HATCh Model for Infection Prevention: Long Term Care

Margaret A. Crowley, PhD, RN
Overview: Infection Prevention and Control Program: RoP

• **Prevention** *(A Contemporary Fable)*
  - **Primary Prevention**: Hand Hygiene; Standard Precautions and PPE; Environmental Cleaning and Disinfection; Placement; Respiratory Hygiene and Etiquette; Safe Injection Practices; Soiled Linen

• **Key strategies**
  - Develop program based on **Annual Assessment** [Workplace Practice]
  - Educate all staff at hire, annually, and audit practice frequently [Care Practice]
  - Encourage all staff to provide feedback/support to one another [Leadership]
  - Provide resources required for safe practice [Environment]
  - Include family and visitors in all learnings and practices [Family and Community]
  - Include senior leadership in program support and direction [Leadership]
Infection Prevention and Control Program

System: Prevent, ID, Report, Investigate, Control: infections & communicable dx

Written Standards, Policies, and Procedures

Annual Review

Linen Management

System for Recording Incidents and Corrective Actions

Antibiotic Stewardship Program

I. P.
• Florence Nightingale

  o **The very first requirement in a hospital is that it should do the sick no harm.**

  o Let whoever is in charge keep this simple question in her head (not, how can I always do this right thing myself; but, how can I provide for this right thing to always be done?)
Infection Control (483.80(a) – Infection prevention and control program.

The facility must establish an infection prevention and control program (IPCP) that must include, at a minimum, the following elements: 1. A system for preventing, identifying, reporting, investigating, and controlling infections and communicable diseases for all residents, staff members, volunteers, visitors, and other individuals providing services under a contractual arrangement based upon the facility assessment conducted according to 483.70 (e) and following accepted national standards.
Key Points: Infection Control Facility Risk Assessment

- Identifies facility’s risk for acquiring or transmitting infections based on…
  - Geographic location, community data, and resident population
  - Facility data – infection surveillance numbers, auditing results, immunization compliance, etc.
  - Personnel feedback and observations
  - Facility specific document
  - Completed annually and whenever significant changes occur
  - Used to develop your infection prevention and control plan and QAPI activities

Source: Maine CDC
Process of Risk Assessment (leading to the IPC Plan)

- Description of Risks
- Statement of Goals
- Description of Strategies to Address Risks (Objectives)
- Description of how these Strategies will be Evaluated (Action Plan)
Levels of Prevention

Primary Prevention

Secondary Prevention

Tertiary Prevention
Infection Control Domains for Risk (Gap) Assessment

- Infection Control Program and Infrastructure
- Healthcare Personnel and Resident Safety
- Surveillance and Disease Reporting
- Hand Hygiene
- Personal Protective Equipment (PPE)
- Respiratory/Cough Etiquette
- Antibiotic Stewardship
- Injection Safety and Point of Care Testing
- Environmental Cleaning

Source: CDC (ICAR)
Collecting Data from Past Year

- Risk Assessment and Infection Control Plan from prior year
- ICAR Summary Report
- Monthly/Quarterly/Annual Infection Surveillance
- Staff Interviews
- Outbreak Reports/summaries
- Vaccination reports (resident/staff)
- Audit data
- State CDC Summary data
- QAPI reports/Projects
<table>
<thead>
<tr>
<th>EVENT</th>
<th>PROBABILITY OF OCCURRENCE</th>
<th>RISK LEVEL OF FAILURE</th>
<th>POTENTIAL CHANGE IN CARE</th>
<th>PREPAREDNESS</th>
<th>RISK LEVEL</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(How likely is this to occur)</td>
<td>(What would be the most likely)</td>
<td>(Will treatment/care be needed for resident/staff)</td>
<td>(Are processes in place and can they work)</td>
<td>(score of 8 or &gt; are considered highest priority for improvement efforts)</td>
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<tr>
<td>Score</td>
<td>High</td>
<td>Med</td>
<td>Low</td>
<td>None</td>
<td>Life Threatening</td>
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<td></td>
<td>3</td>
<td>2</td>
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<td>Risk of TB in the community</td>
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<td>Identify other risk factors in the community based on geographic location (coast, mountains etc.)</td>
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<td>External Factors (Community, Demographics)</td>
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<td>Internal Factors (Facility Related)</td>
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<td>Facility Associated Infection(s)</td>
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<td>Symptomatic urinary tract infection (SUTI)</td>
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<td>Influenza like illness</td>
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<td>Pneumonia</td>
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<td>LRTI (bronchitis)</td>
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<td>Cellulitis/soft tissue infection</td>
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<td>Scabies</td>
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<td>Gastroenteritis</td>
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<td>Norovirus</td>
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<td>Clostridium difficile</td>
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<td>Conjunctivitis</td>
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<td>Antibiotic Stewardship</td>
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<td>Lack of leadership support for antibiotic stewardship</td>
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<td>Inadequate written policies for stewardship</td>
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<td>Unable to determine antibiotic usage report from pharmacy</td>
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<td>Unable to retrieve report summarizing antibiotic resistance patterns (antibiogram)</td>
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<td>Exposure Related</td>
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<td>Lack of accessible hand sanitizer</td>
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<td>Non-compliance with hand hygiene</td>
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<td>No written plan to manage outbreaks</td>
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Assigning Risk Value

• Probability of Occurrence
  o How likely is this to occur?
  o Options: High (3) Medium (2) Low (1) None (0)
  o Issues to consider
    - Known risk
    - Historical data
    - Reports in literature

Source: Maine CDC
Assigning Risk Value

• Risk level of failure?
  o Options: Life threatening (3), Permanent harm (2), Temporary harm (1), None (0)
  o Issues to consider
    - Threat to life and/or health
    - Disruption of service
    - Loss of function
    - Financial impact
    - Legal issues
    - Regulatory issues

Source: Maine CDC
Assigning Risk Value

• Potential change in care?
  o Will treatment/care be needed for resident/staff?
  o Options: High (3), Medium (2), Low (1), None (0)
  o Issues to consider…
    - Potential for disease transmission
Assigning Risk Value

• Preparedness
  o Are processes in place and can they work?
  o Options: Poor (3), Fair (2), Good (1)
  o Issues to consider
    - Status of current plan
    - Training status
    - Auditing status
    - Availability of backup systems
    - Community/public health resources

Source: Maine CDC
Calculating Risk Score

- Multiply event categories to determine risk level
- Risk level scores $\geq 8$ highest priority
- Determine threshold value for when action is needed
- Determine priority areas based on group discussion and risk-level result

Risk Level = Probability of Occurrence + Risk Level of Failure + Potential Change in Care + Preparedness

Source: Maine CDC
Infection Prevention Progress Report

- **Priority:** Based on Risk Assessment
- **Goal:** Address Priority
- **Objective:** What needs to happen to achieve goal?
- **Strategies:** How will your facility meet the goal?
- **Evaluation:** What will your facility do to evaluate progress toward objective?
- **Progress/Analysis:** How is your facility doing? Next steps?
Primary Goal: Prevention of Resident Suffering from HAI

“Clean Care is Safer Care” is not a choice but a basic right. Clean hands prevent patient suffering and save lives.

Professor Didier Pittet, Director, Infection Control Programme
University of Geneva Hospitals and Faculty of Medicine, Switzerland
Lead, First Global Patient Safety Challenge, WHO Patient Safety
• **Competency** is a **measurable** pattern of knowledge, skills, attitudes, and other characteristics that an individual needs to perform work roles or occupational functions successfully.

• **Knowledge, skills, and ability to successfully make real world application.**
Learning

Knowledge
- Facts/Concepts

Skills
- Abilities

Attitudes
- Feelings
• Knowledge re: Efficacy
• Knowledge: Indications and Technique
• Technique with Soap and Water
  Duration of the entire procedure: 40-60 seconds
• Technique with Alcohol-Based Formulation
  Duration of the entire procedure: 20-30 seconds

Are you observing all opportunities?
Encourage Feedback and Support

- How are you providing feedback on performance?
- How often do you evaluate performance?
- How are staff members engaged in providing one another feedback and support? (TeamSTEPPS opportunity)

- Are gloves being worn when they do not need to be? (e.g. feeding a resident)
Provide Resources

- Are staff involved in decision making regarding product selection?
- Do staff provide feedback regarding access to supplies?
- Do staff help in the process of generating reminders? (i.e. posters)
The Five Components of the WHO multimodal hand hygiene improvement strategy

1a. System change – alcohol-based handrub at point of care

1b. System change – access to safe, continuous water supply, soap and towels

2. Training and education

3. Evaluation and feedback

4. Reminders in the workplace

5. Institutional safety climate
Include Family and Visitors in All Learnings

- Encourage partnerships between patients, their families, and HCWs to promote hand hygiene in health-care settings

(WHO Guidelines)
Leadership Support and Engagement in Program Direction

- Is the organization’s commitment to Hand Hygiene Program made visible?
- Do staff have an opportunity to voice challenges with deploying best practices and are these addressed?
- Are there goals to achieve along with public acknowledgement?
Key Reference

- A Unit Guide to Infection Prevention for Long-Term Care Staff. AHRQ Publication No. 16(17)-0003-4-EF, March 2017.
Contact Information

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