgical and medical patients especially critical ones. The staff and senior physiotherapist should have the necessary qualifications and experience delineated in the documented job descriptions, procedures and policies.** **Every patient should have an initial functional assessment upon admission (mobility requirements and deficiencies, respiratory, swallowing difficulties…) by the clinical staff (nursing, medical...) and when needed a more detailed assessment by the physiotherapy staff. A physiotherapy care plan should be initiated, regularly updated, documented and modified when needed. Upon discharge the home discharge plan must include the needed home physiotherapy care.**
	Guiding measures
	10.1. The physiotherapy department is guided by a qualified physiotherapist.
	10.2. Staff providing physiotherapy services are qualified by education and training.
	10.3. Evidence of policies and procedures to guide physiotherapy services.
	10.4. Patients undergo an initial documented functional assessment upon admission by a qualified medical staff member (i.e. registered nurse)
	10.5. Evidence of comprehensive functional assessment by physiotherapist for patients at functional risk.
	10.6. Functional assessment and physiotherapy plan of care are documented in the patient record.
	10.7. Patient's response to treatment therapy is recorded in the patient's medical record.
Mental Health	
5	**OTHER 11. The mental health outpatient department uses an integrated and recovery approach for the care of each person with mental conditions.** **Mental health outpatient department should develop a strategy to raise awareness about the stigma of mental health issues, manage mental conditions, ranging from promotion of available mental services to assessment, counseling, education and follow-up.**
	Guiding measures:
	11.1. The mental health outpatient department has a strategy to promote available mental health services, and reduce the stigma of mental conditions

	11.2. The mental health outpatient department explains confidentiality and its limits to the persons with mental conditions and/or caregivers at the first assessment
	11.3. The mental health outpatient department helps the persons with mental conditions and/or caregivers make informed choices
	11.4. The mental health outpatient department has processes to follow up with high-risk persons with mental conditions and/or caregivers who do not appear for scheduled appointments or who were referred to psychiatric admissions
	11.5. The mental health outpatient department provides psycho-education to persons with mental conditions and caregivers and facilitates the access to self-help and family support group or program, where available
4	**OTHER 12. The mental health outpatient department acts as a referral mental center** **The department should have an active role in mental health programs on a national level in coordination with healthcare organizations and authorities to promote awareness and prevention for mental health disease as well as providing training and supervision to non-specialized staff and clinics.**
	Guiding measures:
	12.1. The mental health outpatient department provides specialized mental prevention programs in coordination with the general hospitals, the mental health program at the ministry of public health, the community and schools, to support health promotion and disease prevention.
	12.2. The mental health outpatient department provides outreach mental health services
	12.3. The mental health outpatient department has processes to act as a referral center for the general hospitals, outpatient departments not specialized in mental health and for clinics with integrated mental health services
	12.4. The mental health outpatient department provides training to non-specialized staff on the World Health Organization mental health gap action program
	12.5. The mental health outpatient department provides support and supervision to clinics with integrated mental health services
5	**OTHER 13. A safe and secure physical environment for patients, families, staff and visitors is ensured at all times in the mental health department.**

	The mental health departement should be a secure area, only accessed by staff upon authorization and continuously surveilled by security and alarm systems.
	Guiding measure:
	13.1. Access to the mental health department is limited to the authorized staff based on hospital policies.
	13.2. Security staff is available 24/7 at the mental health department
	13.3. A security alarm bell system linked to a central point is available.
6	**OTHER 14. The staff in the mental health department are competent and qualified.** **Management of patients in the mental health department require adequate resources with specialized skill set and to be able to ensure the provision of highly specialized and safe care 24h/day 7 days/week** **Moreover, it is important that these skills are acquired by education, training and experience which should encompass procedures addressing issues such as seclusion, isolation, restraints, electroconvulsive therapy etc….) with evidence of competency training and documentation to ensure the required level of care is met at all times, with eventual corrective actions being implemented accordingly.** **These resources and services must be headed by a qualified professional able to integrate and guide the mental health care services within the institution.**
COR	Guiding measures:
	14.1. A full-time psychiatrist qualified by training and education in psychiatry is in charge of the clinical aspects of the psychiatry department/services
	14.2. A registered nurse qualified by education and training in psychiatric nursing and a minimum of five years of experience manages the psychiatry department, when applicable.
	14.3. The unit has its own dedicated head of psychiatry department who can provide expert input into key matters of inpatient service delivery, staff support and decision making, and overall acute care service coordination.
	14.4. There is at least one qualified practitioner, by education, training and experience, on duty during therapeutic program.
	14.5. There is at least one full-time psychotherapist in the department.
	14.6. There is a registered nurse within the department on duty 24h hours per day /7 days per week
	14.7. Evidence of annually staff training on: 14.7.1. Seclusion and/or isolation room procedures 14.7.2. Physical and chemical restraint 14.7.3. Electroconvulsive therapy 14.7.4. Self-harm and suicide awareness and prevention techniques

	14.7.5. Violent behavior de-escalation techniques 14.7.6. Basic psychology and psychosocial intervention. 14.7.7. Addiction
5	**OTHER 15. Seclusion and restraint are used in a safe manner. *[PFR-8]*** **Such behavioral management interventions should be used as a last resort to control a behavioral emergency. Indications for seclusion/restraint must be clearly defined in hospital policy/procedure, diffused appropriately and documented in the file when occurring. Such interventions should not be sustained longer than they should, and thus must be reassessed daily.**
	Guiding measures:
	15.1. The hospital has a policy and procedure for the use of seclusion and restraints.
	15.2. The use of seclusion and restraints are justified and documented in patient records.
	15.3. The need for seclusion and restraints is valid for a predefined limited time and its need is reassessed every 24 hours.
5	**OTHER 16. A care plan is developed and documented for each inpatient.** **The care plan for mental health patients should be based on the logic of assessment and reassessment of all the patient's clinical condition and risks, which can help identify adapted interventions to potentially improve the patient's clinical status and/or prevent unwanted outcomes.** **Initial assessment is performed upon admission, and reassessment is according to patient needs to monitor and identify signs of improvement and relapse** **Based upon the assessment, adequate interventions are identified and planned by the clinical staff, and both the assessment and the interventions and the discharge/at home care plan are documented in the patient's care plan and discussed with the patient and/or family.**
	Guiding measures:
	16.1. Qualified medical and nursing staff follows policies and procedures for assessment and reassessment of patients including the time frame required for completing the initial assessment and the frequency of reassessments.
	16.2. The mental health department collaborates with the patient and/or family member and/or next of kin to develop and document an integrated and comprehensive care plan.
	16.3. The patient's care plan includes but is not limited to the following; 16.3.1 Patient's treatment and outcomes 16.3.2 Timeframes to achieve the outcomes 16.3.3 Strategies to manage symptoms, including identification of early warning signs of relapse and appropriate action. 16.3.4 An exit and aftercare plan

5	**OTHER 17.**	**Violence prevention plan is implemented, evaluated and integrated into the occupational health and safety program.** ***[HC-15]*** **In case of occurrence of violence, the hospital should have policies and procedures to support the process of reporting and management of workplace violence including the availability of resources to aid staff that were affected by violence.** **Violent acts include physical assaults and threats directed toward persons at work or on duty. A comprehensive zero-tolerance violence prevention plan based on proactive risk assessment approaches should include: Management commitment and employee participation, worksite analysis and violence hazard identification, workplace violence hazard prevention and control, violence safety and training and record keeping and program evaluation.**
	Guiding measures:	
	17.1.	The hospital develops implements and documents a violence prevention plan.
	17.2.	Evidence of proactive assessment of areas with possible workplace violence and develops plans accordingly.
	17.3.	The hospital implements a zero-tolerance policy for forms of violence or aggressive behavior whether verbal, physical, or sexual.
	17.4.	Support resources are available for staff enduring work violence.
5	**OTHER 18.**	**Staff is regularly educated and trained on techniques to prevent and respond to violent and/or aggressive patient and family acts.** ***[HC-16]*** **Violence could lead to physical and mental repercussions, therefore there is need to specifically educate and train staff to prevent and respond to violence, resolve conflict and maintain hazard awareness.** **All aggressive/violent behaviors of patients/family need to be documented**
	Guiding measures:	
	18.1.	There is a policy and process to report violent and/or aggressive patient and family acts.
	18.2.	Staff is regularly educated and trained on techniques to prevent and manage violent and/or aggressive patient and family acts.
	18.3.	Violent and/or aggressive patient and family acts are documented.
4	**OTHER 19.**	**Mental health specific indicators are collected and used as part of the quality improvement plan.** **Mental Health services have several areas where performance can be subject to improvement. Therefore, it is important to define and prioritize the key improvement objectives for this department, based on evidence-based indicators results, audit**

		surveys and benchmarking, as part of the hospital-wide quality improvement program. **Indicators could refer to international innovations in quality measurement including "WHO's assessment instrument for mental health systems", or the "International initiative for mental health leadership" but should be set with adapted applicable targets, in order to monitor the quality and safety of services and the progress of the quality improvement plan. (*Examples could include seclusion and restraint minimization, reduction of suicide attempts, adherence to psychotherapy and treatment, etc.…)*** **Discussion of indicator results are done at the leadership level of the department and also at the hospital management level in order to engage appropriate improvement actions, with a timely feedback of results and action plans to the concerned teams.**
	Guiding measures:	
	19.1.	Indicator(s) is used to monitor progress for each quality improvement objective.
	19.2.	Data is collected, analyzed, and interpreted to establish a baseline for indicators
	19.3.	Outcome indicators are evaluated to determine the effectiveness of the quality improvement activities.
	19.4.	Results are properly communicated to the hospital executive management.

SECTION III

Appendix

Launch of the Accreditation process on September 8th 2016 at ESA, Beirut

Expert Subgroup Meetings

Discussion

Standard 6.2:
The scope of services are described and docume
needs.
Standard 17:
Community healthcare needs assessment is don
Discussio

SECTION IV

Glossary

Glossary

- **Access to health care:** "The timely use of personal health services to achieve the best health outcomes".

- **Accreditation**: The action or process of officially recognizing an institution as having a particular status or being qualified to perform a particular activity

- **Adverse drug event:** An injury resulting from medical intervention related to a drug.

- **Allied health professional:** A broad field of healthcare professions made up of specially trained individuals (such as physical therapists, dental hygienists, audiologists, and dietitians) who are typically licensed or certified but are not physicians, dentists, or nurses.

- **APGAR test:** A test performed twice at 1 minute and 5 minutes after birth, to assess the newborn's color, heart rate, stimulus response, muscle tone, and respirations.

- **Benchmarking:** A technique used by the organization to evaluate a result based on a previously obtained result.

- **Care plan:** "A plan that identifies the patient's care needs, lists the strategy to meet those needs, documents treatment goals and objectives, outlines the criteria for ending interventions, and documents the individual's progress in meeting specified goals and objectives. It is based on data gathered during patient assessment. The plan of care may include prevention, care, treatment, facilitation, and rehabilitation".

- **Clinical guidelines**: Statements based on rigorous systematic review of evidence that help healthcare providers to optimize patient care, by providing recommendations to care.

- **Chemotherapy cycle**: An oncology treatment course that is repetitive on a regular intervals with periods of rest in between.

- **Critical patient**: Patients with unstable a vital signs and vital signs that are not within normal limits.

- **Disaster:** As Defined by International Federation of Red Cross and Red Crescent Societies, "A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or

environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins".

- **Emergency situations**: The situation where the hospital's normal capacity does not meet the influx of large number of patients in a specific time period.

- **Family:** A group of individuals that share ties of blood, marriage or adoption.

- **Functional limitation:** A restriction in the performance of essential physical and/or mental daily life activities.

- **Fundamental critical care**: A course attended by clinicians to prioritize assessment needs for the critically ill patient, select appropriate diagnostic tests, identify and respond to significant changes in the unstable patient, recognize and initiate management of acute life-threatening conditions.

- **Guiding measures:** a statement that aims to facilitate the implementation of the standards and to guide the hospitals in fulfilling the objective of the standard.

- **Healthcare-Associated Infections Outbreaks**: An increase in the number of hospital-acquired or healthcare facility-acquired cases of disease among patients or staff over and above the expected number of cases in a hospital.

- **Health Information system:** It is a system that deal with capturing, storing, managing or transmitting information related to the individual's health or the activities of the organizations.

- **High-alert medications:** Include medications that are involved in a high percentage of errors and/or sentinel events and medications whose names, packaging and labeling, or clinical use, look alike and/or sound alike.

- **High-risk patients:** Children and the elderly, patients who do not have the capacity to understand the care process and cannot participate in decisions regarding their care.

- **High-risk persons with mental conditions:** A patient who may expose himself/herself and/or the community to danger.

- **Indicators:** Established measures to determine the effectiveness of the organization in meeting its customers' needs and other operational and financial performance expectations.

- **Institutional review board (IRB):** A formal committee that approves monitors and reviews human based research.

- **Medical record:** A sequential written document of the patient's examination and treatment.

- **Near misses:** An act of commission or omission that could have harmed the patient but did not cause harm as a result of chance, prevention, or mitigation.

- **Next of kin:** The patient's closest living blood relative (i.e. the spouse, adult children, parents, adult siblings, and other relatives).

- **Outbreak:** "A disease outbreak is the occurrence of cases of disease in excess of what would normally be expected in a defined community, geographical area or season".

- **Partogram:** A graphical representation during labor of time and dilation with alert lines.

- **Point-of-care testing**: Medical diagnostic testing performed outside the clinical laboratory in close proximity to where the patient is receiving care

- **Policy:** An overarching plan adopted by an organization to achieve its goals.

- **Potable water:** Potable water is water of a quality suitable for drinking, cooking and personal bathing.

- **Post-anesthesia**: The period following the administration of anesthesia.

- **Procedure:** Documented steps in a process showing the way on how these steps are to be performed.

- **Process:** A set of interrelated actions characterized by a group of specific inputs and value-added tasks that make up a procedure for a set of specific outputs.

- **Psychosocial:** involving mental health, social status and functional capacity within a community/society.

- **Radioactive waste**: any waste generated by nuclear medication, radiation, oncology and PET, this includes all contaminated material.

- **Reprocessing:** The steps done to prepare used medical equipment/devices for use (e.g., cleaning, disinfection, and sterilization).

- **Screening:** A preliminary assessment to detect a probability of a disease, sensation and/or need.
- **Sentinel event:** Unexpected events that results in death or serious physical or psychological injury.
- **Special needs:** Several physical, emotional, behavioral, or learning disabilities or impairments that necessitate additional specialized services.
- **Standard:** a statement defining the outcome that should be in place to provide high quality service
- **Sterilization:** A process that destroys or eliminates all forms of microbial life physically or chemically in healthcare facilities.
- **Systemic therapy**: Treatment using substances that travel through the bloodstream, reaching and affecting cells all over the body.
- **Transition**: transition from one setting to another, or transfer from one physician to another or from a specific type of care to another.
- **Triage:** A process to assign order of interventions based on patient acuity.
- **Verbal and telephone order:** Orders that are spoken aloud rather than written.

SECTION V

References of Glossary

References of Glossary

Apgar Testing. (2017). *TheFreeDictionary.com*. Retrieved 18 January 2017, from http://medical-dictionary.thefreedictionary.com/Apgar+Testing

Benchmarking Process & Learning Resources | ASQ. (2017). *Asq.org*. Retrieved 18 January 2017, from http://asq.org/learn-about-quality/benchmarking/overview/overview.html

Best Practices for Cleaning, Disinfection and Sterilization in All Health Care Settings. (2010) (1st ed., p. 9). Toronto, Canada. Retrieved from https://www.publichealthontario.ca/fr/eRepository/Best_Practices_Cleaning_Disinfection_Sterilization_2012.pdf

CDC - Disinfection & Sterilization Guideline: Terms - *HICPAC*. (2017). *Cdc.gov*. Retrieved 17 January 2017, from https://www.cdc.gov/hicpac/Disinfection_Sterilization/1_sumIntroMethTerms.html

Chapter 9. Access to Health Care. (2014, October 02). Retrieved January 18, 2017, from https://www.ahrq.gov/research/findings/nhqrdr/nhqr11/chap9.html

Chen, T., Schein, O., & Miller, J. (2015). Sentinel Events, Serious Reportable Events, and Root Cause Analysis. *JAMA Ophthalmology*, *133*(6), 631. http://dx.doi.org/10.1001/jamaophthalmol.2015.0672

Dictionary and Thesaurus | Merriam-Webster. (2017). *Merriam-webster.com*. Retrieved 18 January 2017, from http://www.merriam-webster.com/dictionary/

Family. (2017). TheFreeDictionary.com. Retrieved 18 January 2017, from http://legal-dictionary.thefreedictionary.com/family

Fundamental Critical Care Support. (2017). *Sccm.org*. Retrieved 17 January 2017, from http://www.sccm.org/Fundamentals/FCCS/Pages/default.aspx

Guidelines for Hospital Emergency Preparedness Planning. (2017). Retrieved 18 January 2017, from http://asdma.gov.in/pdf/publication/undp/guidelines_hospital_emergency.pdf

Hakkarainen, K., Andersson Sundell, K., Petzold, M., & Hägg, S. (2012). Methods for Assessing the Preventability of Adverse Drug Events. *Drug Safety*, *35*(2), 105-126. http://dx.doi.org/10.2165/11596570-000000000-00000

Improving the Safety of Telephone or Verbal Orders. (2017). Patientsafetyauthority.org. Retrieved 18 January 2017, from http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2006/Jun3(2)/Pages/01b.aspx

Institutional review board. (2017). En.wikipedia.org. Retrieved 18 January 2017, from https://en.wikipedia.org/wiki/Institutional_review_board

Healthcare Associated Infections (HAI) Outbreak Investigation / Notification Protocol. (2017) (1st ed., p. 1). West Virginia. Retrieved from http://www.dhhr.wv.gov/oeps/disease/hai/documents/hai-protocol.pdf.

Joint Commission International Accreditation Standards for Hospitals. (2017) (5th ed., p. 24). Retrieved from https://www.jointcommissioninternational.org/assets/3/7/Hospital-5E-Standards-Only-Mar2014.pdf

Joint Commission International Accreditation Standards for Hospitals. (2017) (5th ed., p. 91). Retrieved from https://www.jointcommissioninternational.org/assets/3/7/Hospital-5E-Standards-Only-Mar2014.pdf

LASA. (2017). Lasa-vu.nl. Retrieved 18 January 2017, from http://www.lasa-vu.nl/themes/physical/functionele_beperkingen.html

Medical Definition of ALLIED HEALTH. (2017). Merriam-webster.com. Retrieved 18 January 2017, from https://www.merriam-webster.com/medical/allied%20health

Medical Definition of POSTANESTHETIC. (2017). Merriam-webster.com. Retrieved 18 January 2017, from https://www.merriam-webster.com/medical/postanesthetic

Medical state. (2017). En.wikipedia.org. Retrieved 18 January 2017, from https://en.wikipedia.org/wiki/Medical_state

NCI Dictionary of Cancer Terms. (2017). National Cancer Institute. Retrieved 17 January 2017, from https://www.cancer.gov/publications/dictionaries/cancer-terms?cdrid=688840

Next Of Kin. (2017). Investopedia. Retrieved 18 January 2017, from http://www.investopedia.com/terms/n/next-of-kin.asp

Non-potable water. (2017). WorkSafe Queensland. Retrieved 18 January 2017, from https://www.worksafe.qld.gov.au/injury-prevention-safety/workplace-hazards/dangers-in-your-workplace/non-potable-water

Overview of clinical practice guidelines. (2017). Uptodate.com. Retrieved 18 January 2017, from https://www.uptodate.com/contents/overview-of-clinical-practice-guidelines

Partogram. (2017). TheFreeDictionary.com. Retrieved 18 January 2017, from http://medical-dictionary.thefreedictionary.com/partogram

Point-of-care testing. (n.d.). *Nova scotia health authority*. Retrieved 8 March 2018, from https://www.cdha.nshealth.ca/pathology-laboratory-medicine/clinical-services/point-care-testing

Quality Glossary - P - ASQ. (2017). Asq.org. Retrieved 4 January 2017, from http://asq.org/glossary/p.html

Screening. (2017). TheFreeDictionary.com. Retrieved 18 January 2017, from http://medical-dictionary.thefreedictionary.com/screening

Sheikhtaheri, A. (2014). Near misses and their importance for improving patient safety. *Iranian Journal of Public Health, 43*(6), 853-854. Retrieved from http://search.proquest.com/docview/1545530537?accountid=8555

Systemic Therapy. (n.d.) In *NCI Dictionary of Cancer Terms*. Retrieved March 08, 2018, from https://www.cancer.gov/publications/dictionaries/cancer-terms/def/systemic-therapy

The definition of medical record. (2017). Dictionary.com. Retrieved 18 January 2017, from http://www.dictionary.com/browse/medical-record

University of Pittsburgh University Marketing Communications Webteam. (2009). Specific Instruction for Medical Waste. Retrieved March 08, 2018, from http://www.radsafe.pitt.edu/waste/medical.php

Pacific health information network (2017). *Health Information Systems (HIS)*. *Phinnetwork.org*. Retrieved 18 January 2017, from http://phinnetwork.org/resources/health-information-systems-his/

What is a disaster? - IFRC. (2017). Ifrc.org. Retrieved 18 January 2017, from http://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/

WHO | Disease outbreaks. (2017). Who.int. Retrieved 17 January 2017, from http://www.who.int/topics/disease_outbreaks/en/