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Using Expert Process to Combat *Clostridium difficile* Infections (CDI)

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Ontario Agency for Health Protection and Promotion / Agence de protection et de promotion de la santé

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Acknowledgements

- PHO's Infection Prevention and Control (IPAC) Department

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Objectives

- At the end of the session, attendees will be able to:
  - Describe the Infection Control Resource Team (ICRT) process.
  - Discuss the collaborative role between all those involved in ICRT visit activities.
  - Summarize key areas of practice improvement that were most frequently identified by ICRT visits.

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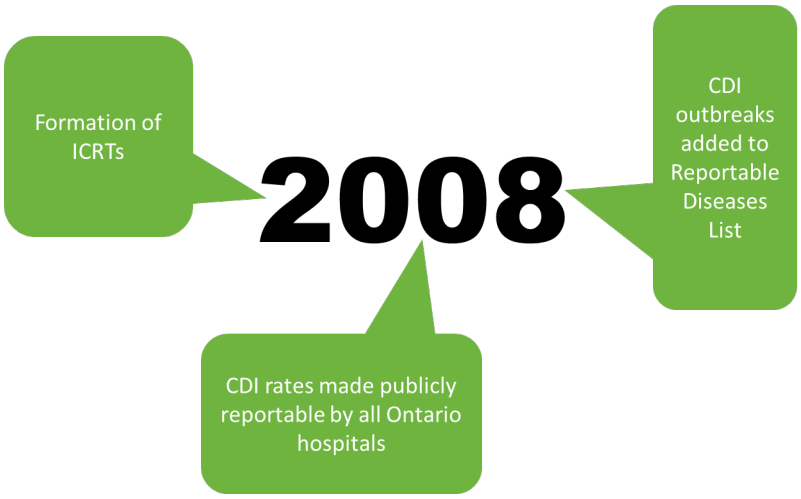

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Goals of the ICRT visits

- ICRT visits provide:
  - Expert scientific advice
  - A 'second set of eyes'
  - Supportive approach
  - Referenced recommendations.

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The ICRT… back then

- Two teams supporting different areas of the province.
- First point of contact.
- Independently coordinated the ICRT visit process and managed CDI outbreaks.
- Teams included an infectious diseases (ID) physician, infection control professionals (ICPs) and others such as epidemiologist and other PHO staff.

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The ICRT… Now

- ICRT visit may be requested in a number of ways.
- Information gathering by IPAC Specialist.
- PHO determines the level of support needed.

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ICRT Members

- Drawn from PHO's Infection Prevention and Control Team.
- At a minimum:
  - One PHO IPAC physician
  - One Program IPAC Specialist
  - One IPAC Manager
  - Representative(s) of Regional Support Unit
- Additional PHO members.

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Expectations

- PHO ICRT Members:
  - Refer to best practices
  - Prepared and ready to support facility before, during and after visit.
- Requesting Facility:
  - Available and transparent
  - Senior Management Team Involvement.

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ICRT Visit – The Overview and Interviews

- Overview Meeting.
- Interviews with relevant staff and/or teams.

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ICRT Visit – The Tour

Opportunity to:

- See practices in action and validate what we heard and read.
- Speak with staff, ask questions, clarify our understanding of issue(s).
- Identify gaps in facility design; patient flow; equipment and supplies management, etc.

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ICRT Visit – The Debrief

- Held at the end of the visit.
- Provide preliminary recommendations.

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ICRT Visit Report

- Final approved PDF report provided soon after.
- Facility is encouraged to share the report (e.g., local PHU).
- PHO will provide ongoing support through the Regional Support Unit as the facility implements the recommendations.

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Regional Support Unit

- Core Function: Provide scientific and technical support.
- Have pre-existing relationship.
- Work with local PHU to support facility's outbreak management issue(s).

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Regional Support Role Before Visit

- Review results of pre-ICRT visit to discuss identified barriers with the team.
- Assist in identifying key issues to ensure appropriate review during the visit.

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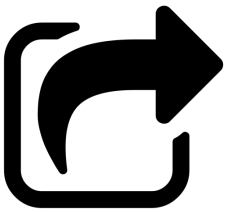
Regional Role During Visit

- Review of information.
- Participation during interviews.
- Gather and share information during the visit.



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Regional Role Following the Visit

- Provide ongoing support.
- May assist in developing a plan to address recommendations.
- Ongoing follow-up support with facility and local PHU.

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Role of Public Health Unit During an ICRT

- Provide PHO outbreak information prior to the visit where applicable.
- Participate during the ICRT visit
  - Overview and debrief meetings
  - Interviews.
- Support Facility
  - Hence importance of sharing report with PHU if not part of the request.

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Lessons Learned

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Methods

- Reviewed PIDAC best practices documents and identified 49 high impact recommendations in 14 general categories
- Selected all CDI-related ICRT reports from 2008 to 2012
- For each recommendation, reviewed ICRT reports to identify if hospital did not meet or needed to improve
- Ranked categories in order of most frequently identified

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What We Saw From 2008 to 2012…

- Between 2008 and 2012, 22 CDI-related ICRT visits to 19 facilities.
- 3 facilities had two ICRT visits over the five-year period.
- The majority (59%) of ICRT visits were at large community hospitals; the remainder were at acute teaching hospitals (27%) and small community hospitals (14%).

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14 Areas of Concern

1. Environmental services (82%)
2. Antibiotic stewardship (73%)
3. Program staffing and medical leadership (73%)
4. Identification and isolation of CDI cases (73%)
5. Hand hygiene (68%)
6. Human waste management (64%)
7. IPAC education and training on Routine Practices/Additional Precautions (55%)
8. Audits of IPAC-related practices (55%)
9. Senior leadership support (32%)
10. Facility design (32%)
11. CDI outbreak management (32%)
12. Communication and partnerships (27%)
13. Access to appropriate and timely laboratory testing (23%)
14. Environmental cleaning services, policies and procedures for CDI (23%)

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Top 5 Areas of Improvement

- Environmental services
- Antibiotic Stewardship
- Program staffing and medical leadership
- Identification and isolation of CDI cases
- Hand hygiene

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Environmental Services

- Most frequently identified IPAC issues were:
  - Clear processes for cleaning and disinfection of shared patient care equipment
  - Clear identification of clean versus dirty shared patient care equipment
  - Adequate environmental services resources – staffing.

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IPAC Program Staffing and Medical Leadership

- Difficulty staffing IPAC programs with ICPs as per minimum requirements.
- Lack of dedicated manager or identification of combined management role.
- Insufficient medical support.
- IPAC program responsible for roles outside their scope.

Antibiotic Stewardship or ASP

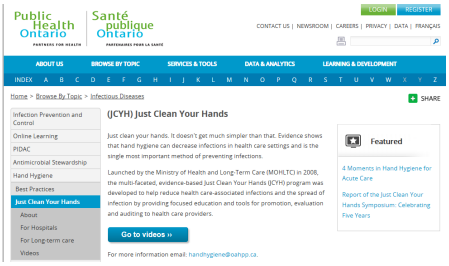
- Lack of ASPs with dedicated resources
  - Most in early stage of implementation
  - No dedicated pharmacist and/or physician.
- ASP activities are not sustainable due to limited resources.
- Inclusion of an ASP recommendation added to Annex C of PIDAC's RPAP document in 2012.

Identification and Isolation of CDI Cases

- Lack of immediate implementation of Contact Precautions when diarrhea was identified.
- Unnecessary movements/transfers of patients
  - Impacted cleaning and disinfection
  - Created challenges for multiple departments
  - Made containment of CDI difficult.
- Poor communication between units.

Hand Hygiene

- Various stages of hand hygiene programs.
- Inadequate location of ABHR dispensers.
- Poor compliance with hand hygiene
  - Reluctance to provide individual feedback
  - Inconsistent awareness of audit results.



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What Have We Learned?

- Identified key common issues where stakeholders require support
- Refer to 49 high-impact recommendations when carrying out ICRT visits
- Informed development of IPAC resources
- Continue evaluation of recommendation up-take to inform impact of ICRT visits

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Overall…

- We have learned as much from those facilities experiencing outbreak management issues as they have learned from us
- Teamwork and collaboration has enabled PHO to improve ICRT visit process

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Did You Know…

A summary of the ICRT findings has been published in the American Journal of

Infection Control (AJIC) and can be found at

http://www.ncbi.nlm.nih.gov/pubmed/27451312

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Thank you…

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