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

‘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.ưaenda Bowes told The Inquiry that mum Margaret Dalton, 74, had to use a "disgusting" commode at the Vale of Leven Hospital in Alexandria, Dunbarton.
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

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

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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**
- **MRSA**
- **C. difficile**

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

Hand Hygiene

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Adhering to Best Practices

• 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
Antibiotic Stewardship

Nursing’s role:

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

Minimal description with how nursing supports antibiotic stewardship

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

Nursing’s role:

- 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. Crouch, MD, MS, FACP• Paul Drusko, MD, AGSF, FSHEA®

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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.

*No national benchmarking available.*

<table>
<thead>
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<th>UTI infxs/catheter days x 1000</th>
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<tbody>
<tr>
<td>A</td>
</tr>
<tr>
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<tr>
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<table>
<thead>
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<tr>
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<td>93</td>
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Resident days: 1839, 1813, 1633