FHCA 2019 Annual Conference & Trade Show

CE Session #44 – Ensuring Success: Evaluating Your Infection Prevention and Control Program
Wednesday, August 7 – 2:15 to 4:15 p.m.
Celebration 3-4 – Clinical/Care Practices

Upon completion of this presentation, the learner will be able to:

- To describe regulatory requirements for a long term care infection prevention and control program
- To identify five key resources to support the implementation of an infection prevention and control program
- To identify three types of metrics for evaluating an infection prevention and control program

Seminar Description:

In this session, attendees will learn to evaluate an infection prevention and control program using the CDC analysis tool as well as qualitative and quantitative metrics. Regulatory requirements will be discussed in concert with national guidelines and best practices necessary to support the implementation of a successful program.

Presenter Bio(s):

A.C. Burke has over 20 years of experience in health care, is board certified in infection control and holds a master degree in health management. She has served as the Healthcare-associated Infection Prevention Program Manager for the Florida Department of Health, the Director of Infection Prevention at Mayo Clinic Florida and is currently the Vice President of Healthcare Quality for RB Health Partners, Inc.

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WHAT'S BUGGING YOU? INFECTION PREVENTION REQUIREMENTS AND PROGRAM EVALUATION

A.C. Burke, MA, CIC

Objectives

This module's objectives are to:

1. Identify the key components of an infection prevention and control program for nursing homes;

2. Identify Centers for Medicare and Medicaid Services (CMS) updated regulatory requirements for infection prevention and control; and

3. Identify three methods to evaluate your infection prevention and control program.

Infections in Long-term Care

According to the CDC

☐ 1 to 3 million serious infections occur every year in long-term care facilities (LTCF).

☐ 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 380,000 people die of the infections in LTCFs every year.

Regulations & Key Program Elements

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CMS Requirements

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Phased approach
- Phase 1 effective November 28, 2016
- Phase 2 effective November 28, 2017
    - Infection prevention and control plan
    - Facility assessment (18 month moratorium – May 2019)
    - Antibiotic stewardship (18 month moratorium – May 2019)
- Phase 3 effective November 28, 2019
    - Infection preventionist

Infection Control § 483.80

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- The facility must establish and maintain an infection prevention and control program designed to provide a safe, sanitary and comfortable environment and to help prevent the development and transmission of communicable diseases and infections.

Infection Control § 483.80

Infection prevention and control program (IPCP) includes a system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases

□ Covers all residents, staff, volunteers, <u>visitors</u>, and other individuals providing services under a contractual arrangement

□ Follows accepted national standards

□ Based on facility assessment

Policies and Procedures

"The facility must develop and implement written policies and procedures for the provision of infection prevention and control. The facility administration and medical director should ensure that current standards of practice based on recognized guidelines are incorporated in the resident care policies and procedure."

Policies and Procedures

□ Based on evidence based guidelines
  ▫ Centers for Disease Control and Prevention
  ▫ Association for Professionals in Infection Control
  ▫ Society for Healthcare Epidemiology of America (SHEA)

□ Ensure compliance with regulatory and accreditation standards
  ▫ Centers for Medicare & Medicaid Services
  ▫ Joint Commission

Guidelines

□ CDC Guidelines
- Hand hygiene
- Isolation precautions
- Disinfection and sterilization
- Environmental infection control
- Multi-drug resistant organisms
- Catheter-associated UTI
- Intravascular catheter-related infection

www.cdc.gov/hai and click on "library of infection control guidelines"

Guidelines

□ CDC Guidelines
- Carbapenem-resistant Enterobacteriaceae (CRE) Prevention Toolkit
- Pneumonia prevention
- Infection control in healthcare workers
- Management of occupational exposures to HBV, HCV, and HIV and recommendations for post-exposure prophylaxis
- Preventing the transmission of Mycobacterium tuberculosis in health-care settings

Guidelines

□ American Society for Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)
- Water management plan

Evidence-based Practice

- □ American Journal of Infection Control
- □ Infection Control & Hospital Epidemiology
- □ Journal of American Medical Association
- □ American Journal of Public Health
- □ Journal of Clinical Microbiology
- □ Clinical Infectious Disease
- □ New England Journal of Medicine
- □ Lancet

Infection Control § 483.80

Policies and Procedures
- □ A <u>system</u> of surveillance designed to identify possible communicable disease or infections before it can spread to other persons in the facility
  - ◘ Data collection tool
  - ◘ System for early detection and management of infectious, symptomatic resident (e.g. Incorporate into resident's baseline care plan)
  - ◘ Communicate resident communicable infection status at time of transfer

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Infection Control § 483.80

- □ System of Surveillance continued
  - ◘ Process surveillance
    - ■ Compliance with practices
  - ◘ Outcome surveillance
    - ■ Infection rates
  - ◘ Data analysis
  - ◘ Detect outbreaks and contain outbreaks
    - ■ Defined as more than expected in a given area or among a specific group

Infection Control § 483.80

- Policies and procedures
  - When and to whom possible incidents of communicable disease or infections should be reported
  - Which communicable diseases are reportable to local/state public health authorities
  - Standard and transmission-based precautions to be followed to prevent spread of infections
    - Respiratory etiquette

Infection Control § 483.80

- Policies and procedures
  - When and how isolation should be used for a resident
  - The circumstances under which the facility must prohibit employees with a communicable disease or infected skin lesions from direct contact with residents or their food, if the contact is likely to transmit the disease
  - Hand hygiene procedures to be followed by staff involved in direct resident contact

Transmission-based Precautions

- In addition to standard precautions
- Identify type and duration or precautions (i.e. contact, droplet)
- Isolation should be the least restrictive possible for the resident under the circumstances
- Criteria for private room, cohorting, and or when resident may share room based on risk factors
- Identify type of precautions and PPE required
  - Use of masks on residents with new respiratory symptoms
- Signage/communication of precautions

Policies and Procedures - Linens

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Personnel must handle, store, process, and transport linens so as to prevent the spread of infection.
- ☐ Handle all laundry as potentially contaminated according to standard precautions.
- ☐ **No** special precautions or categorizing for linens from transmission-based precautions room is required.
- ☐ Clean linens must be transported, loaded, and unloaded in a way that protects the linen from dust and soil.

Resident Care Activities

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- ☐ Accessing vascular devices including peripheral and central venous catheters (if applicable)
- ☐ Safe medication administration
- ☐ Insertion and maintenance of indwelling urinary catheters
- ☐ Wound care and dressing changes
- ☐ Finger sticks and point of care testing
  - ◼ Proper handling of blood glucose meters

Environmental Cleaning and Disinfection

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- ☐ Address routine cleaning and disinfection of high touch surfaces in common areas, resident rooms, and at the time of discharge
- ☐ Privacy curtains
- ☐ Frequency of cleaning
- ☐ Specify who is responsible for cleaning what
- ☐ Type of product(s) that will be used (low vs intermediate level disinfectant) and on what surfaces
- ☐ Resident care equipment

Employee Health

- Reporting of staff illnesses and following work restrictions
- Prohibiting contact with residents and their food when have potentially communicable disease or infected skin lesions
- Assessing risks for TB
- Monitoring and evaluating for clusters or outbreaks of illness among staff
- Implement exposure control plan

Infection Control § 483.80

- The facility is to review its IPCP annually and update the program as necessary
  - Based on facility assessment (§483.70 (e))
    - Resources for daily and emergency operations
    - Includes a facility and community based assessment with all-hazards approach
    - Risk for MDRO, TB, and Influenza
- The facility is to establish and maintain a system for recording incidents identified under the facility's IPCP and the corrective actions taken by the facility.

IPCP Umbrella

- Programs, systems, and plans within the IPCP
  - Antibiotic stewardship program
  - Employee/occupational health
  - Education and training program
  - Infection prevention and control plan
  - Surveillance System
  - Tuberculosis assessment and screening
  - Water management program

ICPC Umbrella

- □ Risk Assessments – At least annually
  - ◘ Infection prevention and control program
  - ◘ TB
  - ◘ Water Management
- □ Risk Assessments – As needed
  - ◘ Construction
  - ◘ Any practice change
  - ◘ For policy & procedure development

Infection Prevention & Control Plan

- □ Goals and objectives
- □ Priority focus areas
- □ Based on surveillance data
- □ Based on risk assessment results
- □ Updated at least annually
- □ Program evaluation

System for Recording Incidents

- □ Identify, record, and investigate incidents under the infection prevention and control program
  - ◘ Incidents may equal failures in infection prevention and control practices
  - ◘ Outbreak detection and response
- □ Develop and implement corrective action

System for Recording Incidents

- □ Failures reported and reviewed by QAPI
- □ Monitor effectiveness of implemented changes
- □ Methods for feedback to appropriate individuals involved in the failed practices

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Infection Control § 483.80 – F881

- □ Antibiotic Stewardship
    - ◻ An antibiotic stewardship program that includes antibiotic use protocols and a system to monitor antibiotic use

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Antibiotic Stewardship F881

Intent is for facility to:
- □ Develop and implement protocols to optimize the treatment of infections by ensuring that residents who require an antibiotic, are prescribed the appropriate antibiotic;
- □ Reduce the risk of adverse events, including the development of antibiotic-resistant organisms, from unnecessary or inappropriate antibiotic use; and
- □ Develop, promote, and implement a facility-wide system to monitor the use of antibiotics.

Antibiotic Stewardship

- Measurable goals/objectives
- How measure/monitor
- How often and when review will occur
  - New admission/readmission
  - Monthly medication review by pharmacist
  - Role of QAPI committee
- Feedback mechanisms to prescribers
- Support tools
- Mode and frequency of education

Infection Control § 483.80 – F882

Designate one or more individuals as the Infection Preventionist(s)(IP) who are responsible for the IPCP

- Have primary professional training in nursing, medical technology, microbiology, epidemiology, or other related field
- Be qualified by education, training, experience, or certification
- Work at least part-time at the facility
  - Have completed specialized training in infection prevention and control
- IP must be a member of the facility's QAPI committee

Competency Domains for Infection Preventionist

- Association for Professionals in Infection Control (APIC) and Certification Board for Infection Control (CBIC)
  - Identification of infectious disease processes
  - Surveillance and epidemiologic investigation
  - Preventing and controlling the transmission of infectious agents
  - Leadership and program management
  - Performance improvement and implementation science
  - Employee/occupational health
  - Environment of care
  - Cleaning, disinfection, sterilization, asepsis

Infection Control § 483.80 – F883

- Pneumococcal and influenza immunizations
  - Each resident/resident representative is educated regarding benefits of and potential side effects of influenza and pneumococcal immunization
  - Each resident is offered an influenza immunization October 1 – March 31, unless resident is medically contraindicated or already immunized
  - Each resident is offered pneumococcal immunization, unless resident is medically contraindicated or already immunized

Infection Control § 483.80 - F883

- Pneumococcal and influenza immunizations cont'd
  - Resident/resident representative has opportunity to refuse influenza and pneumococcal immunization
  - Resident medical record includes documentation of the following:
    - Education (as described above)
    - Whether or not the resident received influenza and or pneumococcal immunization and if not, why (i.e. contraindication, refusal)

Evaluating Your IPC

What is Evaluation?

STANDARDS

SYSTEMATIC

VALUE

MEASUREMENT

ASSESSMENT

FUNCTION

OBJECTIVE

Methods

- □ Qualitative
  - ◻ Comparing and contrasting
  - ◻ What is the value added?
- □ Quantitative
  - ◻ Measurement
  - ◻ How many?
  - ◻ What were the outcomes?
- □ Mixed
  - ◻ Combination of qualitative and quantitative

Key Components and Evaluation

Infection Prevention Plan

Risk Assessment

Surveillance Data

Analysis
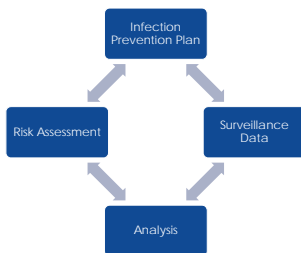
Planning Ahead for Evaluation

- Did you engage stakeholders to ensure support and buy-in?
- How will you know if program is successful?
  - Did the stakeholders define success?
- Did you establish measurable goals and objectives?
- Did you identify methodologies for tracking necessary information to know if you have met goals and objectives?

Planning Ahead for Evaluation

- How will the data be analyzed?
- How will data be communicated?
- Who will data be communicated to and in what format?
- Who will review evaluation summary?
- How will findings be used to drive decision making?

What do you want to evaluate?

What do you want to know?

- Are *C. difficile* infection rates increasing, decreasing, or stable?
- How efficient is our blood glucose monitoring process?
- Are staff competent on how to change a wound dressing?
- What should be our top infection prevention priority?

What data is needed?

- Evaluating competency
  - Direct observations
  - Process measure data
- Evaluating outcomes
  - Surveillance data/infection rates
- Process efficiency
  - Focus group
  - Survey

What tools are needed to support data needs?

- Checklists
  - Process steps
- Surveillance case definitions
- Infection control risk assessments
- Gap analysis tool

Infection Control Risk Assessment (ICRA)

Risk Assessments

- Proactive process
- May be used for strategic planning
- May be part of business impact analysis
- Provide direction on priorities
- Assist with decision making for resource allocation
- Identify potential for harm and or opportunities to reduce risk
- Evaluate if precautions have been taken to prevent harm

Infection Control Risk Assessment

- Evaluation tool for infection prevention and control program
- Drive decision making for infection prevention and control (strategic) plan
  - Goals
  - Measurable objectives
- Quantify threats to prioritize action plans
  - Identify focus areas

ICRA Process

- Multi-disciplinary team
- Identify risk assessment tool
- Identify the hazards
- Score hazards/threats
- Review prioritized list threats
- Develop objectives and strategies to incorporate into IPCP
  - Action plans
- Monitor progress

Example ICRA

Example Risk Assessment Tool by APIC and referred to in CMS SOP under F880

This specific risk assessment is not required for compliance.

Example ICRA

RB Health Partners, Inc. NIPP© Risk Assessment Tool

Potential Hazards/Threats

- Devices (central lines, urinary catheters, ventilators)
- Types of infections
- Prevalence of multi-drug resistant organisms in your facility, community, and referring facilities
- Compliance with policies and procedures for:
  - Hand hygiene
  - Transmission-based precautions
  - Cleaning and disinfection of equipment
  - Cleaning and disinfection of resident rooms
  - Proper management of point of care devices (i.e. glucometers)

Potential Hazards/Threats

- Likelihood of influenza and TB in your facility, community, and referring facilities
- Probability of transmission of influenza in your facility
  - Staff vaccination rates
  - Resident vaccination rates
- Waterborne/aerosol sources
- Highly immunocompromised resident population
- Bloodborne pathogen exposure

Scoring

- Score each hazard/threat
  - Consensus
  - Average individual scores
- Probability of occurrence
- Severity rating
- Current capacity and performance
- Training program

Probability of Occurrence

- □ Has this happened in the past?
- □ Is this likely to occur in the future?
- □ How well do staff adhere to policy and/or practice?
- □ How often does event occur or is it likely to occur?

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Risk Score

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- □ Rarely
- □ Sometimes
- □ Frequently
- □ Almost always or ongoing event

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Severity Rating

- □ What is the impact to the patient/resident?
  - ◘ Loss of life, loss of function, or injury?
- □ Will event lead to significant morbidity? Loss of quality of life?
- □ To what extent will the patient/resident experience harm?
- □ What is the impact to the facility?
- □ Are there financial, legal, or regulatory issues associated with the event?
- □ What does the literature tell us about the event?

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Severity Rating

- Minimal harm
- Some harm
- Major harm
- Catastrophic harm

Current Capacity and Performance

- Do you have policies and procedures in place to address event?
- Are the necessary resources (i.e. supplies, technology, etc.) available to address event?

Current Capacity and Performance

- No gaps in policies or resources
- Few gaps in policies and or resources
- Some gaps in policies and or resources
- Major gaps in policies and or resources

Training Program

- □ Do you have training materials or does training need to be developed?
- □ Have staff been trained?
- □ Are staff trained annually and as needed?
- □ Have competencies been assessed and verified?

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Training Program

- □ No gaps and all staff have been trained (based on job function) and validated competencies
- □ Few gaps in training and or competency validation
- □ Some gaps in training and or competency validation
- □ Major gaps in training and or competency validation

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ICRA Process - Next Steps

- □ Review results
- □ Use results to drive decision making
  - ◘ Priorities for IPAC plan
  - ◘ Objectives and strategies for improvement
  - ◘ Additional action plans and or workgroups
- □ Monitor progress
- □ Re-assess/evaluate as needed (at least annually)

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Gap Analysis

Gap Analysis

- ☐ May be used in concert with ICRA
- ☐ Comparison of current state to desired state
  - ◻ Regulations
  - ◻ Guidelines for program components
- ☐ Identifies opportunities for improvement (i.e. gaps)
- ☐ Qualitative (i.e. no prioritization)
- ☐ Provides guidance for IPAC plan, strategic planning, and action planning

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Gap Analysis Process

- ☐ Identify desired outcome
  - ◻ What do you want to know?
- ☐ Identify or develop tool
- ☐ Complete tool noting if criteria is met or not met
  - ◻ What is missing?
  - ◻ What is needed?
- ☐ Summarize findings
- ☐ Use findings to inform strategic planning, define objectives, and develop action plans

CDC IPAC Assessment Tool

CDC Infection Prevention and Control Assessment
Tool for Long-term Care Facilities
https://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html
- 4 Sections
  - Facility demographics
  - Infection Control Program and Infrastructure
  - Direct Observation of Facility Practices
  - Infection Control Guidelines and Other Resources

CDC IPAC Assessment Tool

Domains for Gap Assessment
- Program infrastructure
- Healthcare personnel and resident safety
- Surveillance and disease reporting
- Hand hygiene
- Personal protective equipment
- Respiratory/cough etiquette
- Injection safety and point of care testing
- Environmental Cleaning

CDC IPAC Assessment Tool

Direct observation tools for facility practices
- Point of care testing
- Hand hygiene
- Isolation precautions
- Indwelling urinary catheter maintenance
- Central venous catheter maintenance
- Wound dressing change

Action Plans and Tracking Progress

Action Plans

- □ Measurable objective(s)
- □ Strategies
- □ Timeline
- □ Monitor and report progress monthly and or quarterly
- □ Progress tracking

Tracking Progress

Action Plans

Objective	Strategies	Progress	Status
By December 31, 2019, achieve 90% compliance with performing hand hygiene upon entry and exit of resident rooms.	**Q1** • Establish baseline • Install additional dispensers • Establish teams for competition & positive reinforcement • Posters • In-service	As of 2/15/19 • Baseline = 45% compliance • Dispensers installed • Teams established • Trophy and lunch • Posters being printed • Inservice scheduled for March 15.	🟢
	Q2 • Provide feedback to staff on performance • Implement rewards for performance • Interactive education • Coaching		
	Q3		
	Q4		

Activity

Evaluate practices and develop an action plan

Activity

For each scenario, identify what needs to be evaluated, how it will be evaluated, and what tools are needed to evaluate the scenario. Then, develop an objective (or objectives and create an action plan on how to achieve the objective(s).

Scenario 1 – MRSA infection rates have been increasing in your facility.

Scenario 2 – You have just completed your annual risk assessment and *C. difficile* infections is your top priority.

Scenario 3 - While rounding, you observe breaks in practice with changing wound dressings.

Summary

- Skilled nursing facilities need to implement a comprehensive infection prevention and control program in accordance with national guidelines.
- Infection prevention and control programs need to be evaluated annually and plans updated based on evaluation results (i.e. ICRA, gap analysis).
- Ongoing analysis is required to monitor progress towards meeting goals and objectives.
- Progress towards success needs to be clearly communicated to stakeholders on a regular basis.

Resources

- Association for Professionals in Infection Control (APIC) Sierra Resources webpage
  https://community.apic.org/sierra/resources/overview
- CDC Infection Control Assessment Tool for Long-term Care
  https://www.cdc.gov/infectioncontrol/pdf/icar/ltcf.pdf

THANK YOU!

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WHAT'S BUGGING YOU? INFECTION PREVENTION REQUIREMENTS AND EVALUATING YOUR PROGRAM

We thank you for your time today.
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