Infection Prevention and Control Training

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Part 1

Key Components of Nursing Home Infection Prevention and Control (IPC) Programs
Presentation Objectives

- Describe the changing population of older adults receiving long-term care services and their risk of infection
- Overview of infection prevention and control opportunities and gaps in long-term care settings
- Strategies for addressing these opportunities
  - Implementing the key components of an infection prevention and control program at your facility
The Healthcare System – More than Just Hospitals

- Acute Care Facility
- Home Care
- Long Term Care Facility
- Outpatient/Ambulatory Facility
- Tranquil Gardens Nursing Home
- Outpatient/Ambulatory Facility
Changing Population Entering Skilled Nursing Facilities (SNFs)/Nursing Homes (NHs)

- Post-acute (Medicare) admissions are increasing
  - Growing medical complexity, exposure to devices, antibiotics
  - High prevalence of multi-drug resistant organisms

CMS. Nursing Home Data Compendium, 2013. AHCA Quality Report, 2013
Impact of Infections in U.S. Nursing Homes

- Infections are among the most frequent causes of hospital transfers from nursing homes (NH):
  - Accounted for 36% of hospital readmissions from a skilled nursing facility (SNF) within 30-days\(^1\)
  - Resulted in 25% of all hospitalizations from 32 nursing homes in a single year\(^2\)
  - Hospitalization for acute infections result in excess cost compared to management in the nursing home\(^3\)
  - Morbidity from hospital transfers (delirium, pressure wounds accelerate functional decline) causes poor resident outcomes and increase costs of care\(^4\)

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Challenges to Preventing Infections in Post-Acute Care/LTC Settings

- Lack of infection surveillance and prevention expertise
  - Training
  - Dedicated staff
- Communal living environment for residents
- Maintaining staff engagement and education

Infection Prevention and Antibiotic Stewardship Policy Drivers in Nursing Homes

2012
CDC releases NHSN reporting option for LTCFs

2014
Office of Inspector General Report

2015
CDC Releases Core Elements of Antibiotic Stewardship for NHs

2013
HHS National Action Plan to Prevent Healthcare associated Infections

2015
WH National Action Plan for Combating Antibiotic Resistant Bacteria

2016
CMS LTCF Regulatory Requirements
§483.80 -- The facility must establish and maintain an infection prevention and control (IPC) program…

- A system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases
- **Annual review** and update of IPC program, policies/procedures
- Antibiotic use protocols and monitoring included in IPC
- Designated IP with specific training
- IPC-specific education and training for all staff

Okay... So Now What?™

OK... so what now?
CDC Infection Control Assessment and Response (ICAR) Activity, 2015-2018

- CDC funding and technical support to state and local health departments
- Structured approach for assessing and identifying gaps in current IPC programs or practices
- Opportunity for health departments to expand their outreach to healthcare facilities
- Health departments serve as external IPC resource for facilities

ICAR Assessments (continued)

- How will your facility benefit from this assessment?
  - A fresh perspective on your existing program
  - It helps to prepare for regulatory surveys
  - It helps with Infection Control Risk Assessment priorities and planning activities

- What is the assessment?
  - It helps to identify your facility’s capacity to detect, report and address healthcare acquired infections and/or outbreaks
  - The State Health Departments have been providing a summary report of opportunities and strengths of facility Infection Prevention program, as well as resources
  - The State Health Departments have also partnered with facilities for education, if requested
LTC Infection Control Assessment Domains

Elements within each domain regarding the following:

- Policies/procedures
- Staff training and education
- Auditing/monitoring adherence to policies
- Providing feedback on staff adherence
- Availability of supplies

Infection Control Domains for Gap Assessment

I. Infection Control Program and Infrastructure
II. Healthcare Personnel and Resident Safety
III. Surveillance and Disease Reporting
IV. Hand Hygiene
V. Personal Protective Equipment (PPE)
VI. Respiratory/Cough Etiquette
VII. Antibiotic Stewardship
VIII. Injection safety and Point of Care Testing
IX. Environmental Cleaning

https://www.cdc.gov/infectioncontrol/pdf/icar/ltcf.pdf
Key Components of an Infection Prevention and Control (IPC) Program

Infection Control Assessment Tool for Long-term Care Facilities

This tool is intended to assist in the assessment of infection control programs and practices in nursing homes and other long-term care facilities. If feasible, direct observations of infection control practices are encouraged. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

Overview

Section 1: Facility Demographics
Section 2: Infection Control Program and Infrastructure
Section 3: Direct Observation of Facility Practices (optional)
Section 4: Infection Control Guidelines and Other Resources

Infection Control Domains for Gap Assessment

I. Infection Control Program and Infrastructure
II. Healthcare Personnel and Resident Safety
III. Surveillance and Disease Reporting
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VII. Antibiotic Stewardship
VIII. Injection safety and Point of Care Testing
IX. Environmental Cleaning
Domain 1 – Infection Control Program and Infrastructure

- **Infection Control Program and Infrastructure**
  - Written facility risk assessment, based on the resident population
  - Written IP plans for emergency preparedness (e.g., pandemic influenza and natural disaster)
  - Written IP plans and processes for reviewing infection surveillance data and IP activities
    - Policies and procedures, based on evidence-based guidelines
    - Annual review
    - Surveillance plan based on residents’ risks
  - Trained IP personnel with dedicated time for program
    - Administrative and medical staff support
Domain 2 – Healthcare Personnel and Resident Safety

- **Resident safety**
  - TB risk assessment and screening
  - Resident pneumococcal vaccination and documentation
  - Resident influenza vaccination and documentation

- **Healthcare Personnel safety**
  - Work-exclusion policies
  - Prompt reporting of signs/symptoms of a potentially transmissible illness
  - TB screening
  - Vaccinations (influenza, hepatitis B)
  - Blood-borne pathogen (BBP) exposure control plan
  - Ongoing competency-based training/education for staff
  - Ongoing audit/feedback of staff adherence to policies

https://www.osha.gov/Publications/osha3186.pdf
Domain 3 – Surveillance and Disease Reporting

- **Surveillance**
  - **Time of admission**
    - Written intake procedures to identify potentially infectious persons
  - **During the resident’s stay at the facility**
    - System for notification when antibiotic-resistant organisms or *C. difficile* are reported by the lab
    - Written surveillance plan for tracking/monitoring infections in residents
  - **Post-discharge/transfer**
    - System for following up on clinical information when residents are transferred to other facilities

- **Disease Reporting**
  - **At all times:**
    - Written outbreak response plan (including definition, procedures for surveillance and containment, list of pathogens for which monitoring is performed)
    - Current list of diseases reportable to public health authorities
    - Point of contact at the local or state health department for assistance during outbreak response

https://www.cdc.gov/HAI/toolkits/InterfacilityTransferCommunicationForm11-2010.pdf
Domain 4 – Hand Hygiene

- Preferential use of alcohol-based hand rub (ABHRs) over soap and water in most clinical situations, except:
  - When hands are visibly soiled (e.g., blood)
  - After caring for a resident with known or suspected *C. difficile* or norovirus during an outbreak or if the facility’s *C. difficile* rates are persistently high

- Training, routine audits/feedback

- Accessible HH supplies

https://www.cdc.gov/handhygiene/
http://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf#page=19
Domain 5 – Personal Protective Equipment (PPE)

- Facility policy on Standard Precautions, including PPE use

- Facility policy on Transmission-based Precautions, PPE use (e.g., C. difficile, influenza)

- Training, routine audits/feedback

- Accessible PPE supplies

Domain 6 – Respiratory Hygiene/Cough Etiquette

- Posted signs
- Resources for performing HH (entrance, common areas)
- PPE (i.e. facemask) accessibility
- Education – personnel, family/visitor

http://www.cdc.gov/flu/protect/covercough.htm
Domain 7 – Antibiotic Stewardship

CDC Core Elements of Antibiotic Stewardship

- Leadership commitment
- Accountability
- Drug expertise
- Action
- Tracking
- Reporting
- Education

http://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html
Domain 8 – Injection Safety and Point of Care Testing

- Facility policy on injection safety
  - This should include protocols for finger sticks and point of care testing

- Personnel training and competency validation

- Routine audits/feedback

- Accessible supplies

- Prevent drug diversion

https://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html
Domain 9 – Environmental Cleaning

- Facility policy on cleaning and disinfection which include:
  - Resident rooms
  - Rooms of residents on transmission-based (e.g., contact) precautions
  - High-touch surfaces in common areas
  - Shared equipment
  - Re-processing of reusable medical devices
- Personnel training and competency validation
- Audits/feedback
- Accessible supplies

Health Department LTC ICAR experience

- 1463 total facility assessments completed by 44 state/local HDs
  - CMS-certified LTCFs (NHs and ICFs) = 94% of assessments
- Types of assessment:
  - 1404 on-site assessments, with 1320 (94%) in NHs and ICFs
- Long-term care settings assessed:

<table>
<thead>
<tr>
<th>Nursing Home (NHs)</th>
<th>Intermediate Care Facility (ICFs)</th>
<th>Assisted Living Facility (ALFs)</th>
<th>Other LTC</th>
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<tr>
<td>1355</td>
<td>16</td>
<td>32</td>
<td>58</td>
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Overall LTC Assessment Experience

- **Common findings and themes**
  - Leadership investment/support for IPC highly variable
  - Staff overseeing IPC programs lacked training and dedicated time
  - Routine auditing of staff adherence to policies and procedures was not in place
  - Feedback on staff adherence to practices was not available
  - Minimal antibiotic stewardship activities in place

- **Benefits from the activity**
  - Created new relationships between health dept. and providers
  - Positive learning experience for providers and health dept.
  - Made IPC education and technical assistance available as new regulatory requirements are coming into effect
  - Allowed health departments to identify and develop LTC specific training and resource needs to strengthen programs
Direct Observation of Facility Practices
CDC Guidance on IC in Long-Term Care

Nursing Homes and Assisted Living (Long-term Care Facilities [LTCFs])

Nursing homes, skilled nursing facilities, and assisted living facilities, (collectively known as long-term care facilities, LTCFs) provide a variety of services, both medical and personal care, to people who are unable to manage independently in the community. Over 4 million Americans are admitted to or reside in nursing homes and skilled nursing facilities each year and nearly one million persons reside in assisted living facilities. Data about infections in LTCFs are limited, but it has been estimated in the medical literature that:

- 1 to 3 million serious infections occur every year in these facilities.
- Infections include urinary tract infection, diarrheal diseases, antibiotic-resistant staph infections and many others.
- Infections are a major cause of hospitalization and death, as many as 390,000 people die of the infections in LTCFs every year.

http://www.cdc.gov/longtermcare
Conclusion of Part 1

- Take actions now so your IPC program will succeed in meeting the growing needs of your residents
- Engaging in activities now will prepare nursing homes for the future. For example:
  - Facilities actively involved in surveillance and prevention programs will be identified as community leaders
  - Facility programs will be in place to meet CMS regulations or future quality incentive programs
Questions?