

## PART 2. EXECUTIVE SUMMARY OF THE MINIMUM REQUIREMENTS BY CORE COMPONENT

### CORE COMPONENT 1: IPC PROGRAMMES



#### NATIONAL LEVEL



#### FACILITY LEVEL



#### CORE COMPONENT RECOMMENDATION

Active, stand-alone, national IPC programmes with clearly defined objectives, functions and activities should be established for the purpose of preventing HAI, promoting patient safety and combating AMR through IPC good practices. National IPC programmes should be linked with other relevant national programmes and professional organizations.

The panel recommends that an IPC programme with a dedicated, trained team should be in place in each acute health care facility for the purpose of preventing HAI and combating AMR through IPC good practices.

#### MINIMUM REQUIREMENTS

#### A functional IPC programme should be in place, including at least:

- one full-time focal point trained in IPC.
- a dedicated budget for implementing IPC strategies/plans.

#### ■ PRIMARY CARE:

##### IPC trained health care officer

- Trained IPC link person, with dedicated (part-) time in each primary health care facility.
- One IPC-trained health care officer at the next administrative level (for example, district) to supervise the IPC link professionals in primary health care facilities.

#### ■ SECONDARY CARE:

##### functional IPC programme

- Trained IPC focal point (one full-time trained IPC Officer [nurse or doctor]) as per the recommended ratio of 1:250 beds with dedicated time to carry out IPC activities in all facilities (for example, if the facility has 120 beds, one 50% full-time equivalent dedicated officer).
- Dedicated budget for IPC implementation.

#### ■ TERTIARY CARE:

##### functional IPC programme

- At least one full-time trained IPC focal point (nurse or doctor) with dedicated time per 250 beds.
- IPC programme aligned with the national programme and with a dedicated budget.
- Multidisciplinary committee/team.
- Access to microbiology laboratory.

## CORE COMPONENT 2: IPC GUIDELINES



### NATIONAL LEVEL AND FACILITY LEVEL

#### CORE COMPONENT RECOMMENDATION

The panel recommends that evidence-based guidelines should be developed and implemented for the purpose of reducing HAI and AMR. The education and training of relevant HCWs on the guideline recommendations and the monitoring of adherence with guideline recommendations should be undertaken to achieve successful implementation.

#### NATIONAL LEVEL



#### FACILITY LEVEL



#### MINIMUM REQUIREMENTS

##### National IPC guidelines

- Evidence-based, ministry-approved guidelines adapted to the local context and reviewed at least every five years.

##### ■ PRIMARY CARE: facility-adapted standard operating procedures (SOPs) and their monitoring

- Evidence-based facility-adapted SOPs based on the national IPC guidelines.
- At a minimum, the facility SOPs should include:
  - hand hygiene
  - decontamination of medical devices and patient care equipment
  - environmental cleaning
  - health care waste management
  - injection safety
  - HCW protection (for example, post-exposure prophylaxis, vaccinations)
  - aseptic techniques
  - triage of infectious patients
  - basic principles of standard and transmission-based precautions.
- Routine monitoring of the implementation of at least some of the IPC guidelines/ SOPs.

##### ■ SECONDARY AND TERTIARY CARE: all requirements as for the primary health care facility level, with additional SOPs on:

- standard and transmission-based precautions (for example, detailed, specific SOPs for the prevention of airborne pathogen transmission);
- aseptic technique for invasive procedures, including surgery;
- specific SOPs to prevent the most prevalent HAIs based on the local context/epidemiology;
- occupational health (specific detailed SOP).

## CORE COMPONENT 3: IPC EDUCATION AND TRAINING



### NATIONAL LEVEL



#### CORE COMPONENT RECOMMENDATION

The national IPC programme should support education and training of the health workforce as one of its core functions.

### FACILITY LEVEL



The panel recommends that IPC education should be in place for all HCWs by using team- and task-based strategies that are participatory and include bedside and simulation training to reduce the risk of HAI and AMR.

#### MINIMUM REQUIREMENTS

##### National training policy and curriculum

- National policy that all HCWs are trained in IPC (in-service training).
- An approved IPC national curriculum aligned with national guidelines and endorsed by the appropriate body.
- National system and schedule of monitoring and evaluation to check on the effectiveness of IPC training and education (at least annually).

##### ■ PRIMARY CARE:

##### IPC training for all front-line clinical staff and cleaners upon hiring

- All front-line clinical staff and cleaners must receive education and training on the facility IPC guidelines/SOPs upon employment.
- All IPC link persons in primary care facilities and IPC officers at the district level (or other administrative level) need to receive specific IPC training.

##### ■ SECONDARY CARE:

##### IPC training for all front-line clinical staff and cleaners upon hire

- All front-line clinical staff and cleaners must receive education and training on the facility IPC guidelines/SOPs upon employment.
- All IPC staff need to receive specific IPC training.

##### ■ TERTIARY CARE:

##### IPC training for all front-line clinical staff and cleaners upon hire and annually

- All front-line clinical staff and cleaners must receive education and training on the facility IPC guidelines/SOPs upon employment and annually.
- All IPC staff need to receive specific IPC training.

## CORE COMPONENT 4: HAI SURVEILLANCE



### NATIONAL LEVEL



### FACILITY LEVEL



#### CORE COMPONENT RECOMMENDATION

The panel recommends that national HAI surveillance programmes and networks that include mechanisms for timely data feedback and with the potential to be used for benchmarking purposes should be established to reduce HAI and AMR.

The panel recommends that facility-based HAI surveillance should be performed to guide IPC interventions and detect outbreaks, including AMR surveillance, with timely feedback of results to HCWs and stakeholders and through national networks.

#### MINIMUM REQUIREMENTS

##### IPC surveillance and a monitoring technical group

- Establishment by the national IPC focal point of a technical group for HAI surveillance and IPC monitoring that:
  - is multidisciplinary;
  - develops a national strategic plan for HAI surveillance (with a focus on priority infections based on the local context) and IPC monitoring.

##### ■ PRIMARY CARE

- HAI surveillance is not required as a minimum requirement at the primary facility level, but should follow national or sub-national plans, if available (for example, detection and reporting of outbreaks affecting the community is usually included in national plans).

##### ■ SECONDARY CARE

- HAI surveillance should follow national or sub-national plans.

##### ■ TERTIARY CARE: functional HAI surveillance

- Active HAI surveillance should be conducted and include information on AMR:
  - enabling structures and supporting resources need to be in place (for example, dependable laboratories, medical records, trained staff), directed by an appropriate method of surveillance;
  - the method of surveillance should be directed by the priorities/plans of the facility and/or country.
- Timely and regular feedback needs to be provided to key stakeholders in order to lead to appropriate action, in particular to the hospital administration.

## CORE COMPONENT 5: MULTIMODAL STRATEGIES



### NATIONAL LEVEL



#### CORE COMPONENT RECOMMENDATION

The panel recommends that national IPC programmes should coordinate and facilitate the implementation of IPC activities through multimodal strategies on a nationwide or sub-national level.

### FACILITY LEVEL



The panel recommends that IPC activities using multimodal strategies should be implemented to improve practices and reduce HAI and AMR.

#### MINIMUM REQUIREMENTS

#### Multimodal improvement strategies for IPC interventions

- Use of multimodal strategies to implement IPC interventions according to national guidelines/SOPs under the coordination of the national IPC focal point (or team, if existing).

#### ■ PRIMARY CARE: multimodal strategies for priority IPC interventions

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

#### ■ SECONDARY CARE: multimodal strategies for priority IPC interventions

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

#### ■ TERTIARY CARE: multimodal strategies for all IPC interventions

- Use of multimodal strategies to implement interventions to improve each one of the standard and transmission-based precautions, triage, and those targeted at the reduction of specific infections (for example, surgical site infections or catheter-associated infections) in high-risk areas/patient groups, in line with local priorities.

## CORE COMPONENT 6: MONITORING, AUDITING AND FEEDBACK



### NATIONAL LEVEL



#### CORE COMPONENT RECOMMENDATION

The panel recommends that a national IPC monitoring and evaluation programme should be established to assess the extent to which standards are being met and activities are being performed according to the programme's goals and objectives. Hand hygiene monitoring with feedback should be considered as a key performance indicator at the national level.

### FACILITY LEVEL



The panel recommends that regular monitoring/audit and timely feedback of health care practices according to IPC standards should be performed to prevent and control HAI and AMR at the health care facility level. Feedback should be provided to all audited persons and relevant staff.

#### MINIMUM REQUIREMENTS

##### IPC surveillance and monitoring technical group

- Establishment by the national IPC focal point of a technical group for HAI surveillance and IPC monitoring that:
  - is multidisciplinary;
  - develops a national strategic plan for HAI surveillance and IPC monitoring and, for IPC indicators monitoring:
    - develops recommendations for minimum indicators (for example, hand hygiene);
    - develops an integrated system for the collection and analysis of data (for example, protocols, tools)
    - provides training at the facility level to collect and analyse these data.

##### ■ 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. This requires decisions at the national level and implementation support at the sub-national level.

##### ■ 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.
- Timely and regular feedback needs to be provided to key stakeholders in order to lead to appropriate action, particularly to the hospital administration.

## CORE COMPONENT 7: WORKLOAD, STAFFING AND BED OCCUPANCY (FACILITY LEVEL ONLY\*)



### FACILITY LEVEL\*

#### CORE COMPONENT RECOMMENDATION

The panel recommends that the following elements should be adhered to in order to reduce the risk of HAI and the spread of AMR: (1) bed occupancy should not exceed the standard capacity of the facility; (2) HCW staffing levels should be adequately assigned according to patient workload.

#### MINIMUM REQUIREMENTS

##### ■ PRIMARY CARE

- **To reduce overcrowding:** a system for patient flow, a triage system (including referral system) and a system for the management of consultations should be established according to existing guidelines, if available.
- **To optimize staffing levels:** assessment of appropriate staffing levels, depending on the categories identified when using WHO/national tools (national norms on patient/staff ratio), and development of an appropriate plan.

##### ■ SECONDARY AND TERTIARY CARE

- **To standardize bed occupancy:**
  - establish a system to manage the use of space in the facility and to establish the standard bed capacity for the facility;
  - hospital administration enforcement of the system developed;
  - no more than one patient per bed;
  - spacing of at least one metre between the edges of beds;
  - overall occupancy should not exceed the designed total bed capacity of the facility.
- **To reduce overcrowding and optimizing staffing levels:** same *minimum requirements* as for primary health care.

\*The national health system, IPC programme and any other relevant body should coordinate and support the implementation of this core component at the facility level.

## CORE COMPONENT 8: BUILT ENVIRONMENT, MATERIALS AND EQUIPMENT FOR IPC (FACILITY LEVEL ONLY\*)



### FACILITY LEVEL

#### CORE COMPONENT RECOMMENDATION

Patient care activities should be undertaken in a clean and hygienic environment that facilitates practices related to the prevention and control of HAI, as well as AMR, including all elements around WASH infrastructure and services and the availability of appropriate IPC materials and equipment. The panel recommends that materials and equipment to perform appropriate hand hygiene should be readily available at each point of care.

#### MINIMUM REQUIREMENTS

##### ■ PRIMARY CARE:

- Water should always be available from a source on the premises (such as a deep borehole or a treated, safely managed piped water supply) to perform basic IPC measures, including hand hygiene, environmental cleaning, laundry, decontamination of medical devices and health care waste management according to national guidelines.
- A minimum of two functional, improved sanitation facilities should be available on-site, one for patients and the other for staff; both should be equipped with menstrual hygiene facilities.
- Functional hand hygiene facilities should always be available at points of care/toilets and include soap, water and single-use towels (or if unavailable, clean reusable towels) or alcohol-based handrub (ABHR) at points of care and soap, water and single-use towels (or if unavailable, clean reusable towels) within 5 metres of toilets.
- Sufficient and appropriately labelled bins to allow for health care waste segregation should be available and used (less than 5 metres from point of generation); waste should be treated and disposed of safely via autoclaving, high temperature incineration, and/or buried in a lined, protected pit.
- 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 (for example, mops, detergent, disinfectant, personal protective equipment (PPE) and sterilization) and power/energy (for example, fuel) should be available for performing all basic IPC measures according to *minimum requirements/SOPs*, including all standard precautions, as applicable; lighting should be available during working hours for providing care.

##### ■ SECONDARY AND TERTIARY CARE:

- A safe and sufficient quantity of water should be available for all required IPC measures and specific medical activities, including for drinking, and piped inside the facility at all times - at a minimum to high-risk wards (for example, maternity ward, operating room/s, intensive care unit).
- A minimum of two functional, improved sanitation facilities that safely contain waste available for outpatient wards should be available and one per 20 beds for inpatient wards; all should be equipped with menstrual hygiene facilities.
- Functional hand hygiene facilities should always be available at points of care, toilets and service areas (for example, the decontamination unit), which include ABHR and soap, water and single-use towels (or if unavailable, clean reusable towels) at points of care and service areas, and soap, water and single-use towels (or if unavailable, clean reusable towels) within 5 metres of toilets.
- Sufficient and appropriately labelled bins to allow for health care waste segregation should be available and used (less than 5 metres from point of generation) and waste should be treated and disposed of safely via autoclaving, incineration (850° to 1100°C), and/or buried in a lined, protected pit.

\* The national health system, IPC programme and any other relevant body should coordinate and support the implementation of this core component at the facility level.



- The facility should be designed to allow adequate ventilation (natural or mechanical, as needed) to prevent transmission of pathogens.
- Sufficient and appropriate supplies and equipment and reliable power/energy should be available for performing all IPC practices, including standard and transmission-based precautions, according to *minimum requirements/SOPs*; reliable electricity should be available to provide lighting to clinical areas for providing continuous and safe care, at a minimum to high-risk wards (for example, maternity ward, operating room/s, intensive care unit).
- The facility should have a dedicated space/area for performing the decontamination and reprocessing of medical devices (that is, a decontamination unit) according to *minimum requirements/SOPs*.
- The facility should have adequate single isolation rooms or at least one room for cohorting patients with similar pathogens or syndromes, if the number of isolation rooms is insufficient