

# Best Practices for CRE and other MDROs in Acute and Long-Term Care Settings

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## **Review of Key CRE (MDRO) Interventions**

- ❑ Contact Precautions**
- ❑ Patient and staff cohorting**
- ❑ Laboratory notification**
- ❑ CRE screening and surveillance**
- ❑ Inter-facility communications**

# Who Should be Placed on Contact Precautions?

- ❑ **In acute care: CP for patients colonized or infected with CRE**
- ❑ **In long-term care:**
  - Apply CP to residents with CRE who are at higher risk for transmission
    - Dependent upon HCP for their activities of daily living
    - Ventilator-dependent
    - Incontinent of stool that cannot be contained
    - Wounds with drainage that is difficult to control
  - For other residents (more functional), requirement for Contact Precautions might be relaxed
    - Emphasize hand hygiene, keep wounds covered especially if going to common areas
  - Standard Precautions should still be observed

# Transport of Patients on Contact Precautions

## ❑ Suggested steps:

- Place barrier (e.g., sheet) between patient and stretcher/wheelchair
- Fully cover patient prior to transport (i.e., by a sheet)
- Remove PPE (i.e., gowns/gloves) and perform hand hygiene prior to exiting patient room
- If contact with patient during transport anticipated, don new gloves to transport the patient
- Don new PPE at destination to move patient
- Clean/disinfect stretcher/wheelchair after transport

## **PPE Use During Physical Therapy**

- ❑ **Use of PPE during physical therapy for patient on Contact Precautions presents a number of challenges**
  - No definitive answer
- ❑ **Some options include:**
  - Do most physical therapy activities in patient's room if possible
  - If doing physical therapy in hallways: HCP can wear gloves and be proactive about hand hygiene for themselves and the patient
  - Designate a room for all physical therapy activities: transport patients on CP to the room, then don PPE to perform physical therapy in the room

## Patient and Staff Cohorting

- ❑ **Cohort CRE patients to specific areas (e.g., units or wards) with dedicated staff**
  - Does not mean 1:1 nurse-to-patient staffing ratio
- ❑ **Use of medical equipment**
  - Use disposable equipment for patients whenever possible
    - Stethoscope, blood pressure cuff
  - Dedicate reusable equipment to the ward/unit if possible
  - Any shared equipment should be cleaned/disinfected between patient use according to manufacturer's instructions
    - Includes pulse oximeters, glucometers, X-ray and ultrasound machines
    - Keep contaminated equipment in designated area if cannot be cleaned right away (e.g., dirty utility room)

# Identifying CRE Patients on Readmission

- ❑ **CRE carriers can be colonized for long periods**
  - Source of transmission to others
- ❑ **Possible approaches:**
  - Work with IT to create an alert or pop-up window when patient's name is entered in the computer system
  - Flag the cover of the paper chart

# Laboratory Notification of Positive CRE Cultures

## ❑ Challenges:

- In most long-term care and some acute-care: testing may be done off-site, no clear protocol for communicating positive results
- Delay in communicating positive results to appropriate staff
- Delay in testing of CRE isolate to see if carbapenemase-producing

## ❑ Suggestions:

- Establish protocol for lab personnel to immediately notify staff (e.g., call nursing station, notify IP)
- Any Enterobacteriaceae nonsusceptible to carbapenem should be considered CRE and placed on CP (as appropriate)



# CRE Screening and Surveillance

- ❑ **Important for detecting unrecognized colonization**
  - Clinical cultures identify only a fraction of patients with CRE
- ❑ **Screening epi-linked contacts**
  - Mainly outbreak situations: look for unrecognized transmission
  - Primarily roommates but may include patients who shared same HCW
- ❑ **Active surveillance cultures**
  - Systematic screening of patients not known to be epi-linked to CRE patients
    - Target “high-risk” patients based on where they are being admitted to, or what risk factors they have

# When and Whom to Screen for CRE?

## ❑ Several challenges and factors to consider:

- Delay in availability of positive test result
- Index patient transferred to many units/wards prior to positive test result
- Acuity of care of index patient may impact how much screening is needed
- No one approach fits every facility
  - Mechanism of carbapenem resistance
  - Low vs high prevalence facility/region
  - Acute vs long-term care settings
    - Acuity of patient varies
    - Finding laboratories to do screening cultures

# Active Surveillance Cultures

## ❑ Which patients to target?

- Patients admitted to high-risk units (e.g., ICU)?
- Patients with certain risk factors?
  - Admitted from certain LTC settings or facilities with a CRE outbreak?
  - Presence of invasive devices and/or draining wounds?

## ❑ When and how frequently to perform active surveillance cultures?

- Only at admission?
- Periodically throughout patient's stay?
- At discharge?

# Inter-Facility Communications

## ❑ Challenges of communicating patient's CRE status

- Facilities afraid to disclose status because of fear that patient transfer may be denied
- Emergent transfer – not enough time to communicate information
- No identified contact at accepting facility to relay information
- How to communicate positive lab results after patient has been transferred

## ❑ Possible approaches

- Develop standardized patient transfer form among all facilities
- Establish facility policy for a communications protocol as part of patient transfer process
- Develop regional / state CRE registry

*Any Questions?*