Ministry of Health

INFECTION PREVENTION AND CONTROL STRATEGIC FRAMEWORK

2021-2025

SEYCHELLES

PREFACE

The Government of Seychelles remains committed to attaining the health-related sustainable development goals through achieving universal health coverage. SDG target 3.8 calls on countries to achieve UHC, including financial risk protection alongside access to quality essential health care services. Over the years, we have made considerable progress in making health care available and accessible to all. The time has now cometo focus on the quality of health care services.

Safety is a critical component of quality care. Patients should not be harmed by care that is intendedto help them. Effective infection prevention and control practices protect patients from harm fromhealthcare-associated infections and safeguard healthcare workers, the Ministry of Health's most valuable asset. The COVID-19 pandemic has taught us just how vital infection prevention and control is. Hand washing has taken on a new meaning; face masks have moved out of the clinicalsetting into our everyday lives, and visiting our loved ones in hospital is no longer a given.

It, therefore, gives me great pleasure to present the Infection Prevention and Control Strategic Framework 2021-2025, which provides a roadmap to improving infection prevention and controlpractices within the health sector and beyond. The Ministry of Health acknowledges that attaining success in Infection Prevention and Control will require effective public health programmes and multisectoral collaboration and cooperation. This framework provides the foundations for such partnerships.

I thank the IPC Team, which has been at the forefront of the fight to improve IPC in Seychelles. Ithank all those who have worked tirelessly to bring this task to fruition. Last but not least, I thankeach and every health care worker who has striven assiduously during these past two years to minimise the impact of COVID-19 on the health of our nation.

Mrs. Peggy Vidot
Minister for Health
Seychelles

ACKNOWLEDGEMENT

The Infection Prevention and Control Committee (IPCC) and the Technical Working Group (TWG) would like to thank all persons who participated in the development of this document.

IPCC Members and drafting team

NAME	POSITION	SECTION/UNIT
Dr. Christian Annasee	Senior Medical Officer (**Chairperson, IPCC)**	Community Health Services
Ms. Naddy Morel	Ag. Chief Dental Therapist **(Vice Chairperson IPCC)**	Oral Health Services
Dr. Vanessa Lesperance	Senior Medical Officer	Occupational Health Unit
Dr. Sarka Viktorova	Senior Anesthetist	ICU
Dr. Lucia Banane	General Surgeon	Surgical Department
Ms. Lindy Leon	Ward Pharmacist	Pharmaceutical Services & Supplies
Ms. Rose-May Benoit	Senior Laboratory Technologist	Public Health Laboratory
Mr. Nichola Atala	Clinical Laboratory Technologist	Clinical Laboratory
Ms. Chelcy Adrienne	Senior Administrative Officer	Ancillary Services
Mrs. Brenda Rath	Support Services Manager	Ancillary Services
Dr. Rawshideve Pudhoo	Medical Officer	Medical Department
Ms. Kerina Savy	Nursing Officer	Operating Theatre
Ms. Rita Jean	IPC Manager **(Secretary)**	IPCU
Ms. Rhonda Burka	Nursing Officer	IPCU
Dr. Gertrude Sika Avortri	Technical Officer, ISD/PHC	WHO/RO
Dr. Bertrand Bamuleke	IPC Consultant	WHO

Additional review team members

NAME	POSITION	SECTION/UNIT
Dr. Louine Morel	Senior Medical Registrar	CDCU
Ms. Cynthia Noshir	Dental Hygienist	Oral Health Services
Ms. Geralda Didon	Director Regulatory and Registration Unit	Public Health Authority
Mr. John Dubel	Senior Nurse Manager	Nursing Directorate
Ms. Chantal Rath	Senior Staff Nurse	DSRU
Ms. Micheline Marie	Public Health Officer **(IPCF)**	Public Health Authority
Mrs. Lindy Poris	Senior Physiotherapist **(IPCF)**	Physiotherapy Department
Ms. Thresa Humphrey	Occupational Therapy Technician **(IPCF)**	Rehabilitation Services
Mrs. Martine Laval	Nursing/Midwifery Officer **(IPCF)**	High Risk Antenatal Clinic
Mrs. Dinah Hibonne	IPC Link Nurse Inner Islands	IPCU

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1. INTRODUCTION

Nationally, healthcare associated infection (HAIs) remain a major cause of avoidable patient harm and pose a serious risk to patients, clients, health care workers in health care facilities and the community. These infections are a leading cause of death and unnecessary expense to individuals and the government. HAIs cause severe or chronic illness, pain, anxiety, depression, longer stay in health care facilities and reduced quality of life. Furthermore, the emergence of serious disease outbreaks such as EBOLA and COVID-19, and an increasing trend of antimicrobial resistance (AMR) have further made the establishment of systems to prevent infections paramount.

Systems for effective Infection Prevention and Control (IPC) encompass evidence–based practical solutions, grounded in infectious diseases, epidemiology, social science and overall health system strengthening. The scope covers among others:

- Existence of leadership and georeferenced arrangements at all levels to oversee implementation of interventions.
- Surveillance of HAIs and AMR.
- Utilization of evidence-based and context specific practices for medical and other clinical procedures.
- Effective handling of patient care equipment and other logistics.
- Administrative controls that create the enabling environment for good performance.
- Environment and infrastructural considerations for limiting the spread of infections.

This national strategic framework sets out what it will take to achieve implementation of evidence-based IPC standards for effective management of public health emergencies and also for improvements in the broader health system as a whole for the period 2021 to 2025. It builds on the findings of the evaluation of the 2014 – 2018 IPC strategic plan carried out in October 2019 and recent health care facility assessments done in 2021. It also takes cognizance of key achievements over the years as well as certain IPC aspects that were not adequately implemented in the previous strategic plan as well as including current recommendations.

The framework is based on collective priorities of all stakeholders designed to have a health sector with strong national IPC leadership and enough capacity to assure patient safety, quality of care and resilient to rapidly recover from the impact of public health emergencies in Seychelles. It outlines key actions needed at the top leadership, health care facilities and community in the context of Seychelles. The framework covers eight (8) strategic areas mainly drawn from the WHO global core components of IPC document (WHO 2016). Successful implementation of the strategies and actions depends greatly on decision-makers, political and managerial commitment of those in authority at the different levels of service delivery. The importance of effective collaboration, partnerships and good communication between all relevant stakeholders cannot be overemphasized.

2. LEGISLATIVE MANDATES

The development and implementation of the strategic framework was guided by the Laws / Decrees/ Acts / Policies/Guidelines of the Ministry of Health and include:

1. Public Health Act - 2015 *(Act 13 of 2015)*
2. MRSA Guidelines for Healthcare Personnel - 2010
3. AMR Strategic Framework - 2017
4. Healthcare Agency Act - 2013
5. Food Act - 2014 *(Act 8 of 2014)*
6. Managing Medical Waste: Duty of Care - 1997
7. Environment Protection Act - 2016 *(Act 18 of 2016)*
8. National Infection Prevention and Control Policy and Guidelines 2014.
9. Prevention of Mother-to-Child Transmission of HIV *National Guidelines of the Republic of Seychelles* - 2019
10. National Guidelines on the Management and Treatment of HIV, Viral Hepatitis B and C, and Sexually Transmitted Infections – 2019
11. National Guidelines on the Organization of the HIV, Viral Hepatitis B and C and Sexually Transmitted Infections Testing Services in the *Republic of Seychelles* - 2019
12. National Aids Council of Seychelles Act - 2013 *(Act 13 of 2013)*
13. 3rd Edition of the IDSR Guideline - 2019
14. National Health Policy – 2016
15. Occupational Safety and Health Decree - 1978

3. SCOPE OF APPLICATION

This strategic framework will be applied at all relevant levels of the health care delivery system as required.

4. CURRENT SITUATION

The situation analysis was based on primary (e.g., interviews) and secondary sources (e.g., literature review of available reports and documents). It was organized in relation to the core components of IPC. The Figure 1 presents the overall status of IPC performance on the IPC core components as at October 2019. See Annex 1 for details of the WHO IPC core components.

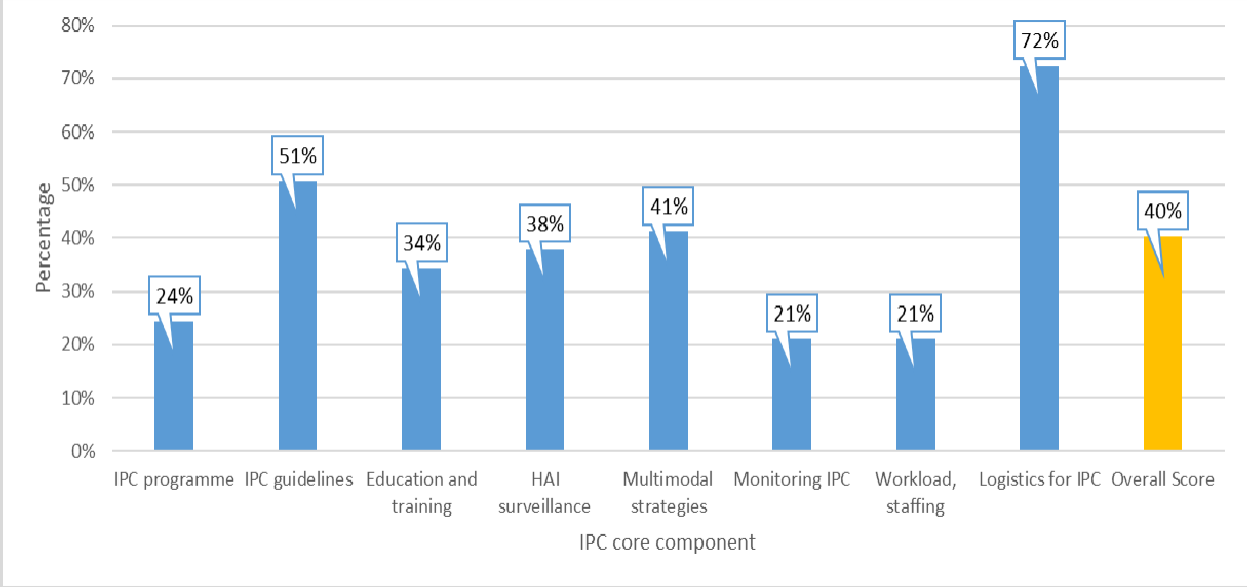

Figure 1: Overall national performance by IPC core component in 2019

4.1 Governance, leadership and organisational arrangements for IPC

Strong and committed national and health care facility leadership is the sine qua non of a successful sustained IPC programme (WHO, 2016). Though, the 2014 national IPC guidelines clearly define the organogram, criteria and terms of reference for IPC programmes at the different health care system levels, Seychelles is yet to put in place a standalone IPC programme. It must be noted that until mid-2019, the IPC unit was managed by only one person with expertise in IPC and that greatly hindered effective functioning. Currently two officers who were trained on-the-job mann the IPC unit under the jurisdiction of the Health Care Agency. This notwithstanding, IPC implementation has been extended to private health care facilities and other stakeholders. There is a multidisciplinary Infection Prevention and Control Committee (IPCC) that meets at least quarterly, but their mandate until the advent of COVID-19 was limited to the Seychelles hospital. There was a Quality and Patient Safety Committee (QPSC) whose mandate also included IPC in 2019, but the committee is currently non-functional. The IPC unit has an annual plan but has no dedicated budget line and is heavily dependent on donor support. It was therefore not surprising that most of the targets set in the 2014/18 strategic plan were not met.

Similar observations were made on the performance of IPC oversight structures at the sub-national level. As of October 2019, only 25% of the health centers/clinics had an IPC focal person. The situation has improved since 2020 when now all have at least one focal person. Frequent transfers and/or re-assignment of the IPC focal persons negatively impact continuity of activity implementation. Furthermore, the IPC focal persons are not given dedicated time to do their job. IPC is an add on job that is done as and when time permits.

Though the IPC unit and IPC focal persons support efforts to combat AMR there is need for improvement. IPC is also a key component of the core capacities for International Health Regulations (IHR) and is now being integrated in the IDSR mechanism.

4.1.1 Application of multimodal strategy for IPC interventions

Multimodal strategy is now seen as the best approach to implement IPC measures to achieve the system, climate and behaviour change that supports safety and quality of care improvements. According to WHO (2016), multimodal thinking means that IPC practitioners do not focus only on single strategies (unimodal) to change practices (for example, training and education), but consider a range of strategies that target different influencers of human behaviour such as procurement, monitoring and feedback, infrastructures and organizational culture. Evidence indicates that the concept is yet to be well understood and applied in the country. The majority of the IPC focal persons interviewed had little or no appreciation of how to apply the strategy. It must be noted that multimodal strategy is relatively new in IPC and requires focused awareness creation and training. It will be beneficial to develop specific guidance documents and standard operating procedures on how to apply the strategy on high priority IPC measures such as the standard and transmission-based precautions. These documents should be widely disseminated to all HCWs and relevant stakeholders.

***4.2* IPC Guidance documents**

One of the National IPC programme functions is to oversee the development and implementation of evidence-based National IPC Guidelines to reduce HAIs and AMR. The availability of technical guidelines on IPC programme organization and key IPC practices are usually a prerequisite for rolling out IPC education and training, including IPC monitoring and evaluation. Where required, health care facilities should adapt these guidelines to their local context and level of care provided. The current IPC and policy guidelines were developed in 2014 taking up the evidence-based practices of IPC. The assessment conducted in November 2019 showed that there was wide availability of the IPC guidelines and SOPs in public health care facilities but not the same in private health care facilities. The assessment however noted inadequate staff adherence. In 2020, the IPC unit developed various COVID-19 SOPs and guidelines but their implementation in health care facilities remains inadequate.

It is imperative to put in place mechanisms to promote more HCW accountability and behaviour change. The existing IPC policies and guidelines should be updated to reflect current knowledge and should be adequately disseminated to all HCWs in both public and private health care facilities. The country should also consider focusing on new approaches to skills development, especially on-the-job training and supportive supervision. The consistent application of the multi-modal strategy in the implementation of all IPC interventions will greatly enhance competence.

4.3 Human resources for IPC

The MoH is responsible for the recruitment, training and development, management and distribution of the health care workforce. The national IPC guidelines and the facilitator's guide are the main IPC training and learning materials. These two documents however need to be reviewed. The IPC unit conducts quarterly training sessions of two to three days for different cadres to increase IPC knowledge and skills. However, with the inception of the pandemic in 2020, trainings have centered mostly on IPC in the context of COVID-19. The IPC unit has so far trained 75% of HCWs in the country. Specific training session to sensitize top managers is limited. The country employs/utilizes several foreign /contract HCWs that do not benefit from formal induction into the system.

IPC content is not well articulated in the pre-service health training programmes in the country. A representative from the training institution was included in the IPCC so as to help translate IPC evidence into the training curricula. However, huge concerns about the theory-practice gap remains. An attempt to address this challenge by instituting formal coordination mechanism between tutors, ward managers and IPC focal persons to discuss and identify strategies to solve the issues did not produce the desired result. The MoH need to follow through to identify workable interventions to ensure that the theory-practice gap is bridged.

Recognizing the ongoing threat of emerging diseases and increasing AMR, robust IPC practices through updated information is critical in the protection of HCWs and provision of safe essential health care services. A systematic IPC induction/orientation programme needs to be put in place, especially for newly and foreign recruited HCWs.

It must be noted that the public usually obtain information about issues related to IPC through the media, which is often sensationalized and inaccurate. This usually raises public's concerns about quality of health services. There is inadequate IPC communication materials for the public. The ongoing threat of the COVID-19 pandemic and detrimental effects associated with HAIs, service users and carers require basic information about how infections occur and can become problematic, what they can do to minimize risks to themselves and others and what they can expectfrom clinical staff.

4.4 Healthcare associated infections surveillance

Overall, systems for HAIs surveillance are not systematically implemented in the country. HAIs surveillance is ad hoc (only done when there is a report of an outbreak) and fragmented with very little or no communication of data for action. The 2019 evaluation noted an overall score of 38%. There is a system for laboratory-based surveillance of hospitalized patients where all specimens with positive result of a multi-drug resistant organism is communicated to the IPC unit, but this is also not functioning well. Some HAIs surveillance forms and a protocol for SSI were drafted but are yet to be finalized. Though it was indicated that there is a system for surveillance of infections among HCWs, the evaluation team was not able to access data on functioning of the systems. Likewise, data on HCWs medical screening, sharps related incidents and vaccination were

inaccessible. The situation is gradually improving with focus on surveillance of HCWs that get infected with COVID-19.

Similar findings were noted regarding AMR stewardship where mechanisms were generally fragmented. An AMR action plan was developed in 2017 but is yet to be implemented. There is very little, if any, collaboration between the IPC unit and the Drugs and Therapeutic Committee. Antimicrobial of use or consumption monitoring is limited. The importance of effective HAI surveillance and AMR stewardship cannot be overemphasized.

4.4.1 Outbreaks and public emergency preparedness and readiness

The occurrence of epidemics is becoming widely common. IPC preparedness and readiness for these emergencies is therefore very important. The country has an emergency preparedness and readiness plan that includes IPC interventions. The plan to a large extent addresses roles and functions of different agencies, training, surveillance, logistics, communication and surge capacity. However, the majority of HCWs were not aware of the contents of the plan and its activation. There are Rapid Response Team (RRTs) that can be called upon to rapidly respond to events/outbreaks. The IDSR system is functioning and oversees notifiable diseases reporting and outbreaks. The public health laboratory regularly uses Adenosine Tri-Phosphate (ATP) to verify the effectiveness of cleaning in high-risk areas such as Neonatal Intensive Care Unit (NICU), Intensive Care Unit (ICU), Central Sterile Supply Department (CSSD), the Haemodialysis unit and operating theatre and the results are used for action.

Written policy/guidelines for placing patients with potentially contagious or communicable infections with clearly defined responsibilities are captured in the IPC guidelines/SOPs. Isolation wards/units or holding areas with recommended facilities are available in most health care facilities but adherence to isolation precautions is not encouraging.

It should be noted however that the disease outbreak management system needs strengthening. Available guidelines and SOPs should be reviewed to reflect current knowledge. Effectiveisolation of patient with infectious diseases is fundamental in reducing the risk of diseasetransmissions. In this regard, all HCWs should be trained to have the requisite competencies in detecting, preventing, controlling and responding to infections/outbreaks.

4.5 Built environment, materials and equipment for infection prevention and control at the health facility

Patient care activities delivered in a clean and hygienic environment with appropriate Water Sanitation and Hygiene (WASH) facilities is critical to both patients and HWCs, as it promotes practices that prevent and control HAIs and AMR. During the October 2019 evaluation, 73% of health care facilities conformed with the set standard of the physical structures and the required IPC equipment. The IPCC is often consulted in the renovation and design of new health care facilities. However, the response to COVID -19 pandemic brought to the fore some challenges in the design of the health care facilities. For example, most health care facilities had challenges in

identifying suitable triage and holding/isolation areas as well as promoting effective flow of services. The MoH provided temporary structure for screening/triaging. The country has further established a temporary isolation hospital for the treatment of COVID-19 cases. There are plans to erect permanent structure for these services.

The evaluation findings in 2019 on the availability of IPC logistics were encouraging. For example, the overall score on the availability of hand hygiene facilities was 56.25% while that ofPPEs was 68.75%. The majority of HCWs interviewed in 2019 stated that they were not satisfiedabout the quality and frequent stockouts of basic supplies. The situation seems to be the same at the health care facility level where stockouts are still currently being experienced. It should be indicated that the procurement, stores and supplies management system has improved at the centrallevel, but the challenge is with the distribution and stock management at the user level. Despite some limitations in 2019, the IPC unit is now occasionally involved in the procurement of IPC materials. Overall, there is need to improve IPC logistic availability and equipment management.

4.6 IPC supportive supervision, monitoring and evaluation.

To help target improvement activities, all stakeholders including health care workers need to know how they are performing against set IPC standards. In this regard, it is important to consistently support HCWs to apply IPC standards and monitor adherence to the standards. The national performance on this aspect in 2019 was 21%. Performance in public health care facilities was better compared to private health care facilities.

Despite availability of some monitoring tools and delineation of reporting lines, overall utilization and monitoring was low. Available online monitoring tools were rarely used as the IPC focal persons preferred paper-based options. It appeared most of the focal persons were not very conversant with the technology and some had challenges with internet access. Monitoring in most health care facilities was thus ad hoc with low submission of reports. Also, the focal persons expressed concerns about high workload as they were not given dedicated time for IPC activities. Since the onset of the COVID-19 pandemic, supportive supervision has taken place but was insufficient.

The IPC monitoring and evaluation system as a whole need strengthening. In 2014, Seychelles drafted a guideline on IPC monitoring and evaluation. The document comprised standards, indicators and tools (checklist) for monitoring but it is yet to be finalized. It is imperative that the document be implemented during the life of the upcoming strategy for 2021-2025. The indicators should be integrated into the routine health monitoring and evaluation system, including those for health related programmes such as HIV, TB and immunization.

4.7 Major IPC challenges

From the situation analysis, the major IPC challenges identified are:

1. Inadequate top commitment to establish and support leadership and organizational structure at national and health care facility levels.
2. Inadequate dissemination of available IPC guidance documents.
3. Inadequate human resource to ensure appropriate staffing levels at all times.
4. Inadequate education and training of health workforce on IPC and challenges of translating theory into practice.
5. Ineffective HAI and emerging infectious diseases surveillance and management systems.
6. Limited data on IPC to guide evidence-based decisions.
7. Maintaining motivation and engagement of clinical and non-clinical staff to practice safely.
8. Ensuring sufficient equipment and supplies to deliver the IPC recommendations.
9. Limited involvement of IPC leadership in decision regarding physical infrastructures of health care facilities

5. STRATEGY DEVELOPMENT PROCESS

The process to develop this strategic framework started with the conduction of an evaluation of the 2014-2018 strategic plan. The evaluation gathered both primary and secondary data from health care facilities as well as interactive meetings and interviews with cross-section of senior officials from the MoH, HCA, PHA and other stakeholders. An in-depth literature review of both international and locally available document and reports, including clinical and non-clinical standards was carried out.

The staff of the IPC unit working with consultants from WHO produced the first draft of the document. A two-day workshop was held for the IPCC and TWG to review the draft. Another two-day meeting was held by the IPC unit staff and the WHO consultants to incorporate inputs from the work before the framework. The final draft was presented to the MoH leadership before it was finalized.

The IPC strategy articulates a goal, strategic objectives built on WHO core components of IPC, intermediate strategic interventions, work plan and indicator framework. The strategies are in line with the current developments in IPC and service delivery.

6. GOALS

This strategic framework is intended to position the prevention and control of infectious diseases as an important tactical area of focus in the mainstreaming of health care quality and service improvement.

7. OBJECTIVES OF THE STRATEGIC FRAMEWORK

The objectives for putting in place this strategic framework are to:

1. Institutionalize IPC programmes at national and health care facility levels with clearly defined functions.
2. Promote enabling environment to support the implementation of IPC, including top leadership and health facility managers' commitment.
3. Ensure the availability of evidence-based national IPC guidance documents for service delivery, including management of public health emergencies.
4. Ensure that all HCWs are knowledgeable on IPC related to their job function.
5. Harmonize system for IPC information management and ensure the availability of quality data and information to guide decisions.
6. Continuously share lessons to help promote best practice.
7. Improve HAI and AMR surveillance.
8. Optimize the built environment and ensure the continuous availability of essential infrastructure, materials and equipment needed to support implementation of effective IPC measures towards improving patient safety and clinical outcomes.

8. EXPECTED KEY ACHIEVEMENTS

The expected key achievements by the end of the 5-year period are:

1. Fully established national IPC programme (i.e. functioning IPCC, an IPC coordinator and IPC officer formally trained, annual IPC plans, evidence of budget allocation and performance reports).
2. IPC focal person nominated and functioning at all (100%) health care facilities (public and private) as per the national IPC guidelines recommendations.
3. 100% availability of national IPC guidelines in all health care facilities (public and private).
4. Health care worker protection and surveillance of COVID-19, HIV, TB, Hepatitis B and C institutionalized in all health care facilities.
5. 90% HCWs in the public and private sectors trained in at least standard and transmission-based precautions and receive at least 2-yearly updates.
6. 90% of all health care facilities have recommended resources for hand hygiene at all hand hygiene stations.
7. 60% adherence to hand hygiene guidelines by health care workers (public and private).
8. 100% availability of tracer personal protective equipment (PPEs) in all health care facilities at all times.
9. Surgical Site Infection (SSI) surveillance reporting in all (100%) hospitals performing surgery and evidence of response measures initiated.
10. At least half-yearly IPC support supervision by national level to all health care facilities.
11. All (100%) public health care facilities reporting on agreed IPC monitoring indicators.

9. GUIDING PRINCIPLES AND CORE VALUES

1. Safety and zero tolerance of avoidable infections.
2. Client-centered care where clients are autonomous decision makers and haveopportunity to express needs and make choices that affect their lives.
3. Effectiveness to achieve the intended results in terms of quality and target in accordance with set performance standards for health service delivery.
4. Efficiency by optimizing use of available resources in delivery of health services.
5. Teamwork to achieve common objectives.
6. Standardization to enhance uniformity in practice.
7. Applicability in the local context.
8. Excellence through striving for evidence-based practice, competency and continuous improvement.
9. Sustainability through national ownership and leadership.
10. Partnership with all stakeholders.

10. STRATEGIC OBJECTIVES, INTERMEDIATE OBJECTIVES AND ACTIVITIES

To achieve IPC goals, strategic objectives, intermediate objectives, activities and indicators are outlined for each of the strategic areas of IPC. These strategies and their descriptions are presented in Figure 2. Table 1 provides further details on intermediate objectives. The matrix of the work plan including the means of verification, time frame, level of responsibility is in Annex 2.

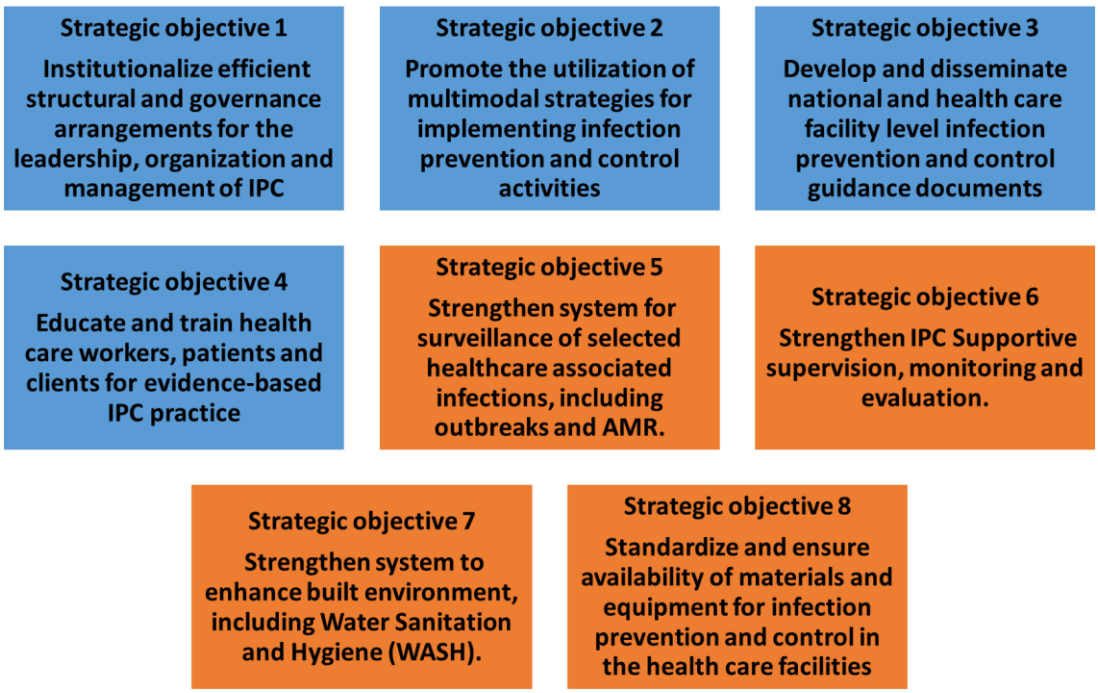

Figure 2: IPC strategic objectives and their description

Table1: Strategic and intermediate objectives

No.	Strategic objective	Intermediate objectives
1	**Institutionalize efficient structural and institutional arrangements for the leadership, organization and management of IPC**	Institutionalize oversight and leadership structures at all levels of service delivery
		Fostering integration, partnership and alliances
		Advocate for improved financial and resource mobilization
2	**Promote the utilization of multimodal strategies for implementing infection prevention and control activities**	
3	**Develop and disseminate national and health care facility level infection prevention and control guidance documents**	
4	**Educate and train health care workers, patients and clients for evidence-based IPC practices.**	Design and support education and training for all healthcare workers in IPC as required for their roles and responsibilities.
		Strengthen IPC professional expertise to support implementation of IPC programmes.
		Develop and disseminate IPC learning and teaching materials
		Promote public awareness and education on infection prevention and control practices.
5	**Strengthen system for surveillance of selected healthcare associated infections, including outbreaks and AMR.**	Institute HAIs surveillance
		Ensure surveillance of occupational associated infections among health care workers
		Support the implementation of the AMR action plan
6	**Strengthen IPC Supportive supervision, monitoring and evaluation**	Strengthening IPC supportive supervision
		Improve IPC monitoring, evaluation and research
7	**Strengthen system to enhance built environment, including Water Sanitation and Hygiene (WASH).**	Intensify the promotion and integration of IPC principles in the design, construction, renovation and maintenance of healthcare facilities
8	**Standardize and ensure availability of materials and equipment for infection prevention and control in the health care facilities**	Promote effective management of IPC equipment and logistics management

10.1 Institutionalize efficient structural changes for the leadership, organization and management of IPC

An effective multidisciplinary team fosters a coordinated approach and shared responsibility for IPC. The WHO recommends an active, stand-alone National IPC programme with clearly defined objectives and functions to be established for the purpose of preventing HAI and combating AMR through evidence-based IPC practices. National IPC programmes should be linked with other relevant directorates, national health programmes, professional organizations, agencies and sectors (WHO 2016).

There must be a national IPC committee established by the HCA to provide direction and oversee effective implementation of the IPC strategy. The Chairperson of the committee must be responsible to the CEO. Implementing agencies and partners will develop implementation plans, monitor progress and report to the national IPC committee on status of their assigned roles and responsibilities.

10.1.1 Institutionalize oversight and leadership structures at all levels of service delivery

Key activities

a. Identify, review and officially inaugurate the infection prevention and control committee (IPCC) every two years to enhance its work.
b. Build technical knowledge and skills of IPCC members on their job through study-tours to other countries with good performance in IPC.
c. Officially, appoint a national IPC coordinator and assistant(s) to oversee the national programme.
d. Work with procurement and logistics management department to provide office equipment (e.g., 2-project, 2-laptops and 1-printer) for the IPC office at nation level.
e. The IPCC working with officials of the IPC unit should develop annual plans that will be endorsed by the MoH.
f. Plan and officially inaugurate health care facility IPC Focal Persons every two years.
g. Health care facility IPC focal persons to develop and implement annual plans to be endorsed by the health facility manager.
h. Establish formal links and integration of IPC into Patient Safety and Quality Assurance Programme.
i. Advocate for top management commitment and support for IPC.

10.1.2 Foster integration, partnership and alliances

Working in partnership and collaboratively across organizational boundaries is essential in the reduction of healthcare associated infections and achieving IPC objectives.

Key Activities

a. Liaise with the CEO of the HCA to formalize mechanisms for collaboration and engagement across ministries, agencies and other stakeholders such as joint planning and participation in the development of IPC policies, standards, guidelines and standard operating procedures.
b. Promote avenues for shared learning with local, regional and international partners.

10.1.3 Advocate for improved financial and resource mobilization

The importance of having a budget line (domestic funding) for IPC programmes at both national and health facility levels cannot be overemphasized. Currently, the programme is very dependent on donor support with sustainability challenges, hence the need to advocate and identify additional resources of funding.

Key activity

a. Advocate for allocation of adequate resources from the MoH, including dedicated budget for IPC programme.
b. Identify other alternative sources such as from the industries/private companies to mobilize resources for IPC work.

10.2 Promote the utilization of multimodal strategies (MMS) for implementing infection prevention and control activities

Utilization of MMS for IPC interventions is a fairly new approach that needs to be promoted. In the period of this strategic framework, the focus will be on the use of the multimodal strategy for implementation of standard and transmission-based precautions.

Key activities

a. Develop, print and disseminate guidelines/SOPs on the use of multimodal strategies (MMS) to implement all the standards and transmission-based precautions.
b. Train all health care facility IPC focal persons on use of the MMS guidelines and SOPs
c. Train all other HCWs on use of the MMS guidelines/SOPs.

10.3 Develop and disseminate national and health care facility level infection prevention and control guidance documents

Written policies, guidelines and protocols are to be developed, disseminated, monitored and updated periodically.

Key Activities

a. Build consensus, finalize, print, disseminate and train all HCWs on the national IPC guidelines, COVID-19 SOPs and other relevant guidance documents for emerging infectious diseases.
b. Liaise with relevant units/departments to put system in place to continuously identify, develop and disseminate guidance documents on emerging infectious diseases.
c. Plan and implement awareness creation activities on the national IPC guidelines amongst top managers, administrators and other key stakeholders.
d. Liaise with all relevant health regulatory bodies for IPC to be incorporated into professional guidelines, practice standards and continuing professional education programmes.

10.4 Educate and train health care workers, patients and clients for evidence-based IPC practices.

It is essential that HCWs have adequate knowledge on IPC specific to the setting in which they are employed. Though some training will be at the national level, the focus will be to develop IPC expertise at the health care facility for in-service training. This strategy will also be achieved through widely disseminating evidence-based guidelines, protocols and other learning materials. All educational programmes should be evaluated based on new evidence or periodically for effectiveness.

10.4.1 Design and support education and training for all healthcare workers in IPC as required for their roles and responsibilities.

Key activities

a. Identify and provide initial training and/or refresher for all IPC Trainers and focal persons. This could be face-to-face and/or virtual on the updated national IPC guidelines and SOPs.
b. Support IPC focal persons to roll-out training of all HCWs in the country on the updated national IPC guidelines and SOPs.
c. Incorporated IPC in the system for induction of new staff and orientation for staff that are reassigned or transferred on IPC.
d. Design and create awareness on IPC among top management.
e. Institute mechanisms to monitor and evaluate the effectiveness of IPC training programmes.

10.4.2 Strengthen IPC professional expertise to support implementation of IPC programmes.

Key activities

a. Collaborate with National Institute of Health and Social Studies (NIHSS) to review health training programme curriculum to reflect current IPC knowledge.

b. Liaise with the health professional regulatory councils to promote IPC awareness and best practice guidance through standards of practice and continuing competency programmes.

c. Advocate for international formal IPC trainings to develop core group of professionals in the country to lead the IPC programme.

d. Advocate for participation in international conferences, seminars and workshops to remain abreast with new development in IPC.

10.4.3 Develop and disseminate IPC learning and teaching materials

Key activities

a. In collaboration with the Health Promotion Unit develop/review, print and disseminate learning materials for the following area:

- Hand hygiene – posters
- Components of standards precautions – leaflets/fliers
- Respiratory hygiene/cough etiquette – posters/fliers
- Personal Protective Equipment – posters
- Reprocessing of instrument and other medical items - posters
- Segregation of waste- posters

b. Review, print and disseminate the IPC facilitator's guide in line with the updated national IPC guidelines to IPC focal persons.

c. Work with the Health Promotion Unit to include IPC technical resources and products on the MoH website.

10.4.4 Promote public awareness and education on infection prevention and control practices.

The importance of public awareness about the spread of infections as well as knowledge about the necessary behavioral changes that help prevent and control infections cannot be overemphasized. There must be a comprehensive plan for client/patient/community information and education.

Key activities

a. Liaise with the Health Promotion Unit, public health care facilities and Non-Governmental Organizations (NGOs) to conduct an environmental scan of IPC and behavior change strategies that could be used in the local context.
b. Liaise with the Health Promotion Unit, public health care facilities and Non-Governmental Organizations (NGOs) to develop and implement a national communication strategy, including campaigns to promote public awareness and support for IPC; this should include wide dissemination of tailor-made communication materials such as posters and fliers on IPC. Patient, client and community education and awareness creation could be through community meetings, open days, circulars, conferences, seminars and other electronic and print medias.
c. Promote and encourage health care facilities to plan and work with community organizations on IPC education.
d. Institute yearly assessment of public knowledge of and satisfaction with IPC practices.

10.5 Strengthen system for surveillance of selected healthcare associated infections, including outbreaks and AMR.

Surveillance system for HAIs should include mechanisms for collection, collation, analysis, interpretation, reporting and feedback of data for prompt action by all relevant stakeholders. In addition, the public health and clinical laboratories need to support IPC by providing relevant information on antibiotic resistant organisms.

10.5.1 Institute HAIs surveillance

Key activities

a. Work with Disease Surveillance and Response Unit (DSRU) to adopt international case definitions for Surgical Site Infection (SSI), review and finalize protocols and tools for its surveillance; train key staff on implementation.
b. Work with Disease Surveillance and Response Unit (DSRU) to adopt international case definitions for urinary catheter associated infection, Ventilator Associated Pneumonia, Central Venous Catheter Infections, and develop/review/finalize protocols and tools for their surveillance; train key staff on implementation.
c. Liaise with public health and clinical laboratories to integrate laboratory activities with HAI surveillance, prevention and control efforts.
d. Collaborate with the Public Health Laboratory to institute systems for targeted environmental surveillance.
e. Procure technical assistance to carry out HAI point prevalence survey.

10.5.2 Ensure surveillance of occupational associated infections among health care workers

The MOH is responsible for the provision of a safe working environment for patients, staff and visitors. This requires the availability of relevant policies and guidelines and promotion of regular screening and immunization of health care workers.

Key activities

a. Work with the Occupational Health Unit, the Health and Safety Unit and the CDCU to:
    - Develop and/ or review and promote use of guidelines on management of work-related infections. This includes guidelines on IPC, HIV, Hepatitis B and C and COVID-19 and other relevant emerging infectious diseases.
    - Promote the screening and immunization of HCWs based on the occupational Health and Safety guidelines of the MoH.

10.5.3 Support the implementation of the AMR action plan

Effective IPC and WASH contribute greatly the prevention of spread of antimicrobial resistance (AMR). The IPC unit will actively collaborate with the unit responsible implement key aspects of the AMR action plan.

Key activities

Liaise with the Pharmacy Unit to:

a. Improve awareness and understanding of AMR among HCWs and the public through education and training.
b. Strengthen knowledge and evidence base through AMR surveillance.
c. Reduce the incidence of infection through effective sanitation, hygiene and IPC measures.
d. Optimize the use of antimicrobial medicines in human and animal health.

10.6 Strengthen IPC Supportive supervision, monitoring and evaluation.

To help target improvement activities, all stakeholders including HCWs need to know how they are performing against set IPC standards. In this regard, it is important to consistently support staff to apply IPC standards and monitor adherence to the standards. Implementation should alsomake use of research findings locally or internationally to inform improvements in IPC. The IPC programme should establish baseline information at the beginning of implementing this strategic framework.

10.6.1 Strengthening IPC supportive supervision

Key activities

a. Develop and disseminate IPC supportive supervision guidelines.
b. Train IPC focal persons and all health care facility supervisors on the use of the supportive supervision guidelines.
c. Conduct targeted external quarterly supportive supervision and monitoring to health care facilities.
d. Facilitate quarterly internal health care facility supportive supervision and monitoring.

10.6.2 Improve IPC monitoring, evaluation and research

Key activities

a. Conduct an assessment to obtain 2021 baseline data/information on the IPC key performance indicators.
b. Update, disseminate and implement the draft IPC monitoring guidelines, indicators and tools.
c. Integrate IPC into national monitoring system as well as monitoring mechanisms for health-related programmes such as HIV, Immunization and TB.
d. Conduct annual national IPC performance audit in all health care facilities.
e. Conduct mid- and end-term evaluation of IPC strategic framework.
f. Promote organizational safety culture by conducting an organizational safety culture survey.
g. Organize annual performance review conferences to share ideas and innovations.
h. Institute systems for reward or recognition for wards/units and health care facilities that demonstrate good practices.

10.7 Strengthen system to enhance built environment, including Water Sanitation and Hygiene (WASH).

There cannot be any effective and efficient IPC without appropriate equipment and logistics for staff and patient use. Quality resources (equipment and supplies) for IPC should be available and proportional to the size and socio-demographic profile of the community in each health care facility. It must be indicated that this strategic framework does not include estimates for procurement of IPC supplies and equipment.

10.7.1 Promote and integrate IPC principles in the design, construction, renovation and maintenance of healthcare facilities.

Key activities

a. Work with PIU and CIC to ensure incorporation of IPC recommendations in planning, provision of and maintenance of buildings and fixtures.
b. Advocate for provision of domestic and sluice rooms for housekeeping activities.
c. Foster closer collaboration between the PIU, CIC and IPCC on design and renovation of health care facilities

10.8 Standardize and ensure availability of materials and equipment for infection prevention and control in the health care facilities

In the past two years, the country has made many strides to improve the system for procurement and management of IPC supplies and equipment. The current challenge is with the quality of some products as well as the supply chain and stock management at the health care facility level. IPCC needs to work with the procurement and Central Stores and Supplies Directorate to come up with specification, estimation of need and improvement of stock management practices in health care facilities.

10.8.1. Promote effective management of IPC equipment and logistics

Key activities

a. Collaborate with the procurement, stores and logistics management department to:
    - Develop and integrate standardized list of IPC supplies and equipment into routine health and logistics management system. This should clearly indicate the specifications.
    - Develop guidelines and train key staff (i.e. health facility managers, supervisors and IPC focal persons) in health care facilities on stores andlogistics management.
    - Support quantification of the public health system IPC supplies and equipment needs, including that for health care facilities to clearly identify current IPC and projected resource requirements.
    - Institutionalize IPC logistics tracking system.
b. Advocate to ensure input of the IPC officers in the procurement of IPC equipment and logistics.

11. MONITORING, REVIEW AND EVALUATION OF THE STRATEGIC FRAMEWORK

The mandate for monitoring and reviewing of the strategic framework is with the IPCC. This strategy document shall be reviewed on an annual basis to ensure that it continues to reflect current priorities. The IPCC is responsible for the review, but external technical assistants could be obtained. A formal end-term evaluation will be done in 2026. The key performance indicators for monitoring the implementation of the strategic framework are outlined in Annex 3.

12. IMPLEMENTING THE STRATEGIC FRAMEWORK

The IPCC working with the IPC unit staff have the primary responsibility of implementing this strategic framework. The strategy will be disseminated and made available to all implementers and related stakeholders. The requisite IPC guidance documents based on local and international recommendations will be developed. The IPC programme management unit will actively promote inclusion of IPC in all health and non-health sector policies and strategies. Also, the IPC programme will foster the establishment of IPC governance and leadership mechanisms in line with the existing health service delivery structures. In this regard, agency, departmental and health care facility managers at the various levels will ensure that IPC actions in this strategy are incorporated in their plans and will be responsible for effective performance. All HCWs and relevant stakeholders in both public and private health and non-health facilities have a responsibility to adhere to IPC policies and guidelines.

13. ASSUMPTIONS AND RISKS

A key assumption that has been made while preparing this strategic framework is that the government and leadership of the MoH will remain relatively committed for the next five-years. This will create an enabling and supportive environment for institutionalizing IPC as mandatory requirement at national, health and non-health facility levels. It is also assumed that public health emergency preparedness, readiness, response and other infection risk management measures will continue to receive strong political will and support at all levels.

Some of the anticipated risks are:

a. Unforeseen pandemic that will demand shift in focus by the MoH.
b. Restructuring of the MoH that leads to frequent changes in management.
c. The economic situation of the country.
d. Instability and unrest of the population.

ANNEXES

Annex 1: Explanation of WHO Core Components of IPC Programmes

Category	Component
IPC programmes	A dedicated organizational structure(s) with clear roles and responsibility for overseeing the design and implementation of IPC at the different levels of services delivery. The members of the structure should be trained and provided with requisite resources to function.
IPC guidelines	Systems to develop/adapt and implement evidence-based standards, guidelines and protocols for the purpose of reducing HAIs and AMR.
IPC education and training	Tailor-made training for all HCWs in IPC and specialized training of IPC specialist/professionals.
Surveillance of infections and assessment of compliance with IPC practices: Microbiology laboratory	Established priorities for surveillance of infections and pathogens, including mechanisms to detect outbreaks and prompt response. Standardization of microbiology laboratory techniques. Use microbiology data for surveillance and IPC activities. Establish laboratory biosafety standards. Promotion of the interaction between IPC activities and the microbiology laboratory. Links between public health services and the health facilities for events of mandatory reporting. Permanent coordination with activities related to waste management and sanitation, biosafety, antimicrobial stewardship, occupational health, patients and consumers and quality of health care.
Multimodal strategies	An approach that comprises implementing a set of three or more IPC components (e.g. instituting an IPC programme; education and training of service providers; surveillance, monitoring and evaluation) collectively and continuously to maximize outcomes and behaviour change.
Monitoring/ audit of IPC practices and feedback	Systematic supportive supervision, monitoring, evaluation and reporting of IPC outcomes, processes and strategies at national level and in health-care facilities. Promotion of evaluation in a non-punitive environment.
Workload, staffing and bed occupancy	Having adequate number and mix of staff for workload. Set standards for appropriate patient placement, bed spacing and bed occupancy.
Built environment, materials and equipment for IPC at the facility level	Setting standards and assuring availability of minimum requirements for IPC such as clean water, electricity, ventilation, handwashing facilities, isolation facilities, storage of sterile supply, and conditions for building and/or renovation.

Annex 2: Work plan

SO.1 Institutionalize efficient structural and institutional arrangements for the leadership, organization and management of IPC				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
1.1 Institutionalize oversight and leadership structures at all levels of service delivery	a. Identify, review and officially inaugurate the infection prevention and control committee (IPCC) every two years to enhance its work.	Multidisciplinary IPCC team established and meet on regular basis	July 2022 then every two years	MoH/HCA
	b. Build technical knowledge and skills of IPCC members on their job through study-tours to other countries with good performance in IPC.	Report on study-tours	2022 to 2025	MoH/HCA
	c. Officially, appoint a national IPC manager and IPC officer (s) to oversee the national IPC programme.	Official letter of appointment of manager or /and officer (s)	Dec 2022	MoH/HCA
	d. Work with procurement and logistics management department to provide office equipment (e.g., 2-projects, 2-laptops and 1-printer) for the IPC office at national level.	Evidence of office equipment with a signed delivery and return note	Feb 2022	IPCU/HCA
	e. The IPCC working with officials of the IPC unit should develop annual plans that will be endorsed by the MoH/HCA.	Copy of endorsed annual plan	January of each year	IPCC, IPCU
	f. Work with the HR unit to review the frequency at which health care facility IPC focal persons are reassigned to every five years.	Report on meetings, revised TOR for IPC focal persons	June 2022	IPCC, IPCU, HR

SO.1 Institutionalize efficient structural and institutional arrangements for the leadership, organization and management of IPC (cont.)				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
1.1 Institutionalize oversight and leadership structures at all levels of service delivery (cont.)	g. Plan and officially inaugurate health care facility IPC Focal Persons every five years.	Report on official inauguration	June 2022	IPCC, IPCU
	h. Health care facility IPC focal persons to develop and implement annual plans to be endorsed by the health facility manager.	Copy of endorsed annual action plan by the health care facility Manager. Evidence of plan implementation.	Jan of each year	IPC Focal Persons, Facility managers
	i. Establish formal links and integration of IPC into Patient Safety and Quality Assurance Programme when these programmes are put in place.	Integration of IPC into Patient Safety and Quality Assurance Programme when the programmes are put in place.	Dec 2025	IPCC, IPCU
	j. Advocate for top management commitment and support for IPC.	Minutes and/or reports of at least twice a year formal advocacy session	Bi-annually	IPCC, IPCU
1.2 Fostering integration, partnership and alliances	a. Liaise with the CEO of the HCA to formalize mechanisms for collaboration and engagement across ministries, agencies and other stakeholders such as joint planning and participation in the development of IPC policies, standards, guidelines and standard operating procedures.	Reports on established formal links of engagement with other ministries and agencies Evidence of participation of key stakeholders in joint IPC activities	Dec 2021 Yearly	CEO, IPCC, IPCU
	b. Promote avenues for shared learning with local, regional and international partners.	Report of participation in shared learning with both national, regional and international partners	Yearly	IPCC, IPCU

SO.1 Institutionalize efficient structural and institutional arrangements for the leadership, organization and management of IPC (cont.)				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
1.3 Advocate for improved financial and resource mobilization	a. Advocate for allocation of adequate resources from the MoH, including dedicated budget for IPC programme.	Evidence of budget allocation for IPC activities	Yearly	IPCC, IPCU
	b. Identify other alternative sources such as from the industries/private companies to mobilize resources for IPC work.	Evidence of receipt of additional IPC resources from outside MoH	Yearly	IPCC, IPCU

SO.2 Promote the utilization of multimodal strategies for implementing infection prevention and control activities			
Key activities	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
2.1 Develop, print and disseminate guidelines/SOPs on the use of multimodal strategies (MMS) to implement all the standards and transmission-based precautions.	Copies of guidelines/ SOPs on the use of MMS at all health system levels	Dec 2022	IPCC, IPCU
2.2 Train all health care facility IPC focal persons on use of the MMS guidelines and SOPs	Report of training of health care facility IPC focal persons on the MMS guidelines	Dec 2022	IPCC, IPCU
2.3 Train all other HCWs on use of the MMS guidelines/SOPs.	Report of training of HCWs on the MMS guidelines.	Dec 2023	IPC focal persons

SO.3 Develop and disseminate national and health care facility level infection prevention and control guidance documents			
Key activities	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
3.1 Build consensus, finalize, print, disseminate and train all HCWs on the national IPC guidelines, COVID-19 SOPs.	Copies of the updated 2021 national IPC guidelines, COVID-19 SOPs and guidance documents in health care facilities. Dissemination report, Training report.	Dec 2022	IPCC, IPCU
3.2 Liaise with relevant units/departments to put system in place to continuously identify, develop and disseminate guidance documents on emerging infectious diseases.	Report on emerging infectious diseases, availability of relevant IPC guidance documents, dissemination report	Yearly	IPCC, IPCU
3.3 Plan and implement awareness creation activities on the national IPC guidelines amongst top managers, administrators and other key stakeholders.	Report on dissemination and awareness creation activities with all stakeholders	Yearly	IPCC, IPCU
3.4 Liaise with all relevant health regulatory bodies for IPC to be incorporated into professional guidelines, practice standards and continuing professional education programmes.	The availability of professional guidelines, practice standards and professional training programmes that have integrated IPC	Yearly	IPCC, IPCU

SO.4 Educate and train health care workers, patients and clients for evidence-based IPC practice.				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
4.1 Design and support education and training for all healthcare workers in IPC as required for their roles and responsibilities.	a. Identify and provide initial training and/orrefresher for all IPC trainers and focal persons.	Training report	Dec 2021	IPCC, IPCU
	b. Support IPC focal persons to roll-out training of all HCWs in the country on the updated national IPC guidelines and COVID-19 SOPs.	Training report from health care facilities	Dec 2022	IPC focal persons, IPCU
	c. Incorporated IPC in the system for induction of new staff and orientation forstaff that are reassigned or transferred onIPC.	Report IPC content in induction and orientation programme. Evidence of participation in induction/orientation programmes	Dec 2022 Yearly	IPC focal persons, IPCU, HR
	d. Design and create awareness on IPC among top management.	Minutes of meetings, Awareness creating report	Twice a year	IPC focal persons, IPCU, IPCC
	e. Institute mechanisms to monitor and evaluate the effectiveness of IPC trainingprogrammes.	Availability of a training monitoring mechanisms Audit tool. Audit report	Feb 2022 Twice a year	IPC focal persons, IPCU, IPCC
4.2 Strengthen IPC professional expertise to support implementation of IPC programmes.	a. Collaborate with National Institute ofHealth and Social Studies (NIHSS) toreview health training programme curriculum to reflect current IPC knowledge.	Availability of a reviewed health programme curriculum with updated IPC Knowledge.	Sept 2023	IPCC NIHSS

SO.4 Educate and train health care workers, patients and clients for evidence-based IPC practice (cont.).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
4.2 Strengthen IPC professional expertise to support implementation of IPC programmes (cont.).	b. Liaise with the health professional regulatory councils to promote IPC awareness and best practice guidancethrough standards of practice and continuing competency programmes.	The availability of professional guidelines, practice standards and professional training programme that have integrated IPC. Proof of attendance of IPC training by health professionals	Yearly	Health Prof. council, Medical &Dental Council, Seychelles Nurses & Midwives Council
	c. Advocate for international formal IPC trainings to develop core group of professionals in the country to lead the IPC programme.	The availability of a register of professionals who have followed formal international IPC training	2024	MoH, HCA, Partners, IPCC, IPCU
	d. Advocate for participation in internationalconferences, seminars and workshops to remain abreast with new development in IPC.	Evidence of participation in international conferences on IPC Certificate of participation	Yearly	IPCC, IPCU
4.3 Develop and disseminate IPC learning and teaching materials	a. In collaboration with the Health Promotion Unit develop/review, print and disseminate learning materials for the following area: o Hand hygiene, components of standards precautions, respiratory hygiene/cough etiquette, PPEs, reprocessing of instrument and other medical items, segregation of waste.	Availability of copies of different learning materials at point of use. Dissemination reports.	Yearly	IPCC/ IPCU, Health Promotion Unit

SO.4 Educate and train health care workers, patients and clients for evidence-based IPC practice (cont.).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
4.3. Develop and disseminate IPC learning and teaching materials (cont.)	b. Review, print and disseminate the IPC facilitator's guide in line with the updatednational IPC guidelines to IPC focal persons.	Report of dissemination of updated IPC facilitator's guide	Dec 2022	IPCC, IPCU
	c. Work with the Health Promotion Unit to include IPC technical resources and products on the MoH website.	Availability of IPC technical resources and product on the MoH website	June 2022	IPCC, IPCU MoH/Health Promotion Unit
4.4 Promote public awareness and education on IPC practices.	a. Liaise with the Health Promotion Unit, public health care facilities and Non-Governmental Organizations (NGOs) to conduct an environmental scan of IPC and behaviour change strategies that could beused in the local context.	Report on environmental scan on IPC practices	March 2022	IPCC, IPCU, MoH/Health Promotion Unit
	b. Liaise with the Health Promotion Unit, public health care facilities and Non- Governmental Organizations (NGOs) todevelop and implement a national communication strategy, including campaigns to promote public awareness and support for IPC.	Availability of national communication strategy document. Implementation report	June 2022 Yearly	IPCC, IPCU, RCCE, MoH/Health Promotion Unit
	c. Promote and encourage health care facilities to plan and work with community organizations on IPC education.	Report of joint activities on IPC	Yearly	FP Facility Manager
	d. Institute yearly assessment of public knowledge of and satisfaction with IPCpractices.	Assessment reports	Yearly	IPCC, IPCU, RCCE, MoH/Health Promotion Unit

SO.5 Strengthen system for surveillance of selected healthcare associated infections, including outbreaks and AMR.				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
5.1 Institute HAIs surveillance	a. Work with Disease Surveillance and Response Unit (DSRU) to adopt international case definitions for Surgical Site Infection (SSI), review and finalize protocols and tools for its surveillance; train key staff on implementation.	Availability of reviewed, evidence-based SSI protocols and tools Report of training of key staff on use of protocol Report on SSI from hospitals	June 2022 Aug 2022 Dec 2022	DSRU, IPCC, IPCU
	b. Work with Disease Surveillance and Response Unit (DSRU) to adopt international case definitions for urinary catheter associated infection, Ventilator Associated Pneumonia, Central Venous Catheter Infections, and develop/review/finalize protocols and tools for their surveillance; train key staff on implementation.	Availability of reviewed, evidence-based protocols for the HAIs Report of training of key staff on use of protocol Report on SSI from hospitals	Dec 2023 Jan 2024 Dec 2024	DSRU, IPCC, IPCU
	c. Liaise with public health and clinical laboratories to integrate laboratory activities with HAIs surveillance, prevention and control efforts.	Availability of the Laboratory activities report including HAIs surveillance	June 2022	DSRU, IPCC, IPCU, Public Health and Clinical Laboratories

SO.5 Strengthen system for surveillance of selected healthcare associated infections, including outbreaks and AMR (cont.).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
5.1 Institute HAIs surveillance (cont.)	d. Collaborate with the Public Health Laboratory to institute systems for targeted environmental surveillance.	Environmental surveillance report	Yearly	IPCC/IPCO DSRU Public Health and Clinical Laboratories
	e. Procure technical assistance to carry outHAI point prevalence survey	Report of HAIs point surveillance survey	March 2023	IPCC/IPCO DSRU
5.2 Ensure surveillance of occupational associated infections among health care workers	a. Develop and/ or review and promote use of guidelines on management of work- related infections. This include guidelineson IPC, HIV, Hepatitis B and C and COVID-19 and other relevant emerging infectious diseases.	Availability of reviewed guidelines for COVID-19 surveillance among HCWs; Report on COVID-19 surveillance Availability and implementation of guidelines on HIV, Hepatitis B and C	Oct 2021 Dec 2021 Dec 2024	Occupational Health Unit, Health and Safety Unit, CDCU, IPCU, IPCC
	b. Promote the screening and immunizationof HCWs based on the occupational Health and Safety guidelines of the MoH.	Screening report of at risk health care workers. Immunization status report for healthcare workers	Third quarter 2024	Occupational unit, Health and Safety, IPCU, IPCC, Health Care facility managers

SO.5 Strengthen system for surveillance of selected healthcare associated infections, including outbreaks and AMR (cont.).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
5.3 Support the implementation of the AMR action plan	a. Liaise with the Pharmacy Unit to improve awareness and understanding of AMR among HCWs and the public through education and training.	Report on awareness creation session among HCWs on AMR	Yearly	Pharmacy unit, IPCU, IPCC
	b. Liaise with the Pharmacy Unit to strengthen AMR surveillance in health care facilities andin the community.	Availability of AMR surveillance system AMR surveillance reports	Yearly	Pharmacy unit, IPCU, IPCC
	c. Liaise with the Pharmacy Unit to reduce the incidence of infection through effective sanitation, hygiene and IPC measures, especially in the use of chemicals.	Evidence of joint activities between the pharmacy unit and IPCU	Yearly	Pharmacy unit, IPCU, IPCC
	d. Liaise with the Pharmacy Unit to optimize theuse of antimicrobial medicines in human and animal health	Evidence of joint activities between the pharmacy unit and IPCU	Yearly	Pharmacy unit, IPCU, IPCC

SO.6. Strengthen IPC Supportive supervision, monitoring and evaluation				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
6.1. Strengthen IPC supportive supervision	a. Develop and disseminate IPC supportive supervision guidelines.	Availability of supportive supervision guidelines at all level of the health care facilities	June 2023	IPCC IPCU
	b. Train IPC focal persons and all health carefacility supervisors on the use of the supportive supervision guidelines.	Report of training on the use of the use of supportive supervision guidelines	Sept 2023	IPCC IPCU, IPC Focal Persons
	c. Conduct targeted external supportive supervision and monitoring to healthcare facilities.	Support supervision and monitoring report	Twice per year	IPCC IPCU
	d. Facilitate quarterly internal health care facility supportive supervision and monitoring.	Quarterly supportive supervision monitoring report	Quarterly	FP Facility supervisors
6.2. Improve IPC monitoring, evaluation and research	a. Conduct an assessment to obtain 2021 baseline data/information on the IPC keyperformance indicators.	Result of the baseline assessment	Dec 2021	IPCC, IPCU
	b. Update and disseminate the IPC monitoring guidelines, indicators and tools.	Dissemination report	Jan 2022, then Yearly	IPCC, IPCU
	c. Integrate IPC into national monitoring system as well as monitoring tool for health related programmes such as HIV, Immunization and TB.	Evidence of IPC monitoring indicators integrated into the national monitoring system	Dec 2023	MoH IPCU CDCU
	d. Conduct national annual IPC performance audit in health care facilities.	Performance Audit reports	Yearly	MoH, IPCC, IPCU

SO.6 Strengthen IPC Supportive supervision, monitoring and evaluation (cont.).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
6.2. Improve IPC monitoring, evaluation and research (cont.)	e. Institute systems for reward or recognitionfor wards/units and health care facilities that demonstrate good practice.	Award presentation reports, Incentives for Focal Person	Yearly	IPCC, IPCU
	f. Organize annual performance review conferences to share ideas andinnovations.	Annual review report	Yearly	IPCC, IPCU
	g. Promote organizational safety culture byconducting an organizational safety culture survey.	Report of the survey	2024	Occupational health, Health and safety Unit, IPCC, IPCU
	h. Conduct mid- and end-term evaluation of IPC strategic framework.	Reports on evaluation	2023 and 2026	IPCC, IPCU
SO.7 Strengthen system to enhance built environment, including Water Sanitation and Hygiene (WASH).				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
7.1. Promote and integrate IPC principles in the design, construction, renovation and maintenance of health care facilities	a. Work with PIU and Capital Infrastructure Committee (CIC) to ensure incorporation of IPC recommendations in planning, provision of and maintenance of buildingsand fixtures.	Evidence of involvement of IPC unit in project planning and implementation	Yearly	IPCC, IPCU PI U, CIC
	b. Advocate for provision of domestic and sluice rooms for housekeeping activities.	Availability of a domestic and sluice room in wards/units	Yearly	IPCC, IPCU PI U, CIC
	c. Foster closer collaboration between the PIU, CIC and IPCC on design and renovation of health care facilities.	Endorsement by IPCC of approved project	Yearly	IPCC, IPCU PI U, CIC

SO.8 Standardize and ensure availability of materials and equipment for infection prevention and control in the health care facilities				
Intermediate Objectives	**Key activities**	**Means of verification**	**Time Frame (end date/period)**	**Responsibility**
8.1. Promote effective management of IPC equipment and logistics	a. Develop and integrate standardized list of IPCsupplies and equipment into routine health and logistics management system. This should clearly indicate the specifications.	Availability of a logistics and supply chain standardized list containing the specified IPC supplies	Dec 2021 then yearly review	IPCC, IPCU Procurement, Stores and Logistics management department
	b. Support quantification of the public healthsystem IPC supplies and equipment needs,including that for health care facilities to clearly identify current IPC and projected resource requirements.	Report of the quantification of IPC supplies	Quarterly	IPCC, IPCU Procurement, Stores and Logistics management department
	c. Develop guidelines and train key staff in health care facilities on stores and logisticsmanagement.	Availability of stores and logistics management training report and guidelines	Oct 2022	IPCC, IPCU Procurement, Stores and Logistics management department
	d. Institutionalize tracking system for tracer IPClogistics.	Availability of functioning tracking system for tracer IPC logistics Report on IPC tracer supplies stocks management	March 2022 Quarterly	IPCC, IPCU Procurement, Stores and Logistics management department

Annex 3: Key IPC performance indicators

IPC Area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
IPC programme	Availability of national functional IPC programme	-	-	Monitoring report	Output	Yearly	National	Functional: Appointed IPC coordinator; defined TOR, Evidence of IPCC meetings, an updated national annual IPC plan and budget
	Proportion of health care facilities that have functional IPC programme	Number of health care facilities that have a functional IPC programme	Total number of Health care facilities	Monitoring report	Output	biannually	National	Functional: defined TOR, Evidence of meetings, and an updated annual IPC plan.
IPC Focal person	Proportion of health care facilities that have IPC focal person	Number of health care facilities that have IPC focal person	Total number of Health care facilities	Monitoring report	Input	quarterly	National	A designated staff trained in IPC (i.e. basic IPC training by MoH); written TOR for IPC implementation; dedicated time to do IPC work
IPC annual report	Proportion of health care facilities that have IPC annual report for the previous year	Number of health care facilities that have IPC annual report for the previous year	Total number of Health care facilities	Monitoring report	Output	annually	National	Availability of IPC previous year's annual report at the healthcare facility.
IPC guidelines	Proportion of health care facilities that have copy of the 2021 national IPC guidelines	The number of health care facilities that have a copy of the 2021 national IPC guidelines	Total number of health care facilities	Monitoring report	Input	biannually	National	Presence of one or more copies of the national IPC guidelines at the health care facility.
COVID-19 SOPs	Proportion of health care facilities that have copy of the COVID-19 SOP	The number of health care facilities that have a copy of the COVID-19 SOP	Total number of health care facilities	Monitoring report	Input	biannually	National	Presence of one or more copies of the COVID-19 SOP at the health care facility.

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Multimodal strategy	Proportion of health care facilities that have a copy of the IPC multimodal strategy guidelines	The number of health care facilities that have a copy of the IPC multimodal strategy guidelines	Total number of health care facilities	Monitoring report	Input	annually	National	Presence of one or more copies of the IPC multimodal strategy guidelines at the health care facility.
Multimodal strategy	Proportion of health care facilities that demonstrate evidence of use of multimodal strategies in at least one of the standard precautions	Number of health care facilities that demonstrate evidence of use of multimodal strategies in at least one of the standard precautions	Total number of the Health care facilities	Monitoring report	Outcome	annually	National	Report on use of multimodal strategy for implementation of standard and transmission-based precautions
Performance assessment	Proportion of health care facilities assessed for IPC performances in the last 12 months	Number of the health care facilities assessed for IPC performance in the last 12 months	Total number of the Health care facilities	Monitoring report	Outcome	annually	National	At least yearly assessment of performance on standard precaution and TBP. Could be internal or external assessment.
IPC Performance assessment	Proportion of health care facilities with IPC quality improvement system in place.	Number of health care facilities with IPC quality improvement system in place.	Total number of health facilities	Monitoring report	outcome	annually	National	Availability of IPC assessment tool or IPC Scorecard or other IPC quality improvement (QI) tools, QI plan, latest QI quarterly report is available.

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Triaging	Proportion of health care facilities with triaging system for ARI	Number of Health care facilities with triaging system for ARI	Total number of Health care facilities	Monitoring report	Outcome	quarterly	National	Triage room/area; has required tools (thermoflash, triage form and register; communication materials (signage, symptom posters), hand hygiene facilities, PPEs; triage vital records are kept correctly for all people who enter the health care facility; demarcated path to isolation area; manned by a trained HCW
Isolation area/room	Proportion of health care facilities that have holding area/room for suspected/confirmed COVID-19 cases	Number of health care facilities with holding area/room for suspected/confirmed COVID-19 cases	Total number of Health care facilities	Monitoring report	Input	quarterly	National	Holding area with hand washing station, toilet (bedpan/urinary), tissue, social/physical distancing arrangement, good ventilation, waste bin; PPEs, pulse oximeter
Health care worker training	Proportion of HCWs in the health care facility trained in IPC in the last 12 months	Number of health care workers in the health care facility trained in IPC in the last 12 months	Total number of health care workers in the health facility	Training reports	output	annually	Health care facility	All categories of health care workers in the health care facility that have received basic training in IPC in the year.
Health care worker training	Proportion of support staff in the health care facility trained in IPC in the last **12 months**	Number of support staff in the health care facility trained in IPC in the last 12 months	Total number of support staff	Training reports	Outcome	Bi-annually	Health care facility	E.g. Cleaners, HIA, maintenance, telephone operator, waste handlers, orderlies, laundry staff and porter Basic training in IPC in the last 12 months.

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
HCW training	Proportion of health professionals in the health care facility who received IPC training in the last **12 months**	Number of health professionals in the health care facility trained in IPC in the last 12 months	Total number of health professionals in the health care facility	Training reports	output	Biannually	Health care facility	Medical officers, nurses, midwives, Allied health professional etc. Basic training in IPC in the last 12 months.
Health care manager training	Proportion of planned IPC awareness creation sessions conducted for health care managers	Number of IPC awareness creation sessions conducted for health care managers	Total number of IPC awareness creation sessions planned	Awareness session report	Output	Biannually	National	Content as in the national IPC guidelines
Patient training and education	Proportion of health care facilities that have a system for patient training/education on IPC	Number of health care facilities that have system for training/education of patients on IPC	Total number of health care facilities	Monitoring report	outcome	quarterly	National	Written schedule for patient training/education, IPC IEC materials (electronic or paper-based), reports on patient training and education.
Staff health and safety	Proportion of health care facilities with system in place to monitor prioritized health care workers infections	Number of health care facilities with system in place to monitor prioritized health care workers infection	Total number of Health care facilities	Monitoring report	Outcome	Bi-annually	National	Including guidelines, register, assessment tools and report of management of prioritized infections in health e.g. (i.e., TB, HIV and hepatitis B)

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Staff health and safety	Proportion of health care facilities with system in place to follow-up exposed/infected HCWs with COVID-19	Number of health care facilities with system in place to follow-up exposed /infected HCWs with COVID-19	Total number of Health care facilities	Monitoring report	Outcome	quarterly	National	Including guidelines, register, assessment tools and report of management specific to COVID-19 in health care workers
Hand hygiene	Proportion of health care facilities that have appropriate hand washing facilities at all hand wash stations	The number of health care facilities that have appropriate hand washing facilities at all hand wash stations.	Total number of hand washing stations sampled	Monitoring report	Input	quarterly	National	Hand washing facilities: Running water, soap, hand drying material, bin for used hand drying materials
Hand hygiene	Number of staffs that performed hand hygiene at all hand hygiene critical moments	Number of staffs that performed hand hygiene at all critical hand hygiene moments	Total number of staffs observed	Monitoring report	outcome	quarterly	Health care facility	Hand Hygiene critical moments: 1. Before touching a patient. 2. After touching a patient. 3. Before clean and aseptic procedures. 4. After body fluid exposure. 5. After touching patient surrounding.
Hand hygiene	Proportion of health care facilities that carried out quarterly audits of hand hygiene supplies	Number of health care facilities that carried out quarterly audits of hand hygiene supplies	Total number of Health care facilities	Monitoring report	Process	Monthly	National	Alcohol hand rub, soap, drying materials, and bin for waste. Apply established minimum stock level.

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
PPEs	Percentage of health care facilities that have minimum stock of all tracer PPEs	Number of health care facilities that had minimum stock of all tracer PPEs	Total number of Health care facilities	Monitoring report	Input	Monthly	National	Tracer PPEs-Gloves (surgical, examination, utility), Surgical Mask, Respirator, Gowns, Aprons, Goggles/ face shield. Apply established minimum stock level.
PPEs	Proportion of staff that used appropriate techniques to don sterile surgical gloves	Number of staffs that used appropriate techniques to don sterile surgical gloves	Total number of staffs observed donning sterile surgical glove	Monitoring report	Process	quarterly	Health care facility	Use of observational tool on donning of sterile surgical gloves
Decontamination of area and supplies	Proportion of health care facilities with dedicated room/area for cleaning of instruments and items at all wards/unit	Number of health care facilities with dedicated room/area for cleaning of instruments/items at all wards/unit	Total number of Health care facilities	Monitoring report	Input	quarterly	National	Dedicated room/area for cleaning, washing sink, running water in all wards/unit
Environmental cleaning	Proportion of health care facilities that have cleaning schedule specifying the frequency at which cleaning tasks should be performed for the different area in the health care facility	Number of health care facilities that had cleaning schedule specifying the frequency at which cleaning tasks should be performed in the different areas in the health care facility	Total number of Health care facilities	Monitoring report	Input	quarterly	National	Schedule available

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Environmental cleaning	Proportion of health care facilities with mechanism for tracking tracer cleaning supplies	Number of health care facilities with mechanism for tracking tracer cleaning supplies	Total number of health care facilities	Monitoring report	input	quarterly	National	Tracer cleaning supplies: Detergent, soap, disinfectant, colour-coded mops, sweeping brushes, floor cleaning dust mop and cleaning cloth, cleaning bucket.
Environmental cleaning	Proportion of health care facilities that have domestic room for housekeeping materials in all wards/units	Number of health care facilities that have domestic room for housekeeping materials in all wards/units	Total number of health care facilities	Monitoring report	Input	Bi-annually	National	Dedicated domestic room/area. Dedicated and appropriate storage facilities e.g.: shelves
Linen management	Proportion of health care facilities with adequate number of bed linen per bed capacity	Number of health care facilities with adequate number of bed linen per bed capacity	Total number of Health care facilities	Monitoring report	Input	Quarterly	National	(3 sets per bed), A sets = 2 bed sheets, mackintosh, draw sheet, blanket, pillow, pillowcase. Inventory book
Waste management	Proportion of health care facilities with a plan on how to manage healthcare waste.	Number of health care facilities that have healthcare waste management plan	Total number of Health care facilities	Monitoring report	Input	Annually	National	Document on how the health care facility will manage healthcare waste from minimization to final disposal with trained person responsible.

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Waste management	Availability of appropriate healthcare waste collection containers/bins at close proximity to all waste generation points	Number of waste generation points with appropriate HCW collection containers/bins at close proximity in the health care facility	Total number of waste generation points	Monitoring report	Input	quarterly	Health care facility	Sealed, covered, labelled, colour-coded for each type of health care waste (infectious, non-infectious, sharp)
Water	Proportion of health care facilities that have water storage sufficient to cover water needs for at least 72 hours when there is water shortage	Number of health care facilities that had water storage sufficient to cover water needs for at least 72 hours when there is water shortage	Total number of health care facilities	Monitoring report	process	quarterly	National	Water tanks to be available to all health care facilities
Energy supply	Proportion of health care facilities that provides 24hrs service that have functioning emergency power supply back-up (solar, generator) for critical areas	Number of health care facilities that provides 24hrs services that have functioning emergency power supply back-up (solar, generator) for critical areas	Total number of health care facilities that provides 24hrs services	Monitoring report	Input	quarterly	National	
Sanitation	Proportion of health care facilities that have toilets separated for staff, patients, and sex	Number of health care facilities that have toilets separated for staff, patients, and sex	Total number of health care facilities	Monitoring report	process	quarterly	National	WASH guidelines
Sanitation	Proportion of health care facilities that have ≥ 1 functioning toilet per 20 users for inpatient settings	Number of health care facilities that had ≥ 1 functioning toilet per 20 users for inpatient settings	Total number of health care facilities	Monitoring report	outcome	quarterly	National	***see below for definition

IPC area	Indicator	Numerator	Denominator	Data Source	Systems component	Frequency	level of application	Remarks/comments
Surgical site infection	Hospital surgical site infection rate	Number of surgical wounds that got infected among inpatients in the hospital	Total number of surgeries done within the given period in the hospital	Surveillance data	Outcome	Quarterly	National	Selected surgeries

******* Improved facilities include: flush/pour flush to piped sewer system, septic tanks, - **Available** to patients and staff (toilets are on premises, doors are unlocked, or a key is available at all times)

Functional (the toilet is not broken, the toilet hole is not blocked, there should be no cracks or leaks in the toilet structure and water is available for flush/pour-flush toilets),

Other indicators for inclusion later

Wound infection	Clean surgery site infection rate	It is an indication of the effectiveness of infection prevention and control practices, and wound management procedures	Number of all clean surgical wounds[1] that become infected while the patients are on admission	Number of patients developing surgical site infections after clean surgery while on admission	Total number of patients who underwent clean surgeries who were hospitalized	Ward register, operation book, patient folder	Higher rates could indicate non-adherence to guidelines on infection prevention and control. Determine threshold if possible
HAIs 1. Urinary tract infection (UTI), including catheter-associated urinary tract infection (CAUTI). 2. Blood stream infection, including central line-associated bloodstream infection (CLABSI). 3. Pneumonia, including ventilator-associated pneumonia (VAP). 4. Multidrug-resistant infections. 5. Infectious diarrhoea and Clostridium difficile infections.							

- [1] *Criteria for inclusion:*
  - *Purulent discharge from incision*
  - *Pain and tenderness, localized swelling, redness or heat, fever above 38oC or more*
  - *Surgeons diagnosis of nosocomial surgical site infection*
- *Criteria for exclusion:*
  - *Dental procedures*
  - *Debridement and operative wound cleaning*
  - *Abscess and drainage of contaminated wound*
  - *Infection of an episiotomy*
  - *Etc.*