Finding the right mix of CPE best practice and patient focus care

Complex IPAC Issues Local Solutions

IPAC EO PHO Education Day

September 21, 2018
Summer of 2017

- We felt reasonably prepared
- Screening and flagging processes in place
- We had a policy based on experience with other AROs and guidelines.
Screening at time of initial case

- Patients who have an infection control critical care indicator (CCI) flag.

- Patients who received healthcare outside of Canada in the past 12 months

- Patients who have been in a health care facility in the past 12 months

- Transfer between Healthcare facilities

- Patients with a lengthy hospital stay rescreen 30 day

- Patients identified as high risk by Infection Prevention or Health Unit. Example suspected or confirmed outbreaks
Our First Case

• No risk factors for ARO screening.
• Had been in a boarding house in GTA
• Moved to Quinte area and was brought into hospital when found wandering
• Treated successfully for pneumonia and arrhythmia.
• Patient was in a semi-private room with ongoing care needs and dementia.
• Not feeling well - urine was sent for culture
• Roommate developed C. difficile & VRE
And Then

• Patient developed C. Difficile

• Tested positive for VRE

• Urine results and stool testing positive for CPE - VIM citrobacter freundii 42 days after admission and after being in 6 different rooms.

IMS meeting held
A very complex case with lots of issues

- C. difficle resolved quickly
- Patient was very hard of hearing
- Largely no family involvement
- Periods of agitation and aggression
- Patient incontinent
- Patient wandered & would exit seek
- Placement was an issue
- Hospital often in surge
- Isolation concerns due to patients lack of compliance and ethical concerns.
A colourful character

- Pt. plan of care addressed behavioral issues:
- positive approach
- if care refused come back later
- anticipate needs (food, elimination, social)
- process to support time out of room * issues with 1:1
- Care plan adjusted according to what worked for pt. while decreasing risk to others
Patient flushed soiled brief down toilet causing backup into room and blocked toilet.
   - Drains treated
   - Maintenance staff used PPE and cleaned all equipment (some equipment that could not be cleaned was disposed of)
   - Team effort into incontinence management of patient. Several failed efforts to remove catheter. Pt would void into radiator and hide incontinent products.
   - Pt. would disconnect catheter and let catheter feely drain *
   - Eventually had a TURP after much consultation.
   - 5 days of 1:1 nursing post op
   - Urine cultures pre-procedure were intermittently CPE and other organism positive –treated with antibiotics preoperatively.
   - Post-procedure urine negative until discharge - started voiding
Code Yellow

Alarm system attached to door to alert staff if patient attempted to leave room unsupervised.
Seeking optimal patient care while preventing transmission

• Patient was on the Acute Care Elderly ACE unit

• Identified ways to have patient out of room for ambulation & socialization

• One on one activities in rm. with activation staff.
Consults and collaboration

• Experts
  ▪ Dr Zoutman COS at time
  ▪ Dr Garber
  ▪ Urology
  ▪ Phycogeriatric consult

• Regional Infection Control
• QHC Ethics Committee
• IC support from other hospitals who had experience with CPE. Thanks to: St Mikes,
  Kingston Regional Health Center,
  St. Joes and others
Communication

• Extensive communication strategies developed & documented as part of pt. care plan e.g. hearing assistive device, tools including photo and communication boards & good communication strategies.

• Communication
  ▪ IMS meeting immediately – senior leadership aware
  ▪ regular meetings of outbreak team
  ▪ discussion at unit huddle
  ▪ Informed PHU and Public Health Ontario (voluntary at time)
Rooms & Roommates

• Rooms
  ▪ All rooms that pt. had been in were terminally cleaned & had drains cultured & treated
  ▪ Patient was moved to an area of the unit with non-acute patients (fewer indwelling devices less turnover)
  ▪ Drain that tested positive was changed. *

• Roommates
  ▪ All patients that shared a room were flagged as CPE exposure. Follow-up swabs X3 with at least one being 21 days after exposure.
Seeking transmission prevention cont.

- Ensured dedicated equipment – followed up with bladder scanner
- Staff education (HSR, maintenance and unit)
- Initially used chlorhexidine bath for patients on the unit
- Nursing staff delivered meal tray and extra nutrition that was arranged for.
- Room cleaning twice a day. Disposable clothes. Drains treated. Mop handle dedicated to room.
4 weeks later

• Second case identified

• There was a room overlap from initial case but the pt.'s were never together.

• Room terminally cleaned and sink drain changed as it was positive for same CPE citrobacter freundii.

• Sink drain cultures repeated and were negative.
Point Prevalence Screening

• CPE Point prevalence

• Point prevalence for CPE done on both units patient was on as well as ICU (pt. movement between medical floors & ICU)

• Point prevalence repeatedly on the unit until pt. discharge 320 days after admission. (due to concern with pt. continence and wandering)
Testing

• Currently in the validation process for a Kit that tests for
  • KPC
  • VIM
  • NDM
  • OXA and IPM
• Cost approximately $20.00
Lessons Learned

• Guideline are guidelines and are evolving
• Experts are expert
• Rocks are Rocks – HH RP always
• Finding a fluid balance between individual patient needs and safety of others is critical & challenging.
• Team work is key: nursing, physicians, OT, lab, hospitality, maintenance, discharge planners, social services, dietary, IPAC, ID & ethics and regional experts.
Are You Hungry