

Attachment 4.

Change Bundle: To Prevent Healthcare Acquired Infections

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A healthcare improvement bundle is a proven approach that helps providers more reliably deliver the best possible care for residents/patients. A bundle is a structured way of improving the processes of care and resident/patient outcomes: a small, straightforward set of evidence-based practices – generally three to five – that, when performed collectively and reliably have been proven to improve outcomes (adapted from IHI.org). Examples of successful bundles include those used in hospitals to reduce CLABSI, catheter-associated urinary tract infections (CAUTI), Surgical Site Infection (SSI) and Ventilator-associated pneumonia (VAP).

The bundle of actions below represents the practices described by nursing homes participating in the National Nursing Home Quality Care Collaborative to prevent healthcare acquired infections. Nursing homes across the country, in collaboration with CMS, QIN-QIOs, long term care trade associations, professional organizations, state health departments, the Centers for Disease Control and Prevention (CDC), ombudsmen, and many other partners and stakeholders have been working over the past several years to improve care for persons residing in long-stay nursing homes. The actions described below are supported by the literature to help prevent healthcare acquired infections.

Six Point Bundle:

1. Promote hand hygiene

- a. Set clear expectations for hand hygiene practices for all staff.
- b. Provide visible reminders of when hand hygiene is needed.
 - When visibly soiled or contaminated
 - Before and after having direct contact with residents (for example, helping them to eat or with other daily needs)
 - After removing gloves
 - Before eating or handling food
 - After using restroom
- c. Make soap/waterless alcohol-based hand sanitizers readily available.
 - Look for ways to make these items readily available to staff given their workflow, for example, provide hand sanitizer bottles that staff can carry in their pockets
 - Identify and address any barriers that are preventing staff from washing their hands (for example, understaffing, overcrowding, if they are frequently carrying items and have no place to put them before washing their hands)
 - Recognize that residents may need assistance with washing their hands
 - Recognize that hand sanitizer can be drying, which can make skin more prone to infection; look for non-drying products and make lotions available
 - Provide staff hand hygiene education (describe activities that contaminate hands, the role that contaminated hands play in infection transmission, the morbidity and mortality associated with healthcare acquired infections, and how to appropriately wash hands) (resources available at <http://www.cdc.gov/handhygiene/index.html>)
- d. Provide education to residents, families and visitors on the importance of proper hand hygiene, for example, a fact sheet or poster.

- e. Provide staff ongoing coaching and performance feedback about hand hygiene.
- f. Conduct hand hygiene audits routinely.

2. Prevent transmission of infections by staff

- a. Set expectations for staff on adherence to Standard and Transmission Based Precautions that include contact precautions, droplet precautions, airborne precautions, and proper use of personal protective equipment.
- b. Provide regular mandatory staff education on infection prevention procedures.
- c. Stress that the use of gloves and other personal protective equipment does not replace hand washing.
- d. Provide adequate supplies for compliance with isolation precautions and have readily available outside of an isolation room.
- e. Appropriately assign residents to rooms to reduce exposure if private rooms are not available; cohort residents according to CDC guidelines (separate symptomatic and asymptomatic residents).
- f. Use single-use or dedicated resident care equipment when appropriate.
- g. Discourage staff from working when sick.

3. Prevent transmission of infections by all persons

- a. Have a process in place to communicate isolation precaution status to families and visitors, and assist them with complying with all necessary precautions.
- b. Implement a flu vaccination program for residents and staff.
- c. Ask families/visitors who are ill to not visit.

4. Establish and implement system-wide environmental cleaning policies

- a. Clean and disinfect resident rooms and resident care equipment using EPA-registered disinfectants.
 - Define routine cleaning procedures (for example, daily) and procedures for more intense cleaning (for example, monthly, on resident discharge, and change in isolation status)
- b. Follow standardized precautions for handling of soiled linen and waste materials.
- c. Dispose of infectious/biohazard waste according to OSHA Bloodborne Pathogen Standards and state/local regulations.
- d. Clean and disinfect re-usable patient care equipment (for example, glucometers) between residents.
- e. Have a defined process in place for handling supplies in the room after a resident is discharged or no longer in isolation.

5. Identify and treat infections appropriately.

- a. Practice antibiotic stewardship, including minimizing use of broad spectrum antibiotics and educating staff and families on the role of antibiotics.
- b. Follow evidence-based guidelines to obtain a UA/CS (urinalysis and culture and sensitivity) and other cultures; review these guidelines with your Medical Director.
- c. Isolate and contact the physician for a resident on (or recently on) antibiotics experiencing diarrhea.
- d. Track, monitor and analyze infection data, perform root cause analysis on outbreaks/rise in infection rates.

- e. Consider use of probiotics or yogurt (as tolerated) when using antibiotics (evidence is inconclusive on this).

6. Avoid indwelling catheter use unless appropriately indicated

- a. Ensure correct diagnoses for voiding problems such as stress, urge, and overflow incontinence or urinary retention.
- b. Create individualized toileting plans based on the cause of the voiding problem, these plans may include frequent toileting or identifying residents that cannot tolerate delay in toileting.
 - Ensure that residents are able to get to the bathroom on a regular basis, and when they need to, without delay
 - Prevent and treat constipation as this can make incontinence worse
- c. Try alternatives to indwelling catheters such as intermittent straight catheterization, condom catheters.
- d. Use a bladder scanner to assess for urinary retention.
- e. Obtain a urology consult to assess and diagnose the specific condition necessitating the need for catheter use and to recommend the appropriate course of treatment.
- f. Utilize two-person insertion of an indwelling catheter using sterile technique.
- g. Maintain a closed catheter system.
- h. Continually assess resident need for the urinary catheter and remove the catheter as soon as appropriate.
- i. Provide staff education on catheter associated urinary tract infection (CAUTI) and appropriate indications for catheter use.

Resource:

Centers for Disease Control and Prevention, healthcare associated infection prevention resources at tools:
http://www.cdc.gov/HAI/prevent/prevention_tools.html#lrc