Changing what we have always done: Surveillance systems analysis
Dr. Laura Sauvé*, Vladlena Abed, Jun Collet, Robyn Hunter, Dr. Jocelyn A. Srigley,
PHSA Infection Prevention and Control

ISSUE
- Health care-associated infection (HAI) surveillance is at the core of Infection Prevention and Control (IPAC) programs.
- Surveillance is defined as the ongoing, systematic collection and analysis of HAI data, closely integrated with timely information dissemination to staff who require it to take action.
- The surveillance system at BC Children’s and BC Women’s Hospitals evolved over two decades to become very complex and time consuming.
- An analysis showed that infection control practitioners (ICPs) were spending up to 80% of their time on surveillance activities, yet there were problems with data completeness, quality & security.

SYSTEMS ANALYSIS ACTIVITIES
- Team process: IPAC coordinator, medical lead & epidemiologist
- Inventory of current surveillance forms and systems
- Mapping surveillance targets
- Current state of surveillance system
- Engage stakeholders – data users, infection control physicians and practitioners, quality & safety.

FORMS AND SYSTEMS INVENTORY
- 15 case management forms
- 8 reporting forms
- Total: 23 forms
- ICPs estimate that 80% of their time is spent on surveillance activities.
- Multiple systems used to collect and retrieve the data:
  1. Paper based
  2. Excel
  3. Access
  4. Powerchart
  5. Careconnect
- Data is sent to stakeholders via
  1. Reports
  2. Faxed paper case report forms
  3. Direct entry into online systems

MAPPING SURVEILLANCE TARGETS
- High Level Surveillance System Overview
- Current state MRSA SURVEILLANCE PROCESS

LESSONS LEARNED AND NEXT STEPS

INFORMATION NEEDS
- IPAC Case Management
  - Used for making clinical decisions – e.g. precaution alerts
  - Includes cluster investigations & disease reporting
  - Requires identifier data and details

Surveillance

LESSONS LEARNED
- Systems evolve over time and tasks are often continued because “that’s the way we have always done things”
- It can be beneficial to examine a system in detail to understand how improvements can be made
- Creativity is required in system improvement when resources are limited
- Future steps will include engaging with the broader group of stakeholders to identify their information needs, and then redesigning the system using simple and yet robust tools to improve the information quality.

lsauve@cw.bc.ca