

# INFECTION PREVENTION AND CONTROL FACILITY ASSESSMENT FRAMEWORK AUDIT REPORT

## About IPCAF survey instrument

IPCAF is a structured, closed-formatted questionnaire with an associated scoring system and is usually self-administered. It comprises 81 indicators subdivided into eight sections corresponding to the eight WHO IPC core components:

- (1) IPC programme;
- (2) IPC guidelines;
- (3) IPC education and training;
- (4) HAI surveillance;
- (5) Multimodal strategies;
- (6) Monitoring and audit of IPC practices and feedback;
- (7) Workload, staffing, and bed occupancy;
- (8) Built environment, and materials and equipment for IPC.

Each section generates a score between 0 and 100. According to the final score (ranging from 0 to 800), the facility IPC programme implementation is categorized into four levels:

- 1) **Inadequate (0–200):** IPC core components implementation is deficient. Significant improvement is required.
- 2) **Basic (201–400):** Some aspects of the IPC core components are in place, but not sufficiently implemented. Further improvement is required.
- 3) **Intermediate (401–600):** Most aspects of the IPC core components are appropriately implemented. The facility should continue to improve the scope and quality of implementation and focus on the development of long-term plans to sustain and further promote the existing IPC programme activities.
- 4) **Advanced (601–800):** The IPC core components are fully implemented according to the WHO recommendations and appropriate to the needs of the facility.

The tool also comprised of Candida auris focused IPC questions suggested by CDC.

With 100% response rate from The Nairobi Hospital, Kenyatta National Hospital and National Spinal Injury and Referral Hospital, we can report the following assessment scores:

## SCORES ASSESSMENT PER FACILITY

**Facility name:** Kenyatta National Hospital

Section (Core component)	Score	Totals
1. IPC programme	100	100
2. IPC guidelines	77.5	100

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3. IPC education and training	95	100
4. HAI surveillance	92.5	100
5. Multimodal strategies	95	100
6. Monitoring/audits of IPC practices and feedback	60	100
7. Workload, staffing and bed occupancy	25	100
8. Built environment, materials and equipment for IPC at the facility level	67.5	100
<b>Final total score</b>	<b>612.5</b>	<b>800</b>

Based on the total score above, the assigned “IPC level” in Kenyatta National Hospital is **Advanced**.

**Facility name:** The Nairobi Hospital

Section (Core component)	Score	Totals
1. IPC programme	90	100
2. IPC guidelines	82.5	100
3. IPC education and training	95	100
4. HAI surveillance	92.5	100
5. Multimodal strategies	100	100
6. Monitoring/audits of IPC practices and feedback	65	100
7. Workload, staffing and bed occupancy	90	100
8. Built environment, materials and equipment for IPC at the facility level	92.5	100
<b>Final total score</b>	<b>707.5</b>	<b>800</b>

Based on the total score above, the assigned “IPC level” in The Nairobi Hospital is **Advanced**.

**Facility name:** National Spinal Injury Referral Hospital

Section (Core component)	Score	Totals
1. IPC programme	50	100
2. IPC guidelines	0	100
3. IPC education and training	20	100
4. HAI surveillance	0	100
5. Multimodal strategies	45	100
6. Monitoring/audits of IPC practices and feedback	7.5	100
7. Workload, staffing and bed occupancy	55	100
8. Built environment, materials and equipment for IPC at the facility level	55	100
<b>Final total score</b>	<b>232.5</b>	<b>800</b>

Based on the total score above, the assigned “IPC level” in National Spinal Injury Referral Hospital is **Basic**.

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**Weighted frequencies of individual IPCAF indicator responses that fulfil the ‘IPC minimum requirements’ among tertiary care facilities, below are responses determined to be minimum requirements according to region facility type.**

**Indicator:** IPC Minimum requirement as per component (Question and answer)

**N:** number of facilities that met the minimum requirement

**%:** percentage of number of facilities that met the requirement

Indicator	N = 3	%
<b>Core component 1: IPC programme</b>		
1. Do you have an IPC programme? Yes	3	100
3. Does the IPC team have at least one full-time IPC professional or equivalent available? Yes, one per $\leq 250$ beds.	2	66.67
4. Does the IPC team or focal person have dedicated time for IPC activities? Yes	2	66.67
6. Do you have an IPC committee actively supporting the IPC team? Yes	3	100
8. Do you have clearly defined IPC objectives (i.e., in specific critical areas)? Yes	2	66.67
9. Does the senior facility leadership show clear commitment and support for the IPC programme by an allocated budget specifically for the IPC programme? Yes	2	66.67
10. Does your facility have microbiological laboratory support for routine day-to-day use? Yes	2	66.67
<b>Median score</b>		<b>66.67</b>
<b>Core component 2: IPC guidelines</b>		
2. Does your facility have guidelines for standard precautions? Yes	1	33.33
2. Does your facility have guidelines for hand hygiene? Yes	1	33.33
2. Does your facility have guidelines for transmission-based precautions? Yes	0	0
2. Does your facility have guidelines for the prevention of surgical site infection? Yes	1	33.33
2. Does your facility have guidelines for the prevention of vascular catheter - associated bloodstream infections? Yes	0	0

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2. Does your facility have guidelines for the prevention of hospital-acquired pneumonia? Yes	0	0
2. Does your facility have guidelines for the prevention of catheter-associated urinary tract infections? Yes	0	0
2. Does your facility have guidelines for disinfection and sterilization? Yes	2	66.67
2. Does your facility have guidelines for health worker protection and safety? Yes	2	66.67
2. Does your facility have guidelines for injection safety? Yes	1	33.33
2. Does your facility have guidelines for waste management? Yes	2	66.67
8. Do you regularly monitor the implementation of at least some of the IPC guidelines in your facility? Yes	2	66.67
<b>Median score</b>		<b>33.33</b>
<b>Core component 3: IPC education and training</b>		
1. Are there personnel with the IPC expertise to lead IPC training? Yes	2	66.67
2. Are there additional non-IPC personnel with adequate skills to serve as trainers and mentors? Yes	2	66.67
3. How frequently do health workers receive training regarding IPC in your facility? At least new employee orientation	2	66.67
4. How frequently do cleaners and other personnel directly involved in patient care receive training regarding IPC in your facility? At least new employee orientation	2	66.67
<b>Median score</b>		<b>66.67</b>
<b>Core component 4: Health-care-associated infection surveillance</b>		
1. Is surveillance a defined component of your IPC programme? Yes	2	66.67
2. Do you have personnel responsible for surveillance activities? Yes	2	66.67
3. Have the professionals responsible for surveillance activities been trained in basic epidemiology, surveillance and IPC? Yes	2	66.67
14. Do you regularly feedback up-to-date surveillance information to? Frontline health workers	2	66.67
14. Do you regularly feedback up-to-date surveillance information to? Clinical leaders/heads of department	2	66.67

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14. Do you regularly feedback up-to-date surveillance information to? IPC committee	2	66.67
14. Do you regularly feedback up-to-date surveillance information to? Non-clinical management/administration	2	66.67
<b>Median score</b>		<b>66.67</b>
<b>Core component 5: Multimodal strategies</b>		
1. Do you use multimodal strategies to implement IPC interventions? Yes	3	100
<b>Median score</b>		<b>100</b>
<b>Core component 6: Monitoring/audit and feedback</b>		
1. Do you have trained personnel responsible for the monitoring/audit of IPC practices and feedback? Yes	0	0
2. Do you have a well-defined monitoring plan with clear goals, targets and activities? Yes	2	66.67
3. Which processes and indicators do you monitor in your facility: hand hygiene compliance (using the WHO hand hygiene observation tool or equivalent)? Yes	2	66.67
5. Do you feedback auditing reports on the state of the IPC activities/performance? Yes, within the IPC team	2	66.67
5. Do you feedback auditing reports on the state of the IPC activities/performance? Yes, to department leaders and managers in the areas being audited	2	66.67
5. Do you feedback auditing reports on the state of the IPC activities/performance? Yes, to frontline health workers	2	66.67
5. Do you feedback auditing reports on the state of the IPC activities/performance? Yes, to the IPC committee or quality of care committees or equivalent	2	66.67
5. Do you feedback auditing reports on the state of the IPC activities/performance? Yes, to hospital management and senior administration	2	66.67
<b>Median score</b>		<b>66.67</b>
<b>Core component 7: Workload, staffing and bed occupancy</b>		

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2. Is an agreed ratio of health workers to patients maintained across your facility? Yes	3	100
3. Is a system in place in your facility to act on the results of the staffing needs assessments when staffing levels are deemed to be too low? Yes	1	33.33
7. Is adequate spacing of > 1 metre between patient beds ensured in your facility? Yes, for all departments (including emergency department and paediatrics)? Yes	1	33.33
8. Is a system in place in your facility to assess and respond when adequate bed capacity is exceeded? Yes, this is the responsibility of the hospital administration/management	2	66.67
<b>Median score</b>		<b>50</b>
<b>Core component 8: Built environment, materials and equipment</b>		
1. Are water services available at all times and of sufficient quantity for all uses? Yes, every day and of sufficient quantity	3	100
3. Are functioning hand hygiene stations available at all points of care? Yes	2	66.67
4. In your facility, are $\geq 4$ toilets or improved latrines available for outpatient settings or $\geq 1$ per 20 users for inpatient settings? Yes, sufficient number present and functioning	1	33.33
5. In your health care facility, is sufficient energy/power supply available at day and night for all uses? Yes, always and in all mentioned areas	3	100
6. Is functioning environmental ventilation available in patient care areas? Yes	3	100
9. Do you have single patient rooms or rooms for cohorting patients with similar pathogens if the number of isolation rooms is insufficient? Yes, rooms suitable for patient cohorting or single rooms available	1	33.33
10. Is personal protective equipment available at all times and in sufficient quantity for all uses for all health workers? Yes, continuously available in sufficient quantities	1	33.33
11. Do you have functional waste collection containers for noninfectious (general) waste, infectious waste and, sharps' waste in close proximity to all waste generation points? Yes	1	33.33
12. Is a functional burial pit/fenced waste dump or municipal pickup available for disposal of non-infectious (non-hazardous/general waste)? Yes	3	100
13. Is an incinerator or alternative treatment technology for the treatment of infectious and sharps' waste functional and of a sufficient capacity? Yes	3	100
15. Does your health care facility provide a dedicated decontamination area and/or	3	100

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sterile supply department for the decontamination and sterilization of medical devices and other items/equipment? Yes, and functioning reliably		
<b>Median score</b>		<b>100</b>

Among the weighted median core component-specific IPCAF scores, core component 8 (built environment, materials, and equipment for IPC) and core component 5 (Multimodal strategies) scored the highest with an average of 100%. Core component 1 (IPC programme), 3 (IPC education and training), 4 (Health-care-associated infection surveillance), and 6 (Monitoring/audit and feedback) had an average score of 66.67%, Core component 7 (Workload, staffing and bed occupancy) had an average median score of 50% while Core component 2 (IPC guidelines) scored the lowest with a median score of 33.33%.

The average median score for all the three facilities is 66.67%, based on the weighted frequencies of individual IPCAF indicator responses that fulfil the ‘IPC minimum requirements’ among tertiary care facilities.

### **Review the framework results and develop an action plan**

Review the areas identified by this evaluation as requiring improvement in your facility and develop an action plan to address them. To undertake this task, consult the WHO Interim practical manual supporting implementation of the WHO Guidelines on Core Components of Infection Prevention and Control Programmes which will provide you with guidance, templates, tips, and examples from around the world as well as with a list of relevant IPC improvement tools.

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### **MDRO and Candida Auris Focused IPC Questions Score Report**

Based on the scoring sheet proposed by representatives from the three facilities, below is a summary of their performance.

#### **SCORE PER FACILITY**

<b>Facility</b>	<b>Score</b>	<b>Total</b>
Kenyatta National Hospital	57	100
Nairobi Hospital	77	100
National Spinal Injury and Referral Hospital	35	100

#### **Performance of all Facilities**

<b>Component</b>	<b>N= 3</b>	<b>%</b>
1) <b>Do you monitor or conduct audits on <i>c. auris</i>?</b> Yes on a schedule	0	0
2) <b>Do you monitor or audit use of personal protective equipment (PPE) in the facility?</b> Yes on a schedule	0	0
5) <b>For hand hygiene, what method is commonly used?</b> Both	2	66.67
5) <b>For hand hygiene, what method is commonly used?</b> alcohol-based hand sanitizer	1	33.33
6) <b>What PPEs are used when handling patients with MDROs?</b> All three	3	100
a) <b>What is the common practice for use of gowns and gloves?</b> single use per encounter	3	100
7) <b>Who conducts environmental cleaning in isolation rooms and in cases of MDRO or <i>c. auris</i>?</b> dedicated cleaning staff	1	33.33
a) <b>Does the hospital have policies that clearly define responsibilities for cleaning and disinfection of non-critical equipment, mobile devices, other electronics and environmental cleaning?</b> Yes	0	0
8) <b>What actions are taken for a patient with MDRO?</b> All six selected	0	0
9) <b>Is there any education/training that non-clinical staff receive (like cleaning staff, radiology, dietary) about IPC and MDRO precautions?</b> Yes	2	66.67



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10) <b>Are there any posted signage for handling MDROs or isolation precautions within the facility?</b> Yes	1	33.33
11) <b>Is there any formalized communication about MDROs or a system for individuals to be put on appropriate precautions?</b> Yes	2	66.67
a) <b>Does your facility keep a list of patients with certain multidrug-resistant organisms (MDROs)?</b> Yes	1	33.33
b) <b>Does your facility have a policy for placement of patients in Contact Precautions?</b> Yes	0	0