Surveillance types & the role of patient surveillance

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CDC definition of surveillance

"The ongoing, systematic collection, analysis and interpretation of health data essential to the planning, implementation and evaluation of health practices, closely integrated with the timely dissemination of data to those who need to know"

Surveillance is the cornerstone of an Infection Control Program and the CORE task of the IPC practitioner

1. Continuous Surveillance
2. Comprehensive/Active surveillance
3. Targeted/Point prevalence surveillance
4. Surveillance during ward visits

Continuous Surveillance

This includes passive, laboratory based and/or computer generated surveillance

- Done daily and in real time
- Laboratory based solely on the findings of laboratory results of clinical specimens
- Reviewing results for alert organisms
- Recording of positive cultures, clinical markers and notifiable disease
- Used for early detection of clusters or possible outbreaks
- Allows for implementation of precautionary measures

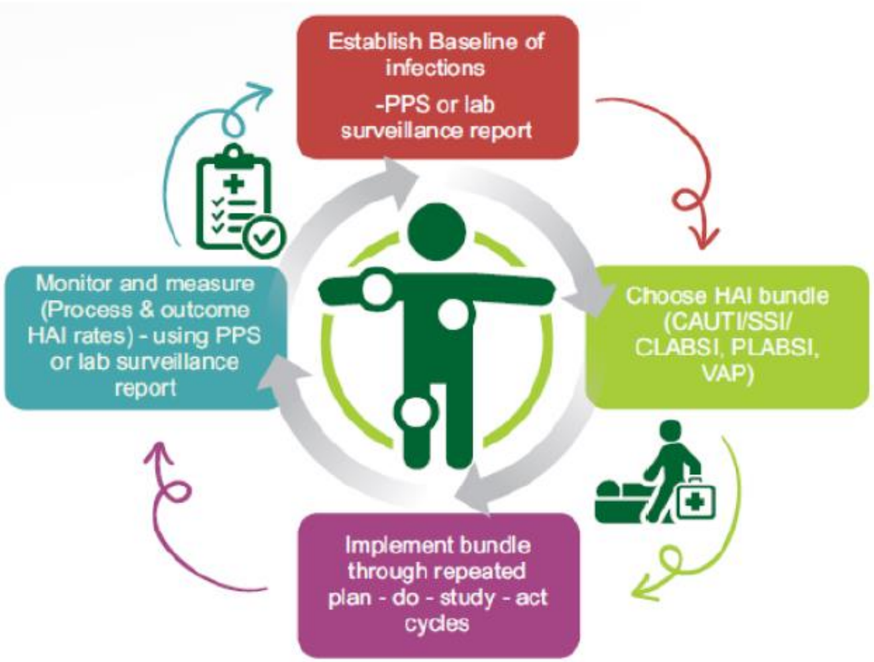
Continuous surveillance of patients

- Patients with predisposing factors
  - Elderly or very young
  - Immuno compromised/supressed
  - Patients with invasive devices
  - Monitoring of patients with clinical signs of infection.

Surveillance includes environment and patient data

- Patients in isolation (single or cohort)
- High risk units and or patients
- Patient data

Comprehensive/active Surveillance



Note: An effective surveillance program includes the collection and analysis of data so that the data can be shared with key staff to inspire them to fix problems. Without sharing of data, surveillance efforts may be wasted.

Used for the detection of ALL HAIs in ALL patients at ALL times

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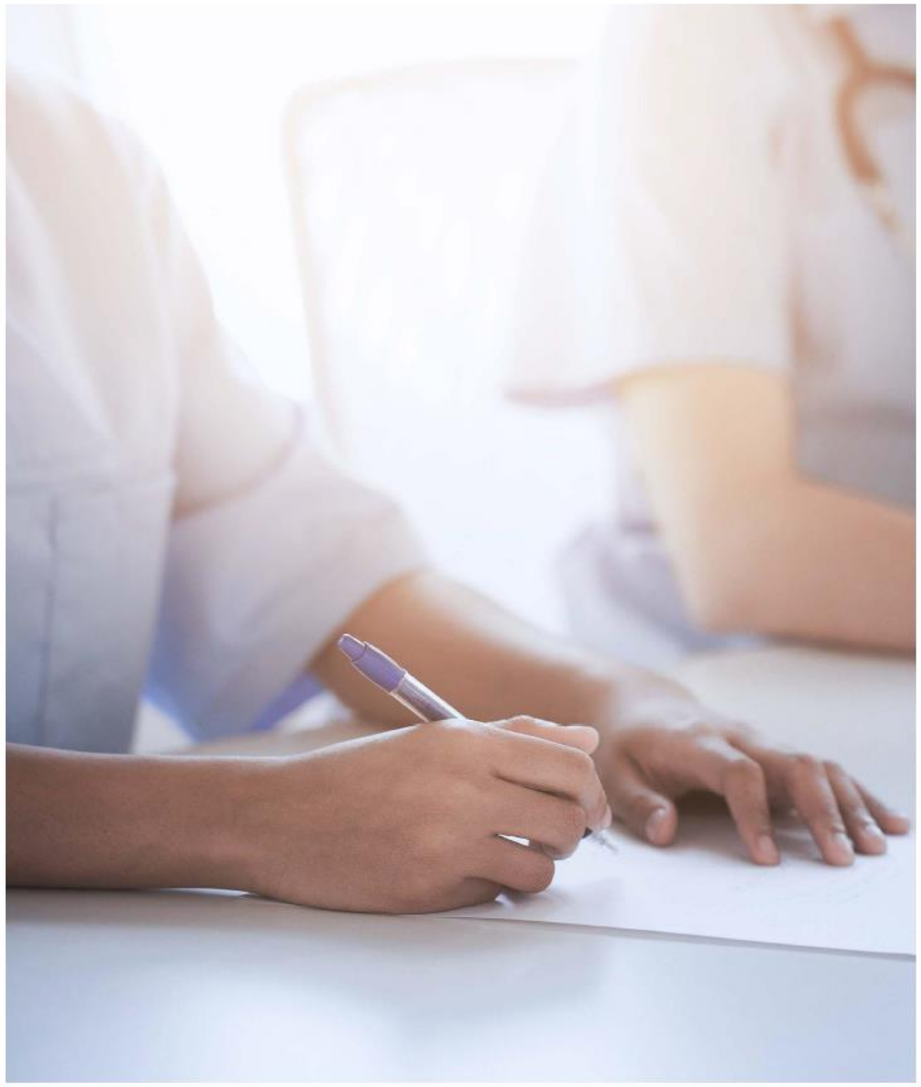
- *Require trained IPC staff that is actively looking for information*
- *Time-consuming & Labour intensive*
- *Hospital wide*

- Implementation of a schedule is required to ensure coverage throughout the health care facility e.g. daily, weekly , bi-weekly etc.
- All patients are observed during these rounds
- Data should be entered into forms/lists/electronic systems
- Investigations of HAIs with Root cause analysis done, addressed and communicated
- May lead to using other surveillance systems
- Possibly created training opportunities

Targeted/Point prevalence Surveillance



- Doing surveillance at a specific time through out the whole facility
- Priority based – aimed at certain wards, organisms, devices, patients or groups
- Indicative of changing patterns before it becomes a problem
- Implementation of real time precautionary measures
- Identifying increase in HAI incidence
- Identifying increase in organisms with early detection of clusters or potential outbreaks
- Reviewing patient documentation:
    - Vital signs
    - Change in condition
    - Baseline urine analysis
    - other test conducted on admission
    - Admission diagnosis or changed diagnosis

Routine Ward Rounds

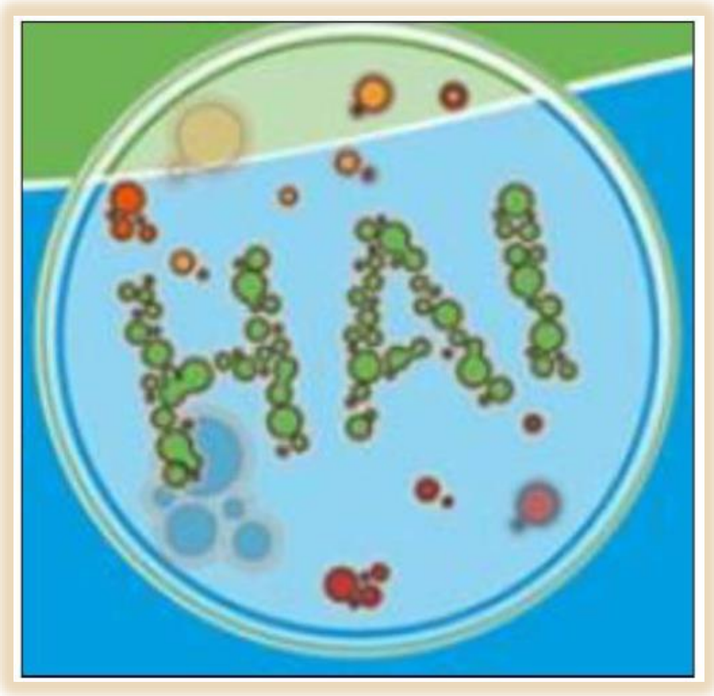
- Conducted by the IPC daily if possible or at least several times a week
- Identify problem areas or changing patterns
- It allows for contact time with nursing staff and other team members of the disciplinary team
- Provides the opportunity to evaluate and or implement precautionary measures in specific units (single or cohort)
- Allows for on-the-spot or in-service training
- Time to assess IPC practices and conduct audits
- Ward rounds may lead to other surveillance types
- Patient surveillance may lead to early identification of infections

The Role of patient surveillance

The primary aim is to assess the rate of infections and endemic likelihood

- Infectious diseases, their likelihood and causes can be identified and monitored
- It allows for early detection of infections, clusters and allows for timely interventions to prevent outbreaks
- It allows for implementation of IPC measures
- Possible identification of at risk patients and allows for timely IPC planning and allocating resources
- Provides time for evaluation of implemented actions and revision of the PDSA either to adapt or adopt
- Assist in investigating and resolving HAIs

Conclusion



Hospital Surveillance:

Ongoing, systematic collection, analysis, interpretation and dissemination of health data, to help guide clinical decision making and action

Summary:

In conducting surveillance it allows you to:

- Provide baseline endemic infection rates
- Identify increase in infection rates e.g. clusters or outbreaks
- Provide information on the occurrence of HAI (incidence and prevalence)
- Evaluate efficacy of control measures
- Reinforce appropriate infection prevention and patient care practices
- Provide data for comparisons
- Engage in problem solving and/or research and planning
- Measure the impact of implementing recommendations
- Enhance a health care organizations performance
- Reduce the risk of adverse outcomes

Thank you