Module 4: Management of IPC programs

Introduction

- IPC aims to prevent or control the spread of infections in healthcare facilities and the community
- All healthcare workers require at least a basic understanding of IPC principles and practice
- Effective IPC includes building a program with all healthcare personnel (HCP) playing their part to prevent the spread of pathogens and AMR.
- IPC programmes include activities, procedures and policies designed to reduce the spread of infections, usually within healthcare facilities.

Module sessions

- **Session 1:** IPC Quality Improvement Process
- **Session 2:** Overview of Occupational health in regards to IPC
- **Session 3:** Health Facility IPC Audit
- **Session 4:** IPC Risk assessment
- **Session 5**: Traffic flow in healthcare settings

Module 4: Learning objectives

- Understand the concept of IPC program management
- Describe the hierarchy of controls and how these controls reduce risk in healthcare settings.
- Understand how to conduct health facility IPC audit
- Understand why and how to conduct Risk assessments
- Understand how safety measures and procedures are put in place
- Describe traffic flow and activity pattern in health care settings
- Identify how the IPC core components provide a blueprint for successful implementation of IPC programs.

IPC Governance and Coordination structures

Structure of infection prevention and control programmes

- Coordinating body (national Department of Health or provincial /regional) healthcare administration
- Facility IPC (primary care clinics and hospitals)
- Facility management,
- The IPC committee and
- the IPC practitioner.

IPC committee representation

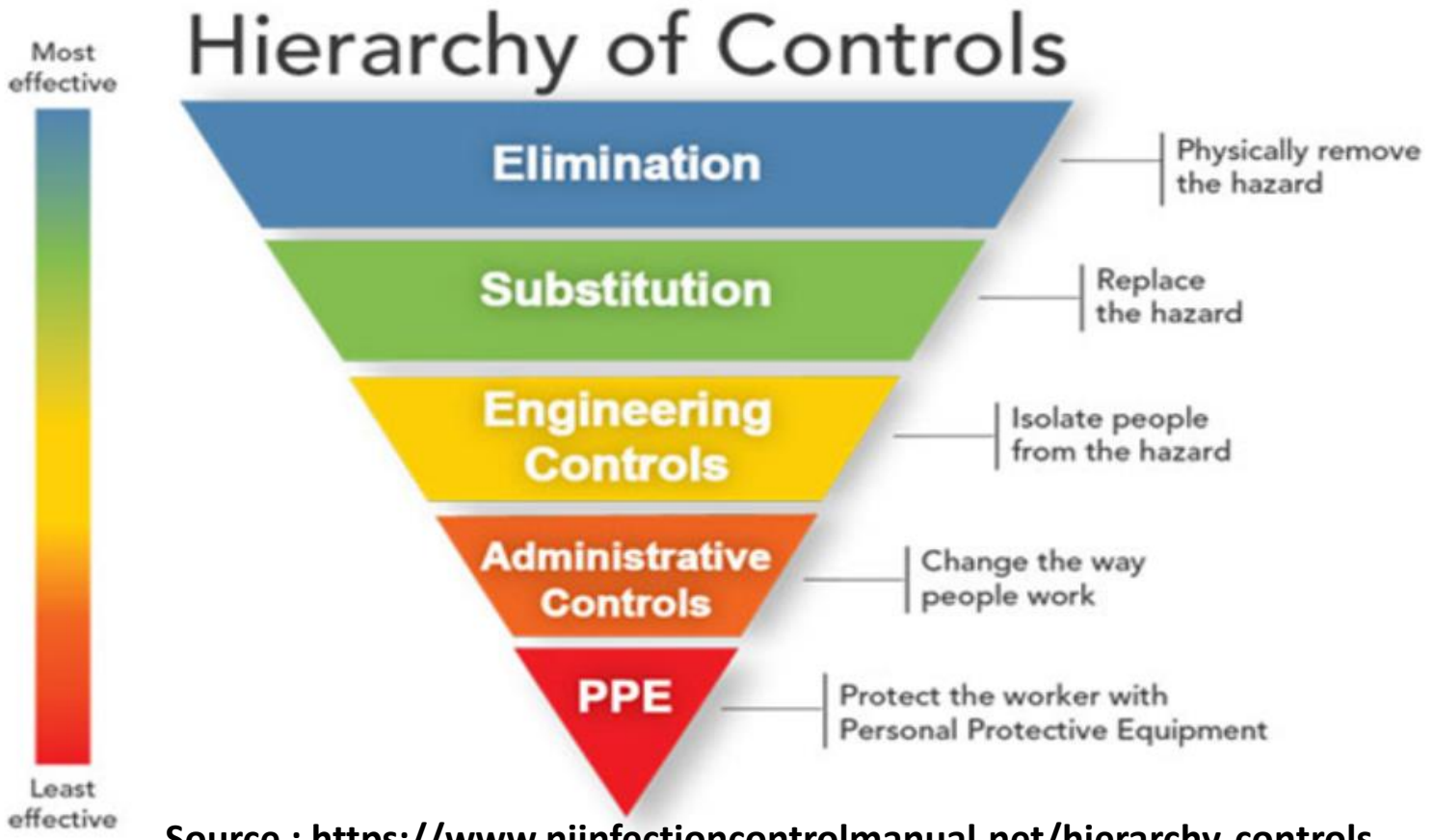
- Facility management
- Nursing management
- Clinicians
- The IPC practitioner or team
- Quality Improvement
- Occupational health
- Pharmacy
- Laboratory/Pathology
- Cleaning services
- Sterile services
- Engineering department.

The infection prevention and control committee roles

An IPC committee is a multi-disciplinary group of healthcare facility staff mandated with the following tasks:

- Management of the IPC programme
- Policy development
- Procurement issues
- Patient safety
- Risk identification
- IPC training and education
- Antimicrobial resistance and disinfectant use
- Surveillance of healthcare-associated infections.

The IPC hierarchy of controls



Source : https://www.niinfectioncontrolmanual.net/hierarchy-controls

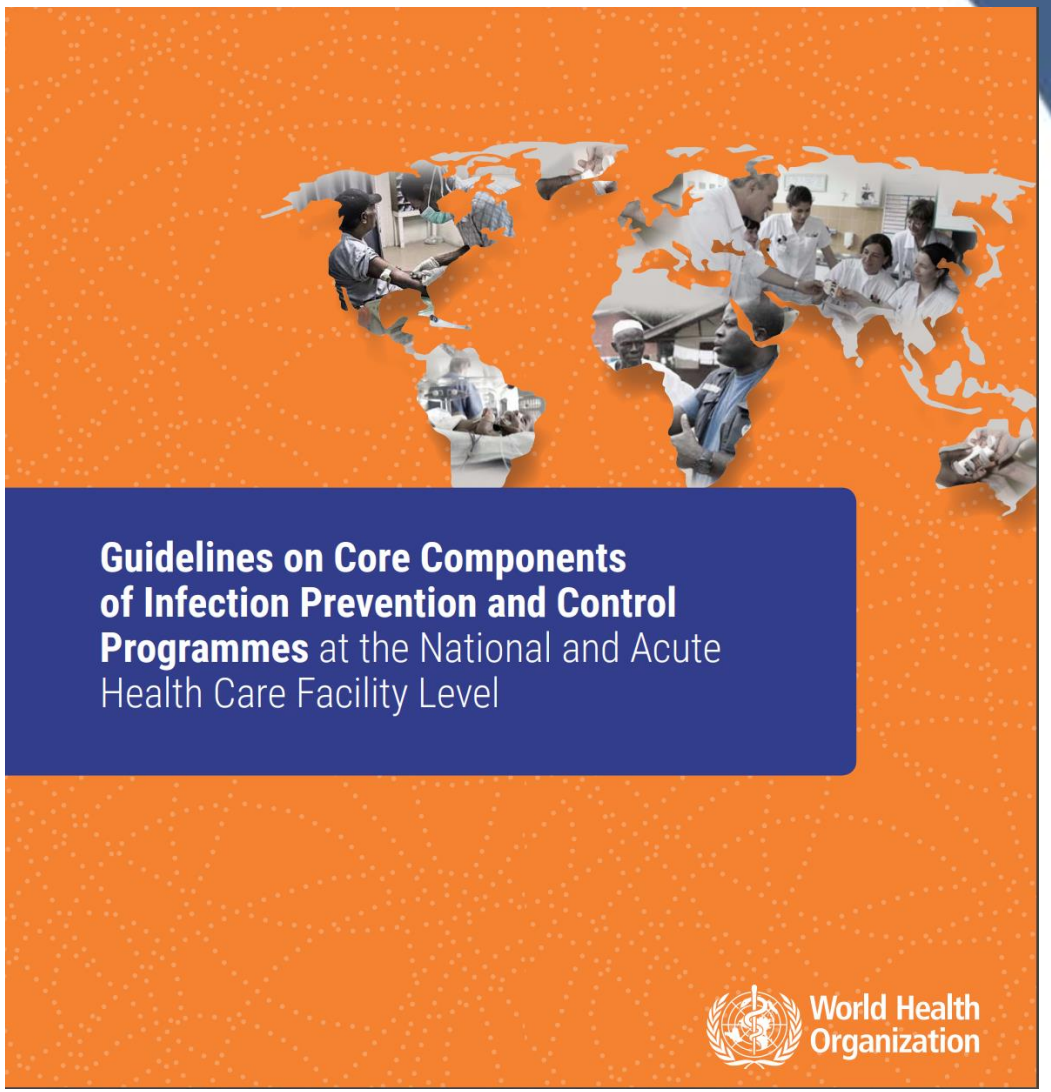
Roles and Responsibilities of the IPC Team

- Performing and reporting on surveillance for healthcare-associated infection
- Investigating and advising on outbreak management
- Providing a clinical advisory service for infection prevention-related issues
- Revising and formulating policies
- Guideline development and implementation are the responsibility of IPC focal point. In case they lack experience or expertise, an external technical support may be offered.
- Providing regular in-service training in IPC for all healthcare workers
- Auditing quality of care, high-risk procedures, and occupational injuries
- Reporting to and advocating for improved standards of care with facility management
- Liaising with all role players, e.g. laboratory, engineering, nursing, clinicians, sterile services, pharmacy, cleaning services, and the procurement division.

The 8 IPC core components

1. National IPC programmes

- With clearly defined objectives and good practices to prevent healthcare associated infections (HAI) and address antimicrobial resistance (AMR).
- A dedicated and trained team should be in place in each facility to implement these good practices at;
- Primary healthcare(an IPC focal person)
- Secondary healthcare (Trained IPC focal point and Allocated budget for IPC implementation)and
- Tertiary healthcare (allocated budget, multidisciplinary committee/team and access to microbiology laboratory)



The 8 IPC core components con't…

2. IPC guidelines

- **Primary care (**Facility-adapted SOPs and their monitoring and Evidence-based facility-adapted SOPs based on the national IPC guidelines)
- **Secondary and Tertiary care (**standard and transmission-based precautions, aseptic technique for invasive procedures, specific SOPs to prevent the most prevalent HAIs based on local context/epidemiology, occupational health **)**

3. IPC education and training

Primary, secondary and tertiary Care

Front liners must receive education and training on their:

IPC guidelines/SOPs and specific IPC training

The 8 IPC core components con't…

4. HAI surveillance

Primary and secondary Care

- HAI not mandatory requirement, just to follow national or regional guidelines

Tertiary care ;

- Conduct active HAI surveillance including information on AMR.
- Enabling structures and supporting resources need to be in place
- The method of surveillance should be directed by the priorities/ plans of the facility and/or country
- Provide timely and regular feedback to key stakeholders in order to lead to appropriate action

The 8 IPC core components con't…

5. Multilevel improvement strategies

Primary Care;

- Use of multimodal strategies – at the very least to implement interventions to improve hand hygiene, safe injection practices, decontamination of medical instruments and devices and environmental cleaning.

Secondary Care

- Use of multimodal strategies – at the very least to improve each item of standard and transmission-based precautions and triage.

Tertiary Care

- Use of multimodal strategies to implement interventions to improve each item of standard and transmission-based precautions, triage, and those targeted at the reduction of specific infections in high-risk areas/patient groups, according to local priorities.

The 8 IPC core components con't…

6. **Monitoring, evaluation and feedback;**

- **Primary Care**
  - 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.
- **Secondary and Tertiary care**
  - 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.
  - Hand hygiene is an essential process indicator to be monitored.
  - Provide timely and regular feedback to key stakeholders in order to lead to appropriate action, particularly to the hospital administration.

The 8 IPC core components con't…

7. Workload, staffing and bed occupancy

- **Primary Care**
  - Reduce overcrowding: establish a system for patient flow, a triage system , and a system for the management of consultations according to existing guidelines.
  - Optimise staffing levels: assessment of appropriate staffing levels
- **Secondary and Tertiary care**

  Standardise bed occupancy:
  - Establish a system to manage the use of space and establish the standard bed capacity;
  - Overall occupancy should not exceed the designed total bed capacity of the facility.
  - Reduce overcrowding and optimise staffing levels

The 8 IPC core components con't…

8. Built environment, materials and equipment

- At all health facilities materials and equipment for good hand hygiene must be available at the point of care
    - Availability of water from an improved source on the premises to perform basic IPC measures
    - Availability of at least two functional, improved sanitation facilities on-site, one for patients and one for staff
    - Availability of functional hand hygiene facilities at points of care
    - Sufficient and appropriately labelled bins to allow for health care waste segregation
    - The facility layout should allow adequate natural ventilation, decontamination of reusable medical devices, triage and space for temporary cohorting/isolation/physical separation if necessary.
    - Sufficient and appropriate IPC supplies and equipment , power/energy , basic IPC measures according , standard precautions, , lighting
    - The facility should have adequate single isolation rooms or at least one room for cohorting patients with similar pathogens, if the number of isolation rooms is insufficient.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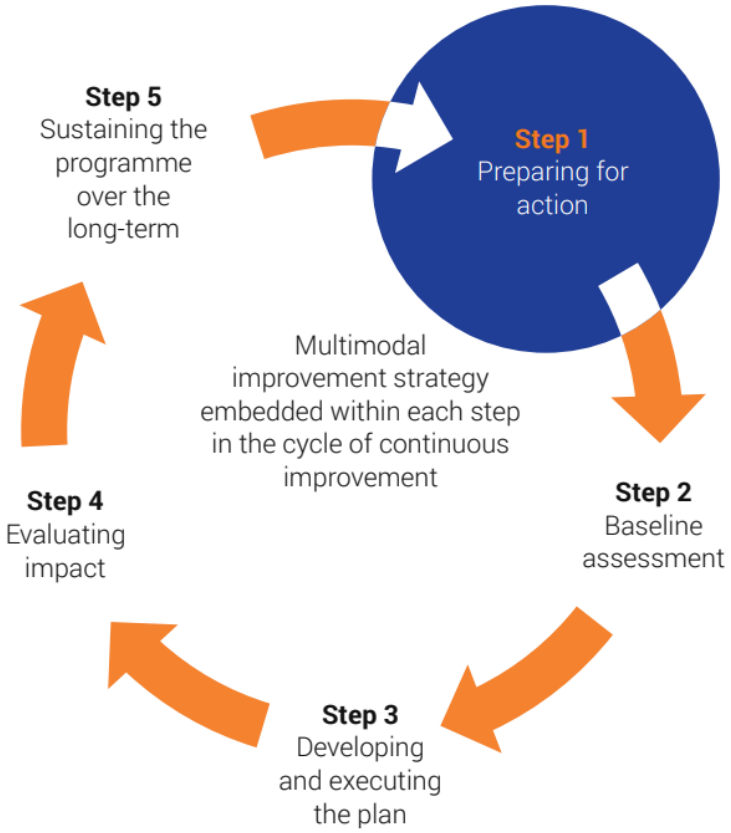
Implementation of IPC programme improvements



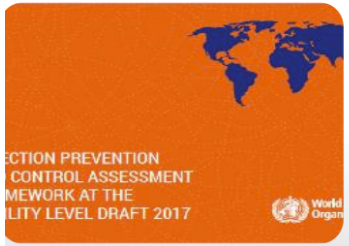
- Developing and executing an action plan requires good project management skills:
- Agree timelines.
- Consider budget and resource needs.
- Establish monitoring mechanisms.
- Consider risks to success.

Source: Improving infection prevention and control at the health facility

Assessments and situation analysis as a key step of project management –Examples of Tools

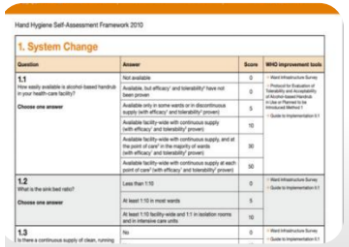
Infection prevention and control assessment tool (IPCAT2)

- National-level assessment tool.
- Provides baseline and ongoing data for improvement.



Infection prevention and control assessment framework (IPCAF)

- Facility-level assessment tool.
- Provides baseline and ongoing data for improvement.



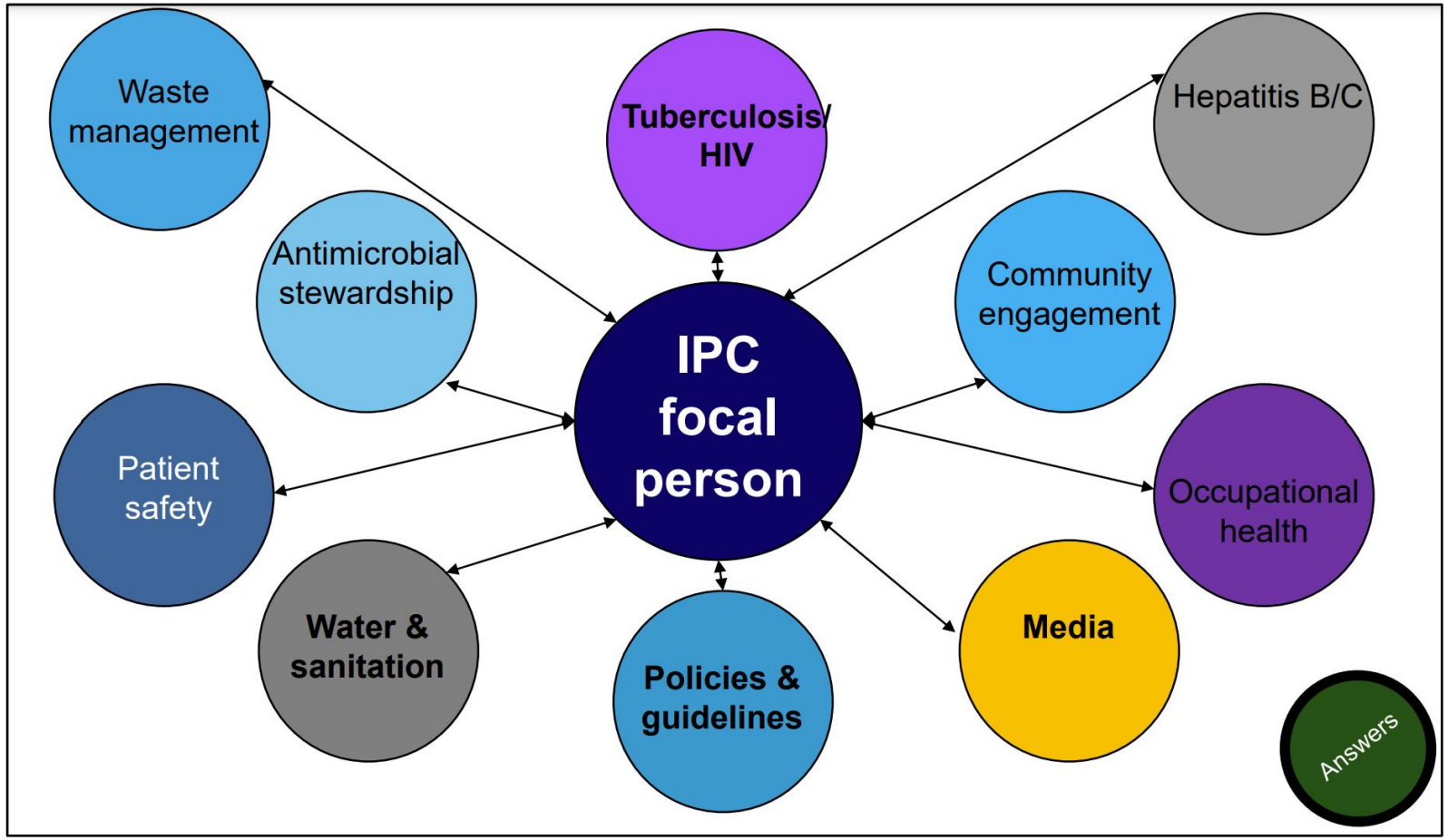
Hand hygiene self-assessment framework (HHSAF)

- Diagnostic tool for health care facilities.
- Provides baseline and ongoing data for improvement.

Structured Action Plan

CORE COMPONENT:<INSERT NAME OF CORE COMPONENT>						
Priority gaps identified	**Action required**	**Lead person**	**Start date**	**End date**	**Budget (if applicable)**	**Monitoring and evaluating implementation progress (include review/ completion dates)**
<List all gaps identified from baseline assessment and prioritized for action>	<List the actions that are planned using information gathered as you work through the 5 steps of the implementation cycle>	<List the lead person or group driving the action plan>	<State when the action will start to be addressed>	<Estimate the deadline for action to be completed, in-cluding periodic review dates if applicable>	<Estimate the budget required to address the required actions>	<Describe the progress that has been made at each review date including decisions and actions taken, and the need for further actions to be taken to achieve completion>
Gap 1:						

Linking IPC with other programmes



Summary

- Developing and executing an action plan requires good project management skills:
- Agreed timelines.
- Consider budget and resource needs.
- Establish monitoring mechanisms.
- Consider risks to success.

- Support the development of an effective IPC programme.
- Support the implementation of the core components of IPC programmes in your facility.
- Contribute to a reduction in HAI and AMR.
- Run effective projects.
- Link with other relevant programmes.
- Train the health workforce effectively.

References

- https://www.who.int/publications/m/item/ipc-training-leadership-and-programme-management-in-infection-prevention-and-control-module-presentation
- The Infection Prevention and Control (IPC) Assessment Framework (IPCAF) 2018
- WHO (2016). Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level. http://apps.who.int/iris/bitstream/10665/251730/1/9789241549929-eng.pdf?ua=1