Infection Prevention and Control; A Systems Perspective from the Joint Commission

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Objectives

- Describe the state of infections in nursing homes
- Discuss potential causes of Infection in nursing home residents/patients
- Compare CMS requirements to the Joint Commission Infection Prevention and Control Standards
- Access the “Applying High Reliability Principles to the Prevention and Control of Infections in Long Term Care” Module on the Joint Commission Website
Fact

- An estimated 1.6 - 3.8 million infections occur in long term care facilities each year.

Fact

- Estimates suggest that these infections could result in as many as 380,000 deaths among nursing home residents each year.

Most Common Nursing Home Infections

- Urinary Tract
- Lower Respiratory Tract
- Influenza
- Clostridium Difficile
- Wounds

National Action Plan To Prevent Health Care-Associated Infections: Road Map To Elimination, April, 2013
Contributing Factors

- Aged Population
- Limited Physiological Reserves
- Co-morbidities
- Poor Nutrition
- Decreased Function/Mobility
Potential Causes of Infection Transmission

- Poor Hand Hygiene
- Staffing Levels
- Lack of Education
- Lack of Leadership
- Culture of the Nursing Home
The Resident/Patient
Burden of Infections

- Decline in Health Status
- Pain and Suffering
- Death
- Increased Cost
Potential Financial Burden

$38 to $137 Million

Performance Incentive Programs
- Nursing Home Value Based Purchasing Demonstration
- Hospital Acquired Condition-Present on Admission
- Case Mix Reimbursement
- Pay for Performance
CMS Requirements F441 483.65 to 483.65(c)

Infection Prevention and Control Plan - Written

- Policies and Procedures
- Surveillance
- Outbreak Investigation
- Isolation Procedures/Protocols
- Education Programs
- Reporting Process
- Hand Hygiene
<table>
<thead>
<tr>
<th>Standard Label</th>
<th>Standard Text</th>
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</thead>
<tbody>
<tr>
<td>IC.01.03.01</td>
<td>The organization identifies risks for acquiring and spreading infections.</td>
</tr>
<tr>
<td>IC.01.04.01</td>
<td>Based on the identified risks, the organization sets goals to minimize the possibility of spreading infections. Note: See NPSG.07.01.01 for hand hygiene guidelines.</td>
</tr>
<tr>
<td>IC.01.05.01</td>
<td>The organization has an infection prevention and control plan.</td>
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<tr>
<td>IC.01.06.01</td>
<td>The organization prepares to respond to an increased number of potentially infectious patients and residents.</td>
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<tr>
<td>IC.02.01.01</td>
<td>The organization implements its infection prevention and control plan.</td>
</tr>
<tr>
<td>IC.02.02.01</td>
<td>The organization reduces the risk of infections associated with medical equipment, devices, and supplies.</td>
</tr>
<tr>
<td>IC.02.03.01</td>
<td>The organization works to prevent the spread of infectious disease among patients, licensed independent practitioners, and staff.</td>
</tr>
<tr>
<td>IC.02.04.01</td>
<td>The organization offers vaccination against influenza to licensed independent practitioners and staff. Note: This standard is applicable to staff and licensed independent practitioners only when care, treatment, or services are provided on site. When care, treatment, or services are provided off site, such as with telemedicine or telephone consultation, this standard is not applicable to off-site staff and licensed independent practitioners.</td>
</tr>
<tr>
<td>IC.02.04.03</td>
<td>The organization provides the influenza vaccination to at-risk patients and residents.</td>
</tr>
<tr>
<td>IC.02.04.05</td>
<td>The organization provides the pneumococcal vaccination to at-risk patients and residents.</td>
</tr>
<tr>
<td>IC.03.01.01</td>
<td>The organization evaluates the effectiveness of its infection prevention and control plan.</td>
</tr>
</tbody>
</table>
The Joint Commission Standards provide a systematic framework that supports the CMS regulation:

F441 The facility must establish and maintain an infection control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of disease and infection.

- IC.01.03.01 • Identifying risks for acquiring & spreading infections
- IC.01.04.01 • Setting goals to minimize the spread of infection
- IC.01.05.01 • Developing an infection prevention & control plan
- IC.02.01.01 • Implementing the infection prevention & control plan
- IC.03.01.01 • Evaluating the program for effectiveness
The Joint Commission Standards provide a systematic framework that supports the CMS regulation: F441 The facility must establish and maintain an infection control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of disease and infection.
High Reliability

While the term “high reliability” is relatively unfamiliar to the long term care field, many of the concepts and practices are already incorporated into ongoing quality improvement activities.

It is important to highlight the commonalities across long term care quality improvement models and strategies to avoid confusion and to promote the adoption of a learning environment and quality improvement mindset among persons expected to implement the practices.
How Does Infection Prevention and Control Relate to High Reliability?
What is High Reliability?

- High reliability organizations
  - described as “systems operating in hazardous conditions that have fewer than their fair share of adverse events.”*
  - Term associated with non-healthcare industries such as nuclear power, aircraft carriers, air traffic control
  - Common elements include engaged leadership, strong safety culture, standardization, error-proofing routine practices

- Hospitals – Unit based safety program associated with reduced HAIss over time

- Little is known about parallel applications of high reliability practices in LTC settings

*Reason (2000)
Overview of Module

- How multiple initiatives work toward the common goal
- What it means to be a high reliability organization
- How errors occur when multiple “defenses” fail
- Why infections should be viewed as failures
- How each person’s role contributes to high reliability
- Why high reliability supports the common goal
Multiple LTC Quality Related Initiatives Under Way

- Advancing Excellence in America’s Nursing Homes Campaign
- Quality Assurance and Performance Improvement Program (QAPI)
- Safety Culture
- Holistic Approach to Transformational Change (HATCH)
- Person-Centered Care
- High Reliability Mindset

- High Reliability Mindset
Common Objectives Across Long Term Care Initiatives

- Personalized approach to care
- Engaged leaders
- Empowered staff
- Safety focus (resident and staff)
- Ongoing improvement efforts
Ultimate Improvement Goal

Residents

Better Health & Quality of Life

Workers

Families & Friends
What is a High Reliability Organization (HRO)?
HRO Characteristics

HROs have systems in place that enable it to withstand operational dangers and hazards.

HROs recognize errors are inevitable, and learn lessons to prevent future errors.

Reason (2000)
A Mindful Infrastructure for High Reliability

5 PROCESSES

1) Preoccupation with Failure
2) Reluctance to Simplify Interpretations
3) Sensitivity to Operations
4) Commitment to Resilience
5) Underspecification of Structures/Deferece to Expertise

Mindfulness

Capability To Discover and Manage Unexpected Events

Reliability

Adapted from Weick, Sutcliffe & Obstfeld (1999)
Three Imperatives to Becoming a High Reliability Organization

- Leadership commitment
- Process Improvement Tools
- Safety Culture
Leadership Commitment

Commitment

Goals

Leadership

Improve

Quality

Influence

Inspire

Safety

Zero Harm
Examples of Process Improvement Approaches

RPI™ is The Joint Commission’s **blended** set of strategies, tools, methods, and training programs - including Lean, Six Sigma, and Change Management - that is used to improve business processes and clinical outcomes.
Examples of Process Improvement Approaches

- Plan
- Do
- Study
- Act

Clinical Microsystems*

* Dartmouth Microsystem Improvement Curriculum (c2013)
Safety Culture Defined

Organizations with a safety culture:

- Acknowledge high-risk, error-prone nature of operational activities
- Consistently minimize the risk of adverse events as they carry out intrinsically hazardous work
- Maintain a commitment to safety at all levels, from frontline staff to managers and executives
- Trust, report, and improve

Adapted from AHRQ; Castle, Wagner, Ferguson & Handler (2011); Reason (2000)
Safety Culture in LTC
Built on Trust

Staff empowered to report errors

Collaboration across departments

Resources dedicated to safety

Strong sense of teamwork

Sufficient staffing

Training & education

Effective communication

Respectful treatment of staff

Visible, effective leadership

Castle, Wagner, Ferguson & Handler (2011)
Long Term Care View

Consistent Excellence

- Safety Culture
- Teamwork
- Person Centered Care
- Leadership
- Process Improvement Tools

High Reliability Mindset

Adapted from Chassin & Loeb (2013)
High Reliability in Long Term Care
Models for Viewing Errors

The Person Approach focuses on the errors of individuals, blaming them for forgetfulness, inattention, or moral weakness.

The System Approach focuses on the conditions under which individuals work and tries to build defenses to avert errors or lessen their effects.

James Reason

Reason (2000)
Reason’s Swiss cheese model
A System Approach to Errors

Defenses

Hazards

Weaknesses

Losses

Reason (2000)
Examples of Systems and Processes that Serve as Defenses in LTC

- Communication Protocols
- Training and Education
- Policies and Procedures
- Competency Evaluation Systems
- Systems for reporting and solving problems
- Leadership and Management
People Make the Defenses Work

Defense: System for Reporting and Solving Problems

- Monitor & Provide Feedback
- Identify & Report
- Design & Implement
- Classify & Analyze
An infection should be viewed as largely preventable.

When an infection does occur, it is often a result of errors in care systems or processes.
Examples of Weaknesses in the Defenses

Defenses

- Policies and procedures
- Training and education
- Leadership and management

Weaknesses

- Lack of accountability for proper equipment use, supply management, and hand hygiene
- Lack of an effective nonpunitive call-in policy
- Lack of an effective training program for agency staff
Strengthening Defenses Prevents Harm

Defenses in Place

Communication Protocols

Training & Education

Policies & Procedures

Leadership & Management

Competency Evaluation System

Systems for Assessment, Measurement, and Performance Improvement

No Outbreak

Reason (2000)
Your Role in High Reliability
Each person and every role in the organization contributes to high reliability!
Common Objectives Across Many Initiatives

- Personalized approach to care
- Engaged leaders
- Empowered staff
- Safety focus (resident and staff)
- Ongoing improvement efforts
CMS Quality Assurance Performance Improvement

The 5 elements of QAPI

1. Design and Scope
2. Performance Improvement Projects
3. Governance and Leadership
4. Feedback, Data Systems and Monitoring
5. Systematic Analysis and Systemic Action

Quality of Care, Quality of Life, Resident Choice

CMS (2013)
High Reliability Supports QAPI

High Reliability Mindset

1. Design and Scope
2. Performance Improvement Projects
3. Feedback, Data Systems and Monitoring
4. Systematic Analysis and Systemic Action
5. Governance and Leadership

Quality of Care, Quality of Life, Resident Choice
Quality Improvement Initiatives Support the Common Goal

- Residents
- Better Health & Quality of Life
- Workers
- Families & Friends
How to Access the Module

http://www.jointcommission.org/HRipcLTC.aspx
Resources

- Applying High Reliability Principles to the Prevention and Control of Infections in Long Term Care Module Available at http://www.jointcommission.org/HRipcLTC.aspx

- Infection Prevention and HAI Portal Available at http://www.jointcommission.org/hai.aspx

- High Reliability Resource Center Available at http://www.jointcommission.org/highreliability.aspx

For questions or for more information on this education module, please contact ltchro@jointcommission.org
References


References


CMS Nursing Home Data Compendium. Available at https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/NHs.html


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Joint Commission Nursing Care Center Program
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