CLABSI prevention: achievements and barriers

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CLABSI prevention: barriers

1. SOP implementation
2. Doctor thinks s/he knows best
3. Nurses not adequately trained
4. Nursing attrition> Government or The Gulf
5. Inadequate nursing supervision> night hours
6. Consultant Doctor thinks s/he is indispensible > cannot be cautioned, penalized
7. Lack of nursing empowerment

CLABSI prevention: barriers

8. Nurses afraid or reluctant to correct the doctor> deep rooted cultural beliefs
9. General lack of the culture of safety within society: fire, driving, construction, environmental pollution, infection control
10. Lack of punitive measures for non-compliance or negligence regarding IPC (Infection Prevention and Control)
11. Relative staff shortage (focus on other clinical activities)
12. Over dependence on one or few persons regarding IPC activities

Perspective of Administration

1. A consultant doctor bad in IPC practices may be highly skilled in the core domain
2. Admin is busy with other priorities: e.g. finance, projects, HR policies
3. Constant attrition of a category of staff: e.g. nurses
4. Punitive actions may lead to conflict, resignation or litigations

How do we change Organizational Behavior and Culture for HCAI prevention?

Behavior=

Function (Personality, Social Environment)

$B = f(P, E)$

Personality cannot be changed (very difficult)

Social Environment or Influences can be changed

Observation: relatively easy to put in place a structure but not easy to implement or sutain a process

How do we change Organizational Behavior and Culture for HCAI prevention?

A. Use different Metrics (in addition to AMR data, HCAI rates)

1. Financial cost of HCAI to the patient
2. Financial cost of HCAI to the hospital
3. Length of hospital stay due to HCAI
4. Bed days lost due to HCAI
5. HCAI related mortality

*Money and death speaks more eloquently than AMR data or HCAI rates

Behavior= Function (Personality, Social Environment)

B. Understand the problem in structure and process at ground zero> use audit tools for IPC

How to assess if your hospital has Admin support for IPC activities?

1. HICC meeting is attended by top management
2. ICT (Infection Control Team) meeting has admin
3. Punitive measures in HR policies for non-compliance to IPC policies
4. IT software for IPC
5. Adequate availability of PPE
6. Hand drying facility
7. Housekeeping staff per bed
8. Dedicated HK staff and not multi-task workers

How to assess if your hospital has Admin support for IPC activities?

9. Adequate number of isolation rooms
10. Targets for HCAI rates set by admin
11. NABL, NABH accreditation
12. Drug and antibiotic formulary in place
13. IPC compliance part of annual consultant appraisal
14. Transparency regarding HCAI/AMR related publication in peer reviewed journals

How to assess if your hospital has Admin support for IPC activities?

Recruitment of key IPC staff in a hospital:

- ≥ 2 microbiologist
- ≥ 1 ID physician
- ≥ 1 Full time ID physician
- ≥ 1 Clinical microbiologist
- ≥ 1 Clinical pharmacologist
- ≥ 1 ICN/100 beds

Positive outcomes of the CDC-ICMR-AIIMS HCAI surveillance network

	Short Term Impact	Long Term Sustainability	Value for Money
Lab Quality Improvement	+++	+++	+++
HCAI surveillance	++	+	+++
AMR containment	+	+	+++
IPC activities	++	+	+++
AMSP	+++	++	+++

+++ Very Good; ++ Can do better; + Can do much better; v Variable; ? Questionable

Tangible and intangible benefits

- Value for Money=

(Tangible benefits + Intangible benefits)/ Cost

- Intangible benefits (not measurable but true):
  - Motivation
  - Drive to perform and excel
  - Knowledge and Training
  - Competence development
  - Network development
  - Team work

Summary: Benefits of this project

1. A benchmark has been set- Lab Quality and CLABSI, CA-UTI structure and process
2. Lab Quality enhancement
3. HCAI data: multi-centric and through a QMS
4. Use of IT systems
5. Network development and Team work
6. Training of project staff and skill development
7. National visibility

VAP surveillance

- VAP surveillance definition for HCF (Health Care Facilities) in India (draft proposal)
- **Inclusion criteria:**
  - Ventilator used
  - Ventilated for >2 calendar days
  - Ventilated through oro-tracheal, naso-tracheal, tracheostomy, non-invasive (BIPAP mask) route

VAP surveillance definition for HCF in India (draft proposal)

- **Initial clinical suspicion:**
- Fulfils inclusion criteria plus
- **Respiratory symptoms/signs**:
  - Cough, expectoration, respiratory distress, SOB, increased respiratory rate (≥ 12/min), decreased oxygen saturation, abnormal ABG, abnormal chest auscultation
  - Fever (may or may not be present)

•Discuss with ICU physicians about how many of the above respiratory criteria should be present ;
•Begin with adult ICU first

VAP surveillance definition for HCF in India (draft proposal)

Confirmation> points to note

- VAP is a clinical and not a microbiological diagnosis
- CXR abnormal or change compared to previous
- Microbiology culture important for treatment, IPC, epidemiology but essential for diahnosis
- Clinical or radiological abnormalities not due to other causes (heart failure, cancer, atypical pneumonia)
- Final diagnosis by: ICU or respiratory physician or ID physician or general medicine

** Not all criteria met: Probable/possible VAP

*** Evaluate sensitivity and specificity of above method against CDC criteria through a pilot study