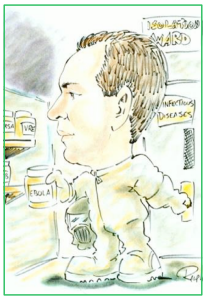
The Nurse & Infection Preventionist Perspective with LTC Antibiotic Stewardship



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Objectives

- Describe the nurse's role with antibiotic stewardship in the LTC facility.
- Discuss how partnering with the LTC infection preventionist can enhance the antibiotic stewardship program.

Disclosures

Commercial interests:

- Crothall Healthcare
- TouchPoint
- Fortis Management Group
- APIC Consulting
- Private consulting business

There are no conflicts with today's presentation

Simple Caveat

- Easier to prevent an infection, than to treat it
- Ergo, effective prevention strategies minimizes the need for abx stewardship

Components of an *Effective* Infection Prevention Program

- Surveillance
- Environmental hygiene monitoring
- Staff and patient vaccination
- Hand hygiene
- Adhering to best practices, bundles
- Rounds, assessing patients & environment
- Antibiotic stewardship through nursing

Combatting *C. difficile*

8 Sun Tuesday, June 8, 2010

'FILTH' AT BUG DEATH HOSPITAL

THE daughter of one of 18 people killed after catching a superbug in a hospital outbreak yesterday blasted the hygiene levels in wards.

Brenda Bowes told an inquiry that mum Margaret Dalton, 74, had to use a "disgusting" commode at the Vale of Leven Hospital in Alexandria, Dunbar-

Interventions to Reduce C. difficile Transmission

Interventions:

- Weekly abx stewardship rounds with pharmacist

Interventions to Reduce *C. difficile* Transmission

Findings:

- IV to po Zyvox conversion without ID approval
- Daily dose Keflex, times 7 days, due to misplaced G-tube (what are you not telling me)
- Overwhelming majority of abx prescriptions are justified
- Pharmacist time challenges with 1:1
- No abx review performed when ID is on board

Interventions to Reduce C. difficile Transmission

Interventions:

- Weekly abx stewardship rounds with pharmacist
- Patient hand hygiene program with alcohol based hand wipes
- Environmental hygiene; increased ATP testing for room cleanliness
- Greater presence on the unit

You are being admitted to a LTCF, and this sign was on the door for the previous resident; should you be nervous?

Pathogens that can be acquired from prior room occupants

- ✓ VRE[1,2,3]
- ✓ MRSA[1,4]
- ✓ *C. difficile*[5]

1. Huangg SS et al. Arch Intern Med 2006;166:1945-51
2. Martinez JA, et al. Arch Intern Med 2003;163:1905-12.
3. Drees M, et a. Clin Infect Dis 2008;46;678-85
4. Hardy KJ, et al. Infect Control Hosp Epidemio 2006;27:127-32
5. Shaugnessy M, et al. Infect Control Hosp Epidemio 2011;32:201-6

Environmental Hygiene

- Goal is to reduce the amount of contamination/ bioburden in the healthcare environment
- Monitor Housekeeping cleaning/disinfection effectiveness by:
  - ATP testing
  - Fluorescent targeting
  - Cultures

Vaccinations Staff and Residents

Influenza/pneumococcal (polysaccharide and conjugate) vaccines; they're effective

- Continue to offer/promote as resident safety issue
- Document staff influenza vaccination declination reasons e.g. needle fear, doesn't work, etc.
- No CMS employee influenza vaccine compliance goal…yet
- Consider making influenza vaccination a condition of employment for new staff

Hand Hygiene

- Up to 70% of all Health Care Associated Infections can be prevented
- Hand hygiene is the simplest, most effective way of preventing the spread of infection
- The *pharmacist as a role model;* hand hygiene
  - Upon entering and leaving a patient room
  - Entering the cafeteria
  - Within your pharmacy department

Respiratory Etiquette

Adhering to Best Practices

Morbidity and Mortality Weekly Report

Intervals Between PCV13 and PPSV23 Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Miwako Kobayashi, MD[1,2]; Nancy M Bennett, MD[3,4]; Ryan Gierke, MPH[1]; Olivia Almendares, MSPH[1]; Matthew R Moore, MD[1]; Cynthia G. Whitney, MD[1]; Tamara Pilishvili, MPH[1]

- Subscribe to MMWR
- Stay active within your professional organizations
- Share you knowledge with your colleagues
- Reference best practices within your policies

Infection Prevention Rounds

- Goal is to round through the clinical area and identify improvement opportunities to promote patient safety and prevent infection
- What's askew here…

LTC Antibiotic Drivers

Abx prescriptions:

- Predicated on the nurse's event description
- Better safe than sorry
- Given to prevent hospitalization
- Given to avoid a nursing home visit
- Controversial for hospice/end of life care
- Placate the resident/family members

Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America

Tamar F. Barlam,[1] Sara E. Cosgrove,[2] Lilian M. Abbo,[3] Conan MacDougall,[4] Audrey N. Schuetz,[5] Edward J. Septimus,[6] Arjun Srinivasan,[7] Timothy H. Dellit,[8] Yngve T. Falck-Ytter,[9] Neil O. Fishman,[10] Cindy W. Hamilton,[11] Timothy C. Jenkins,[12] Pamela A. Lipsett,[13] Preeti N. Malani,[14] Larissa S. May,[15] Gregory J. Moran,[16] Melinda M. Neuhauser,[17] Jason G. Newland,[18] Christopher A. Ohl,[19] Matthew H. Samore,[20] Susan K. Seo,[21] and Kavita K. Trivedi[22]

Minimal description with how nursing supports antibiotic stewardship

Antibiotic Stewardship

Nursing's role:

- Assessing for abx allergy
- Identifying a MDRO hx
- Timely obtaining cultures
- "Watchful waiting" discussion
- Administering abxs on time

Antibiotic Stewardship

Nursing's role:

- Prevention e.g. vaccinations, aseptic technique, hand hygiene, ongoing resident assessment, assessing for the need to remove invasive lines

Antibiotic Stewardship

Nursing's role:

- Monitoring the resident's condition while on therapy
- Assessing culture sensitivities
- Notifying medical team of culture/laboratory results

Antibiotic Stewardship

Nursing's role:

- Continuum of care; reason for and when to discontinue abxs
- Resident and family education
- Prevention e.g. vaccinations, aseptic technique, hand hygiene, ongoing resident assessment, assessing for the need to remove invasive lines

Antibiotic Stewardship

- Inappropriate abx use has been cited by surveyors (F-Tag 329)
- Mindset: Any condition change in the elderly is due to infection
- Urine dipstick/culture have limited value due to asymptomatic bacteriuria

Improving the Management of Urinary Tract Infections in Nursing Homes: It's Time to Stop the Tail From Wagging the Dog

Christopher J. Crnich, MD, MS, FACP[1] • Paul Drinka, MD, AGSF, FSHEA[2,3]

Your Facility
May 2016
Catheter Associated Urinary Tract Infections (CAUTIs)

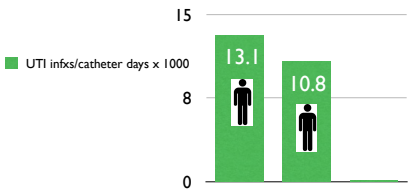
There were 2 residents with 2 infection episodes. One episode was due to an *K. pneumoniae* ESBL and the second due to E. coli.

The Foley catheter was placed due to retention in both cases. The cases were reviewed with the Nurse Managers; no trending or patterns were identified.

Antibiotic use was appropriate in both cases.

One of the infections met McGeer/NHSN CAUTI reporting criteria.

[a]No national benchmarking available.
[b]Data presented at the June 1, 2016 ICC
[c]Surveillance performed and analyzed by Steven J. Schweon, RN, CIC
[d]Resident days does not include held hospital beds



	A	B	C
# infxs	1	1	0
McGeer infxs	1	0	0
Foley days	76	93	62
Resident days	1839	1813	1633