

# NATIONAL STANDARDS IN INFECTION PREVENTION AND CONTROL FOR HEALTH FACILITIES

3rd Edition



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# NATIONAL STANDARDS IN INFECTION PREVENTION AND CONTROL FOR HEALTH FACILITIES

*3rd Edition*

DEPARTMENT OF HEALTH  
HEALTH FACILITY DEVELOPMENT BUREAU

NATIONAL STANDARDS IN INFECTION PREVENTION  
AND CONTROL FOR HEALTH FACILITIES  
THIRD EDITION  
2021

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## **NATIONAL STANDARD IN INFECTION PREVENTION AND CONTROL FOR HEALTH FACILITIES**

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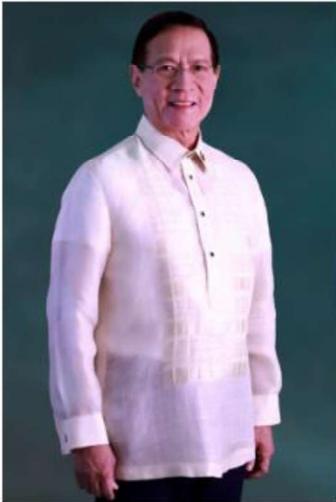
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Republic of the Philippines  
Department of Health  
**OFFICE OF THE SECRETARY**

**MESSAGE**



Aligned with the aspirations of the Universal Health Care (UHC) Act to ensure that all Filipinos have access to quality and affordable health services and are protected against financial risk, the Department of Health (DOH) urges the health sector to move towards the development of a productive, resilient, equitable, and people-centered health system, as outlined in the strategy map of the DOH *FOURmula One Plus (F1 Plus)* for Health.

Aiming for better health outcomes, more responsive health systems, and more equitable health care financing are of paramount importance, especially now that we are gearing up for the full implementation of the Universal Health Care Act.

In concert with the health sector, DOH will ensure high quality and affordable health products, devices, facilities, and services for all Filipinos.

In this light, I heartily commend the Health Facility Development Bureau (HFDB) for their commitment to harmonising and streamlining all salient standards and processes in health facility operations by updating the National Standards in Infection Prevention and Control in Health Facilities under the Integrated Hospital Operations and Management Program (IHOMP). Infection prevention and control is a vital aspect in the delivery of health care services, particularly now that the health sector is focused on responding to and mitigating the impact of the global COVID-19 pandemic. This manual, along with other IHOMP manuals, were designed to ensure accessibility and flexibility of more efficient hospital operations to meet the needs in the enhancement and promotion of quality care.

Hence, let the updated standards defined in this manual stand as relevant bases for the enrichment of equitable access to safe and quality health facilities and services compliant to the standards of care. Keeping in mind performance accountability across all pillars of F1 Plus, particularly in the delivery of health services, along with HFDB's engagement to its partners in the delivery of quality health care for all, this manual shall be instrumental in the achievement of UHC.

Together, let us realise a new health system which focuses on people's needs, while recognizing the Filipino people's varying cultures, beliefs, and values.

*Maraming salamat at mabuhay!*

A handwritten signature in black ink, appearing to read "Francisco T. Duque III".

**FRANCISCO T. DUQUE III, MD, MSc**  
Secretary of Health



Republic of the Philippines  
Department of Health  
**OFFICE OF THE SECRETARY**

**MESSAGE**



With the implementation of the Universal Health Care (UHC) Law, the whole health sector shall endeavor to ensure that every Filipino has better access to appropriate health care services without experiencing financial hardships and that a more responsive health system makes them feel respected, valued, and empowered.

This goal entails improving the quality of the delivery of health care services and making health facilities venues of clinical quality, operational efficiency, and people-centered processes.

The Third Edition of the National Standards in Infection Prevention and Control in Health Facilities aims to ensure that health facilities abide by the set standards for Infection Prevention and Control in health facilities, which reflects updates in the Infection Prevention and Control Standards, especially those brought about by the pandemic.

The National Standards emphasize the important role of Infection Prevention and Control protocols and systems in improving the quality of care offered by health facilities to their patients. The latest edition shall serve as a reference of policies and guidelines for effective implementation. It has 8 chapters that contain the standards for management and structure, guidelines, education & training, surveillance, multi-modal strategies, monitoring & audit, staffing & occupancy, and physical structures.

With this, we enjoin every stakeholder to promote health through continuous learning, peer support, and mentorship, and to implement the standards in this Manual as most appropriate in their respective settings.

Thank you very much and best wishes to all!

A handwritten signature in blue ink, appearing to read "Lilibeth C. David".

**LILIBETH C. DAVID, MD, MPH, MPM, CESO I**  
Undersecretary of Health  
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Republic of the Philippines  
Department of Health  
**OFFICE OF THE SECRETARY**

**FOREWORD**

The Department of Health's (DOH) Health Facility Development Bureau (HFDB) is at the forefront in leading the continuous development of quality health facilities that are efficient and responsive to the needs of Filipinos. The Bureau carries out this goal through the development of relevant health facility policies, programs, and standards, as well as the provision of technical assistance and advisory services in the development, planning, operations, and maintenance of health facilities.

The Manual of National Standards in Infection Prevention and Control for Health Facilities, Third Edition, dutifully integrates the DOH's policy framework and objectives in the implementation of Republic Act No. 11223, the Universal Health Care Act. Also, the manual underscores the reduction of health care-associated infections in operationalizing performance accountability, as a key measure. The HFDB recognizes that Infection Prevention and Control (IPC) Program is paramount to patient safety and service quality in health facilities. The updated policies and procedures shall serve as indispensable reference to hospital administrators and IPC units to effectively and efficiently perform their duties and responsibilities, to the satisfaction of their clientele and the public.

The HFDB is extremely grateful to the Technical Working Group members and experts, invited resource persons, and other stakeholders, who dedicated their time, expertise, and effort to ensure that this edition is responsive and relevant to the health facilities' needs for continuous quality improvement. It is hoped that this manual will enhance the capability of concerned employees in proper health service delivery for better health outcomes.

The HFDB is committed to updating the manual as new technical information becomes available. The Bureau welcomes comments and recommendations from the users of the manual.

  
**MA. THERESA G. VERA, MD, MHA, MSc, CESO III**  
Director IV  
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## PREFACE

The ever-changing world of infection control necessitates updating and improving of the National Standards in Infection Prevention and Control for Health Facilities. The third edition was realized to address the changes in recommendations by the World Health Organization and the Center for Disease Control. In addition, relevant updates to the standards with reference to the Universal Health Care Act (Republic Act No. 11223) have been reflected in this document

The main purpose of this document is to present the standards that should be in place in health care facilities. These standards should be the minimum requirements for IPC programs and should serve as reference in the development of policies and guidelines.

A group of experts were convened to develop the content of this document. Consensus was gathered through the conduct of meetings and consultations. The content was further developed with the substantial contribution and/or review by external experts and stakeholders.

This manual is envisioned to serve as reference for both government and private health care facilities in the country. A strong and effective infection prevention control program will result in quality patient care, patient safety and protection of health care workers.



**CHARISSA FAY CORAZON BORJA- TABORA, MD, FPPS, FPIDSP**  
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## ACKNOWLEDGEMENT

Sincerest gratitude to the Health Facility Development Bureau (HFDB) Director **Dr. Ma. Theresa G. Vera**, and to the Health Facilities and Infrastructure Development Team (HFIDT) Undersecretary, **Dr. Lilibeth C. David**, for their support in the completion of this manual.

Special thanks to the hardworking members of the Infection Prevention and Control Technical Working Group who shared their expertise and patiently reviewed and took necessary changes to make this new edition relevant to the current needs of the infection prevention and control program in healthcare facilities:

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Appreciation is extended to the technical experts and the different societies for sharing their time in reviewing these standards and providing valuable inputs:

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- Philippine Hospital Infection Control Nurses Association, Inc.
- Philippine Hospital Association
- Philippine Health Insurance Corporation
- Philippine Society for Quality in Healthcare
- Philippine Society for Microbiology and Infectious Diseases, Inc.
- Pediatric Infectious Disease Society of the Philippines
- Philippine Association of Central Services and Sterilization Management
- Philippine Medical Association

Special thanks to Dr. Melecia Velmonte who pioneered the practice and promotion of Infection Prevention and Control in the Philippines

## LIST OF ABBREVIATIONS

<b>ABC</b>	Authorized Bed Capacity
<b>ABHR</b>	Alcohol-Based Hand Rub
<b>AMR</b>	Anti-Microbial Resistance
<b>AMS</b>	Anti-Microbial Stewardship
<b>CAUTI</b>	Catheter Associated Urinary Tract Infection
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CLABSI</b>	Central Line-associated Bloodstream Infection
<b>DOH</b>	Department of Health
<b>HAI</b>	Healthcare-Associated Infection
<b>HCWM</b>	Health Care Waste Management
<b>HFDB</b>	Health Facility Development Unit
<b>HFSRB</b>	Health Facilities and Services Regulatory Bureau
<b>IBC</b>	Implementing Bed Capacity
<b>IPC</b>	Infection Prevention and Control
<b>IPCC</b>	Infection Prevention and Control Committee
<b>IPCN</b>	Infection Prevention and Control Nurse
<b>IPCSO</b>	Infection Prevention and Control Surveillance Officer
<b>IPCU</b>	Infection Prevention and Control Unit
<b>LGU</b>	Local Government Unit
<b>MDRO</b>	Multi-Drug Resistant Organism
<b>PPE</b>	Personal Protective Equipment
<b>SSI</b>	Surgical Site Infection
<b>VAP</b>	Ventilator-Associated Pneumonia
<b>WASH</b>	Water, Sanitation, and Hygiene
<b>WHO</b>	World Health Organization

## DEFINITION OF TERMS

<b>Alcohol-based Hand Rub</b>	A preparation designed for application to the hands to inactivate microorganisms and/or temporarily suppress their growth. Such preparations may contain one or more types of alcohol and other active ingredients with excipients and humectants.
<b>Multimodal strategy</b>	This comprises several elements or components implemented in an integrated way with the aim of improving an outcome and changing behavior. It includes tools, such as bundles and checklists, developed by multidisciplinary teams that take into account local conditions.
<b>Primary Care</b>	This refers to initial-contact, accessible, continuous, comprehensive and coordinated care that is accessible at the time of need including a range of services for all presenting conditions, and the ability to coordinate with other healthcare providers in the healthcare delivery system, when necessary. (RA 11223) (AO No. 2020-0047)
<b>Primary Care Facilities</b>	This refers to the institution that primarily delivers primary care services which shall be licensed or registered by the DOH (RA 11223 IRR). (AO No. 2020-0047)
<b>Secondary Care Facilities</b>	For the purposes of this manual, this shall refer to Level 1 and level 2 hospitals (AO No. 2012-0012)
<b>Tertiary Care Facilities</b>	For the purposes of this manual, this shall refer to Level 3 and specialty hospitals (AO No. 2012-0012)
<b>Healthcare-Associated Infection</b>	An infection occurring in a patient during the process of care in a hospital or other health care facility, which was not present or incubating at the time of admission. Health care-associated infections can also appear after discharge. They also include infections acquired by patients in the hospital or facility but appearing after discharge, and occupational infections among staff. (World Health Organization, 2016)
<b>Improved water source</b>	Defined by the WHO/UNICEF Joint Monitoring Programme as a water source that by its nature of construction adequately protects the source from outside contamination, particularly fecal matter. Examples include: public taps or stand pipes, protected dug wells, tube wells or boreholes. (WHO/UNICEF. Progress on sanitation and drinking water: 2015 update and MDG assessment, 2015)

## LIST OF ANNEXES

- Annex A** Organizational Chart
- Annex B** Duties and Responsibilities of IPC Unit Members
- Annex C** The Five-Step Approach to IPC
- Annex D** Five Elements of Multimodal Strategies
- Annex E** Sample Tools
- Annex F** Hospital Ventilation and Air Exchange
- Annex G** Infection Prevention and Control Program Tool
- Annex H** Minimum Requirements for Infection Prevention and Control Programs

**MANUAL OF  
STANDARDS IN  
INFECTION  
PREVENTION AND  
CONTROL FOR  
HEALTH FACILITIES**

*3rd Edition*



# STANDARDS

MANAGEMENT, STRUCTURE, FUNCTIONS, AND  
RESPONSIBILITIES

# 01

## **STANDARDS ON MANAGEMENT, STRUCTURE, FUNCTIONS, AND RESPONSIBILITIES**

The presence of a functional infection prevention and control structure with well-defined functions is key to successful implementation of the program. The support from the top management and the active role of the dedicated team members are crucial in the prevention and control of infection in the healthcare facilities.

### **1.1 There shall be an infection control management structure under the Office of Chief/Director of the Health Facility with sufficient resources and clear lines of responsibility.**

The head of every healthcare facility shall be responsible for:

- 1.1.1 Establishing, organizing, monitoring and supporting the activities of the IPC Unit.
- 1.1.2 Designate one most qualified infection control physician and at least an infection control nurse as managers of the IPC Unit.
- 1.1.3 Ensure that the IPC Unit members are qualified, trained and/or certified in an IPC training course accredited by DOH or other accrediting bodies.
- 1.1.4 Monitor or track records on IPC procedures and reports provided by the IPC Unit.
- 1.1.5 Address efficiently and effectively all IPC concerns and issues occurring at the healthcare facility level.

### **1.2 There shall be a functional IPC Program in the healthcare facility. There shall be clearly defined objectives based on local epidemiology and priorities according to risk assessment and functions that align with and contribute to the prevention of HAI and combating AMR through IPC good practices.**

- 1.2.1 Adequate resources and budget shall be allocated by the hospital to support the implementation of IPC programs and activities.
- 1.2.2 For each primary care facility, there shall be a trained IPC link person, with dedicated (part-) time.
  - 1.2.2.1 There shall be one IPC-trained health care officer at the next administrative level (for example, district/LGU) to supervise the IPC link professionals in primary health care facilities.
  - 1.2.2.2 Smaller healthcare facilities within the geographic area shall link with bigger facilities for infection prevention and control services through their designated representative.
- 1.2.3 For secondary facilities, there shall be trained IPC focal point (one full-time trained IPC Officer [nurse or doctor]) as per the recommended ratio of 1:100 beds with

dedicated time to carry out IPC activities in all facilities IPC committee actively supporting the IPC unit.

1.2.3.1 There shall be a Microbiology laboratory

1.2.4 For tertiary facilities, there shall be a trained full time unit head, at least one full-time IPC nurse with dedicated time per 100 beds and an IPC surveillance officer.

1.2.4.2 There shall be a quality microbiological laboratory support

**1.3 The health facility shall establish an active and effective Infection Prevention and Control Unit (IPCU).**

1.3.1 The IPCU shall be directly under the Office of Chief/ Director of Health Facility.

1.3.2 The IPCU shall have sufficient resources and clear lines of responsibility.

1.3.3 The IPCU shall have a functional relationship to the Infection Prevention and Control Committee.

1.3.4 The IPCU shall be responsible for the day-to-day infection prevention and control activities.

1.3.5 The IPCU shall have adequate regular or permanent staff and has provision of appropriate facilities to enable it to perform its duties.

1.3.6 IPCU shall effectively performs the following functions:

1.3.6.1 Conducts and documents surveillance activities.

1.3.6.2 Coordinates with the Infectious Disease Section, Microbiology Laboratory and Administration as well as other departments about known or suspected cases of notifiable/reportable infectious diseases, food poisoning and other significant infections such as MultiDrug Resistant Organism (MDRO).

1.3.6.3 Ensures adequate, accurate and timely reporting and feedback of information to the concerned area/unit.

1.3.6.4 Investigates, initiates and assesses risks of infection and recommends allocation of resources for investigation, management and control.

1.3.6.5 Responses to urgent problems of infection control through a 24-hour emergency referral system.

1.3.6.6 Proposes resource requirement for the program and any contingencies.

1.3.6.7 Gives advice on the procurement of medical equipment, drugs/medicines and supplies.

1.3.6.8 Participates in the planning and design of plant facilities critical to infection prevention and control, i.e. renovations, repairs, relocation of critical care areas.

1.3.6.9 Develops IPC training modules, organizes the relevant education and training programs for all healthcare staff and encourages reflexive practice of infection control measures.

- 1.3.6.10 Monitors compliance to infection prevention and control policies, guidelines and procedures.
- 1.3.6.11 Recommends/proposes IPCC actions which may have implications for infection prevention and control in the hospital.
- 1.3.7 The qualifications for each of the IPCU members are found in Annex B. The IPCU is composed of:
  - 1.3.7.1 Infection Prevention and Control Unit Head (Medical Officer V for government/DOH healthcare facilities)
    - 1.3.7.1.1 Preferably an Infectious Diseases Specialist/Hospital Epidemiologist
    - 1.3.7.1.2 The unit head is an active consultant who may also be the Chair or Co-chair and **has a minimum required training provided by accredited societies and has experience in infection prevention and control.**
  - 1.3.7.2 Infection Prevention and Control Nurse (IPCN):
    - 1.3.7.2.1 The health facilities shall have a ratio of at least 1 full time ICN for every 100 hospital beds. The ratio may vary with the number of full time IPCN increasing depending on the types of cases seen, services offered, needs and capacity of the healthcare facility
    - 1.3.7.2.2 The IPCN shall be a Supervising Senior Nurse or a Nurse V position in a DOH or government healthcare facilities.
    - 1.3.7.2.3 Additional IPCN shall be a Senior Nurse or a Nurse III position in a DOH or government healthcare facilities based on recommended IPCN-hospital bed ratio and or healthcare facility need.
    - 1.3.7.2.4 The IPCN shall have dedicated time (full time) in undertaking the role.
    - 1.3.7.2.5 The IPCN has received formal/certification training in infection prevention and control provided by an accredited training organization.
    - 1.3.7.2.6 The IPCN coordinates all infection prevention and control activities with the IPCU Head as well as the other areas in the healthcare facility (Refer to Annex B).
  - 1.3.7.3 Infection Prevention and Control Surveillance Officer (IPCSO):
    - 1.3.7.3.1 The IPCSO shall conduct surveillance on AMS, HAI, MDRO, notifiable diseases (PIDS) and other IPC related surveillance activities.
    - 1.3.7.3.2 The IPCSO shall be a full time and regular position (Administrative Assistant V for DOH or government healthcare facilities).

- 1.3.7.3.3 The IPCSO shall be a college graduate and has received training in IPC and IPC surveillance activities provided by an accredited training organization.
  - 1.3.7.3.4 The IPCSO shall accomplish and prepare necessary documents and statistics related to IPC surveillance activities.
  - 1.3.7.3.5 Assists the IPCU on all clerical and administrative activities.
- 1.3.8 The IPCU shall have direct access to the Microbiology Laboratory and facilities.

**1.4 The infection prevention and control committee shall be directly under the Office of the Chief/ Director of Hospital (See Annex A).**

- 1.4.1 The IPC committee of each hospital shall have the following functions:
- 1.4.1.1 Formulates and updates infection prevention and control policies, guidelines and procedures.
  - 1.4.1.2 Ensures implementation of infection prevention and control policies, guidelines and procedures
  - 1.4.1.3 Disseminates information and coordinates effectively with all departments, sections and services of the hospital and other appropriate government agencies for the implementation of IPC.
  - 1.4.1.4 Organizes and provides training and guidance to the hospital IPC Unit, which is responsible for the day-to-day IPC activities.
  - 1.4.1.5 Makes medicines, medical supplies, personal protective equipment, and other equipment and materials readily available for the day-to-day implementation of IPC and for contingency as well.
  - 1.4.1.6 Designs and implements and/or outsources the training and orientation of all health personnel on IPC.
  - 1.4.1.7 Meets at least once monthly and whenever necessary in order to consolidate, analyze and act on reports related to IPC.
  - 1.4.1.8 Reviews, approves and submits mandatory healthcare facility reports on IPC to the DOH Regional Health Office.
  - 1.4.1.9 Prepares, reviews and evaluates the progress and the effectiveness of the infection prevention and control program.
  - 1.4.1.10 Oversees the activities and performance of the IPC Unit.
  - 1.4.1.11 Approves infection prevention and control training modules.
  - 1.4.1.12 Defines the goals, objectives and priorities for all surveillance activities on healthcare associated infections. Including time frame, area, patient population to be studied and surveillance method to be used.
- 1.4.2 The IPC Committee shall be multidisciplinary committee composed of:
- 1.4.2.1 The Chief/ Director of the Health Facility or the designated Chairperson

- 1.4.2.2 Core Members
    - 1.4.2.2.1 Administrative Officer or equivalent
    - 1.4.2.2.2 Representatives from:
      - 1.4.2.2.2.1 Clinical departments including infectious Diseases Section
      - 1.4.2.2.2.2 Nursing Service
      - 1.4.2.2.2.3 Microbiology Laboratory
      - 1.4.2.2.2.4 Special and High Risk Units:
        1. Emergency Room
        2. Operating Room
        3. Dialysis Unit
        4. Intensive Care Unit
        5. Endoscopy Unit
        6. Transplant Unit
        7. Others
      - 1.4.2.2.2.5 Employees Health Service
  - 1.4.2.3 Auxiliary Members / Representatives from:
    - 1.4.2.3.1 Maintenance or Engineering Service
    - 1.4.2.3.2 Pharmacy
    - 1.4.2.3.3 Central Sterilization Unit
    - 1.4.2.3.4 Dietary Service
    - 1.4.2.3.5 Linen and Laundry Service
    - 1.4.2.3.6 Purchasing and Supply Department
    - 1.4.2.3.7 Housekeeping Department
    - 1.4.2.3.8 Linked Healthcare Facilities
    - 1.4.2.3.9 Clinical Laboratory
    - 1.4.2.3.10 Procurement Department
    - 1.4.2.3.11 Quality Assurance Office Representative
    - 1.4.2.3.12 Others as needed
- 1.4.3 Each IPC Committee member shall have specific duties and responsibilities (Refer to Annex B).
- 1.4.4 The Chief/ Director of the Health Facility must be informed about any outbreak of infection in the healthcare facility and coming from the community.

**1.5. All healthcare facilities shall have an Infection Prevention and Control (IPC) Assessment Tool (IPCAT) containing guidelines on core components of IPC programs that shall be implemented.**

- 1.5.1 The IPCAT is a systematic tool that can provide a baseline assessment of the IPC program and activities within a healthcare facility, as well as ongoing evaluations through repeated administration to document progress over time and facilitate improvement.



# STANDARDS

GUIDELINES, POLICIES, AND PROCEDURES

## 02

## STANDARDS ON GUIDELINES, POLICIES, AND PROCEDURES

There shall be written guidelines, policies and procedures for infection prevention and control within the healthcare facility, as guided by the Administrative Order No. 2016-0002 entitled National Policy on Infection Prevention and Control in Healthcare Facilities. The said national policy shall be reviewed and updated every 5 years. Education and training of relevant HCWs and monitoring of adherence to the guideline recommendations shall be executed to effectively ensure implementation of the IPC Programs. There shall be access to a licensed microbiology section in a clinical laboratory that shall provide quality diagnostic and clinical services required for epidemiologic evaluation, effective surveillance and infection control.

**2.1 The Infection Prevention and Control Committee initiates the development, implementation, evaluation, review and updating of written evidence-based guidelines, policies and procedures for the prevention of infection and reduction of AMR within the healthcare facility.**

2.1.1 Primary Level of Care

The facility shall develop guidelines, policies and procedure of the following:

- 2.1.1.1 Hand hygiene
- 2.1.1.2 Standard and transmission-based precautions
- 2.1.1.3 Triage of Infectious Patient
- 2.1.1.4 Aseptic Techniques
- 2.1.1.5 Cleaning, disinfection and sterilization of medical devices and equipment (including reprocessing of reusable medical devices)
- 2.1.1.6 Environmental cleaning and disinfection
- 2.1.1.7 Healthcare waste management
- 2.1.1.8 Safe Injection Practices
- 2.1.1.9 Healthcare Worker Protection (Occupational Health & Safety; including post-exposure prophylaxis and vaccination)
- 2.1.1.10 Prevention of transmission of highly communicable infections (e.g., tuberculosis)

2.1.2 Secondary and Tertiary Level of Care (For Hospitals)

The facility shall meet the requirement needed for primary level of care with additional guidelines, policies and procedure of the following:

- 2.1.2.1 Prevention of transmission of multi-drug resistant organisms

- 2.1.2.2 Surveillance and prevention of hospital-acquired infection, including device-associated infections and surgical site infections
- 2.1.2.3 Outbreak Investigation, Management and Preparedness (including emerging and re-emerging infections)
- 2.1.2.4 Reporting of highly transmissible and notifiable infectious disease
- 2.1.2.5 Risk Management
- 2.1.2.6 Care of the deaths with highly infectious diseases
- 2.1.2.7 Housekeeping Policy
- 2.1.2.8 Pre-Employment Policy
- 2.1.2.9 Environmental cleaning and disinfection for different areas (eg. isolation room, operating room, ICU and other high-risk units, specific patient care areas, regular/ward room etc.)
- 2.1.3 There are infection control guidelines, policies, and procedures for specific patient care areas
  - 2.1.3.1 ICU/CCU and other critical care units
  - 2.1.3.2 OR/DR and Nursery
  - 2.1.3.3 Emergency Room
  - 2.1.3.4 Outpatient Department
  - 2.1.3.5 Animal Bite Clinic
  - 2.1.3.6 TB DOTS Clinic
  - 2.1.3.7 Dialysis Unit
  - 2.1.3.8 Burn Unit
  - 2.1.3.9 Trauma Ward
  - 2.1.3.10 Tuberculosis Ward
  - 2.1.3.11 Transplant Unit
  - 2.1.3.12 Dental Clinic
  - 2.1.3.13 Endoscopy Unit
  - 2.1.3.14 Oncology Unit / Chemotherapy Infusion Center
- 2.1.4 There are infection control guidelines, policies, and procedures for hospital auxiliary service departments/units
  - 2.1.4.1 Info/ Admitting Section/ Admin Offices
  - 2.1.4.2 Laboratory
  - 2.1.4.3 Radiology
  - 2.1.4.4 Dietary
  - 2.1.4.5 Linen and Laundry
  - 2.1.4.6 Pharmacy
  - 2.1.4.7 Sterile Supply Service/ Department

- 2.1.4.8 Engineering and Building Service
- 2.1.4.9 Patient Transport Facilities
- 2.1.4.10 Mortuary Care and Management
- 2.1.5 There are infection control guidelines and policies related to purchasing of drugs/medicines, medical equipment and supplies
- 2.1.6 The IPCU shall coordinate with the Antimicrobial Stewardship Committee with the implementation of Infection Prevention and Control programs and Antimicrobial Stewardship programs as per Administrative Order No. 2019-0002: Implementing Guidelines on the Philippine Antimicrobial Stewardship Program for Hospitals.
  - 2.1.6.1 The IPCU shall coordinate with the AMS in order to maintain the antimicrobial policies and formulary, and ensure that they remain current and adhered to
  - 2.1.6.2 The IPCU shall develop, maintain and disseminate the hospital program
  - 2.1.6.3 The IPCU shall also lead in the creation of evidence-based treatment and surgical prophylaxis guidelines that are incorporated into the antimicrobial policy
  - 2.1.6.4 Lastly, the IPCU shall monitor the process and outcome measures of antimicrobial policies.
- 2.1.7 The Infection Prevention and Control Unit is responsible for creating, developing, promoting, implementing, and monitoring adherence to the guidelines and policies.
  - 2.1.7.1 Relevant stakeholders (e.g. link nurse or doctor, facility managers, quality managers) shall be involved in the development and implementation of SOPs.
  - 2.1.7.2 Involvement of frontline healthcare workers shall be considered in guideline implementation.
- 2.1.8 The evidence-based guidelines are reviewed regularly.
  - 2.1.8.1 The National IPC guidelines and policies shall provide clear definition of IPC priorities and evidence-based standards.
  - 2.1.8.2 The IPC Committee/Unit shall regularly check for any updates or new guidelines from the Department of Health.
- 2.1.9 Data indicators as well as standardized forms shall be provided for the monitoring of adherence of each unit/ department. The following shall be routinely monitored and reported:
  - 2.1.9.1 Hand hygiene
  - 2.1.9.2 Surveillance of HAIs
  - 2.1.9.3 Needle stick injury
  - 2.1.9.4 Antimicrobial resistance
  - 2.1.9.5 Breaks in IPC protocol
  - 2.1.9.6 Respiratory hygiene and cough etiquette

2.1.9.7 Environmental care

**2.2 There shall be a written program for dissemination, implementation and monitoring of infection control policies, guidelines, and procedures.**

2.2.1 IPC program manuals shall be accessible in all sectors of the hospital

2.2.2 Assessment tool shall be instituted by the IPC unit

2.2.3 Continuing education through conduction of training and seminars

**2.3 All microbiology sections shall adhere to the laboratory standards of their respective institutions, in addition to those set by Administrative Order No. 2021-0037 New Rules and Regulations Governing the Regulation of Clinical Laboratories in the Philippines. As such, they shall submit reports on time to the necessary offices and agencies.**

**2.4 For referral testing of samples, all microbiology laboratories must follow a standard protocol on proper collection, handling, and transport of laboratory specimens, pursuant to the standards stated in the aforementioned Administrative Order.**

2.4.1 There shall be a Memorandum of Agreement with the referral microbiology laboratory including:

2.4.1.1 Policies on patients' confidentiality

2.4.1.2 Pertinent documents and information to ensure compliance and safety

2.4.1.3 Roles and responsibilities of both the referring agency/sender and the receiver

2.4.2 Specimens sent for microbiology referral shall be provided with the following information:

2.4.2.1 Type of specimen including shipping regulations of biological materials depending on the category of infectious substances

2.4.2.2 Adequacy of specimens for referral testing

2.4.2.3 Means of specimen transport

2.4.2.4 Identified laboratories for specimen referrals

2.4.2.5 Procedures for local and international transport

2.4.2.6 Sample packaging and labeling of containers

2.4.2.7 Appropriate data storage during transit

2.4.3 Policies and procedures must also be observed on safe handling, transport and disposal of specimens:

2.4.3.1 Biosafety and biohazard precautions

2.4.3.2 Disinfection and sterilization of facility

2.4.3.3 Personal Protective Equipment (PPE), vaccination and prophylaxis required for laboratory personnel

2.4.3.4 Safety waste management

- 2.4.4 Guidelines must be available on spill decontamination in cases of cleanup of damage or leaking packages.
- 2.4.5 For dangerous goods and infectious substances, a separate regulation and requirements for alternative packaging for transport of the identified materials shall be provided, depending on their classification (*Please refer to DOH Manual on Packaging and Transport of Laboratory Specimens for Referral*).
- 2.5 All microbiology sections of the Clinical Laboratory must have an efficient and effective Biosafety Program Management (BPM) to protect its laboratory personnel from exposure to infectious agents. Biosecurity Programs shall likewise be instituted to prevent loss, theft or misuse of microorganisms, biological materials, and research-related information (*Please refer to DOH Manual on Biosafety and Biosecurity*).**



# STANDARDS

INFECTION PREVENTION AND CONTROL TRAINING

## 03

## INFECTION PREVENTION AND CONTROL EDUCATION AND TRAINING

All healthcare staff and trainees shall receive appropriate education and training on prevention and control of infections.

### **3.1 There shall be adequate resources available in the health facility for the required education and training activities.**

- 3.1.1 There shall be qualified staff that oversee the infection prevention and control education program and are trained through modules and programs with endorsement from the Department of Health.
- 3.1.2 There shall be allocated budgets to allow regular attendance of IPC members to continuing educational opportunities to infection prevention and control training and conferences.
- 3.1.3 There shall be coordination with other departments or units in the conduct of IPC education and training.
- 3.1.4 There shall be available and accessible venues for teaching and training.
- 3.1.5 There shall be materials and updated tools needed for IPC education and training, which include the following, but not limited to:
  - 3.1.5.1 Audio-visual
  - 3.1.5.2 Computer
  - 3.1.5.3 Internet access
  - 3.1.5.4 Books and journals

### **3.2 There shall be infection prevention and control educational programs focusing on relevant topics appropriate for specific clinical settings.**

- 3.2.1 There shall be involvement of the IPC unit in the orientation, training, and continuing education of healthcare staff and administrative staff. Orientation shall also be given to patients, relatives, and visitors:
  - 3.2.1.1 There shall be training needs assessment of the above.
  - 3.2.1.2 There shall be involvement of the IPCU in the educational course design development for the patients, relatives, and visitors. Other healthcare staff may administer the orientation.
  - 3.2.1.3 There shall be basic courses in infection prevention and control and documents the attendance and participation.
    - 3.2.1.3.1 Training for staff and trainees is conducted at least annually.

- 3.2.1.3.2 Training participation is included in the Performance Evaluation of staff and trainees.
- 3.2.2 There shall be institutional materials available for education and training. The following are the minimum required IPC training, but not limited to:
  - 3.2.2.1 Basic Epidemiology of Healthcare-Associated Infection
  - 3.2.2.2 Hand Hygiene
  - 3.2.2.3 Isolation Precaution
  - 3.2.2.4 Decontamination, Disinfection and Sterilization
  - 3.2.2.5 Care of the Environment and Hospital Waste Management
  - 3.2.2.6 Needle Stick Injuries and Blood and Body Fluid Exposures
  - 3.2.2.7 Healthcare worker Infection Risks, Prevention and Immunization
  - 3.2.2.8 Tuberculosis, HIV and Hepatitis B
  - 3.2.2.9 Emerging and Re-emerging Infections and Pathogens
  - 3.2.2.10 Rational Antibiotic Use
- 3.2.3 There shall be trainings and institutional materials available for education and training for targeted medical and clinical staff, on the following topics:
  - 3.2.3.1 Healthcare-Associated Infections
  - 3.2.3.2 Ventilator-associated Pneumonia (VAP)
  - 3.2.3.3 Central-Line Associated Bloodstream Infections (CLABSI)
  - 3.2.3.4 Catheter-Associated Urinary Tract Infections (CAUTI)
  - 3.2.3.5 Surgical Site Infections (SSI)
  - 3.2.3.6 Antimicrobial Stewardship Program
  - 3.2.3.7 Outbreak Management
  - 3.2.3.8 Surveillance
- 3.2.4 There shall be mechanisms for information dissemination, which include, but not limited to:
  - 3.2.4.1 Multi-modal Approaches
  - 3.2.4.2 Train-the-trainer Approaches
  - 3.2.4.3 E-learning
  - 3.2.4.4 Interactive and practical sessions such as simulation and/or bedside training
  - 3.2.4.5 Feedback mechanisms
  - 3.2.4.6 In-service Mentorship
- 3.2.5 There shall be tools to measure knowledge, skills and attitude of staff and trainees on infection prevention and control practices, and procedures (e.g. equipment disinfection methods, when and how to isolate patients, etc.) after the implemented training.



# STANDARDS

HEALTHCARE-ASSOCIATED INFECTION  
SURVEILLANCE

## 04

## STANDARDS ON HEALTHCARE-ASSOCIATED INFECTION SURVEILLANCE

There shall be a defined program of surveillance and reporting on, but not limited to Healthcare-Associated Infections (HAI) as defined by the World Health Organization, Needle Stick Injuries, Blood and Body Fluid Exposures and Antimicrobial Resistance (AMR), and breaks in IPC protocol.

**4.1 HAI surveillance as a minimum requirement at the primary facility level should follow national standards.**

**4.2 The Infection Prevention and Control Unit (IPCU) shall set the surveillance process.**

4.2.1 The IPC shall adopt the universally acceptable definitions of HAIs.

4.2.2 The surveillance plan shall identify a targeted population (e.g., hospital-wide, intensive care units)

4.2.3 The method of surveillance should be directed by the priorities/plans of the facility and/or country.

4.2.4 Standard surveillance forms/tools shall be used.

4.2.5 Data gathered such as rates shall be compared with local and international benchmarks (e.g., Department of Health (DOH), International Nosocomial Infection Control Consortium (INICC), Center for Diseases Control and Prevention's (CDC) National Healthcare Safety Network (NHSN)

4.2.6 Rates and trends gathered shall be used for performance improvement.

**4.3 The IPCU shall collect and analyze data, through developed standard reporting forms, and provide report at least annually or as necessary to the following stakeholders:**

- a. Hospital Administrator
- b. Clinicians
- c. Hospital Staff
- d. Health Facilities and Services Regulatory Bureau (HFSRB)
- e. Health Facility Development Bureau (HFDB)

**4.4 The IPCU shall coordinate with the Microbiology, Pharmacy, Antimicrobial Stewardship Committee, and Pharmacy Therapeutics Committee in the development, implementation and monitoring of Antimicrobial Stewardship.**



# STANDARDS

MULTIMODAL STRATEGIES

## 05

**STANDARDS ON MULTIMODAL STRATEGIES**

Infection prevention and control programs shall be implemented using multimodal strategies. The use of multimodal strategies improves practices and impact on IPC programs and outcomes. It supports the translation of guideline recommendations into practice within health care with a view to changing health care worker behavior. The multimodal strategy consists of several elements (3 or more; usually 5) implemented in an integrated way to guide action and provide a clear focus for the implementer.

**5.1 The infection prevention and control programs and activities of health facilities shall be implemented using a multimodal strategy and a multidisciplinary team approach to improve practices and reduce HAI and AMR.**

- 5.1.1 The use of multimodal strategies shall be considered right from the start to support implementation when establishing an IPC program.
- 5.1.2 Where an established IPC program already exists, the extent to which multimodal strategies are embedded shall be considered.

**5.2 The following shall be the basis of the facility in prioritizing IPC interventions using multimodal strategies:**

- 5.2.1 Primary Care
  - 5.2.1.1 Use of multimodal strategies at the very least to implement interventions to improve hand hygiene, safe injection practices, ventilation improvement, use of PPEs, decontamination of medical instruments, devices and environmental cleaning.
- 5.2.2 Secondary Care
  - 5.2.2.1 Use of multimodal strategies at the very least to implement interventions to improve each one of the standard and transmission-based precautions, and triage.
- 5.2.3 Tertiary Care
  - 5.2.3.1 Use of multimodal strategies to implement interventions to improve each one of standard and transmission-based precautions, triage, and those targeted at the reduction of specific infections (i.e. device and non-device related infections) in high risk areas or patient groups.
- 5.2.4 The facilities leaders, managers and key players shall practice multimodal thinking which means that a person does not focus only on a single strategy to change practices, but consider a range of strategies that target different influencers of human behavior (i.e. monitoring and feedback, infrastructures or organizational culture).
- 5.2.5 The facility shall identify champions who are respected individuals with strong communication skills who are knowledgeable and enthusiastic on Infection

Prevention and Control. They shall promote and lead healthcare-associated infection prevention initiatives by engaging and educating colleagues, solving problems, and communicating across all levels of leadership.

The main functions are:

- 5.2.5.1 Protecting those involved in implementation from organizational rules and systems that may act as barriers;
- 5.2.5.2 Building organizational support for new practices;
- 5.2.5.3 Facilitating the use of organizational resources for implementation; and
- 5.2.5.4 Facilitating growth of organization coalitions in support of implementation.

- 5.3 The five-step approach to IPC improvement shall be followed by the facility to support IPC activities and programs' implementation, which is grounded in the principles of successful change and improvement in health care. (Refer to Annex C)**
- 5.4 The health facility shall implement the five common elements of multimodal strategies. (Refer to Annex D)**



# STANDARDS

MONITORING, AUDIT AND FEEDBACK OF INFECTION  
PREVENTION AND CONTROL

## 06

## STANDARDS ON MONITORING, AUDIT AND FEEDBACK OF INFECTION PREVENTION AND CONTROL

Regular monitoring/audit and timely feedback of healthcare practices according to IPC standards are performed to prevent and control HAI and AMR. Feedback shall be provided to all audited persons and relevant staff.

**6.1 A well-defined monitoring plan with clear objectives, targets and activities focused on IPC indicators is in place based on priorities identified by the institution/facility.**

6.1.1 It is important to monitor both process indicators and infrastructure indicators

6.1.2 Hand hygiene, safe injection practices, cleaning and disinfection, personal protective equipment (PPE) are just one of the essential process indicators that can be monitored using standard observation tools. (Annex E)

6.1.3 Surveillance of other structure and process indicators shall be considered, prioritizing those that drive action.

6.1.4 There is an IPC officer or team responsible for periodic or continuous monitoring/audit of selected indicators, and timely feedback. The IPC officer/team is trained in auditing technique plans.

**6.2 Reporting shall be done quarterly, but in case of outbreaks, as necessary. Feedback shall then be given in real-time. Timely and regular feedback of auditing reports on the state of IPC activities or performance is given to:**

6.2.1 All audited persons and relevant staff (individual change)

6.2.2 Hospital management and senior administration (organizational change)

6.2.3 IPC team and committee (or quality of care committees)

**6.3 There are available IPC tools to collect data in a systematic way which include those that assess:**

6.3.1 Infection control program and infrastructure

6.3.2 Infection control training, competency, and implementation of policies and procedures (e.g. hand hygiene compliance)

6.3.3 Systems to detect, prevent, and respond to HAIs and MDROs (e.g. AMS)



# STANDARDS

WORKLOAD, STAFFING, AND BED OCCUPANCY AT  
THE FACILITY LEVEL

## 07

## STANDARDS ON WORKLOAD, STAFFING, AND BED OCCUPANCY AT THE FACILITY LEVEL

Adequate and appropriate workload, staffing, and bed occupancy is crucial in the delivery of Infection Prevention and Control measures in the health facility. To reduce the risk of HAIs and spread of AMR, the following goals must be met: (1) bed occupancy rate shall not exceed the standard capacity of the facility; and (2) staffing levels of healthcare workers shall be adequate according to patient workload.

### **7.1 Bed occupancy rate at any given time shall not exceed the designated Authorized Bed Capacity. The standard bed occupancy rate is 80-85%.**

- 7.1.1 Authorized Bed Capacity (ABC) for each level of facility shall be followed according to the current DOH issuance.
- 7.1.2 One-to-one (1:1) ratio of patient to bed
- 7.1.3 The facility administration/ management shall review the ABC and Implementing Bed Capacity (IBC).
- 7.1.4 Surge capacity management plan shall include the contingency of dedicated beds, appropriately placed, and protocols of activation.

### **7.2 Appropriate staffing levels shall be assessed according to patient workload using national or international standards.**

- 7.2.1 For primary care, the current available staffing standards for primary facilities based on the Manual of Standards for Primary Care Facilities (DOH Department Circular No. 2020-0176) shall be utilized.
- 7.2.2 At the secondary and tertiary level, the current available Organizational Structure and Staffing Standards shall be followed.
- 7.2.3 The head of the facility shall develop appropriate plan to meet the national standard of patient/staff ratio.
- 7.2.4 Staffing for IPC Committee in health facilities will be as follows:
  - 7.2.4.1 For hospitals: Minimum of One (1) Infection Control Doctor and One (1) Infection Control Nurse; ratio of at least 1 full time Infection Control Nurse for every 100 hospital beds
  - 7.2.4.2 For primary care facilities: IPC team shall be headed by the primary care physician and assisted by a designated IPC-link person, who may be an existing health human resource. The IPC-link person shall be the liaison of the facility to the Healthcare Provider Network for IPC concerns. The primary care physician may include other members of the primary care facility in the IPC team as necessary.

**7.3 The design of hospital wards shall be according to the standard designs set by the Department of Health.**

**7.4 Overcrowding shall be reduced by optimizing operational processes.**

7.4.1 The facility shall establish a system for patient flow, such as unidirectional foot traffic, within the health facility.

7.4.2 An appropriate triage system at the Emergency and Outpatient Departments shall be implemented.

7.4.3 Patient navigation shall be established through the referral system within the Healthcare Provider Network.



# STANDARDS

BUILT ENVIRONMENT, MATERIALS, AND EQUIPMENT  
FOR IPC

## 08

## STANDARDS ON BUILT ENVIRONMENT, MATERIALS, AND EQUIPMENT FOR IPC

Adequate facilities must be available to ensure that patient care activities are conducted in a clean and hygienic environment which can facilitate practices related to infection prevention and control (IPC), including availability of appropriate IPC materials and equipment.

**8.1 A safe and sufficient quantity of water shall always be available from an improved source on the premises to perform basic IPC measures, including but not limited to hand hygiene, environmental cleaning, laundry, decontamination of medical devices, and health care waste management. These shall be in accordance with the Health Care Waste Management Manual and the latest and updated guidelines on WASH.**

8.1.1 For secondary or tertiary care facilities, it is critical for water to be available 24 hours on-site from an improved source, and piped into the facility to clinical areas, at a minimum to high-risk wards (for example, maternity ward, operating room/s, intensive care unit), points of care and service areas (for example, sterile services department) as patients in these areas may require 24-hour clinical care where water-related IPC is critical (for example, hand hygiene, environmental cleaning, reprocessing of medical devices).

8.1.2 For secondary or tertiary care facilities, to avoid any frequent service gaps/water shortages, it is recommended that there be sufficient on-site water storage capacity to provide services for a minimum of 48 hours.

**8.2 A minimum of two functional, improved sanitation facilities shall be available on-site, one for patients and one for staff. This shall be in conjunction with the Health Care Waste Management Manual of the Department of Health and the latest and updated guidelines on WASH.**

8.2.1 Improved sanitation facilities located on premises shall be functional with safe management of sewage/fecal waste, which can include but not limited to the use of well-managed septic tanks and leach fields, disposal into functioning sewers or off-site removal.

8.2.2 For secondary or tertiary care facilities, a minimum of two functional, improved sanitation facilities that safely contain waste shall be available for outpatient wards and one per 20 beds for inpatient wards; all shall be equipped with menstrual hygiene facilities.

8.2.3 For secondary or tertiary care facilities, additional sanitation facility include at least one toilet designated for women/ girls to manage menstrual hygiene needs, at least one separated for staff, and at least one meeting the needs of people with limited

physical disabilities; as applicable, sanitation facilities shall also be available for infants and children that are adapted for their use (with for example, smaller seats, child-sized bed pans), segregated by sex for older children.

**8.3 Functional hand hygiene facilities shall always be available at points of care/toilets and include soap, water and single-use towels (or if unavailable, clean reusable towels) or alcohol-based hand rub (ABHR) at points of care and soap, water and single-use towels within 5 meters of toilets.**

- 8.3.1 If ABHRs are available, it is essential to have these accessible at all points of care but it is also essential that soap, water and single-use towels are available in clinical services.
- 8.3.2 When there is a risk of soiling, ABHR is not a substitute for soap and water for hand hygiene after toileting or when hands are visibly soiled (for example, while assisting childbirth).
- 8.3.3 Hand hygiene promotion materials shall be clearly visible and understandable at key places.
- 8.3.4 1:10 sink to bed ratio in healthcare facilities and handwashing stations within 5 meters of toilets.

**8.4 Sufficient and appropriately labelled bins to allow for health care waste segregation (including needle and sharps disposal) shall be available (less than 5 meters from point of generation); waste shall be treated and disposed of safely in compliance with the latest or updated national standard on the design, construction, operation, and maintenance of septic tank systems.**

- 8.4.1 Functional waste collection containers for non-infectious (general) waste, infectious waste, and sharps waste shall be available in close proximity to all waste generation points.
- 8.4.2 Continuous adequate supply of sharps' containers and containers for segregating other types of health care waste and equipment shall be ensured that health care waste is treated and disposed of safely.
- 8.4.3 There shall be adequate drainage of storms and wash water to prevent vector breeding.

**8.5 The facility layout shall allow adequate natural or mechanical ventilation, decontamination of reusable medical devices, triage, and space for temporary cohorting/isolation/physical separation if necessary to prevent transmission of infectious pathogens. Facility layout and construction shall be in conjunction with the latest or updated rules and regulations governing the licensure of healthcare facilities.**

- 8.5.1 Patient placement requires patient beds to be positioned at least one meter apart or increased as necessary according to new evidence or additional recommendations for transmission-based precautions.
- 8.5.2 Isolation rooms shall be provided for highly communicable or yet unknown new infections and for the severely immune-compromised. These shall be available in all hospital facilities. The HFDB, in coordination with the National Council or assigned technical working group, shall review the requirements at recommended intervals for isolation rooms in various hospital facilities.

- 8.5.3 Facility layout shall allow for adequate facilities to practice updated and latest appropriate guidelines for standard or transmission-based precautions.
- 8.5.4 Secondary or tertiary facilities shall have adequate isolation rooms for patients with similar pathogens or syndrome (for example, tuberculosis, measles, cholera, Ebola, severe acute respiratory syndrome, Coronavirus disease); If the number of isolation rooms becomes insufficient, rooms for the cohorting/physical separation of patients with similar pathogens or syndrome shall be available.
- 8.5.5 Cohorting can be carried out in a dedicated area of a general ward. It can be done in any well-ventilated area as long as hand hygiene, standard precautions, and transmission-based precautions are strictly adhered to.
- 8.5.6 Given the increased risk for HAI and AMR at secondary and tertiary health care facilities, WHO minimum requirements for IPC programs recommends at least one isolation room per 20-bedded ward in secondary care facilities and 1:10 in the tertiary care facilities.
- 8.5.7 Adequate ventilation throughout the facility contributes to maintaining a hygienic environment and can be minimally accomplished via the presence of functional windows (preferably equipped with insect traps) and doors that allow at least 6-8 air changes per hour for natural ventilation (for example, by opening opposite windows). For airborne infection isolation room/s and ER/triage areas, 12 air changes per hour is recommended, while up to 15 air changes per hour may be recommended for operating, procedure, or delivery rooms (See Annex F). For hospital rooms, the minimum requirements for air changes are detailed below.

Cubic Meter Per Minute Per Person		Air Changes Per Hour				
		Ceiling Height (meters)				
Min.	Max	2.40	3.00	3.70	4.90	6.10
0.29	0.43	3	2	1- ½	1	¾

- 8.5.8 The formula for air changes per hour in natural ventilation settings is seen in the figure below. This is used for rooms with two opposite openings.

$$ACH = \frac{0.65 \times \text{wind speed (m/s)} \times \text{smallest opening area (m}^2\text{)} \times 3600 \text{ s/h}}{\text{room volume (m}^3\text{)}}$$

$$\text{Ventilation rate (l/s)} = 0.65 \times \text{wind speed (m/s)} \times \text{smallest opening area (m}^2\text{)} \times 1000 \text{ l/m}^3$$

For example, consider a ward with the following dimensions: 10m (length) x 6m (width) x 2.5m (height). The window is 1.5x 2m<sup>2</sup> and the door is 1x2m<sup>2</sup>.

Wind speed is assumed to be 1m/s.

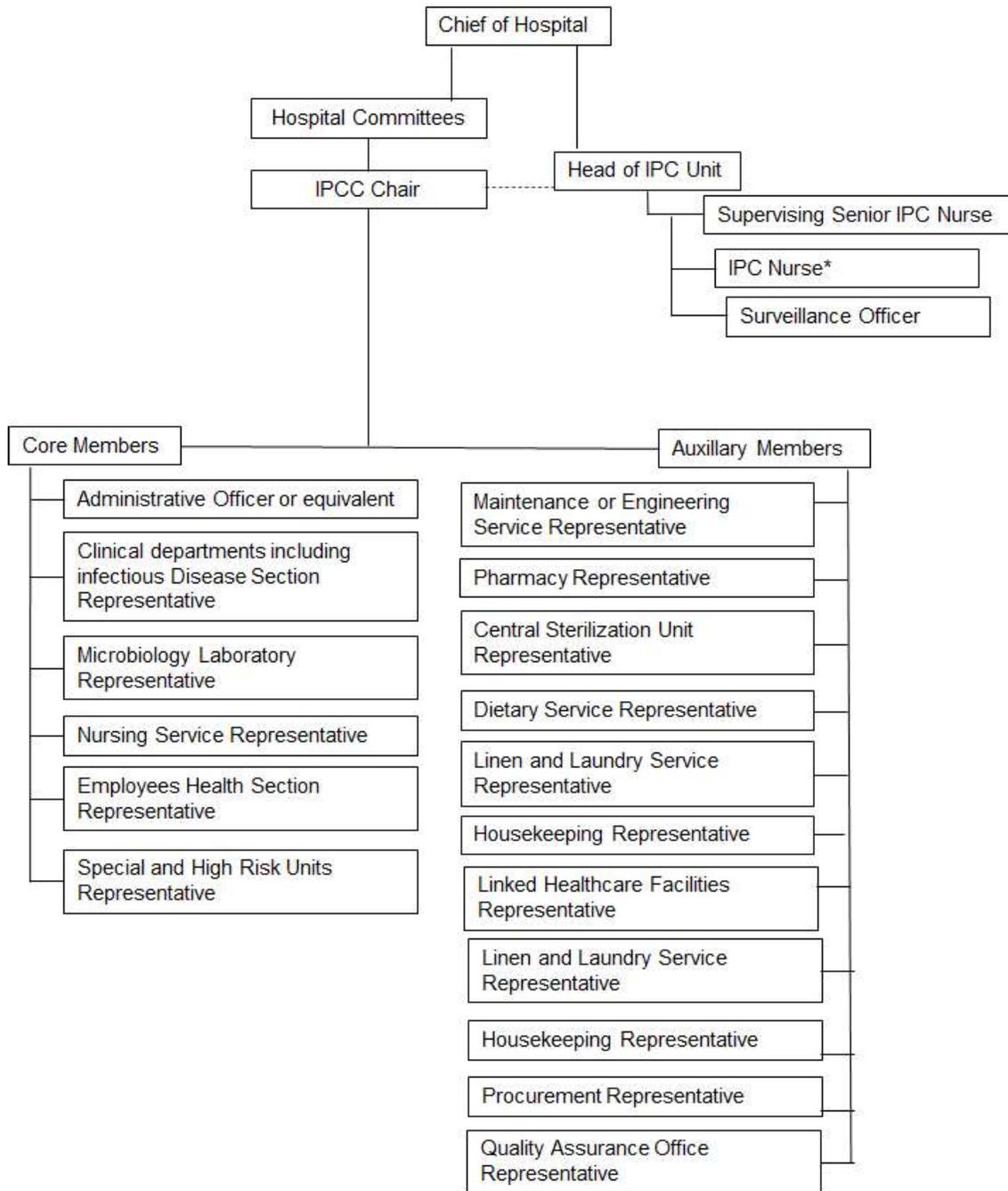
Using the formula above, the ACH is calculated to be: 31.2

- 8.5.9 As per the Philippine Green Building Code, to facilitate natural ventilation, the size of the opening shall be equal to at least ten percent (10%) of the floor area of regularly occupied spaces. All operable windows shall be provided with safety features for protection against strong winds, water penetration and protection for building occupants including child safety and security.
- 8.5.10 For secondary or tertiary care facilities, these shall be designed to ensure adequate ventilation for the entire institution whether natural or mechanical systems are used to achieve desired air exchanges listed above.
- 8.5.11 If the facility performs any procedures requiring reusable medical devices, at a minimum it is essential to create dedicated areas that allow proper workflow from dirty to clean for performing the decontamination and reprocessing of medical devices.
- 8.6 Sufficient and appropriate IPC supplies and equipment (for example, mops, detergent, disinfectant, PPE, and sterilization) and reliable power/energy (for example, fuel and electricity) shall be available for performing all IPC measures according to minimum requirements/SOPs, including all standard and transmission-based precautions, as applicable; adequate lighting shall be available during working or operating hours for providing continuous and safe care.**
- 8.6.1 Reliable power means that a constant (that is, 24-hour) source of power and/or back-up power is available and this can be achieved via an on-site source of energy/power and fuel (for example, wind, solar, stand-by generator/s) to provide back-up as needed.
- 8.6.2 Personal protective equipment (PPE) must be available at all times and in sufficient quantity for all health care workers; including continuous adequate supply of appropriate PPE for both clinical care and health care waste handling and cleaning. Updated or latest guidelines for rational and proper use of PPE may be followed as applicable.
- 8.6.3 For secondary or tertiary care facilities, a dedicated centralized decontamination area and/or sterile supply department for the decontamination and sterilization of medical devices and other items/equipment shall be available and supplied with sufficient water and power. A dedicated clean storage area for patient care items and equipment, including sterile material, and a separate area for the storage of clean linen shall be available as outlined in the WHO manual on decontamination and reprocessing of medical devices for health-care facilities.

The assessment tool for the IPC program is found in Annex G. The matrix for the structure of the IPC program is found in Annex H.

## ANNEXES

### ANNEX A: ORGANIZATIONAL CHART



\* Number of IPC nurses will depend on the health facility capacity. 1 IPCN: 100 bed capacity.

## ANNEX B: DUTIES AND RESPONSIBILITIES OF IPC UNIT MEMBERS

**POSITION : UNIT HEAD**  
**REPORTS TO : HOSPITAL DIRECTOR**  
**SUPERVISES : INFECTION CONTROL TEAM AND ACTIVITIES**

### GENERAL DUTIES AND RESPONSIBILITIES

Plans, organizes, directs and controls all activities of the departments.

### SPECIFIC DUTIES

- Takes a lead role in the effective functioning of the infection prevention and control team.
- Assists the hospital in drawing up annual plans, policies and long term programs for the prevention of hospital infection.
- Recommends in the preparation of the documents for support services and advises on infection aspects.
- Gets involved in setting quality standards with regards to prevention of healthcare associated infections and in the audit of infections.

### QUALIFICATIONS

- Preferably a doctor with Infection Control Training certified by Philippine Hospital Infection Control Society. Specialist in Infectious Disease, Microbiology or Hospital Epidemiology.

**POSITION : INFECTION PREVENTION AND CONTROL NURSE**  
**REPORTS TO : IPC UNIT HEAD**  
**SUPERVISES : ALL NURSING STAFF, AND HEALTH CARE WORKERS**

### GENERAL DUTIES AND RESPONSIBILITIES

Coordinates and supervises all activities in the hospital relevant to infection control.

### SPECIFIC DUTIES

- Acts as coordinator to all hospital staff relevant to infection control.
- Identifies healthcare associated infections.
- Investigates type of infection and infecting organisms.
- Participates in outbreak investigation.
- Participates in analyzing trends and risk factors.
- Conducts surveillance of hospital infections.
- Participates in training of personnel.
- Assists in the development of infection control policies and strategies, reviews and approves patient care policies relevant to infection control.
- Ensures compliance with local and national regulations.
- Serves a liaison with other departments of the hospital.
- Provides expert consultative advice to staff health and other appropriate hospital programs in matters relating to transmission of infections.
- Attends professional meetings and conferences on matters related to infection control.

- Regularly monitors infection control practices and compliance of healthcare workers.
- Monitors staff health in collaboration with the Employees Health Services Department to prevent hospital related infection among hospital staff.
- Participates in sharp injuries investigation and prevention activities.
- Serves as a preceptor in nursing training programs.
- Conducts research studies relevant to infection control.

#### QUALIFICATIONS

- or at least a nurse supervisor with clinical and administrative expertise.
- Good interpersonal and educational background.
- Good communication skills
- With Basic Training in Infection Prevention and Control certified by Philippine Hospital Infection Control Nurses Association.

**POSITION** : **MEDICAL TECHNOLOGIST**  
**REPORTS TO** : **IPC COORDINATOR AND IPC TEAM**  
**SUPERVISES** : **LABORATORY STAFF**

#### GENERAL DUTIES AND RESPONSIBILITIES

Coordinates and implements the safe delivery and handling of laboratory procedures.

#### SPECIFIC DUTIES

- Handles patient and staff specimens to maximize the likelihood of microbiological diagnosis.
- Develops guidelines for appropriate collection, transport and handling of specimens.
- Ensures laboratory practices meet appropriate standards.
- Ensures safe laboratory practice to prevent infection among staff.
- Performs antimicrobial susceptibility testing following internationally recognized methods and prevailing summary reports of prevalence of resistance.
- Monitors sterilization, disinfection and the environment where necessary laboratory activities take place.
- Communicates the results to the infection prevention and control unit.

#### QUALIFICATIONS

- Licensed microbiologist or medical technologist trained in microbiology. With
- With 2 years experience
- Good communication skills
- With teaching ability
- With infection control training certified by Philippines Hospital Infection Control Society.

**POSITION** : **ADMINISTRATIVE OFFICE REPRESENTATIVE**  
**REPORTS** : **HOSPITAL DIRECTOR**  
**SUPERVISES** : **ALL EMPLOYEES**

#### GENERAL DUTIES AND RESPONSIBILITIES

Acts as liaison between IPC Unit and administration, implements and executes policies.

#### SPECIFIC DUTIES

- Facilitates dissemination and implementation of IPC Unit recommendations and policies.
- Ensures financial support for the infection prevention and control program.
- Identifies appropriate resources of programs to monitor infections and apply the most appropriate methods for preventing infections.
- Ensures education and training of all staff through support of programs on the prevention of infection disinfection and sterilization techniques, etc.
- Ensures that the infection prevention control team has authority to facilitate program functions.

#### QUALIFICATIONS

- Senior member of administrative office
- With special interest on infection control

**POSITION** : **CLINICAL DEPARTMENT REPRESENTATIVE**  
**REPORT TO** : **IPC UNIT HEAD AND IPC TEAM**  
**SUPERVISES** : **HOSPITAL STAFF AND PATIENTS**

#### GENERAL DUTIES AND RESPONSIBILITIES

Coordinates with IPCU and directs hospital staff regarding infection prevention and control and related issues.

#### SPECIFIC DUTIES

- Provides direct patient care using practices which minimize infection.
- Supervises and monitors staff implementation and compliance with infection control practices.
- Follow appropriate practice of hand hygiene.
- Works with the IPC Unit.
- Supports the IPC Unit.
- Links with staff and with areas of clinical practice.
- Coordinates with IPC Team/Unit regarding implementation of policies and guidelines.
- Helps in surveillance outbreak investigation.
- Advises the IPC Unit on recent advances in medical procedures that have IPC implication.

#### QUALIFICATIONS

- Registered physician
- Preferably senior member of the hospital staff.
- With special training or interest on IPC.

**POSITION** : **HIGH RISK AREAS REPRESENTATIVE**  
**REPORTS TO** : **IPC COORDINATOR AND IPC TEAM**  
**SUPERVISES** : **HIGH RISK AREAS STAFF**

**GENERAL DUTIES AND RESPONSIBILITIES**

Supervises all activities relevant to IPC practices and procedures.

**SPECIFIC DUTIES**

- Supervises staff on implementation and compliance to IPC practices.
- Refers cases with IPC implication.
- Coordinates with the committee regarding implementation of policies and guidelines.
- Helps investigate local outbreaks.
- Participates in surveillance.
- Maintains hygiene, consistent with hospital policies and good nursing practice in the area.
- Reports promptly to the attending physician any evidence of infection in the patients under nurse's care.
- Limits patient exposure to infections from visitors, hospital staff, other patients or equipment used in the diagnosis or treatment.

**QUALIFICATIONS**

- Registered nurse
- With 2 years experience in the specific high risk area
- With basic IPC training certified by IPC Unit
- Demonstrate leadership ability to the general management of the unit
- Has good interpersonal relationship
- Able to train

**POSITION** : **NURSING REPRESENTATIVE (LINK HEAD NURSE)**  
**REPORTS TO** : **IPC UNIT**  
**SUPERVISES** : **NURSING STAFF AND NURSING AIDES/ORDERLIES**

**GENERAL DUTIES AND RESPONSIBILITIES**

- Conveys to nursing staff the recommendations of IPC Unit for hospital-wide implementation.
- Participates in IPC Unit activities.
- Promotes the development and implementation of nursing techniques and ongoing review of aseptic nursing policies, with approval of the IPC Unit.
- Develops training programs for members of nursing staff.
- Supervises the implementation of techniques for the prevention of infection in specialized areas such as the operating room, adult and pediatric intensive care unit, maternity unit and newborn unit.
- Monitors nurses' adherence to policies.
- Ensures nurse education programs that include IPC policies and procedures.
- Limits patient exposure to infections from visitors, hospital staff, other patients or equipment used in the diagnosis or treatment.

- Maintains hygiene consistent with hospital policies and good nursing practice in the ward.
- Report promptly to the attending physician any evidence of infection in the patients under nurse's care.

#### QUALIFICATIONS

- Registered Nurse
- With supervisory position
- With basic IPC training certified by IPC Unit.
- Able to train

**POSITION** : **PHARMACIST**  
**REPORTS TO** : **IPC UNIT**  
**SUPERVISES** : **PHARMACISTS**

#### GENERAL DUTIES AND RESPONSIBILITIES

Coordinates with the IPC Unit on matters related to IPC.

#### SPECIFIC DUTIES

- Obtains, stores and distributes pharmaceutical preparation using practices which limit potential transmission of infectious agents to patients.
- Dispenses anti-infectious drugs and maintains relevant records (potency, incompatibility, conditions of storage and deterioration).
- Obtains and stores vaccines making them available as appropriate.
- Provides the AMS Committee and IPC Unit with summary reports and trends of antimicrobial use.
- Participates in the development of guidelines for antiseptics, disinfectants and products used for hand hygiene.
- Communicates with IPC Unit and Nursing Services the Pharmacy Services maintenance and other appropriate services.
- Advises the staff on appropriate indications for disinfectants, antiseptics and antibiotics.
- Keeps record of cost and usage of antibiotics and disinfectants.
- Coordinates with IPC Unit on evaluation of disinfectants, antiseptics and antibiotics and other new products with IPC implication.

#### QUALIFICATIONS

- Registered pharmacist
- With basic IPC and AMS training

**POSITION** : **CENTRAL SUPPLY ROOM REPRESENTATIVE**  
**REPORTS TO** : **IPC UNIT**  
**SUPERVISES** : **CENTRAL SUPPLY ROOM STAFF**

#### GENERAL DUTIES AND RESPONSIBILITIES

Controls quality assurance, safety and sterility of equipment and supplies used on patients.

### SPECIFIC DUTIES

- Collaborates with the IPC Unit and other hospital programs to develop and monitor policies on cleaning and decontamination of reusable, contaminated equipment.
- Oversees the use of different methods to monitor the sterilization process.
- Ensures technical maintenance of the equipment according to national standards and manufacturer's recommendation.
- Reports and coordinates supplies, equipment and machine defects to administration, maintenance, IPC team and other appropriate personnel.
- Maintains complete record of each autoclave run and ensures long-term access to records.
- Collects all outdated sterile units at regular intervals.
- Communicates with IPC, nursing, OR, hospital transplant, pharmacy, maintenance and other appropriate services when needed.
- Attends training on appropriate and safe methods of disinfection and sterilization, equipment and supplies use and maintenance.
- advises quality assurance and safe practices in the area.
- Implements policies on disinfection and sterilization.

### QUALIFICATIONS

- College graduate with 5 or more years of experience in hospital work equivalent in service supplies
- With training on disinfection and sterilization and use and maintenance of CSR equipment

**POSITION : DIETITIAN**  
**REPORTS TO : IPC UNIT**  
**SUPERVISES : DIETARY STAFF**

### GENERAL DUTIES AND RESPONSIBILITIES

Implements infection prevention and control precautions and practices to prevent food-borne diseases and other illnesses related to food preparation and handling.

### SPECIFIC DUTIES

- To ensure proper preparation, storage, delivery and handling of food.
- Monitor equipment used for food preparation, serving, processing and storage are cleaned and sanitized after use.
- Monitors compliance of food handlers to IPC practices and procedures.
- Issues written policies and instructions for hand hygiene, clothing, staff responsibilities and daily disinfection duties.

### QUALIFICATIONS

- Registered dietician
- With training on food safety and basic IPC

**POSITION : ENGINEERING OR MAINTENANCE REPRESENTATIVE**  
**REPORTS TO : IPC UNIT**  
**SUPERVISES : ENGINEERING OR MAINTENANCE STAFF**

**GENERAL DUTIES AND RESPONSIBILITIES**

Maintains and controls hospital and IPC related equipment and facilities.

**SPECIFIC DUTIES**

- Tests and maintains efficiency of equipment within the IPC requirements.
- Monitors and maintains the water and electricity supplies.
- Installs and repairs existing equipment to meet required IPC standards.
- Practices standard precautions during performance of duties.
- Collaborates with other departments in selecting equipment and ensuring early identification and prompt correction of any defect.
- Performs preventive maintenance of equipment at prescribed intervals.
- Inspects all surfaces, walls, floors, ceilings and other areas in the facilities regularly to ensure they are smooth and washable.
- Ensures regular measurement of air changes per hour of specific areas in the facility and reports measurement to IPC Unit/Committee

**QUALIFICATIONS**

- Licensed Engineer
- With training on IPC equipment maintenance and basic IPC

**POSITION : HOUSEKEEPING REPRESENTATIVE**  
**REPORTS TO : IPC UNIT**  
**SUPERVISES : HOUSEKEEPERS**

**GENERAL DUTIES AND RESPONSIBILITIES**

Maintains the environment clean and safe.

**SPECIFIC DUTIES**

- Maintains and monitors hospital-wide cleanliness and sanitation.
- Coordinates with the IPC Team on proper waste disposal and use of disinfectants.
- Monitors housekeeping practices with IPC implications.
- Implements cleaning and disinfection policies in the workplace.
- Observes and practices IPC precautions of housekeepers during work.
- Classifies different areas of the hospital based on varying needs for cleaning.
- Develops policies on cleaning and disinfection techniques.
- Informs the engineering or maintenance services on any building problems requiring repair.
- Maintains pest control in the hospital.

**QUALIFICATIONS**

- College graduate with experience in supervising healthcare facilities housekeeping

- With basic IPC training and BIPC training on cleaning and disinfection for housekeepers

**POSITION** : **LAUNDRY AND LINEN REPRESENTATIVE**  
**REPORTS TO** : **IPC UNIT**  
**SUPERVISES** : **LAUNDRY AND LINEN STAFF**

#### GENERAL DUTIES AND RESPONSIBILITIES

Controls proper handling, storage and processing of soiled linens.

#### SPECIFIC DUTIES

- Implements decontamination/disinfection practices in delivery and transport of linen.
- Coordinates with the IPC Team on the proper disinfectants to be used.
- Ensures proper transport, handling, storage and processing and distribution of line.

#### QUALIFICATIONS

- College graduate with experience in management of healthcare facilities laundry and linen
- With basic IPC training and training on linen and laundry for healthcare facilities

**POSITION** : **PROCUREMENT REPRESENTATIVE**  
**REPORTS TO** : **IPC UNIT**  
**SUPERVISES** : **PROCUREMENT STAFF**

#### GENERAL DUTIES AND RESPONSIBILITIES

Addresses procurement issues related to infection prevention and control

#### SPECIFIC DUTIES

- Assists IPC Unit and Committee in the procurement of IPC related items
- Coordinates with suppliers on purchase and delivery of IPC related items
- Gives report on the status of procurement
- Ensures delivery of requested IPC items
- Analyzes the supply chain of IPC related items in the hospital

#### QUALIFICATIONS

- Senior member of procurement department
- With special interest on infection prevention and control
- With knowledge on supply chain management of IPC related items

## **ANNEX C: THE FIVE-STEP APPROACH TO IPC**

### **Step 1. Preparing for action**

This step ensures that all of the prerequisites that need to be in place for success are addressed, including necessary resources (human and financial), infrastructures, planning and coordination of activities and the identification of roles and responsibilities (including key opinion leaders and champions).

### **Step 2. Baseline assessment**

Conducting an exploratory baseline assessment of the current situation, including the identification of existing strengths and weaknesses, is critical for developing a tailor-made action plan that addresses the reality of health care facilities. An IPC assessment tool shall be utilized on this.

### **Step 3. Developing and executing an action plan**

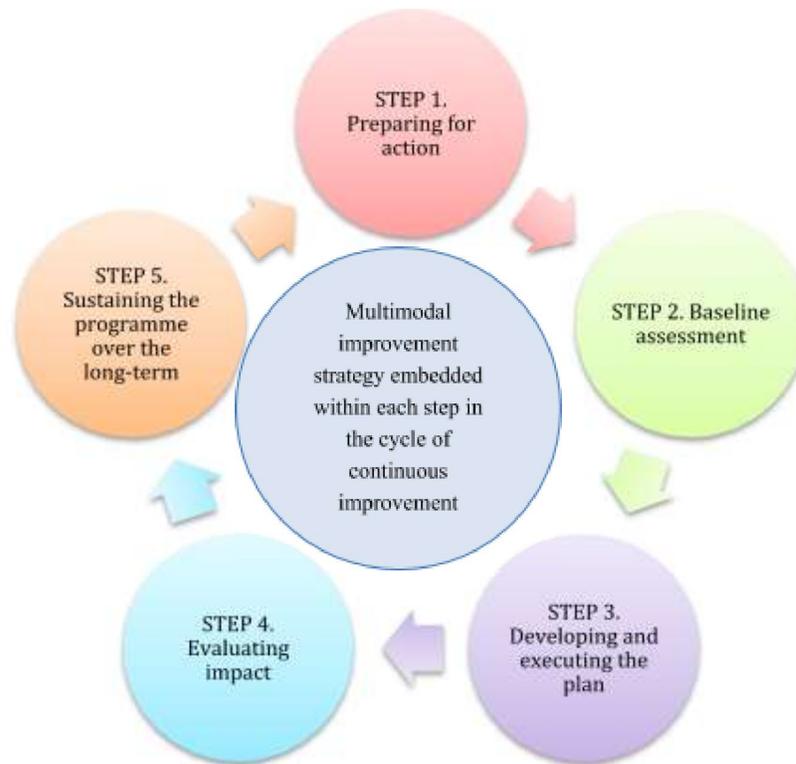
The results of the baseline assessment support the development and execution of an action plan based around a multimodal improvement strategy.

### **Step 4. Assessing impact**

Conducting a follow-up assessment using the same tools as in Step 2 is crucial to determine the effectiveness of the plan. The focus is on impact, acceptability and cost-effectiveness.

### **Step 5. Sustaining the programme over the long term**

An important step in the cycle of improvement is to develop an ongoing action plan and review schedule to support the long-term impact and benefits of the IPC programme, this contributing to its overall impact and sustainability.



## ANNEX D: FIVE ELEMENTS OF MULTIMODAL STRATEGIES

### 1. System Change

- a. The following should be identified as a requirement to implement the IPC programmes and activities:
  - i. Infrastructure
  - ii. Equipment
  - iii. Supplies
  - iv. Other resources (including human resources)
- b. The physical environment should be able to influence healthcare worker Behavior.
- c. Ergonomics and human factors approach should facilitate adoption of the interventions.

Practical example: when implementing hand hygiene interventions, ease of access to handrubs at the point of care and the availability of WASH infrastructures (including water and soap) are important considerations. Are these available, affordable and easily accessible in the workplace? If not, action is needed.

### 2. Training and Education

- a. Identify the following prior to conduct of training and education
  - i. Who needs to be trained?
  - ii. What type of training should be used to ensure that the intervention will be implemented in line with evidence-based policies?
  - iii. What will be the frequency?
  - iv. Does the facility have trainers, training aids, and the necessary equipment?

Practical example: when implementing injection safety interventions, timely training of those responsible for administering safe injections, including carers and community workers, are important considerations, as well as adequate disposal methods.

### 3. Monitoring and Feedback

- a. Identify the gaps in infection prevention and control practices or other indicators in the facility to allow prioritization of interventions.
- b. Ensure that the interventions are being implemented correctly and safely.
- c. Identify how and when feedback will be given to the target audience and managers, and how patients can also be informed.

Practical example: when implementing surgical site infection interventions, the use of key tools are important considerations, such as surveillance data collection forms and the WHO checklist (adapted to local conditions)

#### 4. Reminders and Communications

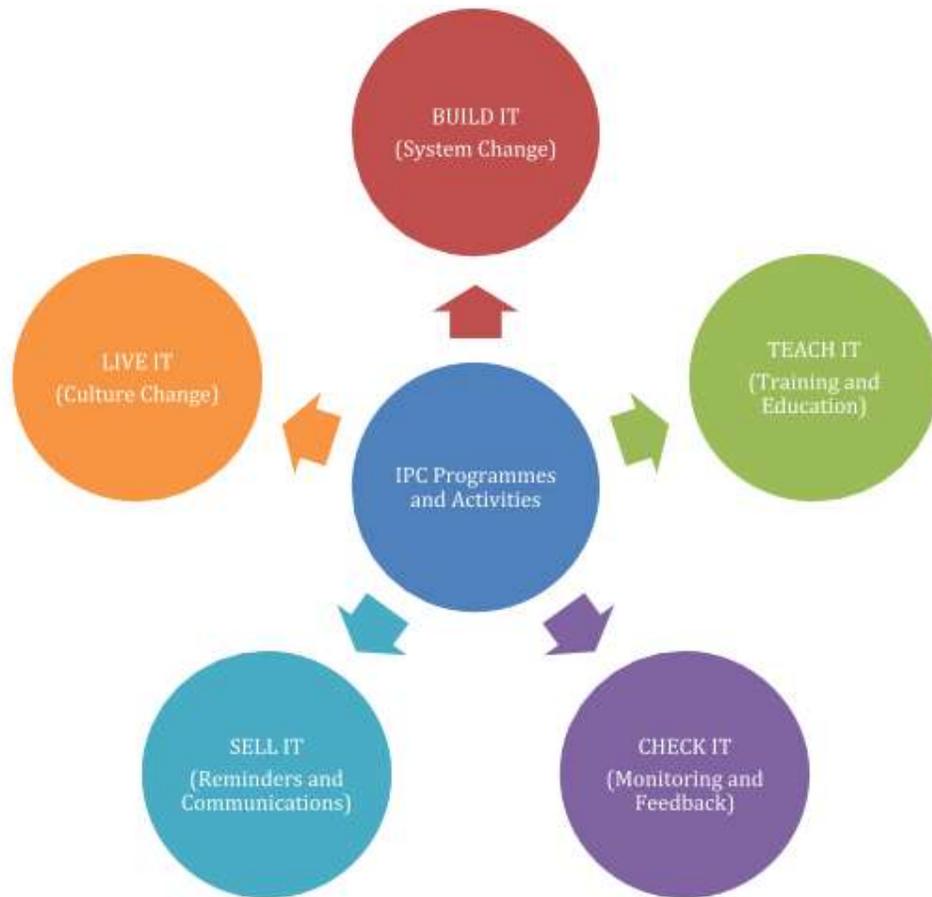
- a. Promote an intervention to ensure that there are cues to action at the point of care and messages are reinforced to healthcare workers and patients.
- b. Provide capacity or funding to develop promotional messages and materials.

Practical example: when implementing interventions to reduce catheter-associated bloodstream infection, the use of visual cues to action, promotional or reinforcing messages, and planning for periodic campaigns are important considerations.

#### 5. Culture Change

- a. Provide demonstrable support for the intervention at every level of the healthcare system.
- b. Identify staff who are willing to be champions and role models for IPC improvement.
- c. Identify teams involved in co-developing or adapting the intervention. Ensure they are empowered and they feel ownership and the need for accountability.
- d. Involve clients (i.e. patients) as part of establishing or strengthening the safety climate which requires local adaptation and careful consideration of the cultural specificities, social dynamics, level of education and literacy.

Practical example: when implementing hand hygiene interventions, the way that a health facility approaches this as part of safety and quality improvement and the value placed on hand hygiene improvement as part of the clinical workflow are important considerations.



**ANNEX E: SAMPLE OBSERVATIONAL TOOLS**

Source: Centers for Disease Control and Prevention. September 2016.

**Hand Hygiene**

V.b. Hand hygiene		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Supplies necessary for adherence to hand hygiene (e.g., soap, water, paper towels, alcohol-based hand rub) are readily accessible to HCP in patient care areas.	<input type="radio"/> Yes <input type="radio"/> No	
Hand hygiene is performed correctly:		
B. Before contact with the patient	<input type="radio"/> Yes <input type="radio"/> No	
C. Before performing an aseptic task (e.g., insertion of IV or preparing an injection, administering eye drops)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
D. After contact with the patient	<input type="radio"/> Yes <input type="radio"/> No	
E. After contact with objects in the immediate vicinity of the patient	<input type="radio"/> Yes <input type="radio"/> No	
F. After contact with blood, body fluids or contaminated surfaces	<input type="radio"/> Yes <input type="radio"/> No	
G. After removing gloves	<input type="radio"/> Yes <input type="radio"/> No	
H. When moving from a contaminated-body site to a clean-body site during patient care	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

## Personal Protective Equipment

VI.b. Personal Protective Equipment (PPE)		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Sufficient and appropriate PPE is available and readily accessible to HCP.	<input type="radio"/> Yes <input type="radio"/> No	
PPE is used correctly:		
B. PPE, other than respirator, is removed and discarded prior to leaving the patient's room or care area. If a respirator is used, it is removed and discarded (or reprocessed if reusable) <u>after</u> leaving the patient room or care area and closing the door.	<input type="radio"/> Yes <input type="radio"/> No	
C. Hand hygiene is performed immediately after removal of PPE.	<input type="radio"/> Yes <input type="radio"/> No	

VI.b. Personal Protective Equipment (PPE), continued		
Elements to be assessed	Assessment	Notes/Areas for Improvement
D. Gloves		
i. HCP wear gloves for potential contact with blood, body fluids, mucous membranes, non-intact skin, or contaminated equipment.	<input type="radio"/> Yes <input type="radio"/> No	
ii. HCP <u>do not</u> wear the same pair of gloves for the care of more than one patient.	<input type="radio"/> Yes <input type="radio"/> No	
iii. HCP <u>do not</u> wash gloves for the purpose of reuse.	<input type="radio"/> Yes <input type="radio"/> No	
E. Gowns		
i. HCP wear gowns to protect skin and clothing during procedures or activities where contact with blood or body fluids is anticipated.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
ii. HCP <u>do not</u> wear the same gown for the care of more than one patient.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
F. Facial protection		
i. HCP wear mouth, nose, and eye protection during procedures that are likely to generate splashes or sprays of blood or other body fluids.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

## Injection Safety

VII.b. Injection safety (This element does not include assessment of pharmacy/compounding practices)		
If injectable medications are never prepared or administered at the facility check <input type="radio"/> Not Applicable here and skip to Section VIII.b. Respiratory Hygiene/Cough Etiquette		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment.	<input type="radio"/> Yes <input type="radio"/> No	
B. Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens).	<input type="radio"/> Yes <input type="radio"/> No	
C. The rubber septum on a medication vial is disinfected with alcohol prior to piercing.	<input type="radio"/> Yes <input type="radio"/> No	
D. Medication containers are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient.	<input type="radio"/> Yes <input type="radio"/> No	
E. Single dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient.	<input type="radio"/> Yes <input type="radio"/> No	
F. Medication administration tubing and connectors are used for only one patient.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable (Facility does not use tubing or connectors)	
G. Multi-dose vials are dated by HCP when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial.  <i>Note: This is different from the expiration date printed on the vial.</i>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable (Facility does not use multi-dose vials or discards them after single patient use)	

VII.b. Injection safety (This element does not include assessment of pharmacy/compounding practices), continued		
Elements to be assessed	Assessment	Notes/Areas for Improvement
H. Multi-dose vials to be used for more than one patient are kept in a centralized medication area and <u>do not</u> enter the immediate patient treatment area (e.g., operating room, patient room/cubicle).  <i>Note: If multi-dose vials enter the immediate patient treatment area they should be dedicated for single-patient use and discarded immediately after use.</i>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable (Facility does not use multi-dose vials or discards them after single patient use)	
I. All sharps are disposed of in a puncture-resistant sharps container.	<input type="radio"/> Yes <input type="radio"/> No	
J. Filled sharps containers are disposed of in accordance with state regulated medical waste rules.	<input type="radio"/> Yes <input type="radio"/> No	
K. All controlled substances (e.g., Schedule II, III, IV, V drugs) are kept locked within a secure area.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable (Controlled substances are not kept at the facility)	
L. HCP wear a facemask (e.g., surgical mask) when placing a catheter or injecting material into the epidural or subdural space (e.g., during myelogram, epidural or spinal anesthesia).	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable (Facility does not perform spinal injection procedures)	

## Respiratory Hygiene

VIII.b. Respiratory Hygiene/Cough Etiquette		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Facility:		
i. Posts signs at entrances with instructions to patients with symptoms of respiratory infection to:	<input type="radio"/> Yes <input type="radio"/> No	
a. Inform HCP of symptoms of a respiratory infection when they first register for care, and		
b. Practice Respiratory Hygiene/Cough Etiquette (cover their mouths/noses when coughing or sneezing, use and dispose of tissues, and perform hand hygiene after hands have been covered with respiratory secretions).		
ii. Provides tissues and no-touch receptacles for disposal of tissues.	<input type="radio"/> Yes <input type="radio"/> No	
iii. Provides resources for performing hand hygiene in or near waiting areas.	<input type="radio"/> Yes <input type="radio"/> No	

## Point-of-Care Testing

IX.b. Point-of-Care Testing (e.g., blood glucose meters, INR monitor)		
If point-of-care testing is never performed at the facility check <input type="radio"/> Not Applicable here and skip to Section X.b. Environmental Cleaning		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. New single-use, auto-disabling lancing device is used for each patient.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
<i>Note: Lancet holder devices are not suitable for multi-patient use.</i>		
B. If used for more than one patient, the point-of-care blood testing meter is cleaned and disinfected after every use according to manufacturer's instructions.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
<i>Note: If the manufacturer does not provide instructions for cleaning and disinfection, then the testing meter should not be used for &gt;1 patient.</i>		

### Environmental Cleaning

X.b. Environmental Cleaning		
Elements to be assessed	Assessment	Notes/Areas for improvement
<p>A. Supplies necessary for appropriate cleaning and disinfection procedures (e.g., EPA-registered disinfectants) are available.</p> <p><i>Note: If environmental services are performed by contract personnel, facility should verify that appropriate EPA-registered products are provided by contracting company</i></p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	
<p>B. High-touch surfaces in rooms where surgical or other invasive procedures (e.g., endoscopy, spinal injections) are performed are cleaned and then disinfected with an EPA-registered disinfectant after each procedure.</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable</p>	
<p>C. Cleaners and disinfectants are used in accordance with manufacturer's instructions (e.g., dilution, storage, shelf-life, contact time).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	
<p>D. HCP engaged in environmental cleaning wear appropriate PPE to prevent exposure to infectious agents or chemicals (PPE can include gloves, gowns, masks, and eye protection).</p> <p><i>Note: The exact type of correct PPE depends on infectious or chemical agent and anticipated type of exposure.</i></p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>	

## Device Processing

XI.b. Device Reprocessing		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Policies, procedures, and manufacturer reprocessing instructions for reusable medical devices used in the facility are available in the reprocessing area(s).	<input type="radio"/> Yes <input type="radio"/> No	
B. Reusable medical devices are cleaned, reprocessed (disinfection or sterilization) and maintained according to the manufacturer instructions.  <i>Note: If the manufacturer does not provide such instructions, the device may not be suitable for multi-patient use.</i>	<input type="radio"/> Yes <input type="radio"/> No	
C. Single-use devices are discarded after use and not used for more than one patient unless they have been appropriately reprocessed as described in the note below.  <i>Note: If the facility elects to reuse single-use devices, these devices must be reprocessed prior to reuse by a third-party reprocessor that it is registered with the FDA as a third-party reprocessor and cleared by the FDA to reprocess the specific device in question. The facility should have documentation from the third party reprocessor confirming this is the case.</i>	<input type="radio"/> Yes <input type="radio"/> No	
D. Reprocessing area: i. Adequate space is allotted for reprocessing activities. ii. A workflow pattern is followed such that devices clearly flow from high contamination areas to clean/sterile areas (i.e., there is clear separation between soiled and clean workspaces).	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No	
E. Adequate time for reprocessing is allowed to ensure adherence to all steps recommended by the device manufacturer, including drying and proper storage.  <i>Note: Facilities should have an adequate supply of instruments for the volume of procedures performed and should schedule procedures to allow sufficient time for all reprocessing steps.</i>	<input type="radio"/> Yes <input type="radio"/> No	
F. HCP engaged in device reprocessing wear appropriate PPE to prevent exposure to infectious agents or chemicals (PPE can include gloves, gowns, masks, and eye protection).  <i>Note: The exact type of correct PPE depends on infectious or chemical agent and anticipated type of exposure.</i>	<input type="radio"/> Yes <input type="radio"/> No	
G. Medical devices are stored in a manner to protect from damage and contamination.	<input type="radio"/> Yes <input type="radio"/> No	

### Sterilization of Reusable Devices

XII. Sterilization of Reusable Devices		
<p>If all device sterilization is performed off-site, complete elements M-O and check Not Applicable for the remaining elements in this section.</p> <p>If sterilization of reusable devices is never performed (either at the facility or off-site) check <input type="radio"/> Not Applicable here and skip to Section XIII.</p>		
Elements to be assessed	Assessment	Notes/Areas for Improvement
<p>A. Devices are thoroughly cleaned according to manufacturer instructions and visually inspected for residual soil prior to sterilization.</p> <p><i>Note: Cleaning may be manual (i.e., using friction) and/or mechanical (e.g., with ultrasonic cleaners, washer-disinfector, washer-sterilizers).</i></p> <p><i>Ensure appropriately sized cleaning brushes are selected for cleaning device channels and lumens.</i></p>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
B. Cleaning is performed as soon as practical after use (e.g., at the point of use) to prevent soiled materials from becoming dried onto devices.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
C. Enzymatic cleaner or detergent is used for cleaning and discarded according to manufacturer's instructions (typically after each use)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
D. Cleaning brushes are disposable or, if reusable, cleaned and high-level disinfected or sterilized (per manufacturer's instructions) after use.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
E. After cleaning, instruments are appropriately wrapped/packaged for sterilization (e.g., package system selected is compatible with the sterilization process being performed, items are placed correctly into the basket, shelf or cart of the sterilizer so as not to impede the penetration of the sterilant, hinged instruments are open, instruments are disassembled if indicated by the manufacturer).	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
F. A chemical indicator (process indicator) is placed correctly in the instrument packs in every load.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
G. A biological indicator, intended specifically for the type and cycle parameters of the sterilizer, is used at least weekly for each sterilizer and with every load containing implantable items.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
H. For dynamic air removal-type sterilizers (e.g., prevacuum steam sterilizer), an air removal test (Bowie-Dick test) is performed in an empty dynamic-air removal sterilizer each day the sterilizer is used to verify efficacy of air removal.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
I. Sterile packs are labeled with a load number that indicates the sterilizer used, the cycle or load number, the date of sterilization, and, if applicable, the expiration date.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
J. Sterilization logs are current and include results from each load.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
K. Immediate-use steam sterilization, if performed, is only done in circumstances in which routine sterilization procedures cannot be performed.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

XII. Sterilization of Reusable Devices, continued		
Elements to be assessed	Assessment	Notes/Areas for Improvement
L. Instruments that undergo immediate-use steam sterilization are used immediately and not stored.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
M. After sterilization, medical devices are stored so that sterility is not compromised.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
N. Sterile packages are inspected for integrity and compromised packages are reprocessed prior to use.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
O. The facility has a process to perform initial cleaning of devices (to prevent soiled materials from becoming dried onto devices) prior to transport to the off-site reprocessing facility.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

### High-Level Disinfection of Reusable Devices

XIII. High-Level Disinfection of Reusable Devices		
If all high-level disinfection is performed off-site, complete elements L-N below and check Not Applicable for the remaining elements in this section.		
If high-level disinfection of reusable devices is never performed (either at the facility or off-site) check here: <input type="radio"/> Not Applicable		
Elements to be assessed	Assessment	Notes/Areas for Improvement
A. Flexible endoscopes are inspected for damage and leak tested as part of each reprocessing cycle. Any device that fails the leak test is removed from clinical use and repaired.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
B. Devices are thoroughly cleaned according to manufacturer instructions and visually inspected for residual soil prior to high-level disinfection.  <i>Note: Cleaning may be manual (i.e., using friction) and/or mechanical (e.g., with ultrasonic cleaners, washer-disinfector, washer-sterilizers).</i>  <i>Ensure appropriately sized cleaning brushes are selected for cleaning device channels and lumens.</i>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
C. Cleaning is performed as soon as practical after use (e.g., at the point of use) to prevent soiled materials from becoming dried onto instruments.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
D. Enzymatic cleaner or detergent is used and discarded according to manufacturer instructions (typically after each use).	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
E. Cleaning brushes are disposable or, if reusable, cleaned and high-level disinfected or sterilized (per manufacturer instructions) after use.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
F. For chemicals used in high-level disinfection, manufacturer instructions are followed for: <ul style="list-style-type: none"> <li>i. Preparation</li> <li>ii. Testing for appropriate concentration</li> <li>iii. Replacement (i.e., upon expiration or loss of efficacy)</li> </ul>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable  <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable  <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

XIII. High-Level Disinfection of Reusable Devices, continued		
Elements to be assessed	Assessment	Notes/Areas for Improvement
G. If automated reprocessing equipment (e.g., automated endoscope reprocessor) is used, proper connectors are used to assure that channels and lumens are appropriately disinfected.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
H. Devices are disinfected for the appropriate length of time as specified by manufacturer instructions.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
I. Devices are disinfected at the appropriate temperature as specified by manufacturer instructions.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
J. After high-level disinfection, devices are appropriately rinsed as specified by the manufacturer.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
K. Devices are dried thoroughly prior to reuse.  <i>Note: For lumened instruments (e.g., endoscopes) this includes flushing all channels with alcohol and forcing air through channels.</i>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
L. After high-level disinfection, devices are stored in a manner to protect from damage or contamination.  <i>Note: Endoscopes should be hung in a vertical position.</i>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
M. Facility maintains a log for each endoscopy procedure which includes: patient's name and medical record number (if available), procedure, date, endoscopist, system used to reprocess the endoscope (if more than one system could be used in the reprocessing area), and serial number or other identifier of the endoscope used.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	
N. The facility has a process to perform initial cleaning of devices (to prevent soiled materials from becoming dried onto devices) prior to transport to the off-site reprocessing facility.	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable	

## ANNEX F: HOSPITAL VENTILATION AND AIR EXCHANGE

(Adapted from CDC and HICPAC Guidelines for environmental infection control in health-care facilities, 2004)

### Surgery and Critical Care

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
Operating/surgical cystoscopic rooms <sup>10, 11</sup>	Out	3	15	–	No	30–60	68–73 (20–23) <sup>12</sup>
Delivery room <sup>10</sup>	Out	3	15	–	No	30–60	68–73 (20–23)
Recovery room <sup>10</sup>	–	2	6	–	No	30–60	70–75 (21–24)
Critical and intensive care	–	2	6	–	No	30–60	70–75 (21–24)
Newborn intensive care	–	2	6	–	No	30–60	72–78 (22–26)
Treatment room <sup>13</sup>	–	–	6	–	–	–	75 (24)
Trauma room <sup>13</sup>	Out	3	15	–	No	30–60	70–75 (21–24)
Anesthesia gas storage	In	–	8	Yes	–	–	–
Endoscopy	In	2	6	–	No	30–60	68–73 (20–23)
Bronchoscopy <sup>11</sup>	In	2	12	Yes	No	30–60	68–73 (20–23)
ER waiting rooms	In	2	12	Yes <sup>14, 15</sup>	–	–	70–75 (21–24)
Triage	In	2	12	Yes <sup>14</sup>	–	–	70–75 (21–24)
Radiology waiting rooms	In	2	12	Yes <sup>14, 15</sup>	–	–	70–75 (21–24)
Procedure room	Out	3	15	–	No	30–60	70–75 (21–24)

**Nursing**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
Patient room	–	2	6 <sup>16</sup>	–	–	–	70–75 (21–24)
Toilet room	In	–	10	Yes	–	–	–
Newborn nursery suite	–	2	6	–	No	30–60	72–78 (22–26)
Protective environment room <sup>11, 17</sup>	Out	2	12	–	No	–	75 (24)
Airborne infection isolation room <sup>17, 18</sup>	In	2	12	Yes <sup>15</sup>	No	–	75 (24)
Isolation alcove or anteroom <sup>17, 18</sup>	In/Out	–	10	Yes	No	–	–
Labor/delivery/recovery	–	2	6 <sup>16</sup>	–	–	–	70–75 (21–24)
Labor/delivery/recovery/ postpartum	–	2	6 <sup>16</sup>	–	–	–	70–75 (21–24)
Patient corridor	–	–	2	–	–	–	–

**Ancillary/Radiology<sup>19</sup>**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
X-ray (surgical/critical care and catheterization)	Out	3	15	–	No	30-60	70–75 (21–24)
X-ray (diagnostic & treatment)	–	–	6	–	–	–	75 (24)
Darkroom	In	–	10	Yes	No	–	–

**Laboratory**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
General <sup>19</sup>	–	–	6	–	–	–	75 (24)
Biochemistry <sup>19</sup>	Out	–	6	–	No	–	75 (24)
Cytology	In	–	6	Yes	No	–	75 (24)
Glass washing	In	–	10	Yes	–	–	75 (24)
Histology	In	–	6	Yes	No	–	75 (24)
Microbiology <sup>19</sup>	In	–	6	Yes	No	–	75 (24)
Nuclear medicine	In	–	6	Yes	No	–	75 (24)
Pathology	In	–	6	Yes	No	–	75 (24)
Serology	Out	–	6	–	No	–	75 (24)
Sterilizing	In	–	10	Yes	–	–	–
Autopsy room <sup>11</sup>	In	–	12	Yes	No	–	–
Nonrefrigerated body-holding room	In	–	10	Yes	–	–	70 (21)
Pharmacy	Out	–	4	–	–	–	–

**Diagnostic and treatment**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
Examination room	–	–	6	–	–	–	75 (24)
Medication room	Out	–	4	–	–	–	–
Treatment room	–	–	6	–	–	–	75 (24)

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Physical therapy and hydrotherapy	In	–	6	–	–	–	75 (24)
Soiled workroom or soiled holding	In	–	10	Yes	No	–	–
Clean workroom or clean holding	Out	–	4	–	–	–	–

**Sterilizing and supply**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
ETO-sterilizer room	In	–	10	Yes	No	30-60	75 (24)
Sterilizer equipment room	In	–	10	Yes	–	–	–

**Central medical and surgical supply**

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
Soiled or decontamination room	In	–	6	Yes	No	–	68–73 (20–23)
Clean workroom	Out	–	4	–	No	–	75 (24)
Sterile storage	Out	–	4	–	–	30-60	–

**Food Service**

NATIONAL STANDARDS IN IPC FOR HEALTH FACILITIES 3<sup>rd</sup> Ed

Area designation	Air movement relationship to adjacent area <sup>2</sup>	Minimum air changes of outdoor air per hour <sup>3</sup>	Minimum total air change per hour <sup>4,5</sup>	All air exhausted directly to outdoors <sup>6</sup>	Recirculated by means of room units <sup>7</sup>	Relative humidity <sup>8</sup> (%)	Design temperature <sup>9</sup> (degrees F [C])
Food preparation center <sup>20</sup>	–	–	10	–	No	–	–
Ware washing	In	–	10	Yes	No	–	–
Dietary day storage	In	–	2	–	–	–	–
Laundry, general	–	–	10	Yes	–	–	–
Soiled linen (sorting and storage)	In	–	10	Yes	No	–	–
Clean linen storage	Out	–	2	–	–	–	–
Soiled linen and trash chute room	In	–	10	Yes	No	–	–
Bedpan room	In	–	10	Yes	–	–	–
Bathroom	In	–	10	–	–	–	75 (24)
Janitor's closet	In	–	10	Yes	No	–	–

Notes:

1. The ventilation rates in this table cover ventilation for comfort, as well as for asepsis and odor control in areas of acute care hospitals that directly affect patient care and are determined based on health-care facilities being predominantly “No Smoking” facilities. Where smoking may be allowed, ventilation rates will need adjustment. Areas where specific ventilation rates are not given in the table shall be ventilated in accordance with ASHRAE Standard 62, *Ventilation for Acceptable Indoor Air Quality*, and ASHRAE *Handbook – HVAC Applications*. Specialized patient care areas, including organ transplant units, burn units, specialty procedure rooms, etc., shall have additional ventilation provisions for air quality control as may be appropriate. OSHA standards and/or NIOSH criteria require special ventilation requirements for employee health and safety within health-care facilities.

2. Design of the ventilation system shall provide air movement which is generally from clean to less clean areas. If any form of variable air volume or load shedding system is used for energy conservation, it must not compromise the corridor-to-room pressure balancing relationships or the minimum air changes required by the table.
3. To satisfy exhaust needs, replacement air from the outside is necessary. The table does not attempt to describe specific amounts of outside air to be supplied to individual spaces except for certain areas such as those listed. Distribution of the outside air, added to the system to balance required exhaust, shall be as required by good engineering practice. Minimum outside air quantities shall remain constant while the system is in operation.
4. Number of air changes may be reduced when the room is unoccupied if provisions are made to ensure that the number of air changes indicated is reestablished any time the space is being utilized. Adjustments shall include provisions so that the direction of air movement shall remain the same when the number of air changes is reduced. Areas not indicated as having continuous directional control may have ventilation systems shut down when space is unoccupied and ventilation is not otherwise needed, if the maximum infiltration or exfiltration permitted in Note 2 is not exceeded and if adjacent pressure balancing relationships are not compromised. Air quantity calculations must account for filter loading such that the indicated air change rates are provided up until the time of filter change-out.
5. Air change requirements indicated are minimum values. Higher values should be used when required to maintain indicated room conditions (temperature and humidity), based on the cooling load of the space (lights, equipment, people, exterior walls and windows, etc.).
6. Air from areas with contamination and/or odor problems shall be exhausted to the outside and not recirculated to other areas. Note that individual circumstances may require special consideration for air exhaust to the outside, (e.g., in intensive care units in which patients with pulmonary infection are treated) and rooms for burn patients.
7. Recirculating room HVAC units refer to those local units that are used primarily for heating and cooling of air, and not disinfection of air. Because of cleaning difficulty and potential for buildup of contamination, recirculating room units shall not be used in areas marked "No." However, for airborne infection control, air may be recirculated within individual isolation rooms if HEPA filters are used. Isolation and intensive care unit rooms may be ventilated by reheat induction units in which only the primary air supplied from a central system passes through the reheat unit. Gravity-type heating or cooling units such as radiators or convectors shall not be used in operating rooms and other special care areas. See this table's [Appendix I](#) for a description of recirculation units to be used in isolation rooms (A7).
8. The ranges listed are the minimum and maximum limits where control is specifically needed. The maximum and minimum limits are not intended to be independent of a space's associated temperature. The humidity is expected to be at the higher end of the range when the temperature is also at the higher end, and vice versa.
9. Where temperature ranges are indicated, the systems shall be capable of maintaining the rooms at any point within the range during normal operation. A single figure indicates a heating or cooling capacity of at least the indicated temperature. This is usually applicable when patients may be undressed and require a warmer environment. Nothing in these guidelines shall be construed as precluding the use of temperatures lower than those noted when the patients' comfort and medical conditions make lower temperatures desirable. Unoccupied areas such as storage rooms shall have temperatures appropriate for the function intended.
10. National Institute for Occupational Safety and Health (NIOSH) criteria documents regarding "Occupational Exposure to Waste Anesthetic Gases and Vapors," and "Control of Occupational Exposure to Nitrous Oxide" indicate a need for both local exhaust (scavenging) systems and general ventilation of the areas in which the respective gases are utilized.
11. Differential pressure shall be a minimum of 0.01" water gauge (2.5 Pa). If alarms are installed, allowances shall be made to prevent nuisance alarms of monitoring devices.
12. Some surgeons may require room temperatures which are outside of the indicated range. All operating room design conditions shall be developed in consultation with surgeons, anesthesiologists, and nursing staff.
13. The term "trauma room" as used here is the operating room space in the emergency department or other trauma reception area that is used for emergency surgery. The "first aid room" and/or "emergency room" used for initial treatment of accident victims may be

- ventilated as noted for the “treatment room.” Treatment rooms used for bronchoscopy shall be treated as Bronchoscopy rooms. Treatment rooms used for cryosurgery procedures with nitrous oxide shall contain provisions for exhausting waste gases.
14. In a ventilation system that recirculates air, HEPA filters can be used in lieu of exhausting the air from these spaces to the outside. In this application, the return air shall be passed through the HEPA filters before it is introduced into any other spaces.
  15. If it is not practical to exhaust the air from the airborne infection isolation room to the outside, the air may be returned through HEPA filters to the air-handling system exclusively serving the isolation room.
  16. Total air changes per room for patient rooms, labor/delivery/recovery rooms, and labor/delivery/recovery/postpartum rooms may be reduced to 4 when supplemental heating and/or cooling systems (radiant heating and cooling, baseboard heating, etc.) are used.
  17. The protective environment airflow design specifications protect the patient from common environmental airborne infectious microbes (i.e., *Aspergillus* spores). These special ventilation areas shall be designed to provide directed airflow from the cleanest patient care area to less clean areas. These rooms shall be protected with HEPA filters at 99.97 percent efficiency for a 0.3 µm sized particle in the supply airstream. These interrupting filters protect patient rooms from maintenance-derived release of environmental microbes from the ventilation system components. Recirculation HEPA filters can be used to increase the equivalent room air exchanges. Constant volume airflow is required for consistent ventilation for the protected environment. If the facility determines that airborne infection isolation is necessary for protective environment patients, an anteroom should be provided. Rooms with reversible airflow provisions for the purpose of switching between protective environment and airborne infection isolation functions are not acceptable.
  18. The infectious disease isolation room described in these guidelines is to be used for isolating the airborne spread of infectious diseases, such as measles, varicella, or tuberculosis. The design of airborne infection isolation (AII) rooms should include the provision for normal patient care during periods not requiring isolation precautions. Supplemental recirculating devices may be used in the patient room to increase the equivalent room air exchanges; however, such recirculating devices do not provide the outside air requirements. Air may be recirculated within individual isolation rooms if HEPA filters are used. Rooms with reversible airflow provisions for the purpose of switching between protective environment and AII functions are not acceptable.
  19. When required, appropriate hoods and exhaust devices for the removal of noxious gases or chemical vapors shall be provided (see Section 7.31.D14 and 7.31.D15 in the AIA guideline and NFPA 99).
  20. Food preparation centers shall have ventilation systems whose air supply mechanisms are interfaced appropriately with exhaust hood controls or relief vents so that exfiltration or infiltration to or from exit corridors does not compromise the exit corridor restrictions of NFPA 90A, the pressure requirements of NFPA 96, or the maximum defined in the table. The number of air changes may be reduced or varied to any extent required for odor control when the space is not in use. See Section 7.31.D1.p in the AIA guideline.

**ANNEX F: INFECTION PREVENTION AND CONTROL  
PROGRAM TOOL**

Republic of the Philippines				
Department of Health				
<b>HEALTH FACILITY DEVELOPMENT BUREAU</b>				
Infection Prevention and Control				
<b>EVALUATION TOOL</b>				
CODE	QUESTION	ANSWER		REMARKS
		YES	NO	
<b>A. STANDARDS ON MANAGEMENT, STRUCTURE, FUNCTIONS AND RESPONSIBILITIES</b>				
<b>IPC Committee</b>				
A1	Is there an Infection Prevention and Control committee under the Office of the Chief/ Director of the Health Facility?			
A1.1	Does the IPC Committee formulate and update IPC policies and guidelines?			
A1.2	Does the IPC Committee disseminate information regarding IPC policies and guidelines?			
A1.3	Does the IPC Committee organize and provide trainings and guidance to the IPC Unit and all health personnel?			
A1.4	How often does the IPC Committee meet?	<input type="radio"/> More than once a month <input type="radio"/> Once a month <input type="radio"/> Quarterly <input type="radio"/> Twice a year <input type="radio"/> Once a year		
<b>IPC Committee Members</b>				
A2	Does the IPC Committee have a designated chairperson?			
A2.1	How many are the core members of the IPC Committee?			
A2.2	How many are the auxiliary members of the IPC Committee?			
<b>IPC Unit</b>				
A3	Is there an infection control management structure (IPC Unit) under the Office of Chief/Director of the Health Facility?			
A3.1	Does the IPC Unit have a designated head/manager?			
A3.2	What is the IPC nurse to hospital bed ratio? (Answer in this format 1:XXX)			
A3.3	Does the IPC Unit have an IPCSO?			
A3.4	Are there sufficient resources for the said unit?			
<b>IPCAT</b>				
A4	Does the health facility have an Infection Prevention and Control Assessment Tool (IPCAT) containing guidelines on core components of IPC programmes?			
<b>B. STANDARDS ON GUIDELINES, POLICIES AND PROCEDURES</b>				
B2	Does the facility have guidelines, policies, and procedures for IPC protocols?			

B2.1	For Hand hygiene			
B2.2	For Standard and transmission-based precautions			
B2.3	For Triage of infectious patients			
B2.4	For Aseptic techniques			
B2.5	For cleaning, disinfection and sterilization of medical devices and equipment			
B2.6	Environmental cleaning and disinfection			
B2.7	Engineering controls relative to COVID-19			
B2.8	Healthcare waste management			
B2.9	Safe injection practices			
B2.10	Healthcare worker protection (occupational health and safety, including post-exposure prophylaxis and vaccination)			
B2.11	Healthcare worker orientation on IPC protocols and zoning			
B2.12	Prevention of transmission of highly communicable infections			
B3	Are there infection control guidelines, policies, and procedures for specific patient care areas, hospital auxiliary service departments/units?			
<b>Microbiology Sections</b>				
B4	Do all microbiology sections have documents that are readily available to all users of the Microbiology section, describing the organizational structure, scope of laboratory services, standard operating procedures and working instructions?			
B5	Do all microbiology laboratories follow a standard protocol on proper collection, handling, and transport of laboratory specimens?			
B6	Do all microbiology sections of the Clinical Laboratory have an efficient and effective Biosafety Program Management (BPM) to protect its laboratory personnel from exposure to infectious agents?			
B7	Are the Biosecurity Programs instituted to prevent loss, theft or misuse of microorganisms, biological materials, and research-related information?			
<b>C. INFECTION PREVENTION AND CONTROL EDUCATION AND TRAINING</b>				
C1	Are there adequate materials, updated tools, and allocated budget for IPC education and training?			
C2	Does the facility have training program for IPC-related topics?			
C2.1	For Basic Epidemiology of Healthcare-Associated Infection			
C2.2	For Hand Hygiene			
C2.3	For Isolation Precaution			
C2.4	For Decontamination, Disinfection and Sterilization			
C2.5	For Care of the Environment and Hospital Waste Management			
C2.6	For Needle Stick Injuries and Blood and Body Fluid Exposures			
C2.7	For proper PPE donning and doffing			
C2.8	For Healthcare worker Infection Risks, Prevention and Immunization			
C2.9	For Tuberculosis, HIV and Hepatitis B			
C2.10	For Emerging and Re-emerging Infections and Pathogens			
C3	Are there institutional materials available for the education and training for targeted medical and clinical staff?			
C3.1	For Healthcare-Associated Infections			

C3.2	For Ventilator-associated Pneumonia (VAP)			
C3.3	For Central-Line Associated Bloodstream Infections (CLABSI)			
C3.4	For Catheter-Associated Urinary Tract Infections (CAUTI)			
C3.5	For Surgical Site Infections (SSI)			
C3.6	For Antimicrobial Stewardship Program			
C3.7	For Outbreak Management			
C3.8	For Surveillance			
<b>D. STANDARDS ON HEALTHCARE- ASSOCIATED INFECTION SURVEILLANCE</b>				
D1	Is there a surveillance process for Healthcare-associated Infection?			
D2	Is there a standard surveillance form/tool being used?			
D3	How often is the result of the surveillance reported?	O more than 2x a year O once a year O every 2 years		
D4	Does the IPCU develop, implement, and monitor antimicrobial stewardship?			
<b>E. STANDARDS ON MULTIMODAL STRATEGIES</b>				
E1	Is multimodal strategy being used in the implementation of the IPC programs and activities?			
E2	Are there adequate resources allocated to support the implementation of IPC programs and activities?			
<b>F. STANDARDS ON MONITORING, AUDIT, AND FEEDBACK OF INFECTION PREVENTION AND CONTROL</b>				
F1	Is there a well-defined monitoring plan with clear objectives, targets, and activities focused on IPC indicators based on priorities identified by the facility?			
F1.1	Hand hygiene compliance monitoring			
F1.2	Rational use of personal protective equipment			
F1.3	Safe injection practices			
F1.4	Cleaning and disinfection monitoring			
F2	Is timely and regular feedback of auditing reports on the state of IPC activities or performance provided to management, committees, and staff?			
F3	Are IPC tools for systematic data collection available?			
<b>G. STANDARDS ON WORKLOAD, STAFFING, AND BED OCCUPANCY AT THE FACILITY LEVEL</b>				
G1	What is the hospital's current bed occupancy rate? (Answer in %)	Answer:		
G1.1	Authorized bed capacity based on DOH license is followed			
G1.2	One-to-one (1:1) ratio of patient to bed			
G1.3	Presence of surge capacity management contingency plan			
G2	Is appropriate staffing based on patient workload implemented?			
G2.1	Current available organizational structure and staffing standards being followed			
G2.2	Staffing plan based on appropriate staff-to-patient ratio available			
G2.3	There is at least one (1) Infection Control Doctor			
G2.4	There is at least one (1) Infection Control Nurse			

G2.5	Ratio of at least one (1) IPC Nurse for every 100 hospital beds			
G3	Is there a policy or plan to reduce overcrowding by optimizing operational processes?			
G3.1	Established system for patient flow such as unidirectional foot traffic			
G3.2	Appropriate triage system at the ER and OPD			
G3.3	Patient navigation through referral			
<b>H. STANDARDS ON BUILD ENVIRONMENT, MATERIALS, AND EQUIPMENT FOR IPC</b>				
H1	Is safe and sufficient quantity of water supply from an improved source available at all times?			
H2	Is there a minimum of two (2) functional improved sanitation facilities available on-site, one for patient and one for staff?			
H2.1	Is there a safe management of sewage/fecal waste through use of well-managed septic tanks and leach fields, disposal into functioning sewers or off-site removal?			
H2.2	Is there a minimum of two (2) functional, improved sanitation facilities for OPD and one (1) per 20 beds for inpatient wards, equipped with menstrual hygiene facilities?			
H2.3	Is there an additional sanitation facility with at least one (1) toilet designated for women/girls to manage menstrual hygiene?			
H2.4	Is there at least one (1) toilet for people with physical disabilities			
H2.5	Are there sanitation facilities adapted for infants and children, segregated by sex for older children?			
H3	Is there available functional hand hygiene facilities at points of care (with soap, water, and single-use towels or alcohol-based hand rub)?			
H3.1	Are there hand hygiene promotion materials that clearly visible and understandable at key places?			
H3.2	Is 1:10 sink to bed ratio being followed?			
H4	Is there sufficient and appropriately labelled bins to allow for health care waste segregation (including needle and sharps disposal) in close proximity to waste generation points?			
H5	Are the hospital beds positioned at least one (1) meter apart?			
H6	Are isolation rooms provided for highly communicable or yet unknown new infections?			
H7	Is there adequate ventilation through functional windows and doors?			
H8	Is there reliable power source 24/7 with available back-up?			
H9	Is there available personal protective equipment at all times and in sufficient quantity for all health care workers?			

**ANNEX G: MINIMUM REQUIREMENTS FOR INFECTION PREVENTION AND CONTROL PROGRAMME**

	<b>Primary Care Facilities and Infirmaries</b>	<b>Secondary Care Facilities</b>	<b>Tertiary Care Facilities</b>
<b>Core Component 1: IPC Programmes</b>	<p><b>IPC trained health care officer</b></p> <ul style="list-style-type: none"> <li>• IPC programme must have clearly defined objectives based on local epidemiology and priorities according to risk assessment and functions that align with and contribute to the prevention of HAI and combating AMR through IPC good practices.</li> <li>• Dedicated budget for IPC implementation as stipulated in the national policy in IPC.</li> <li>• Trained IPC link person, with dedicated (part-) time in each primary health care facility.</li> <li>• One IPC-trained health care officer at the next administrative level (for example, district/LGU) to supervise the IPC link professionals in primary health care facilities.</li> <li>• Smaller healthcare facilities within the geographic area shall link with bigger facilities for infection prevention and control services through their designated representative.</li> </ul>	<p><b>Functional IPC programme</b></p> <ul style="list-style-type: none"> <li>• IPC programme must have clearly defined objectives based on local epidemiology and priorities according to risk assessment and functions that align with and contribute to the prevention of HAI and combating AMR through IPC good practices with measurable outcome indicators.</li> <li>• Dedicated budget for IPC implementation as stipulated in the national policy in IPC.</li> <li>• Trained IPC focal point (one full-time trained IPC Officer [nurse or doctor]) as per the recommended ratio of 1:100 beds with dedicated time to carry out IPC activities in all facilities IPC committee actively supporting the IPC unit</li> <li>• Microbiology laboratory</li> </ul>	<p><b>Functional IPC programme</b></p> <ul style="list-style-type: none"> <li>• IPC programme must have clearly defined objectives based on local epidemiology and priorities according to risk assessment and functions that align with and contribute to the prevention of HAI and combating AMR through IPC good practices with measurable outcome indicators and set future targets.</li> <li>• Dedicated budget for IPC implementation as stipulated in the national policy in IPC.</li> <li>• Trained full time unit head, at least one full-time IPC nurse with dedicated time per 100 beds and IPC surveillance officer.</li> <li>• IPC committee actively supporting the IPC unit</li> <li>• Quality microbiological laboratory support</li> </ul>

<p><b>Core Component 2: IPC Guidelines</b></p>	<p><b>Facility-adapted standard operating procedures (SOPs) and their monitoring</b></p> <ul style="list-style-type: none"> <li>• Evidence-based facility-adapted SOPs based on the national IPC guidelines.</li> <li>• At a minimum, the facility SOPs should include: <ul style="list-style-type: none"> <li>○ Hand hygiene</li> <li>○ Decontamination of medical devices and patient care equipment</li> <li>○ Environmental cleaning</li> <li>○ Health care waste management</li> <li>○ Injection safety</li> <li>○ HCW protection (for example, post-exposure prophylaxis, vaccinations)</li> <li>○ Aseptic techniques</li> <li>○ Triage of infectious patients</li> <li>○ Basic principles of standard and transmission-based precautions.</li> </ul> </li> <li>• Routine monitoring of the implementation of</li> </ul>	<p><b>All requirements as for the primary health care facility level, with additional SOPs on:</b></p> <ul style="list-style-type: none"> <li>• Standard and transmission-based precautions (for example, detailed, specific SOPs for the prevention of transmission of airborne pathogens and multi-drug resistant organisms' transmission);</li> <li>• Aseptic technique for invasive procedures including surgery;</li> <li>• Specific SOPs to prevent the most prevalent HAIs based on the local context/ epidemiology, including device-associated infections and surgical site infections;</li> <li>• Occupational health (specific detailed SOP).</li> <li>• Outbreak Investigation, Management and Preparedness (including emerging and re-emerging infections)</li> <li>• Reporting of highly transmissible and notifiable infectious disease</li> <li>• Pre-employment policy</li> </ul>
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	at least some of the IPC guidelines/ SOPs.		
<b>Core Component 3: IPC Education and Training</b>	<p><b>IPC training for all clinical and non-clinical staff upon hire, annually or as needed</b></p> <ul style="list-style-type: none"> <li>All clinical and non-clinical staff must receive appropriate education and training on the facility IPC guidelines/SOPs upon employment and annually.</li> </ul>	<p><b>IPC training for all clinical and non-clinical staff upon hire, annually or as needed</b></p> <ul style="list-style-type: none"> <li>All clinical and non-clinical staff must receive appropriate education and training on the facility IPC guidelines/SOPs upon employment and annually.</li> </ul>	<p><b>IPC training for all clinical and non-clinical staff upon hire, annually or as needed</b></p> <ul style="list-style-type: none"> <li>All clinical and non-clinical staff must receive appropriate education and training on the facility IPC guidelines/SOPs upon employment and annually.</li> </ul>
<b>Core Component 4: HAI Surveillance</b>	<ul style="list-style-type: none"> <li>HAI surveillance as a minimum requirement at the primary facility level should follow national standards.</li> </ul>	<ul style="list-style-type: none"> <li>Active HAI surveillance should be conducted and include the following information:                             <ul style="list-style-type: none"> <li>Enabling structures and supporting resources need to be in place (for example, dependable laboratories, medical records, trained staff), directed by an appropriate method of surveillance;</li> <li>The method of surveillance should be directed by the priorities/plans of the facility and/or country.</li> <li>Antibiogram or Antibiotic Resistance Patterns</li> </ul> </li> <li>Timely and regular feedback needs to be provided to key</li> </ul>	<ul style="list-style-type: none"> <li>HAI surveillance should be conducted and include the following information:                             <ul style="list-style-type: none"> <li>Enabling structures and supporting resources need to be in place (for example, dependable laboratories, medical records, trained staff), directed by an appropriate method of surveillance;</li> <li>The method of surveillance should be directed by the priorities/plans of the facility and/or country.</li> <li>Antibiogram or Antibiotic Resistance Patterns</li> </ul> </li> <li>Timely and regular feedback needs to be provided to key</li> </ul>

		<p>stakeholders in order to lead to appropriate action, in particular to the hospital administration.</p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p>stakeholders in order to lead to appropriate action, in particular to the hospital administration.</p>
<p><b>Core Component 5: Multimodal Strategies</b></p>	<p><b>Multimodal strategies for priority IPC interventions</b></p> <ul style="list-style-type: none"> <li>• Use of multimodal strategies – at the very least to implement interventions to improve hand hygiene, safe injection practices, decontamination of medical instruments, devices and environmental cleaning.</li> </ul>	<p><b>Multimodal strategies for priority IPC interventions</b></p> <ul style="list-style-type: none"> <li>• Use of multimodal strategies – at the very least to implement interventions to improve each one of the standard and transmission-based precautions, and triage.</li> </ul>	<p><b>Multimodal strategies for all IPC interventions</b></p> <ul style="list-style-type: none"> <li>• Use of multimodal strategies to implement interventions to improve each one of the standard and transmission-based precautions, triage, and those targeted at the reduction of specific infections (for example, surgical site infections or catheter-associated infections) in high-risk areas/patient groups, in line with local priorities.</li> </ul>
<p><b>Core Component 6: Monitoring, Auditing and Feedback</b></p>	<ul style="list-style-type: none"> <li>• Monitoring of IPC structural and process indicators should be put in place at primary care level, based on IPC priorities identified in the other components. This requires decisions at the national level and implementation support at the sub- national level.</li> </ul>	<ul style="list-style-type: none"> <li>• A person responsible for the conduct of the periodic or continuous monitoring of selected indicators for process and structure, informed by the priorities of the facility or the country.</li> <li>• Hand hygiene is an essential process indicator to be monitored.</li> <li>• Timely and regular feedback needs to be provided to key stakeholders in order to lead to appropriate action, particularly to the hospital administration.</li> </ul>	
<p><b>Core Component 7: Workload, Staffing and Bed Occupancy</b></p>	<ul style="list-style-type: none"> <li>• To reduce overcrowding: a system for patient flow, a triage system (including referral system) and a system for the management of consultations should be established according to existing guidelines, if available.</li> </ul>	<ul style="list-style-type: none"> <li>• To standardize bed occupancy: <ul style="list-style-type: none"> <li>○ Establish a system to manage the use of space in the facility and to establish the standard bed capacity for the facility;</li> <li>○ Hospital administration enforcement of the system developed;</li> <li>○ No more than one patient per bed;</li> <li>○ Spacing of at least one metre between the edges of beds;</li> <li>○ Overall occupancy should not exceed the designed total bed capacity of the facility.</li> </ul> </li> <li>• To reduce overcrowding and optimizing staffing levels: same <i>minimum requirements</i> as for primary health care.</li> </ul>	

	<ul style="list-style-type: none"> <li>To optimize staffing levels: assessment of appropriate staffing levels, depending on the categories identified when using WHO/national tools (national norms on patient/staff ratio), and development of an appropriate plan.</li> </ul>	
<p><b>Core Component 8: Built Environment, Materials and Equipment for IPC</b></p>	<ul style="list-style-type: none"> <li>Water should always be available from a source on the premises (such as a deep borehole or a treated, safely managed piped water supply) to perform basic IPC measures, including hand hygiene, environmental cleaning, laundry, decontamination of medical devices and health care waste management according to national guidelines.</li> <li>A minimum of two functional, improved sanitation facilities should be available on-site, one for patients and the other for staff; both should be equipped with menstrual hygiene facilities.</li> <li>Functional hand hygiene facilities should always be available at points of care/toilets and include soap, water and single-use towels (or if unavailable, clean</li> </ul>	<ul style="list-style-type: none"> <li>A safe and sufficient quantity of water should be available for all required IPC measures and specific medical activities, including for drinking, and piped inside the facility at all times - at a minimum to high-risk wards (for example, maternity ward, operating room/s, intensive care unit).</li> <li>A minimum of two functional, improved sanitation facilities that safely contain waste available for outpatient wards should be available and one per 20 beds for inpatient wards; all should be equipped with menstrual hygiene facilities.</li> <li>Functional hand hygiene facilities should always be available at points of care, toilets and service areas (for example, the decontamination unit), which include ABHR and soap, water and single-use towels (or if unavailable, clean reusable towels) at points of care and service areas, and soap, water and single-use towels (or if unavailable, clean reusable towels) within 5 metres of toilets.</li> <li>Sufficient and appropriately labelled bins to allow for health care waste segregation should be available and used (less than 5 metres from point of generation) and waste should be treated and disposed of safely via autoclaving, incineration (850° to 1100°C), and/or buried in a lined, protected pit.</li> <li>The facility should be designed to allow adequate ventilation (natural or mechanical, as needed) to prevent transmission of pathogens.</li> <li>Sufficient and appropriate supplies and equipment and reliable power/energy should be available for performing all IPC practices, including standard and transmission-based precautions, according to <i>minimum requirements/SOPs</i>; reliable electricity should be available to provide lighting to clinical areas for providing continuous and safe care, at a minimum to high-risk wards (for example, maternity ward, operating room/s, intensive care unit).</li> <li>The facility should have a dedicated space/area for performing the decontamination and reprocessing of medical devices (that is, a</li> </ul>

	<p>reusable towels) or alcohol-based handrub (ABHR) at points of care and soap, water and single-use towels (or if unavailable, clean reusable towels) within 5 metres of toilets.</p> <ul style="list-style-type: none"> <li>• Sufficient and appropriately labelled bins to allow for health care waste segregation should be available and used (less than 5 metres from point of generation); waste should be treated and disposed of safely via autoclaving, high temperature incineration, and/or buried in a lined, protected pit.</li> <li>• The facility layout should allow adequate natural ventilation, decontamination of reusable medical devices, triage and space for temporary cohorting/ isolation/ physical separation if necessary.</li> <li>• Sufficient and appropriate IPC supplies and equipment (for example, mops, detergent, disinfectant, personal protective equipment (PPE) and sterilization) and power/energy (for example, fuel) should be available for performing all</li> </ul>	<p>decontamination unit) according to <i>minimum requirements/ SOPs</i>.</p> <ul style="list-style-type: none"> <li>• The facility should have adequate single isolation rooms or at least one room for cohorting patients with similar pathogens or syndromes, if the number of isolation rooms is insufficient.</li> </ul>
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	<p>basic IPC measures according to <i>minimum requirements/ SOPs</i>, including all standard precautions, as applicable; lighting should be available during working hours for providing care.</p>	
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