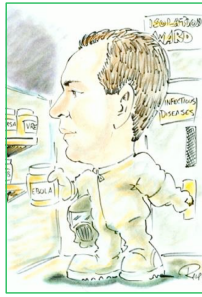


The Nurse & Infection Preventionist Perspective with LTC Antibiotic Stewardship



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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*



Interventions to Reduce *C. difficile* Transmission

Interventions:

- Weekly abx stewardship rounds with pharmacist

Interventions to Reduce *C. difficile* Transmission

Findings:

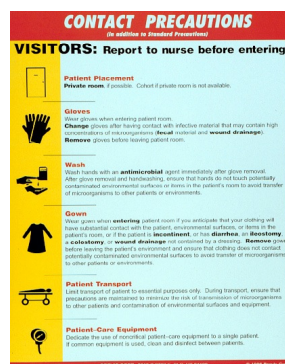
- IV to po Zyvox conversion without ID approval
- Daily dose Keflex, times 7 days, due to misplaced G-tube (what are you not telling me)
- Overwhelming majority of abx prescriptions are justified
- Pharmacist time challenges with 1:1
- No abx review performed when ID is on board

Interventions to Reduce *C. difficile* Transmission

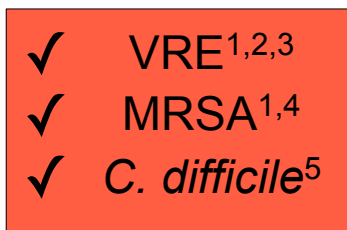
Interventions:

- 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



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

1. Huang 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 al. Clin Infect Dis 2008;46:678-85
 4. Hardy KJ, et al. Infect Control Hosp Epidemiol 2006;27:127-32
 5. Shaughnessy M, et al. Infect Control Hosp Epidemiol 2011;32:201-6

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

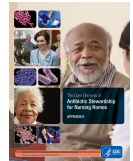


- Up to 70% of all Health Care Associated Infections can be prevented
- Hand hygiene is the simplest, most effective way of preventing the spread of infection
- The *pharmacist as a role model*; hand hygiene
 - Upon entering and leaving a patient room
 - Entering the cafeteria
 - Within your pharmacy 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, MPH¹; Olivia Almendares, MSPH¹; Matthew R Moore, MD¹; Cynthia G. Whitney, MD¹; Tamara Pilishvili, MPH¹

- 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 Lijian M. Abbo,³ Conan MacDougall,⁴ Audrey N. Schuetz,⁵ Edward J. Septimus,⁶ Arjun Srinivasan,⁷ Timothy H. Dellit,⁸ Yongye 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. Trivedi²²

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, FACP¹ • Paul Drinka, MD, AGSF, FSHEA^{2,3}



When Do You Need An Antibiotic?



Taking antibiotics when you don't need them is like leaving the lights on all the time.

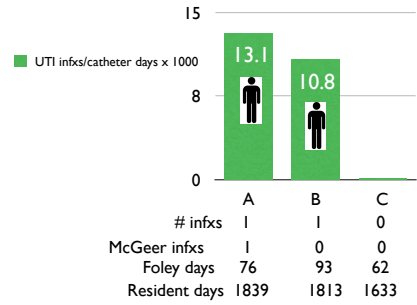
Your Facility May 2016 Catheter Associated Urinary Tract Infections (CAUTIs)

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.



*No national benchmarking available.
*Data presented as the June 1, 2016 ICC
*Surveillance performed and analyzed by Steven J. Schwann, RN, CIC
*Resident days does not include held hospital beds



MDH Minnesota Department of Health

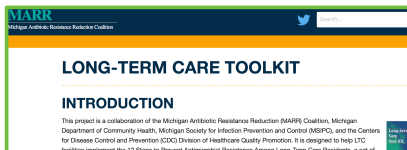
HOME TOPICS ABOUT US

Antimicrobial Stewardship Programs

Minnesota Antimicrobial Stewardship Program Toolkit for Long-term Care Facilities

Overview

Antimicrobial stewardship programs facilitate the responsible use and protection of all antimicrobials and in turn, improve patient safety, reduce healthcare costs and potentially impact rates of antimicrobial resistance.



MARR Michigan Antibiotic Resistance Reduction Coalition

LONG-TERM CARE TOOLKIT

INTRODUCTION

This project is a collaboration of the Michigan Antibiotic Resistance Reduction (MARR) Coalition, Michigan Department of Community Health, Michigan Society for Infection Prevention and Control (MSIPC), and the Centers for Disease Control and Prevention (CDC) Division of Healthcare Quality Promotion. It is designed to help LTC facilities implement the 2015 National Antimicrobial Best Practices.



The Care Barriers of Antibiotic Stewardship for Nursing Homes

CHECKLIST

