

## Carbapenem-Resistant Enterobacteriaceae (CRE) Prevention Facility Self-Assessment and Process Improvement Summary

| Facility name                               |  |
|---|--|
| Name of person conducting self-assessment   |  |
| Date of self- assessment                    |  |
| Date of previous assessment (if applicable) |  |

The following self-assessment tool is composed of carbapenem-resistant Enterobacteriaceae (CRE) prevention strategy checklists, adherence monitoring tools, and a process improvement summary.

## SECTION 1: CRE PREVENTION AND CONTROL STRATEGIES

**Instructions:** Indicate if each strategy is part of your facility's practice. Conduct adherence monitoring for strategies 1, 2, and 9 using the attached monitoring tools and complete the table. Observe a minimum of ten hand hygiene opportunities, two environmental services staff, and three patients on contact precautions.

| CRE I          | Prevention Strategies   | Facility practice? |  |  |  |  |  |
|----------------|---|--------------------|--|--|--|--|--|
| Imple          | Implement prevention strategies regardless of whether or not there are CRE-positive patients.   |                    |  |  |  |  |  |
| 1              | Hand hygiene before, during, and after care of patient  | □Yes □No           |  |  |  |  |  |
|                | Hand Hygiene Adherence  | % Adherence:       |  |  |  |  |  |
| 2              | □Yes □No  |                    |  |  |  |  |  |
|                | Environmental Cleaning and Disinfection Adherence   | % Adherence:       |  |  |  |  |  |
| 3              | Education of healthcare personnel including environmental services staff  | □Yes □No           |  |  |  |  |  |
| 4              | Timely notification from the laboratory of pertinent clinical and infection prevention staff whenever CRE or other highly resistant multidrug-resistant organism (MDRO) is identified | □Yes □No           |  |  |  |  |  |
| 5              | Regular review of devices for indication and discontinuation when no longer needed  | □Yes □No           |  |  |  |  |  |
| 6              | Antimicrobial stewardship program implementation  | □Yes □No           |  |  |  |  |  |
| 7              | CRE screening upon admission for patients determined to be at high risk of colonization with CRE or highly resistant MDROs (Examples, rectal or fecal swab testing)                   | □Yes □No           |  |  |  |  |  |
| 8              | Chlorhexidine bathing of patients at high risk for colonization or transmission of CRE or other highly resistant MDROs  | □Yes □No           |  |  |  |  |  |
| CRE            | Control Strategies  | Facility practice? |  |  |  |  |  |
| Imple<br>patie | ement control strategies in addition to prevention strategies when there are CRE-positive   |                    |  |  |  |  |  |
| 9              | Contact precautions for patients with CRE   | □Yes □No           |  |  |  |  |  |
|                | Contact Precautions for patients with CRE   | % Adherence:       |  |  |  |  |  |
| 10             | For skilled nursing facilities<br>Transmission risk assessment and Enhanced Standard precautions as appropriate for<br>patients with CRE  | □Yes □No           |  |  |  |  |  |
| 11             | Screening of roommates or other patients contacts for CRE colonization when a patient is newly identified with CRE  | □Yes □No           |  |  |  |  |  |
| 12             | Use of dedicated primary care-giving staff for patient(s) infected/colonized with CRE   | □Yes □No           |  |  |  |  |  |
| 13             | Notification of a patient's CRE status when patients colonized or infected with CRE are transferred between facilities  | □Yes □No           |  |  |  |  |  |

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## SECTION 2: ADDITIONAL CRE PREVENTION AND CONTROL PRACTICES

**Instructions:** Select the most appropriate response based on what is currently in place at your facility. When the question refers to CRE or similar MDROs, this includes other highly drug-resistant pathogens such as multidrug-resistant *Acinetobacter* spp. or *Pseudomonas* spp.

|     |  | DECDONCE                     |
|-----|--|------------------------------|
|     | ESTION   | RESPONSE                     |
| 1.  | Is leadership engaged and supportive of efforts to address CRE or similar MDROs?   | □Yes □No                     |
| 2.  | Is preventing/reducing CRE or similar MDROs an organizational goal?  | □Yes □No                     |
| 3.  |  |                              |
|     | <ul> <li>Carbapenemase testing to determine if the CRE is carbapenemase-producing<br/>(examples, KPC, NDM) or non-carbapenemase producing?</li> </ul>  | □Yes □No                     |
|     | b. CRE screening/colonization testing (usually via rectal swabs) of roommates or other patient contacts?   | □Yes □No                     |
| 4.  | Are staff regularly updated or educated about CRE processes, policies, and protocols?  | □Yes □No                     |
| 5.  | If your facility is transferring a patient with CRE or similar MDRO, do you have a protocol for<br>the discharge planner (or infection preventionist or director of nursing) to contact the<br>receiving facility directly (example, by telephone) to ensure the facility is aware of the<br>patient's CRE or MDRO status, and to ensure appropriate infection control precautions are<br>instituted or continued? | □Yes □No                     |
| 6.  | Do you work directly with healthcare facilities in your referral network to address issues like CRE or similar MDRO?   | □Yes □No<br>Please describe: |
|     | For example, do you routinely meet with hospitals you commonly refer patients to discuss issues like interfacility communication and caring for patients with CRE or similar MDRO?   |                              |
| 7.  | Do you work closely with your local health department (LHD) to address issues like MDRO?   | □Yes □No                     |
|     | For example, do you consult with your LHD when a patient with CRE or similar MDRO is identified at your facility?  | Please describe:             |
| 8.  | Does your facility have written policy/procedures for responding to newly identified CRE   | □Yes □No                     |
|     | cases in your facility?  | Please describe:             |
|     | For example, do you receive timely alerts from your lab when a CRE or similar MDRO is identified? Do you have clear policies on when to place patients in contact precautions, screen contacts, dedicate equipment, dedicate staff, etc.?  |                              |
| 9.  | Is your facility prepared to care for patients with CRE? Are there significant ongoing barriers you can identify?  | □Yes □No<br>Please describe: |
|     | For example, does your staff have the education and resources they need to adequately respond and care for patients with CRE? If a CRE case were identified in a new admission tomorrow, would your facility have the appropriate policies and procedures in place to care for this patient? What if CRE were identified in a patient who had been at your facility for more than a week?                          |                              |
| Add | itional Skilled Nursing Facility Question  |                              |
| 10. | Does your facility have written policy/procedures for evaluating new admissions of patients with CRE to determine appropriate infection control measures?  | □Yes □No<br>Please describe: |
|     | For example, if a patient with CRE is transferred to your facility, how would the information be communicated to you and your staff? Which staff member is responsible for reviewing this information and determining the appropriate precautions?   |                              |

| Additional Hospital Questions  |          |
|--|----------|
| 11. Does your hospital have a procedure for identifying patients at high risk of colonization with CRE upon admission, including:  |          |
| a. Patients with a history of receiving healthcare outside of the United States?   | □Yes □No |
| b. Patients with a recent stay (for example, within 6 months) at a Long Term Acute Care<br>(LTAC) hospital?  | □Yes □No |
| 12. Does your hospital have a procedure in place to flag the records of patients with<br>known history of CRE infection/colonization so they can be placed in Contact<br>precautions on readmission? | □Yes □No |

## SECTION 3: CRE PREVENTION PROCESS IMPROVEMENT SUMMARY

**Instructions:** Pick one or more recommendations provided during your facility's baseline prevention assessment, and list them in the left column. If your facility did not participate in a baseline prevention assessment, address gaps identified in Sections 1 and 2 above. Use the right column to describe any process change resulting from the suggested recommendations or prevention strategy gaps. Describe your facility plan or actions taken to improve infection prevention practices, including (projected) implementation dates. An example is provided. Use additional pages as needed.

| Identify gap to target.                         |   | Describe plans or actions taken.  |
|---|---|---|
| <b>Example:</b> Hand hygiene adherence was 46%. |   | <b>Example:</b> Posted hand washing checklist at each sink in Nov 2018.                         |
| Utilize peer to peer monitoring.                |   | Implemented "peer-to-peer" hand hygiene monitoring program to improve                           |
|   |   | compliance. Hand hygiene is improving slowly among staff; struggling with visitor hand hygiene. |
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Assessment completed by: Date: Unit:

Regular monitoring with feedback of results to staff can improve hand hygiene adherence. Use this tool to identify gaps and opportunities for improvement. Monitoring may be performed in any type of patient care location.

**Instructions:** Observe at least 10 hand hygiene (HH) opportunities per unit. Observe a staff member and record his/her discipline. Check the type of hand hygiene opportunity you are observing. Indicate if HH was performed. Record the total number of successful HH opportunities and calculate adherence.

| HH<br>Opportunity   | Discipline | What ty                               | Was HH performed for<br>opportunity observed? ✓ or Ø                        |   |                   |  |  |
|---|------------|---------------------------------------|---|---|-------------------|--|--|
| Example   | Ν          | □ before care/entering roon<br>*Remem |   | $\Box$ after body fluids $\Box$ ould be performed before an | ~                 |  |  |
| HH1.  |            | □ before care/entering roon           | n 🗆 before task   | □ after body fluids □ a                                     | after care        | upon leaving room  |  |
| HH2.  |            | □ before care/entering roon           | n □ before task   | $\Box$ after body fluids $\Box$ a                           | after care        | upon leaving room  |  |
| НН3.  |            | □ before care/entering roon           | n □ before task   | $\Box$ after body fluids $\Box$ a                           | after care        | □ upon leaving room  |  |
| HH4.  |            | □ before care/entering roon           | n □ before task   | $\Box$ after body fluids $\Box$ a                           | after care        | □ upon leaving room  |  |
| HH5.  | HH5.       |                                       |   | $\Box$ after body fluids $\Box$ a                           | after care        | upon leaving room  |  |
| HH6.  | HH6.       |                                       | n 🗆 before task   | □ after body fluids □ a                                     | upon leaving room |  |  |
| HH7.  |            | □ before care/entering roon           | n 🗆 before task   | □ after body fluids □ a                                     | after care        | upon leaving room  |  |
| HH8.  |            | □ before care/entering roon           | n 🗆 before task   | $\Box$ after body fluids $\Box$ a                           |                   |  |  |
| НН9.  |            | □ before care/entering roon           | n 🗆 before task   | $\Box$ after body fluids $\Box$ a                           | after care        | upon leaving room  |  |
| HH10.   |            | □ before care/entering roon           | n 🗆 before task   | $\Box$ after body fluids $\Box$ a                           | after care        | upon leaving room  |  |
| Disciplines:P = PhysicianCNA = Nurse AssistantRT = RespiratoryD = DietaryS = StudentN =NurseVIS = Visitor |            | y Therapist                           | VOL = Volunteer<br>W = Social Worker<br>OTH = Other, Specify<br>U = Unknown |   |                   | Opportunities:<br>• = Opportunity Successful<br>Ø = Opportunity Missed |  |
| For HH1-HH10:         Total # HH Successful ("# < "):   |            |                                       |   |   |                   | Adherence<br># HH Successful ÷ Total H                                 | :%<br>H Opportunities Observed x 100)<br>Version 2016 10 1 |

| HH<br>Opportunity   | Discipline  | What                           | 1 per line)            | Was HH performed for<br>opportunity observed? ✓ or<br>Ø                     |           |   |  |
|---|---|--------------------------------|------------------------|---|-----------|---|--|
| Example   | <i>mple</i> N Defore care/entering room* Defore task Dafter body fluids dafter care* D upon leaving room * <b>Remember</b> : Hand hygiene should be performed before <u>and</u> after glove use |                                |                        |   |           | ~   |  |
| HH11.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH12.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH13.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | □ after c | are 🛛 upon leaving room                       |  |
| HH14.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | □ after c | are 🛛 upon leaving room                       |  |
| HH15.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | □ after c | are 🛛 upon leaving room                       |  |
| HH16.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH17.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH18.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH19.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| HH20.   |   | □ before care/entering roc     | m 🗆 before task        | □ after body fluids   | 🗆 after c | are 🛛 upon leaving room                       |  |
| CNA = Nurse AssistantRT = Respiratory TherapistW = SD = DietaryS = StudentOTH |   |                                |                        | VOL = Volunteer<br>W = Social Worker<br>OTH = Other, Specify<br>U = Unknown | ,         |   | Opportunities:<br>✓ = Opportunity Successful<br>Ø = Opportunity Missed |
| For HH1-HH10  | :   |                                |                        |   |           |   |  |
| Total # HH Successful ("# < "):   |   |                                |                        |   |           | Adherence<br>(Total # HH Successful ÷ Total H | :%<br>H Opportunities Observed x 100)                                  |
| Instructions: O   | bserve a clinic   | al unit.                       |                        |   |           |   |  |
| Is successful hand hygiene possible?  |   |                                |                        |   |           | Yes/No; Con                                   | nments   |
| HHQ1. There i   | s visible and ea  | asy access to hand washing sir | nks or hand sanitizer  | where most needed.  |           |   |  |
| HHQ2. There is a sufficient supply of soap at hand washing stations.          |   |                                |                        |   |           |   |  |
| HHQ3. There i   | s a sufficient su   | upply of paper towels at hand  | washing stations.      |   |           |   |  |
| HHQ4. There i   | s sufficient sup  | ply of alcohol-based hand sar  | nitizer (e.g. no empty | y containers).  |           |   |  |



Regular monitoring with feedback of results to staff can maintain or improve adherence to environmental cleaning practices. Use this tool to identify gaps and opportunities for improvement. Monitoring may be performed in any type of patient care location.

**Instructions:** Observe at least two different environmental services (EVS) staff members. Observe each practice and check a box if adherent, Yes or No. In the column on the right, record the total number of "Yes" for adherent practices observed and the total number of observations ("Yes" + "No"). Calculate adherence percentage in the last row.

| Environmental Cleaning Practices   |  | EVS S        | taff 1 | EVS Staff 2 |      | EVS Staff 3 |   | Adherence by Task |       |            |
|--|--|--------------|--------|-------------|------|-------------|---|-------------------|-------|------------|
|  |  |              |        |             | LVJJ |             | LVJJ  |                   | # Yes | # Observed |
| ES1.   | The room is clean, dust free, and uncluttered.   |              | Yes    | No          | Yes  | No          | Yes   | No                |       |            |
| ES2.   | Detergent/disinfectant solution is mixed and stored a manufacturer's instructions.   | according to | Yes    | No          | Yes  | No          | Yes   | No                |       |            |
| ES3.   | Solution remains in wet contact with surfaces accord<br>manufacturer's instructions.   | ling to      | Yes    | No          | Yes  | No          | Yes   | No                |       |            |
| ES4.   | Cleaning process avoids contamination of solutions a<br>tools; a clean cloth is used in each patient area, and t<br>changed when visibly soiled.                                 | -            | Yes    | No          | Yes  | No          | ☐ Yes   | No                |       |            |
| ES5.   | Environmental Services staff use appropriate personal protective<br>equipment (e.g. Gowns and gloves are used for<br>patients/residents on contact precautions upon entry to the |              | Yes    | No          | Yes  | No          | Yes   | No                |       |            |
| ES6.   | <ul> <li>contact precautions room.)</li> <li>High-touch surfaces* are thoroughly cleaned and disinfected after each patient.</li> </ul>  |              |        | No          | Yes  | No          | ☐ Yes   | No                |       |            |
| *Some ex   | amples of high touch surfaces:   |              |        |             |      |             |   |                   |       |            |
| Bed rails Chair Room inner   |  |              | 0      |             |      |             | Toilet bedpan cleaner<br>In-room medical carts<br>In-room cabinets<br>In-room computers/keyboards |                   |       |            |
| # of Correct Practice Observed ("# Yes"): Total # Environmental Services Observations ("# Observed"): Adherence<br>(Up to 15 Total) (Total "# Yes" ÷ Total "# Observed (i.e. cell is blank), do not count in total # Observed. |  |              |        |             |      |             |   |                   |       |            |



Regular monitoring with feedback of results to staff can maintain or improve adherence to contact precautions practices. Use this tool to identify gaps and opportunities for improvement. Monitoring may be performed in any type of patient care location where patients are on contact precautions.

**Instructions:** Observe 3-4 patients/residents on contact precautions. Observe each practice and check a box if adherent, Yes or No. In the column on the right, record the total number of "Yes" for adherent practices observed and the total number of observations ("Yes" + "No"). Calculate adherence percentage in the last row.

| Contact Precautions Practices  |   | Contact Precautions |    | Contact Precautions |           | Contact Precautions |           | Contact Precautions |            | Adherence by Task |            |
|--|---|---------------------|----|---------------------|-----------|---------------------|-----------|---------------------|------------|-------------------|------------|
|  |   | Patient/Resident 1  |    | Patient/R           | esident 2 | Patient/R           | esident 3 | Patient/F           | Resident 4 | # Yes             | # Observed |
| CP1.   | Gloves and gowns are available and located near point of use.   | Yes                 | No | Yes                 | No        | Yes                 | No        | 🗌 Yes               | No         |                   |            |
| CP2.   | Signs indicating the patient/resident is on contact precautions are clear and visible.  | ☐ Yes               | No | Yes                 | No        | Yes                 | No        | ☐ Yes               | No         |                   |            |
| CP3.   | The patient/resident on contact precautions is<br>housed in single-room or cohorted based on a<br>clinical risk assessment.   | Yes                 | No | Yes                 | No        | Yes                 | No        | Yes                 | No         |                   |            |
| CP4.   | Hand hygiene is performed before entering the<br>patient/resident care environment.   | ☐ Yes               | No | Yes                 | No        | Yes                 | No        | ☐ Yes               | No         |                   |            |
| CP5.   | Gloves and gowns are donned before entering the patient/resident care environment.  | Yes                 | No | Yes                 | No        | Yes                 | No        | Yes                 | No         |                   |            |
| CP6.   | Gloves and gowns are removed and discarded, <b>and</b><br>hand hygiene is performed before leaving the<br>patient/resident care environment. <i>Soap &amp; water is</i><br><i>used if it is hospital policy or if the patient/resident has</i><br><i>C.difficile infection.</i>               | Yes                 | No | Yes                 | No        | Yes                 | No        | Yes                 | No         |                   |            |
| СР7.   | Dedicated or disposable noncritical patient-care<br>equipment (e.g. blood pressure cuffs) is used; if<br>dedicated/disposable equipment is unavailable,<br>then equipment is cleaned and disinfected prior to<br>use on another patient/resident according to<br>manufacturers' instructions. | Yes                 | No | Yes                 | No        | Yes                 | No        | Yes                 | No         |                   |            |
| # of Correct Practices Observed ("# Yes"): Total # Contact Precautions Observations ("# Observed"): Adherence% (Up to 28 total) (Total "# Yes" ÷ Total "# Observed" x 100) If practice could not be observed (i.e. cell is blank), do not count in total # Observed. |   |                     |    |                     |           |                     |           | •                   |            |                   |            |