

Surveillance of Healthcare - Associated Infections

Purva Mathur

June, 2021

Background

- **Healthcare associated infections:**
 - Huge Magnitude (LMICs)
 - Avoidable mortality, Morbidity
 - Length of stay
 - Cost
 - AMR
- **HAIs:** Often caused by **multi-drug resistant pathogens**; difficult to treat
 - Broad spectrum antimicrobial coverage for these infections further augments the problem of AMR.

- Surveillance of HAIs and implementation of prioritized preventive measures: **extremely beneficial.**
- **Most developed nations have National Systems for HAI surveillance.**
- **Reporting of HAI rates is mandatory in these nations and is often considered a quality indicator for a hospital.**

Indian Scenario

- Till now, there was no systematic network of surveillance of hospital acquired infections, despite the high numbers of HAIs and huge burden of AMR.
- With a population of over 1.3 billion (17.5% of global population) and extremely high rates of MDR organisms, India carries a major responsibility to control the spread of AMR.

HAI-IPC Network

- This network is being technically coordinated jointly by the AIIMS-ICMR- CDC.
- NCDC
- Sites under Swacchhta Action Plan
- Voluntary participation



राजेश भूषण, आईएएस
सचिव

RAJESH BHUSHAN, IAS
SECRETARY



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

D.O. No. Z.28015/01/2020-EMR
21st May 2021

Dear Chief Secretary,

There were few reports of secondary bacterial and opportunistic fungal infections like Mucormycosis during the first peak of the COVID-19 pandemic. However, with large number of COVID-19 cases being reported across the country during the second peak, these secondary infections including opportunistic infections have amplified significantly and Mucormycosis has emerged as an area of concern. This highlights the need for infection prevention and control as well as sanitation and hygiene in healthcare settings.

2. Accordingly, the following activities needs to be undertaken to ensure that there is robust infection prevention and control practices in Covid hospitals and other health facilities:

- i) Establish/activate the Hospital Infection Control Committee with the head of the institution or an administrator as the chairperson.
- ii) Designate an infection prevention and control nodal officer – preferably a microbiologist or senior infection control nurse.
- iii) Prepare and implement the Infection Prevention Control (IPC) Programme in the hospital/health facilities, as per the guidance given in National Guidelines for Infection and Control in Healthcare Facilities (available at [https://www.mohfw.gov.in/pdf/National%20Guidelines%20for%20IPC%20in%20HCF%20-%20final\(1\).pdf](https://www.mohfw.gov.in/pdf/National%20Guidelines%20for%20IPC%20in%20HCF%20-%20final(1).pdf)). This involves the following key components of:
 - a. Infection prevention and control manual
 - b. Guidelines on antimicrobial use and management
 - c. Educational programmes and strategies
 - d. Risk assessment and risk management
 - e. Planning, monitoring, audit and feedback
 - f. Implementation strategies
- iv) Emphasise and strengthen procedures and practices for IPC. In the context of COVID-19,
 - a. Standard precautions are to be applied all across the hospital/health facility
 - b. Transmission-based precautions need heightened focus on droplet, airborne and contact precautions from the perspective of protecting healthcare workers and ensuring patient safety.
- v) Improve the environment and facilitate:
 - a. Ventilation with focus on fresh air and natural ventilation wherever control systems with requisite air changes are not available.
 - b. Cleaning, disinfection and sanitation of the hospital environment and frequently touched surfaces, with recommended disinfectants like 1% sodium hypochlorite or 70% alcohol.
 - c. Safe water and food to prevent water or food borne diseases in hospital settings

.....contd/-

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: 2 :

- d. Biomedical waste needs to be managed as per the CPCB guidelines available at https://cpcb.nic.in/uploads/Projects/Bio-Medical-Waste/BMW-GUIDELINES-COVID_1.pdf
- vi) Infection Prevention and Control practices needs to be enhanced in Intensive Care Units (ICUs) using a bundle-approach to prevent device associated infections such as ventilator associated pneumonia or catheter-associated blood stream, urinary infections etc.
- vii) Infection Prevention and control practise in the clinical laboratories and those attached to hospitals are very crucial for the safety of laboratory/hospital staff and health security of the community.
- viii) Meticulous adherence to Infection Prevention and Control while managing immunocompromised patients such as COVID-19 patients on steroid treatment, with co-morbidities (such as diabetes where good glycemc control needs to be established; the guidelines for which are available at <https://www.mohfw.gov.in/pdf/ClinicalGuidanceonDiabetesManagementatCOVID19PatientManagementFacility.pdf>).
- ix) In due course, establish surveillance of healthcare associated infections with focus on ventilator associated pneumonia, catheter-associated blood stream infection, catheter-associated urinary tract infection, surgical site infections, gastro-intestinal outbreaks. Further guidance can be taken from AIIMS HAI network; details available at <https://www.haisindia.com>
- x) Train all hospital staff to develop their skills in IPC, irrespective of their individual routine duties, in implementing procedures and protocols described in the Hospital Infection Control Manual.
- xi) A State Nodal Officer needs to be identified to monitor the implementation of infection prevention and control to provide evaluation and feedback of the IPC programme in the state.

3. The Ministry of Health and Family Welfare will provide all necessary assistance to implement the National Guidelines for Infection Prevention and Control in Healthcare Facilities.

Harm Regards.

Yours sincerely

(Rajesh Bhushan)

Chief Secretary / Administrator of All States and UTs



सत्यमेव जयते

National Centre for Disease Control

(formerly National Institute of Communicable Diseases)



Directorate General of Health Services , Ministry of Health & Family Welfare
Government of India

Technical Wings

National Health Programme
NEW

NCDC Branches

Administrative Wing

Resource/Digital Library
NEW

Conferences / Workshops /

National action plan on AMR (NAP-AMR)

Back

- [National Action Plan on Antimicrobial Resistance](#)
- [Delhi Declaration on Antimicrobial Resistance](#)
- [Guidance document for developing SAPCAR](#)

- State action plans on AMR



AWARD TO PUBLIC HEALTH FACILITIES KAYAKALP



Awards Criteria

CHAPTER - II

The awards would be distributed based on the performance of the facility on the following parameters.

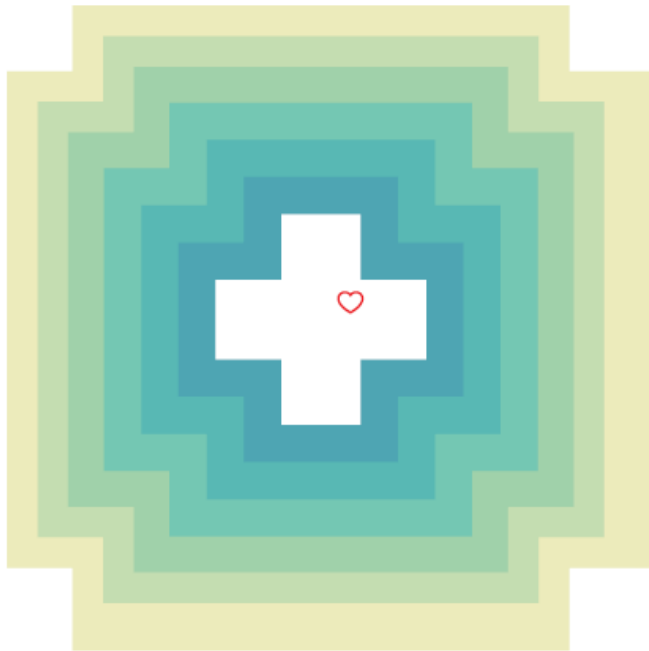
- I. Hospital/Facility Upkeep
- II. Sanitation and hygiene
- III. Waste Management
- IV. Infection control.
- V. Support Services
- VI. Hygiene Promotion

Score card for the award and tools for the facility assessment are given in the Annexure 'I' and Annexure 'II' respectively.



THE HEALTH OF OUR HOSPITALS

Tracking the Performance of District Hospitals



https://niti.gov.in/writereaddata/files/document_publication/District%20Hospital%20Booklet_final.pdf

TABLE 1. LIST OF INDICATORS FOR RANKING DISTRICT HOSPITALS²

Category A: Indicators that are largely under the control of the State

Category B: Indicators that are largely under the control of the District hospital

DOMAIN	WEIGHTAGE (%)	CATEGORY	INDICATORS
Structure (15%)	3	A	1. Number of functional hospital beds per 100,000 population
	3	A	2. a- Ratio of doctors in position to IPHS norm b- Ratio of staff nurses in position to IPHS norm c- Ratio of paramedical staff in position to IPHS norm
	3	B	3. Proportion of support services available
	3	A	4. Proportion of core healthcare services available
	3	A	5. Proportion of diagnostic services available
Process (10%)	5	B	6. Kayakalp score
	5	B	7. Quality score
Outputs and Outcomes (75%)	8	B	8. Number of laboratory tests per technician
	8	B	9. Stock out rate of essential drugs
	8	B	10. OPD per doctor
	9	B	11. Bed occupancy rate
	8	B	12. Surgical Productivity Index
	8	B	13. C-section rate
	8	B	14. Blood bank replacement rate
	9	B	15. Post-surgical infection rate
	9	B	16. Patient satisfaction score



NATIONAL ACCREDITATION BOARD
FOR HOSPITALS AND HEALTHCARE
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5th
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APRIL 2020

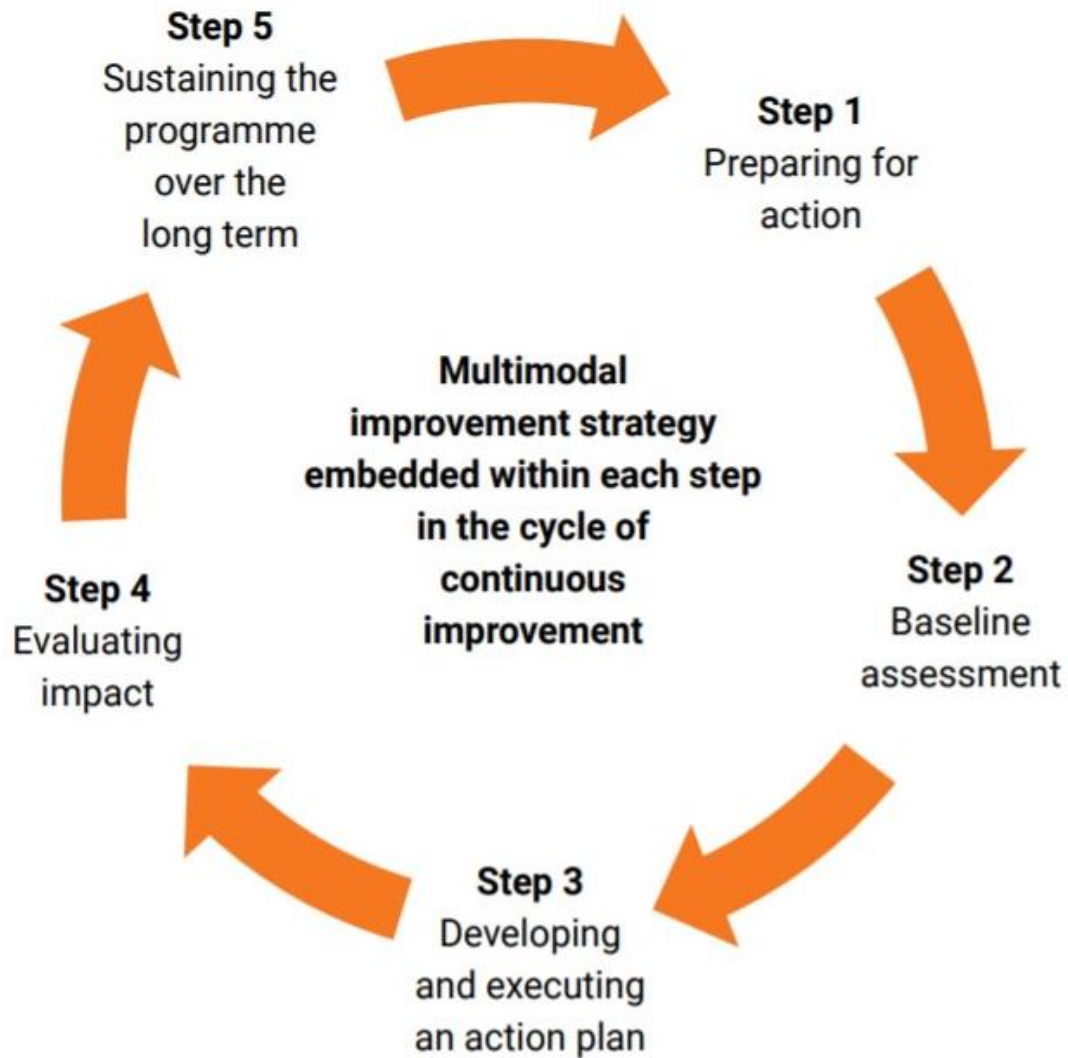
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STANDARDS FOR
HOSPITALS
APRIL 2020



S. No.	Particular	Page
1.	Access, Assessment and Continuity of Care (AAC)	7-14
2.	Care of Patients (COP)	15-20
3.	Management of Medication (MOM)	21-26
4.	Patient Rights and Education (PRE)	27-31
5.	Hospital Infection Control (HIC)	33-37
6.	Continuous Quality Improvement (CQI)	39-42
7.	Responsibilities of Management (ROM)	43-46
8.	Facility Management and Safety (FMS)	47-51
9.	Human Resource Management (HRM)	53-57
10.	Information Management System (IMS)	59-76

Advantages

- Part of a larger network
- Trainings
- Reporting & Feedback
- IPC Tools
- ~ 95% HAIs are Device associated/ SSIs: **IPC**
- IPC starts with Quality assured, Local, Standard, sustained surveillance data
- Accreditations
- Kaya-Kalp



About this training

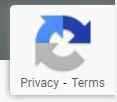
- This workshop will describe the methods used in conducting HAI surveillance in ICUs.
- All hospitals in this network are adhering to the standard surveillance case definitions and data collection and reporting procedures to ensure that the data is comparable across the network.

HEALTHCARE ASSOCIATED INFECTION SURVEILLANCE IN INDIA

The project will strengthen the national capacity for surveillance of HAIs, report the magnitude & types of AMR & HAI threats affecting India. This project will also serve the need for reliable AMR data to support successful patient care.

DOWNLOAD CENTRE

APPLICATION LOGIN



Materials provided

- HAI Surveillance SOPs
- Baseline assessment tools
- CLIP Tools
- Case report forms
- Database SOPs
- SSI SOP

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