Infection Prevention & Performance Improvement

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Objectives

- Identify the five elements of Quality Assurance Process Improvement (QAPI)
- Discuss the importance of goal setting in infection prevention
- List 3 potential process improvement projects (PIP) related to infection prevention
- Describe how PA-PSRS analytics can assist in infection reporting at QAPI committee
Quality Assurance Process Improvement (QAPI)

QAPI is the coordinated application of two mutually-reinforcing aspects of a quality management system: Quality Assurance (QA) and Performance Improvement (PI).

-Centers for Medicare and Medicaid Services
CMS Long-Term Care Final Rule Effective November 28, 2018

- 42 CFR part § 483.80 Infection Control. Phase 3
  - Trauma Informed Care
  - Call system for each resident at bedside
  - Compliance and Ethics Program
  - Staff training
  - Infection Preventionist in place
  - Coordination of QAPI plan with incorporation of Infection Prevention
What is Quality Assurance?

- Process of meeting quality standards and assuring that care reaches an acceptable level
- A reactive, retrospective effort to examine why a facility failed to meet certain standards
What is Process Improvement?

- Proactive and continuous study of processes to prevent or decrease the likelihood of problems
- Aims to improve processes involved in health care delivery and resident quality of life
What is the Principle of QAPI?

- Delivery of clinical interventions safely and with high quality
- Emphasizes autonomy and choice for residents
- Facilities will have a written QAPI plan adhering to these principles
QAPI Activities

- QAPI activities involve members at all levels of the organization to:
  - Identify opportunities for improvement
  - Address gaps in systems or processes
  - Develop and implement an improvement or corrective plan
  - Continuously monitor effectiveness of interventions

(CMS)
5 Elements of QAPI

- Element 1: Design and Scope
- Element 2: Governance and Leadership
- Element 3: Feedback, Data Systems, and Monitoring
- Element 4: Performance Improvement Projects (PIPs)
- Element 5: Systematic Analysis and Systemic Action
Element 1: Design and Scope

- Ongoing program
- Address all services provided
- Evidence-based
- Written QAPI plan

(CMS; Harmony)
Element 2: Governance and Leadership

- Developed with staff, resident, and family member participation
- Resources provided for QAPI program
- Non-punitive environment
Element 3: Feedback, Data Systems, and Monitoring

- Meaningful change
- Utilize various data sources
- Set benchmarks and monitor
- Track and investigate adverse events

(CMS; Harmony)
Element 4: Performance Improvement Projects (PIPs)

- Based on areas of concern or areas that need increased staff focus
- Staff participation
- Meaningful to facility scope of services

(CMS; Harmony)
Element 5: Systematic Analysis and Systemic Action

- Systematic approach to determine when in-depth analysis is needed
- Demonstrate proficiency in RCA
- Continual learning
- Continuous improvement

(CMS; Harmony)
QAPI Components

- Using data to identify opportunities for improvement
- Building on residents’ own goals
- Bringing meaningful resident and family voices
- Incorporating caregivers in the QAPI mission
- Developing Performance Improvement Project (PIP) teams
- Root Cause Analysis
- Undertaking systemic change
- Developing a feedback and monitoring system

(Atlantic Quality; CMS; Lippincott)
What is a Quality Measurement?

- Quality measurement - The process of using data to evaluate performance against recognized *quality* standards

- Quality measurement can be used to improve care by:
  - Preventing the overuse, underuse, and misuse of antibiotics
  - Identifying what is working and not working
  - Driving accountability
  - Measuring and addressing disparities
  - Helping staff and prescribers make informed choices

(AHRQ; CMS)
Quality Measures

- Quality measure - A tool that is used to measure performance against a recognized standard of care
- Process measure - Determines how often the measured service occurred
- Outcome measure - Evaluates health as a result of the care they received
Where do the Numbers Come From?

- **Numerator** - The measure focus; Describes the target process, condition, event, or outcome expected for the targeted population

- **Denominator** - Represents the number of residents/occurrences during a defined time period who were at risk of, or eligible for, the numerator event

(AHRQ; CMS)
Benefits of QAPI

- Competencies that equip you to solve quality problems and prevent their recurrence
- Competencies that allow you to seize opportunities to achieve new goals
- Fulfillment for caregivers, as they become active partners in performance improvement
- Better care and better quality of life for residents

(CMS)
Risk Assessment

- **Foundation of a facility’s infection prevention plan**
- **Basis for developing written goals and measurable objectives**
- **Done on an annual basis**
Goals

Goals assist in:
- Clarifying vision
- Providing direction
- Focusing resources
- Clarifying decision making
- Providing motivation

(AHRQ; APIC)
PIP Suggestions

Strategy

Quality  Efficiency  Costs
Antibiotic Stewardship

- CMS regulation for facilities to have an antibiotic stewardship program
- Focus on one infection type, such as urinary tract infection
Antibiotic Stewardship Goals

Short term goal: 5% reduction in overall process and outcome measures from baseline

Long term goal: 10% reduction in overall process and outcome measures from baseline

- Process measures
  - Decrease in % of urine cultures for ASB
  - Decrease in % of antibiotic orders for ASB
  - Decrease in % of treated UTIs that do not meet criteria

- Outcome measures
  - Decrease in % of new antibiotic orders for all UTIs
  - Decrease in % of urine cultures performed
Device–Associated Infections

- Central line-associated bloodstream infections (CLABSIs) result in thousands of deaths each year and billions of dollars in added costs to the U.S. healthcare system.
- Catheter-associated urinary tract infections (CAUTI) are possibly the most preventable HAI, with significant potential cost savings.
- Both of these infections are preventable by following best practices.

(APIC)
Device-Associated Infection Goals

- Reduce catheter-associated urinary tract infections (CAUTI) from baseline
  - Short-term goal: 20% reduction, from ____/1000 device days to /1000 device days
  - Long-term goal: 50% reduction, from ____/1000 device days to /1000 device days

- Reduce central line-associated bloodstream (CLABSI) from baseline
  - Short-term goal: 20% reduction, from ____/1000 device days to /1000 device days
  - Long-term goal: 50% reduction, from ____/1000 device days to /1000 device days
Hand Hygiene Compliance

- Most important measure to prevent the spread of infection
- Improve hand hygiene compliance among all health care workers
- Increase knowledge on the importance of hand hygiene and the proper technique of hand hygiene to reduce HAIs
Hand Hygiene Goals

- Hand hygiene compliance will increase on the resident care departments as measured on monthly auditing.
  - Short term goal: 90%
  - Long term goal: 95%

- Hand hygiene products (soap, paper towels, alcohol based hand rub) will be readily available to staff as measured on monthly auditing.
  - Short term goal: 90%
  - Long term goal: 95%

- Residents and visitors will receive education on the importance of hand hygiene on an annual basis as measured on retrospective review.
  - Goal: 95%
Personal Protective Equipment (PPE) Compliance

- Standard Precautions and PPE are part of Bloodborne Pathogen Exposure Control Plan
- Improve PPE compliance among all healthcare workers
- Increase knowledge on the proper technique of donning and doffing PPE
PPE Goals

- PPE compliance will increase on the resident care departments as measured on monthly auditing.
  - Short-term goal: 90%
  - Long-term goal: 95%

- PPE supplies will be readily available to staff as measured on monthly auditing.
  - Short-term goal: 90%
  - Long-term goal: 95%

- Staff will receive education on donning and doffing of equipment annually and in the event of an outbreak.
  - Short-term goal: 90%
  - Long-term goal: 95%
Environmental Cleaning

- Helps reduce the incidence of healthcare-associated infections
- Enhanced safety
- Protects everyone in the facility from potential transmission of a pathogenic organism
Environmental Cleaning Goals

- Environmental services staff will be compliant with hand hygiene and PPE usage.
  - Short-term goal: 90%
  - Long-term goal: 95%

- Cleaning agent is mixed appropriately and being used according to manufacturer recommendations for use.
  - Short-term goal: 90%
  - Long-term goal: 95%

- No food or drink is present on housekeeping cart.
  - Short-term goal: 90%
  - Long-term goal: 95%
Equipment Cleaning and Disinfection

- Blood contamination of glucometers creates the potential for bloodborne pathogen transmission.
- Noncritical medical equipment can be a fomite to harbor and transmit pathogens.
- Noncritical medical equipment should be disinfected after each resident use.
Equipment Cleaning and Disinfection Goals

- Glucometers are disinfected according to manufacturer instruction after each use.
  - Short-term goal: 90%
  - Long-term goal: 95%

- Medication carts are free of debris and cleaned as per policy.
  - Short-term goal: 90%
  - Long-term goal: 95%
Influenza Vaccination

- Single best way to protect yourself, your family, and your residents
- Provide a safe environment for staff, residents, and visitors from increased compliance with influenza vaccination
Influenza Vaccination Goals

- Increase in healthcare worker influenza vaccination rates from previous influenza season.
  - Short-term goal: ___% of employees vaccinated
  - Long-term goal: ___% of employees vaccinated

- Increase in resident influenza vaccination rates from previous influenza season.
  - Short-term goal: ___% of residents vaccinated
  - Long-term goal: ___% of residents vaccinated
Multi-drug Resistant Organisms (MDROs)

- MDROs have increased in prevalence in hospitals, long-term care facilities, and the community over the last three decades
- These organisms have a tremendous impact on resident safety
- Options for treating residents with MDRO infections are often extremely limited
- MDRO infections are associated with increased LOS, costs, and mortality

(APIC; CDC)
Multidrug-Resistant Organism Goals

- Reduce healthcare- acquired MDRO rate throughout the facility from baseline
  - Short-term goal: 20% reduction from ____/1000 resident days to /1000 resident days
  - Long-term goal: 50% reduction from ____/1000 resident days to /1000 resident days
How can PA-PSRS Analytics Assist?
Polling Question

Which methods does your facility use to track and analyze the number and types of HAI?

1. PA-PSRS analytic reports and graphics
2. Excel spreadsheet lists and graphics
3. List of residents on antibiotics
4. Corporate-based tools
5. No formal method
PA-PSRS for Feedback

Have You Updated Your Facility Contact Information?

Analytical Data Tools
- Search Submitted
- Event Reports
- Patient Infection
- History Report
- Event Report Data Analysis
- Data Export
# Infection Type Table

## Central Line Utilization Rate

*for Facility*

**January 2015 to December 2015**

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<th>Jan</th>
<th>Feb</th>
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*M = missing facility utilization data*

*Central Line Utilization rate is calculated as the number of central line days divided by the number of resident days.*

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Infection Type Graphic

Urinary Tract Infection - Device Rate vs Peer Comparison Group for Facility
January 2015 to December 2015
Urinary Catheter Utilization Rate
April 2014 to August 2014

Urinary Catheter Days Total

- Red: Urinary Catheter Rate
- Blue: Urinary Catheter Days Total
- M: missing data

Urinary Catheter Utilization Rate
April 2014 to August 2014

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M = missing data

* Urinary Catheter Utilization rate is calculated as the number of urinary catheter days for the month divided by the number of resident days that month.
Polling Question

Have you used the Patient Safety Authority’s Learning Management System (LMS) for education on PA-PSRS?

1. Yes, I have completed many training sessions.
2. Yes, I have completed 1 or 2 training sessions.
3. No, I have not used LMS.
4. What is LMS?
Learning Management System
Learning Management System

ECRI Institute

e-Learn

ECRI Institute’s e-Learn membership is a catalog of patient safety and risk management Continuing Medical Education (CME) courses.

This site can only be viewed using Internet Explorer or Firefox.

Currently the LMS vendor does not support Google Chrome or Safari.

LMS Video Tutorials - Click Here

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Password:
Log In

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Learning Management System
Learning Management System
What questions do you have?
Thank You!

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References

References

