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.

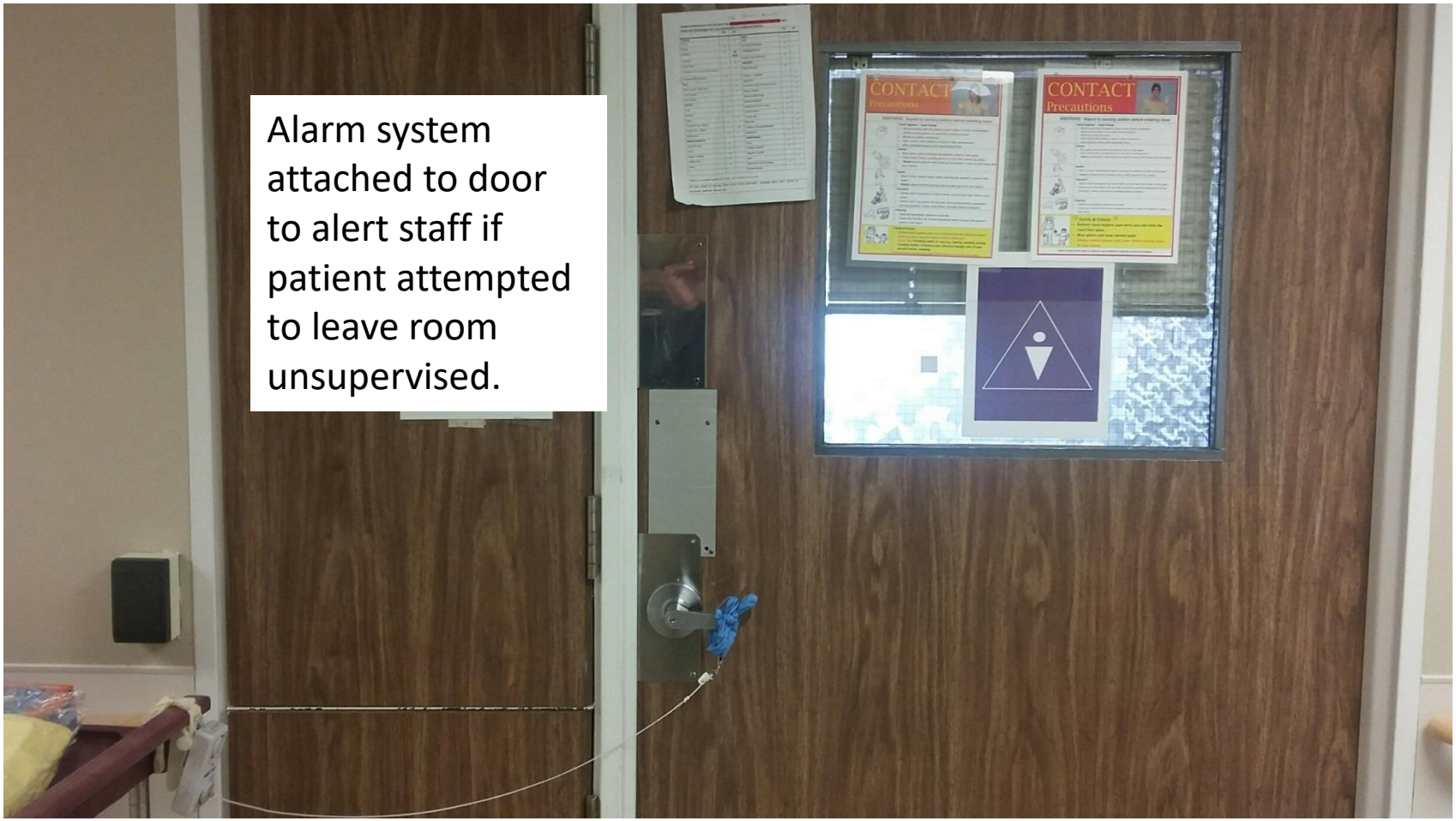
A colourful character

- 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

Code Brown

- 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.
CONTACT
Precautions
CONTACT
Precautions

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