Infection Control Assessment and Response (ICAR) in Long-term Care

Carol Genese, MBA
ICAR Infection Preventionist
Communicable Disease Service
New Jersey Department of Health
Agenda

• ICAR Introduction
• ICAR Findings LTC
• ICAR Education & Resources
• ICAR Webinars
• ICAR Future Plans
Attention to Basic Infection Prevention Must Extend Across the Entire Healthcare Continuum

e.g., Dialysis, ASC, Endoscopy, Doctor/Dental Office...
Facilities work together to protect patients.

Common Approach (Not enough)
- Patients can be transferred back and forth from facilities for treatment without all the communication and necessary infection control actions in place.

Independent Efforts (Still not enough)
- Some facilities work independently to enhance infection control but are not often alerted to antibiotic-resistant or C. difficile germs coming from other facilities or outbreaks in the area.
- Lack of shared information from other facilities means that necessary infection control actions are not always taken and germs are spread to other patients.

Coordinated Approach (Needed)
- Public health departments track and alert health care facilities to antibiotic-resistant or C. difficile germs coming from other facilities and outbreaks in the area.
- Facilities and public health authorities share information and implement shared infection control actions to stop spread of germs from facility to facility.
How common are these breaches?

- Anonymous survey of 5,500 US HCWs, primarily RNs
- 1% “sometimes or always” reused a syringe on a 2nd patient
- 1% “sometimes or always” reused a multi-dose vial after accessing with a reused syringe
- 6% use single dose/single use vial for more than one patient

Pugliese, et al 2010. AJIC.
Available at: http://www.cdc.gov/injectionsafety or http://www.ajicjournal.org/article/PIIS0196655310008539/abstract
Why are there Lapses in **BASIC** Infection Prevention Practices?

- Lack of awareness
- Poor/insufficient training
- Economics
- Lax or non-existent policies
### Ebola hits the U.S.

#### Number of Ebola Cases and Deaths as of Sept. 30

<table>
<thead>
<tr>
<th>Country / State</th>
<th>Probable/ suspected</th>
<th>Confirmed</th>
<th>Total of confirmed and probable/suspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guinea</td>
<td>207</td>
<td>650</td>
<td>710 deaths</td>
</tr>
<tr>
<td></td>
<td>175</td>
<td>635</td>
<td>1,157 cases</td>
</tr>
<tr>
<td>Liberia</td>
<td>2,769</td>
<td>927</td>
<td>1,998 deaths</td>
</tr>
<tr>
<td></td>
<td>1,108</td>
<td>890</td>
<td>3,696 cases</td>
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<tr>
<td>Sierra Leone</td>
<td>228</td>
<td>2,076</td>
<td>522 deaths</td>
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<tr>
<td></td>
<td>48</td>
<td>574</td>
<td>2,304 cases</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1</td>
<td>19</td>
<td>6 deaths</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>7</td>
<td>20 cases</td>
</tr>
<tr>
<td>Congo</td>
<td>40</td>
<td>30</td>
<td>42 deaths</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>70 cases</td>
</tr>
<tr>
<td>Senegal</td>
<td>0</td>
<td>1</td>
<td>1 case</td>
</tr>
<tr>
<td>U.S.A. - Texas</td>
<td>0</td>
<td>1</td>
<td>1 case</td>
</tr>
</tbody>
</table>

#### Map of Ebola in the U.S.

- **Confirmed cases of Ebola**: Looked for in 230 cities and towns in 49 states.
- **Level 4 Biocontainment facilities**: Located in 20 cities, including Atlanta, Boston, Dallas, and New York City.
- **Airports screening for Ebola**: Located in 30 international airports.

**Graphic Staff**: World Health Organization

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ICAR Goals

• Assessments
  • Request prior self assessment
• Identify/share best practices
  • Steal Shamelessly & Share Selflessly
• Facilitate discussions
• Identify & help mitigate gaps
• Bolster outbreak response/reporting
• Establish relationships

Infection Prevention Has No Walls!
ICAR Team

• Core team
  – 0.5 FTE IP Carol Genese, MBA
  – 1 FTE IP Jessica Felix, BSN, RN, CIC
  – 1 FTE Epidemiologist Rini Jose, MPH
  – 0.5 FTE IP Bridget Farrell, RN, CIC, CPHQ

• ICAR Support
  – Rebecca Greeley, Infectious Disease Team Lead
  – Jason Mehr, HAI Coordinator
  – Laura Taylor, Health Educator
  – Patty Barrett, Antimicrobial Resistance Coordinator
  – Local Health Department Representation
  – Subject Matter Experts within NJDOH
Assessments are

• Non-regulatory
• Consultative
• Collaborative
• Less than one day
• FREE

• A platform for sharing **evidence-based resources**
• Summarized
• Followed-up with a phone call (6 months)
• Followed-up with notifications/outreach

NOT
Healthcare Associated Infections (HAIs)

About ICAR
The New Jersey Department of Health, Communicable Disease Service (CDS) was awarded funds by the U.S. Centers for Disease Control and Prevention (CDC) as part of a three-year nationwide program to reduce healthcare-associated infections (HAIs). With this cooperative agreement, CDS established the Infection Control Assessment and Response (ICAR) team to assist healthcare facilities to reduce the number of HAIs by assessing their infection prevention programs, providing educational resources, and sharing best practices.

The ICAR team is comprised of epidemiologists and infection preventionists specializing in the prevention of HAIs. This team will assess a variety of patient care facilities including acute care, long-term care, hemodialysis, and other outpatient settings.

ICAR Assessments
The ICAR team is currently seeking HCFs of all types to participate in a non-regulatory assessment of their infection prevention program and practices. The ICAR team will not share individual facility information.

Related Links
- Antimicrobial Resistance
- Injection Safety

ICAR Video

On behalf of the New Jersey Department of Health
Infection Control Assessment and Response Team

Awarded to

FACILITY NAME

In recognition of
Their valuable collaboration in the prevention of healthcare-associated infections.

October 10, 2017

Financial support for this project is provided by the Centers for Disease Control and Prevention (CDC).

http://www.state.nj.us/health/cd/topics/hai.shtml
## Assessments

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>EVD Hosp.</th>
<th>Other Hosp</th>
<th>LTC</th>
<th>Dialysis</th>
<th>OP Settings</th>
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<tr>
<td>Pre-hosp. Prep.(EMS, ED)</td>
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<td></td>
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<tr>
<td>Staffing pt. care team</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transport to RX area</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Patient Placement</td>
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<tr>
<td>Monitoring Exposures</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Lab Safety</td>
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<td></td>
<td></td>
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<tr>
<td>Management of Waste</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of Deceased</td>
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<td></td>
<td></td>
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<td>Communications</td>
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<td>Special Populations</td>
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</table>
## Assessments

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>EVD Hosp</th>
<th>Other Hosp</th>
<th>LTC</th>
<th>Dialysis</th>
<th>OP Settings</th>
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<td>CAUTI/CLABSI/VAE/SSI</td>
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<tr>
<td>Injection Safety</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td>CDI</td>
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<td>X</td>
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<td>HCW (&amp; resident) Safety</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<td>Antibiotic Stewardship</td>
<td>X</td>
<td>X</td>
<td>[ ~X</td>
<td></td>
<td></td>
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<tr>
<td>Point of Care Testing</td>
<td>X</td>
<td>X</td>
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<td></td>
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<td>Training &amp; Competence</td>
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<td>Sterilization of Reusable Devices</td>
<td></td>
<td></td>
<td></td>
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<td>X</td>
</tr>
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</table>
| High Level Disinfection of Reusable Devices  |          |            |     |          | X           | (including dialyzers)
<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
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<tbody>
<tr>
<td>Central East</td>
<td>2.6 million</td>
</tr>
<tr>
<td>North East</td>
<td>2.4 million</td>
</tr>
<tr>
<td>South</td>
<td>1.8 million</td>
</tr>
<tr>
<td>North West</td>
<td>1.3 million</td>
</tr>
<tr>
<td>Central West</td>
<td>0.8 million</td>
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</table>

* SOURCE: Five Year 2014 American Community Survey
**NJDOH Preparedness Regions by SNF Beds***

<table>
<thead>
<tr>
<th>Region</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central East</td>
<td>13,496</td>
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<tr>
<td>North East</td>
<td>10,459</td>
</tr>
<tr>
<td>South</td>
<td>10,072</td>
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<tr>
<td>North West</td>
<td>6,625</td>
</tr>
<tr>
<td>Central West</td>
<td>4,860</td>
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</table>

*SOURCE: 2010 Census Summary File 1
Long-term Care ICAR Tool: Percent Adherence (%) by Domain

- Percent "No"
- Percent "Yes"
Long-term Care ICAR Tool: Percent Adherence (%) by Domain

- Percent "Yes"
- Percent "No"

Domain Adherence (%)

Long-term Care Domains
Long-term Care ICAR Tool: Antibiotic Stewardship Percent Adherence (%)
Long-term Care ICAR Tool: Antibiotic Stewardship Percent Adherence (%)

Antibiotic Stewardship Domain Questions

- Leadership support?
- Individual(s) accountable?
- Antibiotic expertise?
- Written policies?
- Implemented practices?
- Report of abx. usage (last 6 mos.)?
- Report of abx. resistance (last 24 mos.)?
- Prescriber feedback?
- Training for nursing staff?
- Training for prescribers?

Percent "No"  Percent "Yes"
Long-term Care ICAR Tool: Personal Protective Equipment Percent Adherence (%)

- Policy on std. precautions?
- Policy on transmission-based...
- Training upon hire?
- Training annually?
- Auditing of adherence to PPE...
- Feedback to personnel?
- Supplies necessary?

Percent "No" vs. Percent "Yes"
Long-term Care ICAR Tool: Personal Protective Equipment Percent Adherence (%)
Long-term Care ICAR Tool: Hand Hygiene Percent Adherence (%)

- Policy promotes alcohol-based hand rub?
- Training upon hire?
- Training annually?
- Routine auditing?
- Feedback to personnel?
- Supplies necessary?

Hand Hygiene Domain Questions
Long-term Care ICAR Tool: Hand Hygiene Percent Adherence (%)
What happens after assessments?

• Maintain relationship
  • Updates & notifications
  • Glo-Germ™ tracking form
• Written Summary & Phone Call
  • Document findings
  • Includes links to focused resources
ICAR Education in Long-term Care

Jessica Felix, BSN, RN, CIC
ICAR Infection Preventionist
Communicable Disease Service
New Jersey Department of Health
Competency Based Training

- CDC definitions
  - Healthcare Personnel (HCP) Infection Prevention (IP) Competency
  - HCP IP Competency-Based Training
  - Competency Assessment
  - Audit
  - Feedback

Glo-germ™ Trainings

- 787 staff trained
  - Emergency Medical Technicians
  - Nutritionist
  - Dietary
  - Environmental Services
  - Nursing
  - Therapy
  - Students
  - Clerical
- Environmental cleaning
- Hand hygiene

Glo Germ™: How To

Glo Germ Handwashing Training

1. Shake the bottle of Glo Germ well and place a small amount, about the size of a nickel, into the palm of one hand and spread over both hands completely as if applying hand lotion. Be sure to cover hands completely, particularly under nails, around cuticles and between fingers.

2. Place hands under UV light to view “glowing germs” that exist before hand washing. Demonstration works best in a darkened room.

3. Perform the CDC-recommended hand wash using soap and water. The amount of effort required to remove the simulated germs is equal to that of removing most bacteria.

4. Again, place hands under UV light, paying special attention to thumbs, areas around nails and between fingers. The UV light reveals the remaining “germs” as proof of improper hand washing.

Glo Germ Environmental Cleaning Training

1. Apply Glo Germ to various areas in the patient care environment.

2. Perform routine surface cleaning and disinfection.

3. Pass the UV light over the surfaces; the remaining traces of Glo Germ will glow on the areas that weren’t thoroughly or appropriately cleaned (e.g., oversight or transfer from one area to another). When checking restroom areas for cleanliness, UV light may be used for the detection of urine without using Glo Germ material.

What is Glo-germ™?

- Fluorescent marker
- Simulates germs
- Luminesce under black light
Summary Reports

- Covers 9 domains
  - IC Program and Infrastructure
  - HCP and Resident Safety
  - Surveillance and Disease Reporting
  - Hand Hygiene
  - PPE
  - Respiratory/Cough Etiquette
  - Antibiotic Stewardship
  - Injection Safety and POC Testing
  - Environmental Cleaning
HAI Conference

- Initiatives against AR/ Antibiotic stewardship
- Investigations of HAI/IC breaches
- ICAR
- Emerging diseases and PUI
- PPE: Tips and lessons learned
Sustainable Education

- Webinars
- Readily available
- Online access
- “Short and sweet”
- Shareable
ICAR Video Leader Guide

- Stimulate discussion
- Self-evaluation
- Engaging
- Q&A
- Additional resources

The three Infection Control Assessment and Response (ICAR) videos were created to start a dialogue between the ICAR team and healthcare/direct patient care professionals in various settings. The videos cover topics included on ICAR assessments that are recognized as important to patient safety to decrease disease transmission, but are not always followed in practice. Glucometer use, medication preparation, and injection safety are areas of nursing practice that are separate, but have significant overlap.

This Leader Guide was created to stimulate discussion among healthcare staff. These three scenarios were developed to assist with identifying poor infection prevention practices and to foster a better understanding of why infection prevention is a key element in reducing disease transmission. We hope that facility “Leaders” (e.g., those responsible for monitoring staff competencies) will find this guide helpful. Please view the videos on the New Jersey State Government YouTube page and then refer to this guide to lead discussion with staff.

http://www.nj.gov/health/cd/topics/hai.shtml
ICAR Video #1: Glucometer

• Safe Glucometer Use
  – Demonstrates poor practice vs. best practice
  – Highlights risks associated with poor practice
  – Hand hygiene technique
  – Cleaning and disinfection of glucometer
ICAR Video #2: Med Prep

- Medication Preparation Areas
  - Is it clean?
  - Who is responsible for cleaning and when?
  - Cleaning vs. disinfection
  - Additional items in the area
ICAR Video #3: Injection Safety

- Injection Safety
  - Disinfecting septum of medication vials
  - One needle, one syringe, one time
  - Single-dose vial vs. Multiple-dose vials
INFECTION CONTROL ASSESSMENT RESPONSE (ICAR)
SAFE GLUCOMETER USE

NJDOH ICAR VIDEO #1
What was wrong?

• Lack of hand hygiene
• No cleaning and disinfection of glucometer/equipment
• Setting equipment/glucometer down in the immediate patient/resident area (e.g., bed, table, tray) without a barrier.
• Entering with gloved hands
Glucometer Cleaning and Disinfection

- Glucometer should be cleaned and disinfected after using it
- If unsure, clean and disinfect prior to use
- Know facility policy
• Ensure the appropriate product is being used
  – Manufacturer's provide validated disinfection products
  – “Other EPA registered wipes may be used for disinfecting”
    • [https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants](https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants)

• OSHA’s Bloodborne Pathogen Standard
  – “OSHA's current stance is that EPA-registered disinfectants for HIV and HBV meet the requirement in the standard and are "appropriate" disinfectants to clean contaminated surfaces, provided such surfaces have not become contaminated with agent(s) or volumes of or concentrations of agent(s) for which higher level disinfection is recommended.” [https://www.osha.gov/html/faq-bbp.html](https://www.osha.gov/html/faq-bbp.html)
Glucometer Cleaning and Disinfection Cont’d

- Appropriate dwell time
- Ensure the surface remains wet for specified contact time to achieve disinfection

Webinar: Antibiotic Stewardship in Long-Term Care

- ICAR data
- CMS CoP
- Antibiotic resistance and stewardship programs
- Three facilities discuss:
  - Instituting program
  - How to’s
FUTURE PLANS: SUSTAINABLE EDUCATION
Self Assessment

• Ease of use
• Definitions
• Clarification
• All inclusive summary report
Guidance and Recommended Resources for Infection Prevention Partners

- Background
- Introduction to IP
- Networking
- Information technology
- Data and surveillance
- Infectious/communicable diseases
- HAI prevention
- Policies & procedures
- Resources
Webinar Series

- Setting specific
- Bridging the gap
- ICAR findings
- Survey tags
- Gap mitigation
Thank you!

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