



وزارة الصحة  
Ministry of Health

English Edition

# HOSPITAL COMMISSIONING CHECKLISTS

STRUCTURAL & OPERATIONAL  
STANDARDS

قوائم التحقق لتشغيل  
المستشفيات

معايير الانشاء والتشغيل

Oct **2020**  
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## Message from Hospital Commissioning Unit

انطلاقاً من حرص وزارة الصحة لتقديم نموذج من نماذج برامج التحول MOH2.0 ممثلة بوحدة تأهيل وتشغيل المستشفيات والتي تم إنشاؤها بقرار من سعادة وكيل وزارة الصحة للخدمات العلاجية الدكتور طريف بن يوسف الأعمى رقم 1441-351258 وتاريخ 18 صفر 1441 هـ والموافق 17 أكتوبر 2019، بهدف وضع آليات للرقابة والإشراف على خطط تشغيل المستشفيات انطلاقاً من نطاق الخدمة والصلاحيات المخولة للوحدة.

ويأتي من ضمن مهام وحدة تأهيل وتشغيل المستشفيات العمل على بناء أدوات قياس وقوائم تحقق تستخدم لتقييم جاهزية المستشفيات للتشغيل والرقابة عليها لما بعد التشغيل. وها هي اليوم قوائم التحقق في نسختها الأولية بعد أن تم بناءها بالتعاون مع جميع الإدارات الوكالات المعنية بديوان الوزارة وبجهد مشكور وأيضاً تم مراجعتها من ذوي الاختصاص في مجالات مختلفة بهدف الخروج بها في أحسن حله.

كل الشكر للداعمين أصحاب السعادة وأصحاب العطاء المميز والجهد الجميل ومن بهم استطاعت الوحدة شق الطريق والوصول لما نحن عليه اليوم

### شكر خاص لأصحاب السعادة

سعادة أعضاء اللجنة المشكلة بقرار معالي وزير الصحة (رقم ١٩٥٦٨١٠-١٤٣٩ وبتاريخ ١٦ يوليو ٢٠١٨م) للإشراف على تشغيل عدد ١٩ مستشفى الموقرين

سعادة الدكتور محمد بن خالد العبدالعالي  
مساعد وزير الصحة

سعادة الدكتور طريف بن يوسف الأعمى  
وكيل الوزارة للخدمات العلاجية

سعادة الأستاذ عبدالعزيز بن حسن عبدالباقى  
الوكيل المساعد للتخطيط والتميز المؤسسي

سعادة الدكتور عبدالعزيز بن سهيل صوان  
مدير عام الإدارة العامة لشؤون المستشفيات

#### عبداللطيف بن سعد العقيفي

رئيس وحدة تأهيل وتشغيل المستشفيات  
مدير التخطيط الاستراتيجي والعمليات بالإدارة العامة للوحدة

## INTRODUCTION :

The Hospital Commissioning Unit has been created by order of The Deputy Minister for Therapeutic Services in Oct 2019, to develop regulation and oversee the new hospital preparedness and operation as part of MOH2.0 transformation. One of the important task for the Hospital Commissioning Unit is to develop a checklist which will be utilized to help hospitals to assess the readiness and support operation.

The Checklists have been developed by collaborative and cooperative efforts from all concerned General Directorates and Deputyship in MOH Head Office for the period Nov 2019 to Sep 2020, which considered as 1<sup>st</sup> MOH Hospital Commissioning Checklists.

These checklists are designed to help hospitals for the self-assessment readiness and work as a guide to operate the hospital. They intended to provide tools to conduct and manage, checking readiness of the hospitals before operation. The format of the checklists was written in an easy-to-implement way and answer the common questions that come to the mind.

In accordance with the objectives of the Hospital Commissioning Unit, providing the required support and preparing Hospital to be operated in accordance with the established operational plan. Such checklists will be used by Surveyor to assess the readiness for operation.

## Hospital Commissioning Unit



### MISSION

To Support Healthcare Facilities in Operating with ultimate Safe Environment.



### VISION

To be the leader in Healthcare Commissioning in KSA.

### Hospital Commissioning Unit Team

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### Hospital Commissioning Unit Advisory Team

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## Special Thanks To Participated Deputyships and Directorates

General Directorate of Human Resources  
General Directorate of Nursing  
General Directorate of Infection Prevention and Control  
General Directorate of Environmental Health  
General Directorate of Projects and Construction  
General Directorate of Quality and Patient Safety  
General Directorate of Clinical Excellence  
General Directorate of Operational Excellence  
General Directorate of Radiology and Applied Services  
General Directorate of Security and Safety  
General Directorate of Supplies and Replacement  
General Directorate of E-Health and Digital Transformation  
General Directorate of Maintenance  
General Directorate of Pharmaceutical Care  
General Directorate of Laboratories and Blood Banks  
General Directorate of Dietitian  
General Directorate of Dental  
General Directorate of Medical Rehabilitation and Long Care  
General Directorate of Engineering Services  
General Directorate of Special Centers  
Deputyship for Therapeutic Services  
Assistant Deputyship for Planning and Organizational Excellence

## Definitions:

<b>Cx</b> – Commissioning	<b>EN</b> – Environmental
<b>NUR</b> – Nursing	<b>ME</b> – Medical Equipment
<b>NUT</b> – Nutrition	<b>HL</b> – Hospital Layout
<b>ICU</b> – Intensive Care Units	<b>FS</b> – Fire and Safety Safety
<b>LAB</b> – Laboratories	<b>IC</b> – Infection Control
<b>M</b> – Maintenance	<b>PH</b> – Pharmacy
<b>HR</b> – Human Resources	<b>OR</b> – Operating Theater
<b>PT</b> – Physical Therapy	<b>LD</b> – Leadership
<b>RAD</b> – Radiology	<b>QPS</b> – Quality and Patient
<b>IT</b> – Information Technology	<b>CE</b> – Clinical Excellence
<b>MW</b> – Medical Waste	<b>ER</b> – Emergency
<b>MR</b> – Medical Records	
<b>ENOD</b> – Endoscope	

## 1082 Standards and Sub-Standards

<b>NUR</b> 44 Standards	<b>NUT</b> 32 Standards	<b>ICU</b> 36 Standards
<b>LAB</b> 111 Standards	<b>M</b> 21 Standards	<b>HR</b> 40 Standards
<b>PT</b> 30 Standards	<b>RAD</b> 46 Standards	<b>IT</b> 45 Standards
<b>MW</b> 41 Standards	<b>MR</b> 17 Standards	<b>ENOD</b> 21 Standards
<b>EN</b> 34 Standards	<b>ME</b> 45 Standards	<b>HL</b> 39 Standards
<b>FS</b> 68 Standards	<b>IC</b> 143 Standards	<b>PH</b> 75 Standards
<b>OR</b> 16 Standards	<b>LD</b> 74 Standards	<b>QPS</b> 22 Standards
<b>CE</b> 39 Standards	<b>ER</b> 43 Standards	

## NURSING CHECKLIST

Cx.Nur	Checklist Elements
Cx.Nur1	<b>Nursing Administration</b>
Cx.Nur1.1	Staffing plan are allocated according to the skill level, qualifications, patients' volume and acuity and in accordance with laws and regulations and nursing licensing boards
Cx.Nur1.2	Schedule policy defines duration of working shifts, assignment of overtime when needed, on-call requirements
Cx.Nur1.3	Job description are provided by qualification, education and skill are available to provide nursing care
Cx.Nur1.4	Nursing reference manuals and policies are readily available and accessible to all units
Cx.Nur1.5	Nursing policies and procedures manual
Cx.Nur1.6	Current nursing practice manuals/books
Cx.Nur1.7	Space allocated for nursing department
Cx.Nur1.8	Essential and emergency equipment are available based in par level
Cx.Nur1.9	Essential and emergency consumable are available based in par level
Cx.Nur1.10	Essential and emergency linen are available based in par level
Cx.Nur2	<b>Quality</b>
Cx.Nur2.1	Nursing Quality Performance Indicators
Cx.Nur2.2	Approved Quality Plan
Cx.Nur3	<b>Education</b>
Cx.Nur3.1	Approved Nursing Education Plan
Cx.Nur4	<b>Layout of Nursing Unit as designed</b>
Cx.Nur4.1	Centered nursing station to have same accessibility to all rooms
Cx.Nur4.2	Station supply with call bell system, computer, scanner, printer, telephone and chair
Cx.Nur4.3	Centered dashboard electronic unit board
Cx.Nur4.4	Available consumable Room
Cx.Nur4.5	Consumable items are Labeled
Cx.Nur4.6	Par level is followed according to the policy
Cx.Nur4.7	Black and yellow garbage are Labeled
Cx.Nur4.8	Temperature and humidity are recorded
Cx.Nur4.9	Tissue and gloves holder are available
Cx.Nur4.10	Needle sharp container is available
Cx.Nur4.11	Tap water facility available & the temperature adequate
Cx.Nur4.12	Space is available to prepare medication
Cx.Nur4.13	High alert medication and look like medication are Labeled
Cx.Nur4.14	Narcotic medication is locking
Cx.Nur4.15	Checklist of room available
Cx.Nur4.16	Refrigerator is clean, arranged and temperature is monitored
Cx.Nur5	<b>Staff room</b>
Cx.Nur5.1	Furniture in the department are safe, no broken wheels, etc..
Cx.Nur5.2	Rooms are clean, free of litter and debris
Cx.Nur5.3	Refrigerators are cleaned on regular basis
Cx.Nur5.4	Temperature chart maintained for all indicated refrigerators
Cx.Nur6	<b>Patient Nutrition Room</b>
Cx.Nur6.1	Furniture in the department are safe, no broken wheels, etc..
Cx.Nur6.2	Rooms are clean, free of litter & debris
Cx.Nur6.3	Refrigerators are cleaned on regular basis
Cx.Nur6.4	Temperature chart maintained for all indicated refrigerators
Cx.Nur6.5	To follow all CBAHI nursing standards



## NUTRITION CHECKLIST

Cx.Nut	Checklist Elements
Cx.Nut1	To ensure the implementation of decided layout of the nutrition department as follow: the readiness of the buildings units inside the department (receiving area-store) dry food-cold material stores, refrigerators and cold rooms-frozen food stores, freezing rooms-plastic material stores-hygiene (cleaning) materials store-Meat preparation area-vegetable preparation and processing area-salad area-sweets area-cooking area-distribution area and the dining room
Cx.Nut2	Complete all required items/devices and tools as per the approved list for the kitchen and dining rooms
Cx.Nut3	Check the certificate of power tolerance for the workloads for operating the equipment inside the kitchen area
Cx.Nut4	Gas installations are complying with the safety standards and requirements that required by the gas company regulations
Cx.Nut5	The sanitary installations shall be of sufficient capacity and cover all work sites
Cx.Nut6	Plumbing installations (fixtures) must be safe and secure
Cx.Nut7	Offices for the staff of the Nutrition Department and the Nutrition contractor
Cx.Nut8	Providing private toilets for the nutrition department in proportion to the number of employees (women-men)
Cx.Nut9	Fill out the nutrition department's operation form (attached) from the concerned hospital
Cx.Nut10	Department is managed by qualified licensed dietician
Cx.Nut11	Department has a staffing plan defining number, type and qualifications of staff required for 24-hour 7 days provision of services
Cx.Nut12	Availability of a nutrition assessment plan for critical and non-critical patients
Cx.Nut13	Availability of access control system
Cx.Nut14	Availability of a food preparation and handling guideline
Cx.Nut15	All equipment including but not limited to fridge/freezer temperature are monitored and logged
Cx.Nut16	Availability of department material safety data sheet
Cx.Nut17	Availability of evacuation plan
Cx.Nut18	Availability of education/training/in-service program
Cx.Nut19	Availability of engineering maintenance activity logbook
Cx.Nut20	Availability of a food safety program
Cx.Nut21	Availability of a Sanitation and Pest Control program
Cx.Nut22	Availability of washrooms equipped with cold and hot water, soap, sanitizer and towels
Cx.Nut23	To follow with CBAHI standards

## ICU CRITICAL AREA CHECKLIST

Cx.ICU	Checklist Elements
Cx.ICU1	ICU located in an easy access\connectivity with Emergency, Operation Theater, Radiology, Laboratories and Pharmacy Departments.
Cx.ICU2	Staffing plan for medical, nursing, RT
Cx.ICU3	Appointed director/In charge
Cx.ICU4	He/She must be having overall administrative responsibility of the unit
Cx.ICU5	Senior accredited specialist in intensive care medicine with postgraduate degree (PG). In addition to have formal education/ training and experience in intensive care medicine with preferably 5-7 years (full time) work experience in intensive/ critical care medicine
Cx.ICU6	There is a list of required stock items indicating the maximum and minimum number required
Cx.ICU7	Stocks are stored and organized in an accessible manner that permits easy identification of supplies
Cx.ICU8	<b>Availability of Laboratory services</b>
Cx.ICU8.1	Glucometer/ Ketometer: two (02) per 6-12 bed Adult ICU + One (01) backup
Cx.ICU8.2	Medical gas
Cx.ICU8.3	Pendant? wall mounted
Cx.ICU8.4	Central medical gas and vacuum pipe line
Cx.ICU8.5	Supply from the main fold division (with a back-up supply from emergency central cylinder bank)
Cx.ICU8.6	Oxygen: minimum 2 outlets with 2 flow meters
Cx.ICU8.7	Air: minimum 2 outlets
Cx.ICU8.8	Central nursing station
Cx.ICU8.9	Ability to visualize and monitor all patients or at least priority patients
Cx.ICU8.10	Central monitoring system
Cx.ICU8.11	Patient calling alarm
Cx.ICU8.12	All other central control panel
Cx.ICU9	<b>Availability of Patient care Items</b>
Cx.ICU9.1	Monitors one each for every bed + 25% equipment backup
Cx.ICU9.2	ICU Ventilators (Long Term : Chronic / Adult – Pediatric) based on Scope of Services
Cx.ICU9.3	At least one transport ventilator with monitor + 1 backup
Cx.ICU9.4	Syringe pumps: Four to eight (4 to 8) per bed in ICUs or at least 2-4 in ICUs + 25% reserve Infusion pumps Four to eight (4 to 8) per bed in ICUs or at least 2-4 in ICUs + 25% reserve
Cx.ICU9.5	Crash cart with defibrillator: at least one in 06-12 beds adult ICU + 1 in reserve
Cx.ICU9.6	FOB (Fiber-Optic Bronchoscope): two (02) adult FOBs
Cx.ICU9.7	Ultrasound as per sinusoidal obstruction syndrome (SOS)
Cx.ICU9.8	CRRT (Continuous Renal Replace Therapy) for adult ICU
Cx.ICU9.9	One portable x-ray machine + PACS (Picture archiving and communication system) preferred as per SOS
Cx.ICU9.10	Trays / trolleys: drug carts
Cx.ICU9.11	Noise control alarms
Cx.ICU10	<b>Hand hygiene</b>
Cx.ICU10.1	Wash sink 1:4 bed ratios, enough width and depth (one sink/room)
Cx.ICU10.2	Scrub station
Cx.ICU10.3	To follow with CBAHI standards

## LABORATORY CHECKLIST

Cx.Lab	Checklist Elements
Cx.Lab1	<b>Organization and Management</b>
Cx.Lab1.1	The Laboratory has the organizational and management structure and its relationship to any other organization with which it may be associated
Cx.Lab1.2	Appointment of a quality manager with delegated responsibility and authority to oversee compliance with the requirements of the quality management system
Cx.Lab1.3	Laboratory management has responsibility for design, implementation, maintenance, and improvement of the quality management system
Cx.Lab1.4	A quality manual describes the quality management system, and the structure of the documentation used and include or make a reference to procedures including technical procedures
Cx.Lab1.5	Appointment of section head for key functions
Cx.Lab1.6	Adequate training, specified responsibility, authority, training checklist, and assignment letter
Cx.Lab1.7	Laboratory management implement quality indicators for systematically monitoring and evaluating KPI
Cx.Lab1.8	Management support of all Laboratory personnel by provides them with the appropriate authority and resources to carry out their duties
Cx.Lab1.9	Laboratory establish and implement procedures for identification, collection, indexing, access, storage, maintenance and safe disposal of quality and technical record
Cx.Lab2	<b>Signage</b>
Cx.Lab2.1	First aid signage is visible and contains details of first aid officers for the area
Cx.Lab2.2	An Emergency Evacuation Diagram (from FMD) is located in the near vicinity and is clearly displayed
Cx.Lab2.3	Exit signs are in place and illuminated
Cx.Lab2.4	Hazard/safety signage on entrance/s clearly visible and contains information including: <ul style="list-style-type: none"> <li>• Authorized access only</li> </ul>
Cx.Lab3	<b>3 Emergency Requirements</b>
Cx.Lab3.1	Exit doors are marked, clearly visible and can be opened from inside
Cx.Lab3.2	Exit corridors are clear of obstructions (including outside of the building)
Cx.Lab3.3	Overhead sprinklers and detectors are clear of obstruction
Cx.Lab4	<b>Biosafety</b>
Cx.Lab4.1	PPE and suitable supply are available and in good condition
Cx.Lab4.2	There is appropriate Biosafety signage at the Laboratory entrance and storage rooms. As per NFPA standard on fire protection for Laboratories using chemicals
Cx.Lab4.3	All cultures or biohazardous materials are correctly Labeled
Cx.Lab4.4	A supply of disinfectant for decontamination purposes is available and is clearly Labeled
Cx.Lab4.5	Fume cupboards and biosafety cabinets have been tested and are in date and empty if no experiments are being conducted (maintenance checklist biomedical)
Cx.Lab5	<b>Biosecurity</b>
Cx.Lab5.1	The area has restricted access (observational)
Cx.Lab5.2	There is negative air pressure in the area when applicable (microbiology)
Cx.Lab5.3	All windows are sealed and covered and there are no gaps when applicable
Cx.Lab5.4	Appropriate resources are available to transport microorganisms (driver training checklist)
Cx.Lab6	<b>Personnel</b>
Cx.Lab6.1	Laboratory management have an organizational plan, personnel policies
Cx.Lab6.2	Laboratory management be staff resources adequate to undertaking of the work required and the carry out of other functions of the quality management system (Staffing plan)
Cx.Lab6.3	Available delegation of authority letters
Cx.Lab6.4	Laboratory be a continuing education program available to staff at all levels (educational plan)
Cx.Lab6.5	Policies be established which define who may access patient data and who is authorized to enter and change patient results, correct billing or modify computer programs
Cx.Lab6.6	Laboratory controlled personnel files with updated competencies and privileges

Cx.Lab6.7	Laboratory supervisors must be qualified and responsible
Cx.Lab6.8	Employees be trained to quality assurance, prevent or contain the effects of adverse incidents
<b>Cx.Lab7</b>	<b>Laboratory Equipment</b>
Cx.Lab7.1	Laboratory be furnished with all items of equipment required for the provision of services, installation and function checklist
Cx.Lab7.2	Equipment be shown to be capable of achieving the performance required and comply with specifications relevant to the examinations concerned
Cx.Lab7.3	Can be modified as (Ensure that all Laboratory equipment checked and shown to be functioning satisfactorily before the operation)
Cx.Lab7.4	Laboratory establishes a program that regularly monitors and demonstrates proper calibration and function of instruments, reagents and analytical system (It also have a documented)
Cx.Lab7.5	The Laboratory has a documented and recorded program of preventive maintenance which at a minimum follows the manufacturer's recommendation
Cx.Lab7.6	Equipment be maintained in a safe working condition including examination of electrical safety and emergency stop devices
Cx.Lab7.7	The Laboratory has a list of manufacturer and manufacturer' contact person
Cx.Lab7.8	Equipment be operated by authorized personnel only
Cx.Lab7.9	The Laboratory has a manual for used and maintenance of equipment
Cx.Lab7.10	The Laboratory has a Labeled or otherwise coded to indicate the status of calibration or verification and the date when calibration or re-verification
Cx.Lab7.11	Equipment including hardware, software, reference materials, consumables, reagents, and analytical systems be safeguarded from adjustments or tampering that might invalidate examination results
Cx.Lab7.12	Laboratory defines and documents its policies and procedure for selection and use of purchased external services, equipment, consumable supplies that affect the quality of its services. There be procedures and criteria for inspection, acceptance/rejection, and storage of consumable materials
Cx.Lab7.13	The Laboratory has a list of the manufacturer, supplier, and reagents
Cx.Lab7.14	Purchased equipment and consumable supplies that affect the quality of the service not be used until they have been verified as comply with standard specification or requirements defined for the procedure concerned. SFDA (SAUDI FOOD AND DRUG ASSOCIATION) approved
Cx.Lab7.15	Laboratory be responsible for selecting referral Laboratories and ensure that the referral Laboratory is competent to perform the requested examinations and maintain a register of all referral Laboratories that it uses
Cx.Lab7.16	Laboratory be verified the results from referral Laboratories. A duplicate of the Laboratories report before provided to the user of Laboratories services (policy of referral Laboratories)
<b>Cx.Lab8</b>	<b>Accommodation and Environmental Conditions</b>
Cx.Lab8.1	The Laboratory has space allocated so that its workload can be performed without compromising the quality of work, quality control procedures, safety of personnel or patient care services
Cx.Lab8.2	The Laboratory design and environment be suitable for the task and separation form office
Cx.Lab8.3	There be an effective separation between adjacent Laboratory sections in which there are incompatible activities
Cx.Lab8.4	The Laboratory be controlled temperature of the refrigerator for reagents, blood sample, calibrator, control materials which affect the analytical results
Cx.Lab8.5	The sample be stored at a suitable condition which is not affect to the quality of sample
Cx.Lab8.6	Laboratory have procedure for storage and destroy hazard sample
<b>Cx.Lab.9</b>	<b>Assuring quality of examination procedure</b>
Cx.Lab9.1	Laboratory design internal quality control systems that verify the attainment of the intended quality results
Cx.Lab9.2	Laboratory have corrective action records where internal quality control out of range
Cx.Lab9.3	Laboratory participate in as interLaboratory comparisons such as those organized by external quality assessment schemes

Cx.Lab9.4	Laboratory management monitor the results of external quality assessment and participate in the implementation of corrective actions when control criteria are not fulfilled
Cx.Lab9.5	A program for calibration of analytical systems be designed and performed so as to ensure that results are traceable to SI units. Calibrator and control materials be recorded
Cx.Lab9.6	Documentation of statements regarding reagents, procedures or the examination system when traceability is provided by supplier or manufacturer
Cx.Lab9.7	For those examinations performed using different equipment; there be a defined mechanism for verifying the comparability of results throughout the clinically appropriate intervals
Cx.Lab10	<b>Pre-analytical Process</b>
Cx.Lab10.1	Specific instructions for the proper collection and handling of primary sample be documented and implemented by Laboratory management and made available to those responsible for primary sample collection
Cx.Lab10.2	Laboratory have a procedure for sample preparation
Cx.Lab10.3	Laboratory have a written policy concerning verbal requests for sample examination
Cx.Lab10.4	Sample portions also be traceable to the original primary sample
Cx.Lab10.5	Laboratory monitor the transportation of samples to the Laboratory such that they are transported, within time frame, within temperature interval specified in the primary sample collection manual and in a manner that ensures safety for carrier (policy of sample packaging)
Cx.Lab10.6	Criteria/policy developed for acceptance or rejection of primary sample
Cx.Lab10.7	Laboratory have documented for rejection of inappropriate primary sample
Cx.Lab10.8	Laboratory have a procedure for storage primary sample, if it is not immediately examination
Cx.Lab11	<b>Analytical</b>
Cx.Lab11.1	Laboratory be preferred procedures are those that have been published in established/authoritative textbook, journals or international, national or regional guidelines. standards of procedures (SOP's) or manuals
Cx.Lab11.2	Laboratory be reviewed of procedures at least once in twelve months and documented
Cx.Lab11.3	All procedures be documented and be available at the workstation for relevant staff. Standards of procedures (SOP's) or manuals
Cx.Lab11.4	Laboratory management in consultation with the requesters establish turnaround times for each of examination. Policy of the TAT (turnaround time)
Cx.Lab12	<b>Post-analytical Procedures</b>
Cx.Lab12.1	Storage of the primary sample be in accordance with approved policy
Cx.Lab12.2	Safe disposal of samples no longer required for examination be carried out in accordance with local regulations or recommendations for waste management
Cx.Lab13	<b>Reporting</b>
Cx.Lab13.1	The Laboratory has a procedure for reporting of results including date time, procedure, and receiver and reported by telephone and facsimile
Cx.Lab14	<b>Amendment of Reports</b>
Cx.Lab14.1	The Laboratory has written policies and procedures regarding the alteration reports. When altered, the record must show the time, date and name of the person responsible for the change
Cx.Lab15	<b>Document control</b>
Cx.Lab15.1	All documents relevant to the quality management system be uniquely identified
Cx.Lab15.2	Quality documents be included title, edition or current revision date or revision number, number of pages, authority for issue and source identification
Cx.Lab15.3	The Laboratory has a procedure for check and review documents and have a master list and invalid or obsolete documents are promptly removed from all point of use, or otherwise assured against inadvertent use
Cx.Lab15.4	The Laboratory has a policy that defines the length of time various records pertaining to the quality management system and examination results are to be retained. Retention time be defined by the nature of the examination or specifically for each record

Cx.Lab15.5	All records be legible and stored such that they are readily retrievable. Records may be stored on any appropriate medium subject to national, regional or local legal requirements. Facilities provide a suitable environment to prevent damage, deterioration, loss or unauthorized access
Cx.Lab15.6	The Laboratory has a policy that defines the length of time various records pertaining to the quality management system
Cx.Lab16	<b>Control of Nonconformities</b>
Cx.Lab16.1	Laboratory have a policy and procedure to be implemented when it defects that any aspect of its examination does not conform to its own procedures or the agreed upon requirements of its quality management system
Cx.Lab16.2	The Laboratory defines and implement procedure for release of results in case of nonconformities, including the review of such results. These events be recorded
Cx.Lab17	<b>Continuous Improvement</b>
Cx.Lab17.1	The Laboratory should review Quality Management System every year and planned for next year
Cx.Lab17.2	The Laboratory has development quality system activities between organization and team
Cx.Lab18	<b>Customer Management</b>
Cx.Lab18.1	The Laboratory has a policy and procedures for the resolution of complaints or feedback received from clinicians, patients or other parties. policy of customer satisfaction (internal/external)
Cx.Lab18.2	First aid signage is visible and contains details of first aid officers for the area
Cx.Lab19	To follow with CBAHI standards

## MAINTENANCE CHECKLIST

Cx.M	Checklist Elements
Cx.M1	Preparing contractors to start the Job
Cx.M2	Notification award from Company(s) and determination of receiving date
Cx.M3	Issuing letter for Contractor(s)
Cx.M4	Approval of sub-contractors for expired warranty systems according to rule and regulation
Cx.M5	Approval of technicians and engineers from Saudi Engineering Council
Cx.M6	All Documenting notes and reporting to hospital administration
Cx.M7	Utility Management Plan Including Utility Failure In addition to plan covers all activities and steps required to start up the operation
Cx.M8	Complete the process of evaluating, verifying and documenting the performance of facility systems, subsystems, components and operations and maintenance procedures to ensure that they function to the intent of the design and efficiently as a system
Cx.M9	Identified defects and any outstanding work under the contract and documented in the Defect register and Should be rectified
Cx.M10	Implementation of maintenance criteria based on the operating manuals
Cx.M11	Train new technicians on the new systems
Cx.M12	Receive a copy of the inventory statement, the inventory/register documentation contains important information
Cx.M13	Preparing technicians and engineers to create job in the work area
Cx.M14	Provide all equipment for maintenance cleanliness which must meet the contract conditions and criteria
Cx.M15	<b>On the day of receiving</b>
Cx.M15.1	Approved staffing plan
Cx.M15.2	Submit general health clearance certificates to workers
Cx.M15.3	Licensed housing allowance as per rules and regulation. Go with the safety as a safety measure more than commissioning
Cx.M15.4	Provide the necessary tools for maintenance and hygiene, to check the agreements of the contract
Cx.M15.5	Departmental orientation, end-user training by contracted services
Cx.M16	To follow with CBAHI standards

## HR CHECKLIST

Cx.HR	Checklist Elements
Cx.HR1	Availability of positions based on hospital capacity standard
Cx.HR2	Percentage of Doctors' jobs created according to WFS (work force system) approved by MOF (ministry of finance) (1.00 Doctor per bed)
Cx.HR3	Percentage of Nurses' jobs created according to WFS approved by MOF (1.68 Nurses per bed)
Cx.HR4	Percentage of Pharmacists' jobs created according to WFS approved by MOF (0.20 Pharmacists per bed)
Cx.HR5	Percentage of Allied health professions' jobs created according to WFS approved by MOF (1.84 AHPs per bed)
Cx.HR6	Opening bank accounts
Cx.HR7	Open social insurance account
Cx.HR8	Create hospital salary scale in Mawared
Cx.HR9	Presence of Attendance Management System
Cx.HR10	Hospital's HRIS (HR information system) connected to the MOH
Cx.HR11	Presence of HR archiving system
Cx.HR12	Presence of Hospital organizational structure
Cx.HR13	Mawared access and permissions were identified and provided to users
Cx.HR14	Presence of HR procedures and policies manual in two languages and work systems (the executive regulation for human resources in MCS, regulatory frameworks, a regulation for non-Saudis employment, and a list of Standard operating procedure (SOP) employment)
Cx.HR15	Assure all staff have their Credentialing and Privileging as per needs
Cx.HR16	Hospital recruitment plan exists and reviewed periodically and updated annually
Cx.HR17	Presence of job description for each job or employee
Cx.HR18	<b>There is a personnel file for each employee which must contain the following elements but not limited to</b>
Cx.HR18.1	Copies of qualifications, licenses, graduation certificate and registration after validation
Cx.HR18.2	Career, educational and training history
Cx.HR18.3	Current job description
Cx.HR18.4	Evidence of employee preparation at the hospital, its department, and the position it will occupy
Cx.HR18.5	Evidence of an initial assessment of an employee's competence in carrying out the work assigned to him
Cx.HR18.6	Education received during the work period
Cx.HR18.7	Copies from annual reviews
Cx.HR18.8	Other documents required by laws and regulations
Cx.HR18.9	There is an ongoing orientation program (General and Specific) for each department to all staff, volunteers, and contract workers determined by the hospital
Cx.HR18.10	Appoints a responsible person to manage the employee health program
Cx.HR18.11	Hospital Staff Health Program covers all staff members
Cx.HR18.12	There is an appointment letter for each leadership position (Admin, Medical or Clinical)
Cx.HR19	<b>There is an education and training programs for all employees including</b>
Cx.HR19.1	Provides ongoing education and training in accordance with job or work requirements
Cx.HR19.2	There is a documentation for all education and training activities
Cx.HR19.3	Education and training including all required policies and procedures including infection control policy and procedures
Cx.HR19.4	Education and training including environmental safety plans
Cx.HR19.5	There is a process to measure staff satisfaction
Cx.HR19.6	There is an Annual Evaluation Process for each staff
Cx.HR19.7	Each new employee will be evaluated within Proportionally Period (for the 1st 3 months)
Cx.HR19.8	Staff are oriented on their responsibilities and roles based on their Job Description
Cx.HR19.9	There is a specific location for Personnel Files



## PHYSICAL THERAPY (MEDICAL REHABILITATION AND LONG-TERM CARE CHECKLIST)

Cx.PT	Checklist Elements
Cx.PT1	The medical rehabilitation department shall be easy to access
Cx.PT2	All entry points, doors or openings, shall be a minimum of 1200 mm wide, unobstructed
Cx.PT3	The Entry to the facility should be clearly identified through appropriate signage informing visitors where to proceed
Cx.PT4	Entry doors should cater for disabled access and may require automatic doors (Sliding doors)
Cx.PT5	The Entry should be located adjacent to a vehicle set down point and readily accessible from the street and parking areas
Cx.PT6	Waiting areas must cater for disabled access
Cx.PT7	The treatment area needs to accommodate equipment such as plinths, gym equipment, mats, treatment tables, parallel bars and steps (space between every equipment (80cm-1 meter)
Cx.PT8	The Physiotherapy area should include a specifically designated area for electro-medical patient treatment (Electrical connections are close to places designated for electrical appliances) based on the scope of services
Cx.PT9	Treatment bays (The open areas accommodate more than one patient in the same condition) and rooms should be located with close access to waiting areas for patient access and plaster rooms and other treatment spaces for staff access
Cx.PT10	Treatment bays may include mesh and pulleys (A device to restore elasticity of the shoulder preferably installed from the first) for exercises to sides and ceiling space over the plinth
Cx.PT11	Specialist rooms or areas will be required for activities of daily living (ADL) training and may include an ADL kitchen, laundry, bathroom and bedroom. (Provides a miniature environment for what the patient can find at home)
Cx.PT12	Occupational therapists may also require smaller consult rooms and a plaster/ splinting room if hand therapy or lymphedema services are provided (for fine movement of hands) (Basin with hand splint)
Cx.PT13	Speech therapy consultation may be associated with an adjacent observation room with one-way glazing
Cx.PT14	Suitable office room for head department
Cx.PT15	Suitable storage space for equipment and consumables
Cx.PT16	Availability of amenities for male and female staff
Cx.PT17	Availability of treatment room in the inpatient wards
Cx.PT18	Suitable measurement room for Prosthetics and Orthotics department (room for prostheses of 300 beds and larger)
Cx.PT19	Suitable examination room for prosthetics and orthotics department
Cx.PT20	Suitable workshop space for prosthetics and orthotics department
Cx.PT21	Availability of emergency exit doors
Cx.PT22	Availability of good ventilation (air conditioning) and good lighting for the department
Cx.PT23	Availability of a fireproof safety cabin to store flammable and chemicals in the prosthetics department
Cx.PT24	Suitable and equipped toilets for persons with disabilities (doors width not less than 180 cm)
Cx.PT25	Availability of all needed medical equipment and tools for each department (according scope of service)
Cx.PT26	Availability of all needed medical materials and consumables for each department
Cx.PT27	Availability of all needed medical assistive tools and devices for the patients in each department
Cx.PT28	Efficient equipment operation details (technicians who will deal with the device will have received the appropriate training)
Cx.PT29	Availability of education room or rooms in the department or unit
Cx.PT30	To follow with CBAHI standards

## RADIOLOGY CHECKLIST

Cx.Rad	Checklist Elements
Cx.Rad1	The department location is easily accessible from emergency, inpatients and outpatients, the building drawing, floor plan, and the layout
Cx.Rad2	There are clear guidance signs to access the department
Cx.Rad3	There are rooms for radiology equipment according to the scope of services and general directorate of radiology and applied services standards
Cx.Rad4	There are rooms for supporting equipment (Portable) or parking in each floor
Cx.Rad5	There is a male waiting area according to the radiology department sections (or waiting are general)
Cx.Rad6	There is a female waiting area according to the radiology department sections
Cx.Rad7	There are patients' changing (room/rooms)
Cx.Rad8	There are patients' preparation room (e.g., cannulation, etc..)
Cx.Rad9	There is a male patients' toilet
Cx.Rad10	There is a female patients' toilet
Cx.Rad11	There are facilities for patients with special needs
Cx.Rad12	There is an office for the head of department
Cx.Rad13	There is an office for the technologist supervisor
Cx.Rad14	There is a place for reception and registration
Cx.Rad15	There is a store for medical supplies according to guidelines
Cx.Rad16	Availability of properly equipped Preparation and Recovery rooms when sedation is provided according to the department scope of service as required SOS
Cx.Rad17	There is a place for clean utility room
Cx.Rad18	There is a place for dirty utility room
Cx.Rad19	There is a store for cleaning tools
Cx.Rad20	There are efficient medical gases supply in rooms
Cx.Rad21	The department has sufficient emergency exits
Cx.Rad22	The design of department achieving and fulfilling the necessary level of radiation protection as per SFDA
Cx.Rad23	A qualified and licensed radiologist is managing the department
Cx.Rad24	The department has a staffing plan defines number, type, and qualifications of staff required for 24-hour 7 days provision of services (Radiologist, radiology technologist/technician, medical physicist, Medical Radiation Safety Officer (MRSO), administrative)
Cx.Rad25	Availability of radiological equipment (diagnostic/interventional) based on the department scope of service and to MOH general directorate of radiology and applied services standards
Cx.Rad26	Availability of a standardized radiological investigations requests (forms Manual or automated) utilized by hospital medical staff
Cx.Rad27	Availability of a Radiology information systems (RIS) and picture archiving and communication systems (PACS) along with the IT support
Cx.Rad28	The department Radiology Information System (RIS) is fully integrated with the Hospital Information System (HIS)
Cx.Rad29	Availability of written protocols on the communication of routine, urgent, critical and unexpected results with other departments based on the radiology department policy
Cx.Rad30	Availability of a Radiation safety program indicating management of radioactive materials, periodic inspections maintenance, and calibration of all equipment
Cx.Rad31	Availability of a full, comprehensive and continuous educational program including but not limited to: policy and procedures, radiation safety, Patient safety, Infection control and dealing with hazardous radioactive waste
Cx.Rad32	The MRI unit is divided into two zones (Zone1: magnet room and control room, Zone2: Preparation and waiting area) as per SFDA
Cx.Rad33	Availability of safety warning Labels/signs/posters indicating the existence risk of radiation
Cx.Rad34	Availability of radiation dosimetry tools/radiation-monitoring badges

Cx.Rad35	Availability of logs/records monitoring staff radiation exposure levels
Cx.Rad36	Availability of lead aprons, thyroid and gonad shields for staff and patients
Cx.Rad37	Availability of a file for each equipment in the department for quality assurance, monitoring and evaluation purposes containing (name, manufacturer, receiving and installation dates, operation manual, supplying contract, warranty/maintenance contract, results of acceptance tests and results of quality tests)
Cx.Rad38	Availability of crash carts as per the scope of services
Cx.Rad39	<b>Record Keeping</b>
Cx.Rad39.1	Availability of preventive, corrective and emergency maintenance records
Cx.Rad39.2	Availability of records for personnel monitoring
Cx.Rad39.3	Availability of performance evaluations of all equipment
Cx.Rad40	<b>Contingency Plan</b>
Cx.Rad40.1	Availability of a seven-day fail-safe contingency plans to address the following: PACS failure, equipment failure and any personnel issues
Cx.Rad40.2	Availability of FM200 in the PACS in the server room
Cx.Rad40.3	To follow with CBAHI standards

## INFORMATION TECHNOLOGY CHECKLIST

Cx.IT	Checklist Elements
Cx.IT1	<b>Infrastructure Requirements</b>
Cx.IT1.1	<b>The following requirements must be installed to assure readiness of Infrastructure but not limited to:</b>
Cx.IT1.1.1	Availability of Internal Network
Cx.IT1.1.2	Availability of Network devices
Cx.IT1.1.3	Availability of Network points
Cx.IT1.1.4	Availability of Optical fiber connection between buildings
Cx.IT1.1.5	Availability of Hardware
Cx.IT1.1.6	Availability of Computers
Cx.IT1.1.7	Availability of Peripheral devices
Cx.IT1.1.8	Availability of Connection
Cx.IT1.1.9	Availability of IP-VPN 1
Cx.IT1.1.10	Availability of IP-VPN 2
Cx.IT1.1.11	Availability of Dual Home
Cx.IT2	<b>HIS system</b>
Cx.IT2.1	Availability of all required HIS modules based on hospital scope of services
Cx.IT2.1.1	Timetable for implementation, testing and staff training
Cx.IT2.1.2	Availability of maintenance contract
Cx.IT2.1.3	Downtime policies and procedures
Cx.IT3	<b>PACS System</b>
Cx.IT3.1	<b>Availability of the following requirements to assure readiness of PACS System but not limited to:</b>
Cx.IT3.1.1	All functionality of PACS including interface with HIS
Cx.IT3.1.2	Timetable for implementation, testing and staff training
Cx.IT3.1.3	Availability of maintenance contract

## MEDICAL WASTE CHECKLIST

Cx.MW	Checklist Elements
Cx.MW1	<b>Hospital has a Healthcare Waste Management Unit</b>
Cx.MW1.1	Approved hospital Waste Management committee /activities or functions
Cx.MW1.2	Unit manager managing unit functions
Cx.MW1.3	Medical waste by contacted according to the laws and regulation
Cx.MW2	<b>Hospital has a Healthcare Waste Management Plan</b>
Cx.MW2.1	The classification of waste items generated by the hospital clearly
Cx.MW2.2	Identified and defined lists of hazardous and non-hazardous waste items
Cx.MW2.3	Standard Operating Procedure (SOP) available for waste management
Cx.MW2.4	Clear well controlled flow of hazardous healthcare waste from the sources of generation to the final treatment
Cx.MW2.5	Establishment of coordinated waste management plans for each department with the active participation of the departmental chiefs, head nurses or chief technicians
Cx.MW2.6	Regular inspection of the means of collection, transportation and storage through checklists monthly according to MOH Guideline
Cx.MW2.7	Approved waste spill management plan
Cx.MW2.8	Labelling of all medical waste bags/containers as per defined classifications
Cx.MW2.9	Labor working in medical disposal are well trained and vaccinated against blood borne pathogens
Cx.MW3	Availability of supplies (Stock of PPE, color coded bins and bags, trolleys) based on departmental needs
Cx.MW4	Availability of waste registry per category (pharmaceutical, radioactive, Laboratory pathogens, sharps) in the unit AND all departments
Cx.MW5	<b>Contracted housekeepers and/or environmental cleaning services</b>
Cx.MW5.1	Well-acquainted with the layout of the hospital and comprehend thoroughly the hospital waste management policy
Cx.MW6	<b>Staff Education and Awareness</b>
Cx.MW6.1	Availability of the hospital waste management guideline/manual
Cx.MW6.2	Continuous education regarding infection prevention and occupational health aspects of healthcare professionals
Cx.MW6.3	Consideration of the locations for collection, transportation and storage of these areas for the setting of individual departments, the flow of patients in ambulatory services, bed locations and number in wards
Cx.MW6.4	Access control to these areas restricted to healthcare staff only and be off bounds to patients and visitors
Cx.MW7	<b>Waste collection</b>
Cx.MW7.1	Collection receptacles must be particularly scrutinized for the kind of waste items disposed in them using checklists
Cx.MW7.2	Material Safety Data Sheet (MSDS) attached and list of drugs in container to accompany bin to waste area
Cx.MW7.3	Availability of wash area in the storage area after each collection
Cx.MW8	<b>Waste transportation</b>
Cx.MW8.1	Mapping and inspection of the storage areas and the route of transportation
Cx.MW9	<b>Waste Storage</b>
Cx.MW9.1	Disposal of waste items in the designated receptacles as per Saudi Building Code
Cx.MW9.2	Storage is carried out in utility rooms specially prepared for this purpose
Cx.MW9.3	Storage areas equipped with safety and fire protection system
Cx.MW10	<b>Waste Treatment</b>
Cx.MW10.1	Identify responsibility of treatment by an outsourced waste disposal service provider
Cx.MW10.2	Availability of an off-site for the final treatment of hazardous healthcare waste
Cx.MW11	<b>Record Keeping</b>
Cx.MW11.1	Availability of complete regular documentation of waste management activities done

Cx.MW11.2	Regular and routine audits of the outsourced waste disposal service provider are been conducted from collection to transportation, treatment and final disposal
Cx.MW12	Availability of a Contingency Waste Management Plan to deal with spills of hazardous healthcare waste and the possible failure of the final treatment method
Cx.MW13	To follow with CBAHI standards

## MEDICAL RECORD CHECKLIST

Cx.MR	Checklist Elements
Cx.MR1	The hospital has a policy for accessing Electronic Medical Record (Authorization)
Cx.MR2	There is a policy of initiation of a medical record for each patient with in first contact with the hospital with a unique number
Cx.MR3	Availability of Medical Record Auditing (Analysis and Assembly) system
Cx.MR4	Availability of Medical Coding system (ICD 10 AM)
Cx.MR5	Availability of Admission, discharge & transfer (ADT) System
Cx.MR6	The hospital has a system in place for monitoring completion of medical records
Cx.MR7	Availability of Appointment System
Cx.MR8	Availability of Electronic archiving system
Cx.MR9	The hospital has a policy for the retention of medical records in accordance with laws and regulations
Cx.MR10	The hospital develops and implements a policy for the release of medical records from the medical records department
Cx.MR11	To follow with CBAHI standards

## ENDOSCOPY UNIT CHECKLIST

Cx.ENDO	Checklist Elements
Cx.ENDO1	Outpatient entrance
Cx.ENDO2	Reception Area
Cx.ENDO3	Waiting area
Cx.ENDO4	Staff office room
Cx.ENDO5	Patient examination room
Cx.ENDO6	Patient preparation room
Cx.ENDO7	Staff changing rooms (male/female)
Cx.ENDO8	Scrubbing area
Cx.ENDO9	Inpatient entrance
Cx.ENDO10	Two separate entrance/exit doors /window should be provided to allow for the entry of clean instruments and for the removal of used endoscopes at the end of the procedure (The room should be adjacent to the first-stage recovery area)
Cx.ENDO11	There is negative pressure room for bronchoscope procedures
Cx.ENDO12	<b>Reprocessing area</b>
Cx.ENDO12.1	Dirty area separated under negative pressure good ventilated - The 'dirty' area should be equipped with at least one double sink unit -Handwashing facilities should also be provided -The 'clean' area of the endoscope cleaning room should contain the automated endoscope reprocessors (AER), or manual with controlled measures
Cx.ENDO12.2	Scope store area separated with store cabinet good ventilated under positive pressure
Cx.ENDO13	Recovery area (separate bays for men and women) (ECG machine - crush cart - gas cabinets)
Cx.ENDO14	Medical store good ventilated with fresh air with environmental control measures and has a monitor for temp & humidity
Cx.ENDO15	Clean utility room
Cx.ENDO16	Dirty utility room
Cx.ENDO17	Bathroom
Cx.ENDO18	Discharge area
Cx.ENDO19	To follow with CBAHI standards



## ENVIRONMENTAL CHECKLIST

Cx.En	Checklist Elements
Cx.En1	<b>Water Quality</b>
Cx.En1.1	Water tanks are clean and working well & water supply is safe
Cx.En1.2	Water pipes are clean and working well
Cx.En1.3	No Water leaks from distribution network or tanks
Cx.En2	<b>Sewage Treatment Plants</b>
Cx.En2.1	Secondary treatment or more is required
Cx.En2.2	Located away and opposite wind direction
Cx.En3	<b>Kitchen</b>
Cx.En3.1	Located in the basement or the ground floor
Cx.En3.2	The floors non-absorbent of materials, easy clean, no cracks
Cx.En3.3	Doors are waterproof and auto-opening
Cx.En3.4	Windows are designed to prevent dust and provide a suitable mesh wire to prevent insects
Cx.En3.5	Good lighting
Cx.En3.6	Good ventilation: checking HVAC system efficiency
Cx.En3.7	The presence of sinks for food and dishes washing (three phases)
Cx.En3.8	Adequate hand wash
Cx.En3.9	Eyewash stations
Cx.En3.10	Suitable foodstuff storage area
Cx.En3.11	Refrigerators and freezers work well
Cx.En3.12	Pest Control policy in place
Cx.En4	<b>Laundry</b>
Cx.En4.1	Located in the basement or the ground floor
Cx.En4.2	The dirty and clean area are completely separated
Cx.En4.3	Negative pressure in the dirty area
Cx.En4.4	The floors non-absorbent of materials, easy clean, no cracks
Cx.En4.5	Good lighting
Cx.En4.6	Good ventilation
Cx.En4.7	Eyewash stations
Cx.En4.8	Proper hand washing facilities
Cx.En4.9	A special area for keeping cleaning materials
Cx.En4.10	Special pathway and elevator to transport clothes
Cx.En4.11	Samples for new construction (air, water, environmental) are taken before operation
Cx.En4.12	Shelves above the ground to store clean clothes
Cx.En5	To follow with CBAHI standards

## MEDICAL EQUIPMENT CHECKLIST

Cx.ME	Checklist Elements
Cx.ME1	Ensure equipment & furniture are available & ready for operation as per MOH equipment standards
Cx.ME2	Ensure Availability of User manual and operation manual for Users
Cx.ME3	Availability of the equipment's list at the biomedical department
Cx.ME4	Available Approval certificates for all items
Cx.ME5	For computerized equipment's ensure a software copy and license key is available for users
Cx.ME6	Ensure manufacture Performance test result certificate is available
Cx.ME7	Ensure QA results & certificate are available
Cx.ME8	Ensure technical training for the users and certificates are available
Cx.ME9	Complete elements of the contract as follow: Operation, maintenance, Safety, security, Housekeeping & Warehouse employee as per the contract terms
Cx.ME10	Ensure Completed Testing and commissioning checklist (Certificate)
Cx.ME11	Ensure Availability of 3-month consumables inventory
Cx.ME12	Ensure installation as per approved build drawing
Cx.ME13	Ensure the Availability of the following requirements (Asset identification, warranty information, Performance test pass, Electrical safety pass, Next PPM due date Labels) for all items
Cx.ME14	Ensure the delivery agreement include all required documents including the manufacture recommendations in both languages (Arabic and English)
Cx.ME15	Ensuring the medical device technical support information from vendor is submitted (address, person in-charge, telephone and mobile number, fax number, email, medical device registration number and any relevant information)
Cx.ME16	Ensure that the medical device is exactly as ordered and corresponds with delivery note
Cx.ME17	Verifying of quantity, specification, consumable item and accessories delivered as stated in the purchase agreement
Cx.ME18	Ensure the equipment has successfully undergone performance and safety tests with documented results
Cx.ME19	Ensure the Availability of technical training certificate (instalment, troubleshot, service, repair, and maintain equipment and instruments) to the technical personnel provided
Cx.ME20	Ensure visual inspection documents of the device or equipment for physical damage Incompleteness, misassemble, void, wear and/ or abuse
Cx.ME21	Availability of product recall process
Cx.ME22	Documented verification of Calibration test report and calibration certificate of the medical device
Cx.ME23	Ensure installation as per approved a-build drawing
Cx.ME24	Updated risk assessment as needed
Cx.ME25	Ensure documented approval of Radiation & Magnetic shielding, Vault room concrete wall & sLab by accredited Engineer
Cx.ME26	Ensure Building utilities & services T&C Conducted (HVAC, Chilled water, heat exchanger, domestic water, drainage, medical gases, IT/LAN & Electrical Power)
Cx.ME27	Ensure RF, AC/DC interference & Vibration test conducted & pass all requirements for MRI, PET-CT & other sensitive Medical equipment
Cx.ME28	Ensure the finished floor complete with all provisions for medical equipment installation such as base plates, fixing bolts, shielding, electrical trunking for power and controls, compressed air gases and other building services requirement for the equipment operation as required by the equipment vendor
Cx.ME29	Ensure documented Air quality, Room and above ceiling cleanliness for the whole floor served by AHU passed infection control department requirements and property maintained up to preliminary handover
Cx.ME30	Documented Environmental Department clearness of pest control measures
Cx.ME31	Ensure Purge vent for MRI installed and tested
Cx.ME32	Ensure documented Room temperature and humidity functioning. T&C completed and passed

Cx.ME33	Ensure stable Electrical power and grounding system compliance to equipment manufacturer requirement installed and completed for all equipment components and other metallic components
Cx.ME34	Ensure Power supply contains proper local disconnect with over current protection and lock out/tag- out provisions
Cx.ME35	Ensure Suitable steel support for mounting equipment available from walls or ceiling
Cx.ME36	Ensure all architectural finishing work such as fixed cabinet, panting, sinks, and floor finishing completed as per contract
Cx.ME37	Ensure IT/Network requirements for connection to facility network, Patient Information System, workstations, PACS, and filming cameras available and fully commissioned
Cx.ME38	Ensure Fire Detection, Alarm System, Sprinklers or other approved firefighting system installed and commissioned by the Building Contractor and (passive and active fire protection) Clearances, workspace, and egress meets local and international regulatory requirements for Fire/ Life Safety and evacuation
Cx.ME39	Ensure emphasize on Do(s) and Don't(s) include decontamination & Sterilization procedures as per the approved manual
Cx.ME40	Ensure Availability of all warranties & periodic certificates for all items
Cx.ME41	Ensure documented proof of installation, testing and commissioning by the specialist
Cx.ME42	Ensure quantities, specification & condition as per the contract
Cx.ME43	Ensure Operation catalogue, Service & Spare part are available
Cx.ME44	Ensure built drawing are available & approved by project manager
Cx.ME45	To follow with CBAHI standards

## HOSPITAL LAYOUT CHECKLIST

Cx.HL	Checklist Elements
Cx.HL1	<b>Layout of the hospital</b>
Cx.HL1.1	The hospital Layout is matched with the Floor Plan
Cx.HL1.2	Current Hospital Building as per the approved design
Cx.HL2	<b>Site plan</b>
Cx.HL2.1	Availability of Car Parking as per standard (2.5 X # of bed)
Cx.HL2.2	Handicap parking (OPD, Main Entrance, ER)
Cx.HL2.3	Availability of suitable entrance and flow for handicap patients (handicap ramp)
Cx.HL2.4	3 Main Entrance (Public, Emergency & Services)
Cx.HL2.5	CCTV System to cover at least 50% of the hospital locations
Cx.HL2.6	Security Office to manage Entrance and Exit
Cx.HL2.7	Signage Outdoor (Wayfinding)
Cx.HL2.8	Helicopter landing Zone
Cx.HL2.9	Electricity System is functioned and maintained
Cx.HL2.10	Generator System is functioned and maintained
Cx.HL2.11	Availability Outdoor night lightening
Cx.HL2.12	The completion of asphalt works
Cx.HL2.13	Availability of Gardens (Hospital Healing Environment)
Cx.HL3	<b>Main Hospital building</b>
Cx.HL3.1	Indoor Air Quality in special areas with proper monitoring as per Cx.IC Standards
Cx.HL3.2	Availability of Furniture, Furnishings & Equipment (FF&E)
Cx.HL3.3	Furniture layout facilitating communication
Cx.HL3.4	Comfortable Furniture
Cx.HL3.5	Communications system is well defined
Cx.HL3.6	Cleanliness of the whole hospital sites
Cx.HL3.7	Signage Indoor (Wayfinding)
Cx.HL3.8	Color aids for Wayfinding
Cx.HL3.9	Risk assessment for building readiness
Cx.HL3.10	HVAC system and material selection as per Infection Control Requirements
Cx.HL3.11	There are suitable access control systems for certain areas as per need
Cx.HL3.12	BMS is functioning and maintained
Cx.HL3.13	Security System is functioning and maintained
Cx.HL3.14	Availability of Synchronized Clock System
Cx.HL3.15	Availability of waiting time information (Screen/board)
Cx.HL3.16	Amenities (Appropriate and suitable waiting room, bathroom, play room, pray room, vending machine etc.)
Cx.HL3.17	Availability of Hand hygiene Facilities (Sinks and/or Gel Dispenser)
Cx.HL3.18	Appropriate size of receptions, registration, nursing units etc.
Cx.HL3.19	Kiosk or display for information access
Cx.HL3.20	ATM machine
Cx.HL4	To follow with CBAHI standards

## FIRE SAFETY CHECKLIST

Cx.FS	Checklist Elements
Cx.FS1	Fire Zoning
Cx.FS1.1	Life Safety drawings approved by civil defense
Cx.FS1.2	Fire rated partitions extended above false ceiling
Cx.FS1.3	Fire rated doors as per approved drawing and the fire rating hours in shown on door Label
Cx.FS1.4	Any openings in fire rated partition shall be sealed with approved fire stop material
Cx.FS1.5	Fire dampers installed in HVAC ducts
Cx.FS1.6	Cladding and interior finishing are fire rated
Cx.FS2	Fire Fighting
Cx.FS3	Fire Protection drawings approved by civil defense
Cx.FS4	Electrical Fire Pump are UL/FM and the pump capacity and head are as per approved hydraulic calculation, Pumps are in good working condition
Cx.FS5	Diesel Fire Pump are UL/FM and the pump capacity and head are as per approved hydraulic calculation, Pumps are in good working condition
Cx.FS6	Jockey Pumps are in good working condition
Cx.FS7	PPM are shown/mentioned on pumps
Cx.FS8	Sprinkler system is provided throughout the whole hospital
Cx.FS9	Floor control valve assembly is provided for each floor
Cx.FS10	Landing valves are provided in emergency exit staircases
Cx.FS11	Fire Department Connection are provided
Cx.FS12	Fire Hydrant are Provided
Cx.FS13	Gas suppression system is provided (mention the room names for which the gas suppression system is installed)
Cx.FS14	Generators are in good working condition (mention the number of generators and the model)
Cx.FS15	PPM are shown/mentioned on Generators
Cx.FS16	NOVEC 1230 / FM 200 Gas suppression system is provided for (server room-communication room-medical archive room)
Cx.FS17	CO2 Gas suppression system is provided for rooms located outside the Main Building (Generator Rooms - Transformer room - Switchgear Room/Main electrical Room)
Cx.FS18	No Faults or Troubles are indicated on gas suppression Fire Alarm Control Panel and the panel is connected to the Main Fire alarm Panel
Cx.FS19	Gas Cylinder Pressure is indicated within green zone
Cx.FS20	Wet chemical system is provided for Kitchen Hood
Cx.FS21	Fire Alarm
Cx.FS22	Fire Alarm drawings approved by civil defense
Cx.FS23	Fire Alarm System is of addressable type
Cx.FS24	No faults or troubles are indicated on Fire Alarm Control Panel
Cx.FS25	Fire Alarm system is provided throughout the hospital
Cx.FS26	Fire Alarm System is interfaced with Elevators
Cx.FS27	Fire Alarm System is interfaced with HVAC
Cx.FS28	Smoke Detectors are in good working condition
Cx.FS29	Heat Detectors are in good working condition
Cx.FS30	Manual Pull Station are in good working condition
Cx.FS31	Are smoke detectors distributed properly (spacing between detectors are as per approved drawing and git should not exceed 9.1 m)
Cx.FS32	Interface of fire alarm with emergency doors
Cx.FS33	Life Safety (Emergency Exit)

Cx.FS34	Emergency Exits are sufficient as per approved drawing
Cx.FS35	Emergency exits are not locked and easily accessible
Cx.FS36	Distance between emergency exits is as per approved drawing
Cx.FS37	Illuminated Exit Signs are provided
Cx.FS38	No obstructions exist in the means of egress
Cx.FS39	Evacuation plan exist are visible to all occupants
Cx.FS40	Portable Fire Extinguishers are provided as per approved drawing and easily accessible
Cx.FS41	Fire Hose Cabinets are provided as per approved drawing and easily accessible
Cx.FS42	Water is available in Fire Hose Cabinet
Cx.FS43	Entrance gate size can accommodate Fire Engine Truck
Cx.FS44	Life Safety (Stairs)
Cx.FS45	Are emergency exit staircase as per Project specification and width as per shown on drawing
Cx.FS46	Emergency exit stair handrail are in good condition
Cx.FS47	Emergency exit Doors are self-closing
Cx.FS48	Emergency exit doors open towards means of egress
Cx.FS49	Emergency exit stair case enclosure is fire rated, any opening is fire rated
Cx.FS50	Emergency exit Stair Case are as per approved drawings
Cx.FS51	Ramps are as per Project specification
Cx.FS52	Lighting the escape stairs enough Regular and emergency lighting
Cx.FS53	All Electrical lines are kept in safe environment
Cx.FS54	All wires all over the hospital must be intact
Cx.FS55	All electrical outlet must not be overloaded
Cx.FS56	All Plugs should be Labeled
Cx.FS57	<b>Training</b>
Cx.FS57.1	Hospital Staff are trained for emergency evacuation
Cx.FS57.2	Hospital Staff are trained to use fire extinguishers
Cx.FS57.3	Authorized person is responsible for shutting down electrical power in case of emergency
Cx.FS57.4	Hospital Staff are trained to use fire extinguishers
Cx.FS58	To follow with CBAHI standards

## INFECTION CONTROL CHECKLIST

Cx.IC	Checklist Elements
Cx.IC1	<b>Administrative Work</b>
Cx.IC.1.1	The hospital has an Infection Control director responsible for directing all aspects of the Infection Control department
Cx.IC.1.2	Infection Control management director is qualified by education, training, and experience at least 2 years
Cx.IC.1.3	There are infection Control program and Approved I.C. manual
Cx.IC2	<b>Hand Hygiene facilities</b>
Cx.IC2.1	At least one easily accessible hand washing sink for every 2-4 beds in the critical care areas (if designed as open areas without physical barriers) and one sink per patient's room (if designed as private room for one patient)
Cx.IC2.1.1	Surgical Scrub Sink: A long and deep sink that can accommodate one or more staff scrubbing for a sterile procedure at the same time. The tapware is wall mounted with hands-free operation (mandatory-elbow, foot or electronic). This sink is used in operating rooms (OR) and required to be equipped with scrub brushes and antiseptic soap dispensers.
Cx.IC2.1.2	Type A A large "Clinical Scrub" type. The tapware is wall mounted with hands-free operation (mandatory-elbow, foot or electronic). This hand washing basin is used in areas requiring clinical hand washing for sterile procedures (e.g., ICUs and Cardiac Catheterization units)
Cx.IC2.1.3	Type B A general staff hand washing basin that is medium sized and wall mounted. The tapware is either wall mounted, or basin mounted with hands-free operation (optional - elbow or wrist). This basin is used in areas requiring general hand washing of HCWs (e.g., isolation rooms, in-patient units and corridors)
Cx.IC2.1.4	Type C A staff hand washing basin that is small sized and wall mounted. The tapware is either wall mounted, or basin mounted with hands-free operation (optional-elbow or wrist). This HW basin is used in areas requiring general hand washing of the staff, (e.g., staff amenities and toilet areas)
Cx.IC2.2	Soap dispenser(s), which should be suitable for using disposable bags of plain or antimicrobial soap (i.e., non-refillable dispensers)
Cx.IC2.3	Dispensers of scrub brushes and antiseptic soap (i.e., non-refillable dispensers)
Cx.IC2.4	Dispenser(s) of disposable paper towels (types B & C)
Cx.IC3	<b>Airborne Infection Isolation Room (AIIR)</b>
Cx.IC3.1	There is a clinical hand washing facility with hands free control inside the patient's room (or outside the patient's room in the anteroom if available)
Cx.IC3.2	Patient's room is provided with private toilet and shower (for isolation room in ICU, NICU, CCU toilet and shower are optional)
Cx.IC3.3	Walls & floors are made of materials that are easily cleanable & disinfected, with rounded angles between walls & floors Examples: e.g., slip resistant vinyl floors, acrylic washable walls, etc..
Cx.IC3.4	Number of required Airborne Infection Isolation Rooms (AIIRs): At least one Airborne Infection Isolation Room (AIIR) for every 25 beds in general wards (one AIIR at least)
Cx.IC3.5	At least one Airborne Infection Isolation Room (AIIR) for each 12 beds in the emergency room (one AIIR at least)
Cx.IC3.6	At least one Airborne Infection Isolation Room (AIIR) for each 8 beds in the ICU/PICU departments (one AIIR at least)
Cx.IC3.7	At least one Airborne Infection Isolation Room (AIIR) in the NICU department
Cx.IC3.8	<b>Airborne Infection Isolation Room (AIIR) should fulfill the following specifications</b>

Cx.IC3.8.1	All the above mentioned MOH specifications for standard isolation single room
Cx.IC3.8.2	Patient's room should be under negative pressure (pressure difference between the patient's room and the corridor = at least -2.5 Pascal)
Cx.IPC3.8.3	To maintain pressure difference between the patient's room and the corridor the following requirements are essential:
Cx.IC3.8.3.1	• Windows must be sealed and fixed (i.e., could not be opened)
Cx.IC3.8.3.2	• Openings in walls and ceiling should be sealed and airtight
Cx.IC3.8.3.3	• Doors are required to be properly designed and well-sealed
Cx.IC.3.8.4	100% fresh air supply from central AC or concealed separate unit (i.e. return of air is not permitted)
Cx.IC.3.8.5	Air is totally exhausted to outside (100%) through High-Efficiency Particulate Air (HEPA) filters
Cx.IC.3.8.6	Air exchange of Airborne Infection Isolation Room (AIIR) should be 12 air changes per hour or more ( $\geq 12$ ACH)
Cx.IC.3.8.7	The exhaust air ducts are independent of the building exhaust air system
Cx.IC.3.8.8	All components of AIIR ventilation unit (supply & exhaust) are connected to emergency power supply to maintain negative air pressurization in the event of power failure
Cx.IC3.9	Fixed monitor outside AIIR in the corridor to continuously monitor the negative pressure $\pm$ air changes per hour, with audiovisual alarm that is activated when the ventilation system fails
Cx.IC4	<b>Aseptic Technique</b>
Cx.IC4.1	Each patient care area should have a separate clean area for preparation of medications. This area must be away from patients' treatment areas, and properly arranged & maintained
Cx.IC5	<b>Housekeeping &amp; Hospital Environment</b>
Cx.IC5.1	Each patient care department should have separate clean and dirty utility rooms
Cx.IC5.2	Medical departmental Stores
Cx.IC6	<b>Medical store in the patient care should be consistent with the following approved specifications:</b>
Cx.IC6.1	Adequate capacity and secured against unauthorized access
Cx.IC6.2	Regularly cleaned, and properly arranged & maintained away from contamination, air vents and direct sunlight
Cx.IC6.3	Controlled ventilation with adjusted temperature and humidity (Temp: 22 - 24 °C / RH: up to 70%)
Cx.IC6.4	Provided with appropriate storage shelves • Storage shelves are at least, 40 cm from the ceiling, 20 cm from the floor, and 5 cm from the wall • Storage shelves are made of easily cleanable material, e.g., fenestrated stainless steel, Aluminum or hard plastic
Cx.IC7	<b>Hemodialysis Unit (HD)</b>
Cx.IC7.1	The minimum floor area of an individual hemodialysis patient's station is 80 feet (about 9 m <sup>2</sup> ) and the distance separating adjacent dialysis chairs/beds is not less than 1.2 m
Cx.IC7.2	Special room is available for Central Venous Catheter CVC insertion, and it is equipped with appropriate hand washing facility
Cx.IC7.3	At least one easily accessible hand washing sink for every 2-4 beds, if the unit is designed as open areas without physical barriers / One sink per patient's room, if the unit is designed as private rooms (i.e., one room for each patient)
Cx.IC7.4	With the presence of HVB Positive patients, unit should have separate room(s), to dialyze them by dedicated staff during dialysis sessions using designated machines, equipment, instruments, supplies and medications which are used only for them
Cx.IC8	<b>Dialysis Respiratory Triage Pathway</b>
Cx.IC8.1	Dialysis Respiratory Pathway (Respiratory Zone): a designated path for capturing, early detection, management, and dialyzing (or transfer when needed) of dialysis patients or individuals accompanying them with respiratory illness and/or suspected for MERS-COV or 2019n-COV (Respiratory Triage - Respiratory Waiting Area - Isolation Room(s))
Cx.IC8.2	Respiratory Triage Area: a special area facing the entrance of hemodialysis unit with required equipment and supplies (for capturing of dialysis patients or individuals accompanying them with respiratory symptoms)



Cx.IC8.3	Respiratory Waiting Area This area should fulfill the following specifications: 1) Fixed chairs with minimal distance 1.2-meter in-between chairs 2) Multilanguage posters for health educations: Respiratory hygiene & cough etiquette 3) Availability of Alcohol hand rub & medical waste bin
Cx.IC8.4	Respiratory Triage Pathway (Respiratory Zone) should include at least one Airborne Infection Isolation Room (AIIR) with all the above mentioned specifications or one single room with portable HEPA filter with all required isolation signs to pick up patients suspected for MERS-COV or 2019n-COV and provide care for them. (AIIR is essential for chest x-ray, swabbing and any Aerosol generating procedures (AGP)) Otherwise a written protocol is available and strictly applied to transfer patients to another healthcare facility to get their dialysis sessions while applying airborne infection isolation precautions
Cx.IC8.5	Dialysis Respiratory Pathway (Respiratory Zone) is preferably to have a Portable chest x-ray to be used when required
Cx.IC9	<b>Operating Room (OR) There is a clear demarcation between unrestricted, semi-restricted and restricted zones of OR</b>
Cx.IC9.1	Unrestricted area with limited public access that may include: <ul style="list-style-type: none"> <li>• Central control point: to monitor the entrance of patients, personnel, and materials from the unrestricted area into the semi-restricted area</li> <li>• Locker rooms that lead into semi-restricted area</li> <li>• Pre-operative admission area</li> <li>• Offices &amp; waiting areas</li> <li>• Post-anesthesia care units (PACUs)</li> </ul>
Cx.IC9.2	Semi-restricted area that includes: <ul style="list-style-type: none"> <li>• Corridors leading from the unrestricted area to the restricted area of the surgical suite</li> <li>• Storage areas for clean and sterile supplies</li> </ul>
Cx.IC9.3	Restricted area: A designated space with restricted access that can be reached only through a semi-restricted
Cx.IC9.4	OR floors, walls and ceiling are formed of one piece without connections, cracks, or decorative parts with minimal openings that are completely sealed and that made of materials that withstand repeated cleaning and disinfection
Cx.IC9.5	<b>OR ventilation system should be consistent with the following approved specifications</b>
Cx.IC9.5.1	1) Operates all the time and never shuts down (only central controls = no peripheral or local controls)
Cx.IC9.5.2	2) Air is introduced from the ceiling and exhausted near the floor
Cx.IC9.5.3	3) All re-circulated or fresh air is filtered through High-Efficiency Particulate Air (HEPA) filters
Cx.IC9.5.4	4) Provides positive pressure inside operating theater(s) (at least +2.5 Pascal, with respect to corridors)
Cx.IC9.5.5	5) Provides $\geq 20$ air changes per hour (ACH) inside operating theater(s) with 20% fresh air
Cx.IC9.5.6	6) Adjusted temperature and humidity: temperature ranges from 21 - 24 °C and relative humidity 20% - 60%
Cx.IC10	<b>Laboratory</b>
Cx.IC10.1	Restricted access for authorized personnel only (with universal biohazard symbol posted at the entrance)
Cx.IC10.2	There is at least one Biological Safety Cabinet class II-B (BSC - Class II-B) for proper containment during manipulations of infectious materials that may generate aerosols. Biological Safety Cabinet should be installed away from staff traffic, air currents, doors and windows
Cx.IC10.3	Each work area should have dedicated appropriate hand washing sink, which is equipped with emergency eyewash facility for immediate use in case of exposure to blood, body fluids and chemicals. These sinks are apart from working sinks used for handling body fluids and chemicals
Cx.IC10.4	Specimen collection and receiving area(s) should have dedicated appropriate well-equipped hand washing sink(s)

Cx.IC10.5	Microbiology Laboratory that manipulates cultures suspected or confirmed to contain Mycobacterium tuberculosis complex is at least Biosafety Level III Laboratory (BSL-3 Laboratory) with the following specifications
Cx.IC10.5.1	1) Separate suit specifically designed for mycobacterial culture: isolated from other parts of the building or the department with restricted entrance through an anteroom
Cx.IC10.5.2	2) Biological Safety Cabinet Class III, or Class II-B with exhaust air discharged to outside through High-Efficiency Particulate Air (HEPA) filters
Cx.IC10.5.3	3) One-pass (non-recirculating) isolated ventilation system with directional airflow from clean to least clean areas and exhaust air filtered through High-Efficiency Particulate Air (HEPA) filters
Cx.IC10.5.4	4) Mycobacteriology Laboratory must be under negative pressure - 2.5 Pascal air changes per hour (6 – 12 ACH)
Cx.IC10.5.5	5) Mycobacteriology Laboratory should be equipped with ventilation monitoring device (to record negative pressure differences $\pm$ air exchanges per hour ACH)
Cx.IC10.6	Microbiology Laboratory must have an autoclave which is placed in appropriate location and fulfils all quality control parameters for autoclaving these cultures within the Laboratory before disposal
Cx.IC11	<b>Dental Services</b>
Cx.IC11.1	Dental Records
Cx.IC11.2	Complete Dental Unit
Cx.IC11.3	Dental Cabinet
Cx.IC11.4	Intra-oral/Dental x-ray unit with Sensor and Computer Desktop
Cx.IC11.5	Diagnostic instruments set
Cx.IC11.6	Restorative instruments set
Cx.IC11.7	Surgical instruments set include (Forceps, Elevators and Suture)
Cx.IC11.8	Handpieces (high-speed, Low-speed and, straight)
Cx.IC11.9	Ultrasonic Scaler Hand-Piece
Cx.IC11.10	Infection Control Manual in Dental Clinic
Cx.IC11.11	Infection Control Supplies and Requirements
Cx.IC11.12	Certified Dentist according the Specialty and job Description
Cx.IC11.13	Certified (Dental Assistant or Nurse)
Cx.IC11.14	A special store is available for sterilized instruments
Cx.IC11.15	Water treatment unit with RO as the main component is available for the water entering the dental chair(s)
Cx.IC11.16	Air and water filters and dental chairs' filters should be installed and changed according to manufactures' instructions
Cx.IC11.17	Dental Laboratory should be specially designed as three physically separated working areas: receiving area -production area - shipping area
Cx.IC11.18	Receiving area should have utility sink(s) for washing received items and dedicated well equipped sink(s) for hand washing
Cx.IC.12	<b>Dietary Services</b>
Cx.IC12.1	Kitchen is designed as physically separated areas with specified equipment & supplies (e.g., Mixers, juicers, boards, plates, knives, etc.) for different types of food
Cx.IC12.2	Boards, plates and knives used to cut meat, poultry, fish or vegetables are identifiably separated (color-coded).
Cx.IC12.3	Each work area should have dedicated appropriate hand washing sink(s) and/or hand rub antiseptic dispenser(s)
Cx.IC13	<b>Laundry</b>
Cx.IC13.1	Laundry should be designed as two physically separated zones (Clean & Dirty Zones) Work flow should be Unidirectional Flow from Dirty to Clean areas with traffic control signs (soiled or dirty area clean area)

Cx.IC13.2	Optional: • laundry is preferred to be equipped with Double Doors Washing Machines to ensure complete physical separation between clean & dirty Zones
Cx.IC13.3	• Dirty Area is maintained at negative pressure (- 2.5 Pascal) to eliminate the spread of infectious agents into the surrounding environment • Clean Area is maintained of clean, stored linen
Cx.IC13.4	Each working area should have dedicated appropriate and easily accessible hand hygiene facilities (hand washing sink(s) and/or hand rub antiseptic dispenser(s)) • Dirty Area: at least one dedicated appropriate hand washing sink ± hand rub antiseptic dispenser(s) • Clean Area: hand rub antiseptic dispenser(s) is(are) preferred
Cx.IC13.5	Carts used for collection & transport for clean and dirty linen are clearly identified (either color- coded or clearly identified with special symbols)
Cx.IC14	<b>The Mortuary</b>
Cx.IC14.1	Each working area should have dedicated appropriate and easily accessible hand hygiene facilities (i.e., hand washing sink(s) and/or hand rub antiseptic dispenser(s))
Cx.IC14.2	The mortuary should be of adequate space, well organized, and ventilated
Cx.IC15	<b>ER Respiratory Triage Pathway</b>
Cx.IC15.1	ER Respiratory Pathway (Respiratory Zone): a designated path for capturing, early detection, and management (or transfer when needed) of individuals with respiratory illness and/or suspected for MERS-COV or 2019n-COV (Respiratory Triage - Respiratory Waiting Area - Respiratory Clinic - Isolation Room(s))
Cx.IC15.2	Respiratory Triage Area: a special area facing ER entrance with required equipment and supplies (for capturing individuals with respiratory symptoms passing through ER entrance)
Cx.IC15.3	Respiratory Waiting Area: an area for waiting of all individuals suspected of MERS-COV form or 2019n-COV form, until being evaluated by trained physician for case definition of MERS-COV and 2019n-COV in the Respiratory Clinic This area should fulfill the following specifications: 3) Fixed chairs with minimal distance 1.2-meter in-between chairs 4) Multilanguage posters for health educations: Respiratory hygiene & cough etiquette
Cx.IC15.4	Respiratory Clinic: single patient clinic to pick up cases suspected for MERS-COV or 2019n-COV. This clinic should be provided with all required equipment and supplies + Portable HEPA filters, otherwise a written protocol that is applied to transfer patients to an AIIR in another department outside ER to perform chest x-ray, swabbing or any Aerosol generating procedures (AGP) while applying airborne infection isolation precautions
Cx.IC15.5	Respiratory Triage Pathway (Respiratory Zone) should have a Portable chest x-ray to be used when needed
Cx.IC16	<b>Central Sterilization Services Department (CSSD)</b>
Cx.IC16.1	Each hospital must have CSSD (none of the sterilization activities are carried out by individual departments outside CSSD)
Cx.IC16.2	CSSD surface area should be at least 0.7 m <sup>2</sup> to 1 m <sup>2</sup> for every bed (example: in a hospital of 500 beds capacity, we need a CSSD with total surface area between 350 m <sup>2</sup> and 500 m <sup>2</sup> )
Cx.IC16.3	CSSD is preferred to be in the ground floor or the underground floor (because of its heavy equipment)
Cx.IC16.4	CSSD is required to be easily accessible from all departments specially the Operating Room Optional: CSSD is preferred to be directly connected to the Operating Room through 2 elevators: - Elevator between the Operating Room and the decontamination area of CSSD to receive dirty instruments - Elevator between the storage & dispensing area of CSSD and the Operating Room to send sterilized instruments.

Cx.IC16.5	CSSD entrance should lead to changing rooms for CSSD staff before going inside to different working areas
Cx.IC16.6	CSSD is divided into 2 Zones (Clean & Dirty Zones) with complete physical separation between the Clean Zone (Preparation & Packaging areas, Sterilizers' Loading & Unloading areas, and Storage & Dispensing areas) and Dirty Zone (Receiving & Decontamination area) Optional: CSSD is preferred to be divided into 3 Zones with complete physical separation between these zones <ul style="list-style-type: none"> <li>• First Zone (Receiving &amp; Decontamination area)</li> <li>• Second Zone (Preparation &amp; Packaging areas, and Sterilizers' Loading areas)</li> <li>• Third Zone (Sterilizers' Unloading areas, Storage areas, and Dispensing areas)</li> </ul>
Cx.IC16.7	Work flow should be Unidirectional Flow from Dirty to Clean areas with traffic control signs
Cx.IC16.8	CSSD should be equipped with closed carts that are used to transport items safely: <ul style="list-style-type: none"> <li>- Transport of contaminated items from different departments to CSSD</li> <li>- Transport of sterilized items from CSSD to different departments (after being cleaned and disinfected after each use)</li> </ul>
Cx.IC16.9	CSSD should be equipped with the following equipment (Washer Disinfectors WD, Ultrasonic cleaners, drying cabinet, Sterilizers, sealer machines, ...etc.) Optional: <ul style="list-style-type: none"> <li>• CSSD is preferred to be equipped with Double Doors Washer Disinfectors to ensure complete physical separation between: <ul style="list-style-type: none"> <li>- Clean &amp; Dirty Zones in the Two-zones model</li> <li>or</li> <li>- First &amp; Second Zones in the Three-zones model</li> </ul> </li> <li>• CSSD is preferred to be equipped with Double Doors Sterilizers (to ensure complete physical separation between Second &amp; Third Zones in the Three-zones model)</li> <li>• CSSD is preferred to be equipped with a computerized system for tracking of reprocessing of instruments and items with recall of unsterilized ones.(or manual registration if the system is not available)</li> </ul>
Cx.IC16.10	The Decontamination Area is equipped with double or triple deep sink(s), which is(are) used for the manual cleaning of instruments. This(these) sink(s) is(are) apart from hand washing sink(s) that is(are) dedicated to hand hygiene Decontamination Area should have at least one dedicated appropriate hand washing sink.
Cx.IC16.11	The Decontamination Area is equipped with emergency eyewash safety station that is accessible within 30 meters or 10 seconds of potential chemical exposure.
Cx.IC16.12	The Decontamination Area is maintained at negative pressure (- 5 Pascal) $\pm$ 5%, with 10 air changes per hour at least, temperature ranges from 18 °C to 20 °C and relative humidity from 35% to 60%
Cx.IC16.13	All surfaces, walls & floors are made of solid and non-porous materials, which are easy to clean and withstand frequent cleaning & disinfection
Cx.IC16.14	Each working area should have dedicated appropriate and easily accessible hand hygiene facilities (hand washing sink(s) and/or hand rub antiseptic dispenser(s)) <ul style="list-style-type: none"> <li>• First Zone (Receiving &amp; Decontamination area): at least one dedicated hand washing sink <math>\pm</math> hand rub antiseptic dispenser(s)</li> <li>• Second Zone (Preparation &amp; Packaging areas, and Sterilizers' Loading areas): hand rub antiseptic dispenser(s) is(are) preferred</li> <li>• Third Zone (Sterilizers' Unloading areas, Storage areas, and Dispensing areas): hand rub antiseptic dispenser(s) is(are) preferred</li> </ul>
Cx.IC16.15	The Preparation & Packaging Area is maintained at positive pressure (+ 5 Pascal) $\pm$ 5%, with 10 air changes per hour at least, temperature ranges from 20 °C to 24 °C and relative humidity from 35% to 60%
Cx.IC16.16	The sterile storage area is maintained at positive pressure (+ 5 Pascal) $\pm$ 5%, with 4 air changes per hour at least, temperature ranges from 20 °C to 24 °C and relative humidity up to 70%

Cx.IC17	Occupational Health Clinic
Cx.IC17.1	There is a special clinic for employee health that provides pre- employment counseling and screening, immunization, post exposure management and work restriction
Cx.IC17.2	There is a written policy and procedures for employee's health issues (pre-employment counseling and screening, immunization, post exposure management and work restriction)
Cx.IC17.3	The immune status of newly hired staff against hepatitis B, measles, mumps, rubella and varicella are determined by documented vaccination. Serological evidence of immunity documented clinical/Laboratory evidence of disease with life immunity. Appropriate vaccine is administered to those who are susceptible
Cx.IC17.4	There is an implemented system for reporting, follow up and management of exposure to open pulmonary TB. MERS-COV. chicken pox, measles, mumps and rubella
Cx.IC17.5	The screening, immunization, post exposure management data are kept in staff medical records
Cx.IC17.6	Exposed health care workers are isolated when needed (either home isolation staff accommodation or identified rooms in the hospital for HCWs isolation)
Cx.IC17.7	Approved MOH policies for work restriction are applied
Cx.IC18	To follow with CBAHI standards

## PHARMACY CHECKLIST

Cx.Ph	Checklist Elements
Cx.Ph1	<b>Main Items in Pharmacy</b>
Cx.Ph1.1	A written hospital drug formulary is available
Cx.Ph1.2	Prescriptions (Manual VS Electronic) In/out patient completed with full patient profile
Cx.Ph1.3	All drugs are Labeled according to the policy
Cx.Ph1.4	Labeling must be computerized & no hand written Labeling is carried out
Cx.Ph1.5	Availability of temperature and humidity monitor
Cx.Ph1.6	Limited access to pharmacy
Cx.Ph1.7	All refrigerator (s) - connected to emergency power supply (alarm system)
Cx.Ph1.8	Proper waste management system
Cx.Ph1.9	Trash cans (regular, hazardous and sharp containers)
Cx.Ph1.10	List for Crash Cart Distribution allover hospital areas
Cx.Ph2	<b>In-Patient Pharmacy</b>
Cx.Ph2.1	Receiving Physician Orders area
Cx.Ph2.2	Processing Physician Orders area
Cx.Ph2.3	Packaging Areas for ready to dispense area
Cx.Ph2.4	Shelves for storing Medication
Cx.Ph2.5	Refrigerator (s) and their Monitors
Cx.Ph2.6	Freezer (if applicable)
Cx.Ph2.7	Discharge area
Cx.Ph3	<b>Unit Dose Area</b>
Cx.Ph3.1	Adequate Medication Preparation Area (s) for unit dose
Cx.Ph3.2	Available Medication trolleys (carts based on bed capacity)
Cx.Ph3.3	Available unit dose machine (s) "Prepackaging machine"
Cx.Ph3.4	Shelves for storing Unit Dose Medication
Cx.Ph4	<b>Extemporaneous Compounds area</b>
Cx.Ph4.1	Required materials for extemporaneous compounds
Cx.Ph4.2	Stainless steel Sink
Cx.Ph4.3	Hazardous cabinet (if applicable)
Cx.Ph4.4	Eyewash\shower
Cx.Ph4.5	Spell kit
Cx.Ph5	<b>IV Room</b>
Cx.Ph5.1	Anti-room with PPE area and sink
Cx.Ph5.2	Positive pressure/monitor (the pressure differential more than 2.5 Pa and ideally should be 8 Pa)
Cx.Ph5.3	Laminar flow hood (s)
Cx.Ph5.4	IV room design as per (USP797 & USP800)
Cx.Ph5.5	Wall, ceiling, floor and light coated and easy cleaning
Cx.Ph5.6	Double door refrigerator (s)
Cx.Ph5.7	TPN supply requirement (TPN filters, Filter needles and all required utilities)
Cx.Ph5.8	TPN Services compounding machine
Cx.Ph5.9	Monitor for humidity and temperature
Cx.Ph5.10	House-keeping services
Cx.Ph6	<b>Out Patient Pharmacy</b>
Cx.Ph6.1	Prescriptions (Manual VS Electronic)
Cx.Ph6.2	Suitable counters
Cx.Ph6.3	Special window for handicap
Cx.Ph6.4	Windows with limited barriers; acceptable height, a chair for the patient to sit on, if there is glass it should not block the hearing of the patient and pharmacist
Cx.Ph6.5	Queue System

Cx.Ph6.6	Waiting area
Cx.Ph6.7	Privacy for Counseling
Cx.Ph6.8	Refrigerator (s)
Cx.Ph6.9	Storage Area and Shelves for Medications
<b>Cx.Ph7</b>	<b>Narcotic Room</b>
Cx.Ph7.1	Controlled drugs and narcotics are distributed and controlled according to the MOH guidelines
Cx.Ph7.2	Secure windows (if available)
Cx.Ph7.3	Secure Design for Medications
Cx.Ph7.4	Double Lock Door
Cx.Ph7.5	Refrigerators (if applicable)
Cx.Ph7.6	Vaults for Narcotic and Controlled Medications
Cx.Ph7.7	CCTV monitoring & documentation requirement
<b>Cx.Ph8</b>	<b>Medication Room</b>
Cx.Ph8.1	Suitable access to medication room
Cx.Ph8.2	Medication Shelves and/or automated dispensing system
Cx.Ph8.3	Medications' cassettes
Cx.Ph8.4	Medications' Preparation area
Cx.Ph8.5	Emergency medications
Cx.Ph8.6	Emergency bag in ER
<b>Cx.Ph9</b>	<b>Pharmacy stores</b>
Cx.Ph9.1	Suitable Size for pharmacy store
Cx.Ph9.2	Shelves
Cx.Ph9.3	Refrigerator
Cx.Ph9.4	Room temperature monitoring
<b>Cx.Ph10</b>	<b>Counselling</b>
Cx.Ph10.1	A suitable independent counselling area with privacy
Cx.Ph10.2	Printed medical materials as brochures
Cx.Ph11	To follow with CBAHI MM standards

## OR CHECKLIST

Cx.OR	Checklist Elements
Cx.OR1	Qualified individual directs the operating room
Cx.OR2	Types of operations according to the standards and scope of services
Cx.OR3	<b>There is a clear demarcation between unrestricted, semi-restricted and restricted zones of OR</b>
Cx.OR3.1	Unrestricted area with limited public access that may include: <ul style="list-style-type: none"> <li>• Central control point: to monitor the entrance of patients, personnel, and materials from the unrestricted area into the semi-restricted area</li> <li>• Locker rooms that lead into semi-restricted area</li> <li>• Pre-operative admission area</li> <li>• Offices &amp; waiting areas</li> <li>• Post-anesthesia care units (PACUs)</li> </ul>
Cx.OR3.2	Semi-restricted area that includes: <ul style="list-style-type: none"> <li>• Corridors leading from the unrestricted area to the restricted area of the surgical suite</li> <li>• Storage areas for clean and sterile supplies</li> </ul>
Cx.OR3.3	Restricted area: A designated space with restricted access that can be reached only through a semi
Cx.OR4	OR floors, walls and ceiling are formed of one piece without connections, cracks, or decorative parts as per the SBC with minimal openings that are completely sealed and are made of materials that withstand repeated cleaning and disinfection according to Saudi Board Code
Cx.OR5	<b>OR ventilation system should be consistent with the following approved specifications</b>
Cx.OR5.1	Operates all the time and never shuts down (only central controls = no peripheral or local controls)
Cx.OR5.2	Air is introduced from the ceiling and exhausted near the floor
Cx.OR5.3	All re-circulated or fresh air is filtered through High-Efficiency Particulate Air (HEPA) filters
Cx.OR5.4	Provides positive pressure inside operating theater(s) (at least +2.5 Pascal, with respect to corridors)
Cx.OR5.5	Provides $\geq 20$ air changes per hour (ACH) inside operating theater(s) with 20% fresh air
Cx.OR5.6	Adjusted temperature and humidity: temperature ranges from 21 - 24 °C and relative humidity 20% - 60%
Cx.OR6	Availability of Crash cart
Cx.OR7	To follow with CBAHI standards



## LEADERSHIP CHECKLIST

Cx.LD	Checklist Elements
Cx.LD1	The Hospital governing body is defined
Cx.LD1.1	Written document defines the governing body responsibilities and authority level
Cx.LD1.2	Governing body structure is approved by MOH
Cx.LD2	Governing body defines the Hospital scope of service
Cx.LD2.1	Scope of service focusing in the services that will be provided in the first year of operation
Cx.LD2.2	Scope of service communicated to all related parties and approved by MOH if required
Cx.LD3	Governing body with hospital leaders developed and approve hospital organizational chart
Cx.LD3.1	Organizational chart developed based on the Hospital scope of service and start up plan
Cx.LD3.2	Organizational chart identifies the relationship between the hospital's governance, leadership, and other directors with titles
Cx.LD3.3	The commissioning team are aware of the organizational chart and its intent and can demonstrate their relationship to it
Cx.LD3.4	Governing body appoints Hospital Director
Cx.LD4	Hospital director recommends/plans to the governing body the appointment of the
Cx.LD4.1	Medical Director
Cx.LD4.2	Nursing Director
Cx.LD4.3	All clinical and administrative departments head/directors
Cx.LD5	Governing body approve hospital mission, vision and values
Cx.LD5.1	Mission, vision and values developed by hospital leaders
Cx.LD6	Governing body approved and provide hospital budget
Cx.LD6.1	Required budget provided to cover all start up requirements
Cx.LD6.2	Budget is covering all resources; manpower, medical equipment, and all other operation resources
Cx.LD7	Governing body approved the hospital strategic plan
Cx.LD7.1	The strategic plan addresses all clinical and non-clinical services and programs
Cx.LD7.2	Operational plans driven by the approved strategic plan
Cx.LD7.3	All objectives and goals translated into projects with clear required resources and time schedule plan
Cx.LD7.4	Governing body, Commissioning steering committee and/or Hospital leaders approves the required resources
Cx.LD7.5	Close and timely monitoring process for progress by structure milestone
Cx.LD7.6	The commissioning steering committee has a clear term of reference
Cx.LD7.7	The commissioning steering committee include all key personnel responsible of starting up the operation
Cx.LD7.8	The commissioning steering committee has proper authority and delegation to make decisions and recommendations required to execute the startup plan
Cx.LD.8	Governing body approved the startup plan
Cx.LD8.1	The plan developed by commissioning steering committee and all other related parties
Cx.LD8.2	The plan covers all activities and steps required to start up the operation
Cx.LD8.3	The plan has a clear and accurate time schedule
Cx.LD8.4	The plan assessed and reviewed periodically by the commissioning steering committee
Cx.LD8.5	All corrective actions and changes in the plan communicated to related parties
Cx.LD9	Governing body and hospital leaders ensure comply with all related laws and regulations
Cx.LD9.1	MOH regulations
Cx.LD9.2	SCFHS
Cx.LD9.3	Civil Defense certificate of occupancy
Cx.LD9.4	Saudi Health Council
Cx.LD9.5	Council of Cooperative Health Insurance (CCHI)
Cx.LD9.6	CBAHI
Cx.LD9.7	Evidence-based criteria developed by departments leaders to select the contracted entities
Cx.LD9.8	All contracted entities meet the applicable law and regulations

Cx.LD9.9	Hospital leaders ensure all services provided by the contracted entities meet the quality and patient safety
Cx.LD9.10	Hospital leaders continuously monitor the performance of the contracted services
<b>Cx.LD10</b>	<b>Governing body defines and approve delegation of authority</b>
Cx.LD10.1	Delegation of authority for the hospital director
Cx.LD10.2	Delegation of authority for commissioning steering committee
Cx.LD10.3	All delegation of authority required to execute the startup plan is granted
<b>Cx.LD11</b>	<b>Departments/units directors' responsibilities</b>
Cx.LD11.1	All departments and unites, clinical and administrative directed by a qualified leader
Cx.LD11.2	All directors have a job description specifying duties and responsibilities matching the required credentials
Cx.LD11.3	All departments/units' directors develop and ensure
Cx.LD11.3.1	Departmental organizational chart
<b>Cx.LD11.4</b>	<b>Departmental internal and external customers</b>
Cx.LD11.4.1	Patients
Cx.LD11.4.2	Visitors
Cx.LD11.4.3	Staff
Cx.LD11.4.4	Suppliers
Cx.LD11.4.5	Contractors
Cx.LD11.4.6	Organizations
Cx.LD11.5	Departmental mission and scope of services
Cx.LD11.6	Operational plan
Cx.LD11.7	Departmental policies and procedures manual as defined by the departments
Cx.LD11.8	Departmental communication plan
<b>Cx.LD11.9</b>	<b>Departmental resources required</b>
Cx.LD11.9.1	Space
Cx.LD11.9.2	Staffing
Cx.LD11.9.3	Equipment
Cx.LD11.9.4	Supplies
Cx.LD11.9.5	Departmental orientation, training, continuing education program
Cx.LD11.9.6	Departmental performance measurement plan
Cx.LD.12	To follow with CBAHI standards

## QUALITY AND PATIENT SAFETY CHECKLIST

Cx.QPS	Checklist Elements
Cx.QPS1	Established Quality Management Department
Cx.QPS2	The hospital has a quality management director responsible for directing all aspects of the quality management department
Cx.QPS3	The quality management director is qualified by education, training, and experience in healthcare quality
Cx.QPS4	The quality management department provides facilitation to all departments (e.g., use of indicators to evaluate and improve performance)
Cx.QPS5	Approved Quality and Patient Safety Program
Cx.QPS6	There is a Quality Plan
Cx.QPS7	There is a Patient Safety Plan
Cx.QPS8	There is a quality and patient safety education activities and awareness sessions for hospital staff
Cx.QPS9	The hospital defines the scope and objectives of the risk management program as well as the individual responsible for the program (Risk Management Plan)
Cx.QPS10	Quality management program is including policy creation pathway and evaluation
Cx.QPS11	Hospital has Essential Safety Requirements (ESR) Self-Assessment and Corrective Action Plan (CAP) as needed
Cx.QPS12	There is a committee for Quality and Patient Safety
Cx.QPS13	There is a committee to oversee all Commissioning Tasks and Readiness
Cx.QPS14	<b>There are committees to oversee hospital operation based on specific specility as follows</b>
Cx.QPS14.1	Data collection for Structure, Process and Outcome Indicators of Quality Post Operation
Cx.QPS14.2	The hospital has system for data collection and analysis
Cx.QPS14.3	Hospital leaders select a set of structure, process and outcome indicators (e.g.: Availability of essential supplies and equipment, Documentation of Committee meeting, Testing and Commissioning etc.)
Cx.QPS14.4	The hospital has a process to handle sentinel events (policy for identification and management of sentinel events) according to the relevant authorities
Cx.QPS14.5	There is a reporting system for MOH
Cx.QPS14.6	Occurrence Variance Report (OVR) and Its Management
Cx.QPS14.7	The hospital has an incident (occurrence/variance) management system that supports improvements of care processes
Cx.QPS15	To follow with CBAHI standards

## CLINICAL EXCELLENCE CHECKLIST

CxCE	Checklist Elements
<b>Cx.CE1</b>	<b>VTE</b>
Cx.CE1.1	Availability of Venous thromboembolism (guideline/policy/committee)
Cx.CE1.2	MOH ram adult (surgical /medical) In-Patient Deep Vein Thrombosis (DVT) screening and prophylaxis
Cx.CE1.3	MOH ram (Antenatal/postnatal) Thromboprophylaxis Assessment and Management
Cx.CE1.4	Mechanical prophylaxis devise (Sequential Compression Device (SCD)) SURGICAL 1:1, ICU1:1, WORDS1:3
<b>Cx.CE2</b>	<b>SEPSIS</b>
Cx.CE2.1	Written sepsis protocol to standardize sepsis management
Cx.CE2.2	Availability of sepsis guideline/manual/policy committee
Cx.CE2.3	Blood lactate measurement devise available in emergency department /ICU
<b>Cx.CE3</b>	<b>Acute Stroke Ready Hospitals</b>
Cx.CE3.1	Written stroke protocol to standardize acute stroke management
Cx.CE3.2	Predetermined written transfer protocols to PSHs and CSHs
Cx.CE3.3	Emergency CAT scan
Cx.CE3.4	Availability of medications for the acute management of hypertension, hyperglycemia, hypoglycemia, seizures and coagulopathies
Cx.CE3.5	Intravenous thrombolytics (IVr-tPA)
<b>Cx.CE4</b>	<b>Primary Stroke Hospitals</b>
Cx.CE4.1	Written stroke protocol to standardize acute stroke management
Cx.CE4.2	Predetermined written transfer protocols to CSHs
Cx.CE4.3	Emergency CAT scan
Cx.CE4.4	Medications for the acute management of hypertension, hyperglycemia, hypoglycemia, seizures and coagulopathies
Cx.CE4.5	Intravenous thrombolytics medication (IVr-tPA)
<b>Cx.CE5</b>	<b>Comprehensive Stroke Hospitals</b>
Cx.CE5.1	A written stroke protocol
Cx.CE5.2	EKG and long term Holter monitoring testing (device)
Cx.CE5.3	Transthoracic echocardiography (device)
Cx.CE5.4	Transesophageal echocardiography (TEE) and cardiac MRI (device)
Cx.CE5.5	CAT scan
Cx.CE5.6	CT perfusion scanning (device)
Cx.CE5.7	The Acute Stroke Unit (ASU)
Cx.CE5.8	Hospital policies documenting the ASU admission, transfer and discharge policy
Cx.CE5.9	Intravenous thrombolytics (IVr-tPA) and vasoactive medications
Cx.CE5.10	Medications for the acute management of hypertension, hyperglycemia, hypoglycemia, seizures and coagulopathies
Cx.CE5.11	Rehabilitation services provided as patient need
<b>Cx.CE6</b>	<b>Acute care of myocardial infarction</b>
Cx.CE6.1	MI guideline/manual/policy of MI management/protocol
Cx.CE6.2	Echocardiogram (ECG)
Cx.CE6.3	(Thrombolytic administration)
Cx.CE6.4	Percutaneous coronary intervention (PCI)
Cx.CE7	To follow with CBAHI standards

## ER CHECKLIST

Cx.ER	Checklist Elements
Cx.ER1	Qualified licensed physician is responsible for managing the emergency department
Cx.ER2	The department has a staffing plan defines number, type and qualifications of staff required for 24-hour 7 days provision of services
Cx.ER3	A qualified nurse manager supervises nursing services in the emergency department
Cx.ER4	Nursing staff in the emergency department receive continuous training with competency assessment
Cx.ER5	<b>The emergency department has adequate resources that support the provision of safe care</b>
Cx.ER5.1	Availability of the following in the emergency department: -All necessary equipment, supplies, and medications -Log book/sheet for checking the available/needed supplies -Fully equipped emergency bags -Log sheet for daily checking of emergency bags
Cx.ER5.2	Availability of adequate space in the resuscitation/trauma room
Cx.ER5.3	Availability of the medication bag and its contents (all resuscitation medications as per Saudi Heart Association requirements)
Cx.ER5.4	Availability of adequate waiting areas in emergency department that is accessible to the medical staff
Cx.ER5.5	Availability of emergency department registration area and registration clerk
Cx.ER5.6	Availability of security personnel and adequacy in the emergency department
Cx.ER6	Availability of a triage policy and procedure to prioritize emergency patients, pathways and guidelines
Cx.ER7	Availability of a policy defining the rights and responsibility for patients in the emergency department, including patients under observation, patients waiting for admission, patients waiting for admission with no bed available (boarding patients) and patients waiting for transfer to another organization
Cx.ER8	Availability of all Emergency diagnostic tests and results communicated on a timely manner
Cx.ER9	Availability of an open communication channel between staff and with the designated regional drug and poison information center
Cx.ER10	Availability of the communication policy with consultants for opinions, including Immediate (life, limb, or function threatening) and emergent consultations
Cx.ER11	<b>Availability of effective ambulance services in coordination with Red Crescent services</b>
Cx.ER11.1	The ambulance is equipped and supplied
Cx.ER11.2	Availability of ambulance daily check log
Cx.ER12	<b>Respiratory Triage</b>
CxER12.1	Availability of a designated area for respiratory triage at the ER entrance with required personal protective equipment (facemask, hand hygiene sanitizer and tissues)
CxER12.2	Availability of a trained nurse who is able to communicate in multi-language with patients and families in the visual triage area
Cx.ER12.3	Availability of updated respiratory triage scoring forms (MERS-COV and COVID-19) as per published guidelines
Cx.ER12.4	Availability of a designated respiratory triage area (Respiratory waiting area/ Respiratory Triage Clinic/isolation room)
Cx.ER12.5	Respiratory waiting area is available with fixed chairs and distance at least 1.2 meters
Cx.ER12.6	A trained physician is available in the respiratory triage area to assess patients on case definition of MERS-COV and COVID-19
Cx.ER13	<b>Emergency Room</b>
Cx.ER13.1	Availability of a policy and procedure for suspected or confirmed MERS-COV and COVID-19 patients
Cx.ER13.2	Availability of a continuous job-specific infection control training on MERS-COV and COVID-19 with competency assessment for staff
Cx.ER13.3	Availability of a Protocol for early detection, management, and transfer of respiratory illness patients





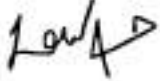



Cx.ER13.4	Availability and accessibility of Hand hygiene supplies for Health Care Workers (HCW) and patients (hand washing sink, hand rub dispenser, paper towels) in all care areas
Cx.ER13.5	Nasopharyngeal swabbing and sputum sampling of suspected patients is available and performed by trained nurse/physician available at a 24-hour coverage
Cx.ER13.6	Availability of N-95 respirators and PPE at patient care areas
Cx.ER13.7	Availability of a Record/logbook for HCWs and visitors entering the isolation room
Cx.ER13.8	Availability of a color-coded transmission precaution cards written in English and Arabic to be used based on patient diagnosis
Cx.ER13.9	Availability of at least one Airborne Infection Isolation Room (AIIR) for 1/12 beds
Cx.ER13.10	AIIRs are under negative pressure (minimum -2.5 Pascal) with air totally exhausted to outside (100%) through High-Efficiency Particulate Air (HEPA) filter with air changes per hour at least 12 ACH with documented evidence
Cx.ER13.11	Availability of a fixed monitor outside the isolation room showing continuous monitoring of the ventilation parameters (pressure difference, ACH, temperature, relative humidity) with alarms
Cx.ER13.12	The distance between patient beds are maintained at a minimum of 1.2 meters
Cx.ER13.13	Availability of a Portable chest x-ray in the ER respiratory zone and isolation rooms
Cx.ER13.14	Availability of a cleaning/disinfection activity log showing regular cleaning of the environment, documenting the responsible HCW, agents used, methods, frequency, and list of environmental surfaces
Cx.ER13.15	Availability of Biological spill kits in the area
Cx.ER14	To follow with CBAHI standards

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Name	Title	Signature	Date
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Dr. Tareef Alaama	Deputy Minister for Therapeutic Services		01 Oct 2020



محضر اجتماعات فريق عمل  
مراجعة معايير قوائم التحقق لتشغيل المستشفيات  
من وحدة تأهيل وتشغيل المستشفيات

شكل فريق عمل مراجعة معايير قوائم التحقق لتأهيل وتشغيل المستشفيات بتاريخ 2020/5/3م بناء على توجيه د. عبداللطيف العقيفي رئيس وحدة تأهيل وتشغيل المستشفيات ، وعضوية كل من :

- 1- الأستاذة / فدوى أبوسمن - مستشارة الوحدة ومنسقة الفريق عضواً
- 2- الدكتور / فتحي محمد محمد علي - مستشار في الشؤون الطبية عضواً
- 3- الأستاذ / محمد الخيري - مستشار تطوير معايير عضواً
- 4- المهندس / هاني الضويان - مستشار في الشؤون الهندسية عضواً
- 5- المهندسة / نهى الأمين - مستشارة في الشؤون الهندسية عضواً
- 6- الدكتورة / عالية هاشم عبد الغفار- مستشارة في الجودة وسلامة المرضى عضواً
- 7- الأستاذ / صالح الزيد - المنسق الاعلامي والتقني للوحدة عضواً

وقد عقد فريق العمل حتى تاريخه (10) اجتماعات خلال الفترة 2020/5/1م إلى 2020/5/31م ، وبمعدل اجتماع كل (3) أيام، واستعرض خلالها الفريق النقاط التالية :

- 1 - مراجعة جميع قوائم التحقق المعدة من قبل الوحدة .
- 2 - تحديد وحصر قوائم التحقق لـ28 قسم .
- 3 - إنجاز قوائم التحقق لـ12 قسم .
- 4 - جاري العمل في مناقشة قوائم التحقق لـ10 أقسام .
- 5 - إنشاء قوائم تحقق جديدة لـ 6 أقسام إضافية .
- 6 - بناءً عليه تم إصدار القوائم بعد المراجعة الثانية من فريق العمل.

د. فتحي محمد محمد علي

المساعد الفني لمشرف برج النساء  
والتوليد في مجمع الملك فيصل الطبي  
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مدير إدارة المرافق مستشفى بريدة  
المركزي

الدكتور / عبد اللطيف سعد العقيفي

رئيس وحدة تأهيل وتشغيل المستشفيات  
بوزارة الصحة



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