RID'S CURRICULUM OF CARE:
STEPS TO ACHIEVE RID RECOGNITION
FOR LONG-TERM CARE FACILITIES

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CLEAN HANDS: THE ESSENTIAL FIRST STEP TO SAFE CARE

All caregivers need to meticulously follow the five moments of hand hygiene:

1. Before touching a patient
2. Before performing clean or aseptic procedures
3. After exposure to bodily fluids
4. After touching a patient
5. After touching the surroundings.

This last step is the most often neglected, and therefore vital to stress. If you clean your hands with alcohol-based sanitizer or soap and water, then put your hands on the bedrail or pull open a drawer, your hands are no longer adequately clean to actually examine or treat the patient.

Remember that gloves are not a substitute for hand hygiene. Pulling on gloves before cleaning hands simply contaminates the exterior of the gloves. ALWAYS perform hand hygiene before donning gloves.

Never wear the same gloves to care for more than one patient. Move from clean tasks to dirty ones while assisting a patient.
Germs can live under artificial fingernails and extensions. Therefore they should not be worn by personnel with direct care-giving duties. Bracelets and rings should also be avoided, because bacteria cling to them.

ENVIRONMENTAL CLEANING: THE KEY TO INFECTION PREVENTION

Meticulous hand hygiene is important, but as long as surfaces in patient care areas are inadequately cleaned, caregivers' hands will become re-contaminated seconds after they're cleaned, as soon as their hands or gloves make contact with a contaminated surface.

That is why a properly cleaned environment is key to infection prevention, and the role of environmental services staff is so vital. The environmental services staff must be supported every step of the way to ensure safety for patients.

GENERAL STRATEGY

The successful strategy will ensure high-touch surfaces—bedrails, faucets, door knobs, and bedside tables, are cleaned thoroughly every day, and reusable medical equipment such as blood pressure cuffs and wheel chairs, are cleaned in between the use on each patient. This is essential to protect patients from VRE, MRSA, and C. diff, which can live on surfaces for weeks.

Patients' rooms, including blinds, minimal touch surfaces, and curtains, should be thoroughly cleaned periodically but do not require daily attention. While cleaning, avoid actions such as shaking bed linens that will aerosolize bacteria. Also work from high to low surfaces and proceed from cleaner areas to dirtier ones. To effectively clean, surfaces must be drenched for several minutes with the disinfectant. A quick spray and wipe is not sufficient. Consult the manufacturer's labeling to avoid inadequate contact time.

TEST SURFACES FOR CLEANING ADEQUACY TO AVOID THE CONSEQUENCES OF HUMAN ERROR

We all make mistakes. Research shows that typically, cleaners overlook half the surfaces in a room. To avoid the consequences of inadequately cleaned high touch surfaces, supervisors need to test and see that bedrails, over-bed tables, faucets, and door knobs, and other high touch items are being cleaned well daily. The use of fluorescent markers is a good way to periodically assess cleaning thoroughness.

USE DISINFECTANTS, NOT DETERGENTS, IN AREAS USED BY PATIENTS, INCLUDING ROOMS, PHYSICAL EXERCISE AREAS, AND COMMON SEATING AREAS.

Disinfectants kill micro-organisms such as VRE, MRSA, and other infection-causing pathogens. Viruses, and most bacteria can be eliminated with cleaners that contain quaternary ammonia. But for the fungus Candida auris, Clostridium difficile, and other spore forming bacteria, use a cleaner containing hypochlorites (bleach) or peroxide.

MICROFIBER IS BEST

Research confirms the benefits of microfiber over other cleaning cloths. Its densely constructed synthetic strands attract dust particles better, used less water and chemicals, and reduced labor time.

RECREATIONAL EQUIPMENT

Recreation equipment, including weights, balls, and mats, should be wiped off in between the use with each patient. Once a day is not enough. Canisters of bleach wipes should be kept on hand in the rehabilitation areas for that purpose.

CLEANING SPILLS OF BLOOD AND OTHER BODILY FLUIDS

Using protective gloves, and other PPE appropriate to the task, clean spills of blood and bodily fluids with EPA registered disinfectants with specific claims for HIV and hepatitis B virus. These are generally on EPA lists D and E for germicides. If these are not readily available, use chlorine bleach.

PRIVACY CURTAINS

Beware these curtains. They are generally the most heavily contaminated items in patients' room. Caregivers routinely pull these curtains open and closed, each time picking up bacteria and depositing more. RID recommends the use of paper disposable privacy curtains, attachable at the top with Velcro, or antimicrobial curtains.

AUTOMATIC ROOM DISINFECTION

Several automatic method of room disinfection, including pulsed xenon UV devices, hydrogen peroxide room foggers, dry hydrogen peroxide, and others have been show to dramatically reduce bioburden in healthcare facilities. The CDC still adheres to its 2011 statement that "more research" is needed before determining the reliability and efficacy of these methods. RID disagrees. These automatic room disinfection methods can almost eradicate VRE, MRSA, and C. diff contamination and save lives.

Particularly in outbreak situations, long term care facilities should consider using these high-tech options.

SPECIAL CONSIDERATION DURING CONTRUCTION, REPAIRS, OR RENOVATION

During any type of demolition or construction, assess the risk of infection-causing dust or aerosols. This is especially important to prevent infections caused by Aspergillus , a fungus. Immune compromised patients are especially vulnerable.

MATTRESSES AND PILLOWS: OFTEN OVERLOOKED SOURCES OF INFECTION

Mattress covers need to be removed, and mattresses inspected frequently. Mattresses that are not routinely cleaned become hotbeds of germs. Numerous studies link bodily fluids leaked into mattresses as the source of infection outbreaks. In 2018, the Food and Drug Administration warned healthcare institutions for the second time about the toxic brew that can build up inside a mattress.

Intensive cleaning is essential if the previous user of the mattress had C. diff and was taking antibiotics. C. diff patients on antibiotics shed spores, and heavily contaminate mattresses, posing a risk for the next occupant of the bed.

Disposable pillows are one way to mitigate against infection risk. Otherwise pillow covers must be removed and pillows carefully inspected before being used by the next patient.

PREVENTING C. DIFF

Clostridium difficile, “C. diff,” for short, is the most common healthcare associated infection. Rigorous hygiene is the best line of defense against C. diff. Clean, Clean, Clean, preferably with bleach. Healthcare apologists often blame the use of antibiotics. That is incorrect. Inadequate cleaning is the major cause of C. diff. It’s true that patients on antibiotics are especially vulnerable to C. diff’s symptoms, but no one contracts C. diff without first ingesting the spores.

Patients almost always give themselves C. diff by touching surfaces invisibly contaminated with the spores, then touching their food and swallowing the spores along with the food. Or simply touching their own mouth with their contaminated fingers.

To protect patients, keep surfaces, especially in bathrooms, cleaned with bleach.

In addition, hand hygiene is essential. Not just for caregivers. For the patients too. Remind patients to clean their hands before picking up a sandwich, or other food items. Encourage patients to always clean their hands on the way to common dining areas.

Remember that alcohol hand sanitizers do not kill C. diff. Hands need to be cleaned with soap and water.

PREVENTING PRESSURE SORES

Pressure sores – also often called pressure ulcers, or decubitus ulcers, or bed sores, cause tremendous suffering and the risk of infection. Preventing them is the hallmark of long term quality care.

There are many factors that make predispose patients to pressure sores including the natural thinning of the skin with aging, lack of mobility, incontinence, edema, and poor nutrition.

But these sores can be avoided with a plan, applied to reach patient meticulously from day one.

1. It starts with risk assessment, evaluating the patient's skin condition, degree of mobility, and any vascular or diabetic problems that interfere with circulation.

2. Inspect skin daily, and take action in response to any sign of damage.

3. Clean skin promptly after an incidence of incontinence, and keep skin clean and dry.

4. Because immobility is a major cause of pressure injuries, turn and reposition bed-bound patients every two hours or so. Keep a record of these re-positionings.

5. Use pressure-relieving mattresses, heel protectors, foam wedges between the knees and other devices to avoid prolonged pressure on any part of the body.

6. Keep a careful, daily assessment of the stages of pressure injuries, to ensure medical care and infection prevention.

PROVIDING ORAL CARE

Oral care is also a key indicator of long-term care quality. Failure to provide it often leads to non-ventilator associated pneumonia. That type of pneumonia is one of the most common reasons long term care patients have to return to the hospital.

Inadequate oral care is also linked to dementia and cardiovascular problems. Yet patients who are in a weakened condition rarely take the initiative to clean their own mouths or even ask for help.

The billions of microbes in the mouth replicate every 4 to 6 hours, and patients can easily aspirate these microbes. Micro-aspiration occurs when patients are sleeping or just groggy from medications.

Oral care begins on Day One, when patients arrive. It is commonplace for a hospital patient to be discharged with a hard, brown crust of bacteria in the inside of the mouth, coating the roof of the mouth as well as the tongue. No one has helped the hospital patient with oral hygiene.

When this crust flakes and is aspirated, it can cause pneumonia.

To avoid this, keep the patient's head elevated during sleeping, increase lung strength and expansion using breathing exercises, and most important of all, clean the mouth or help and encourage the patient to do it.

First of all, have the right equipment on hand: a soft-bristled tooth brush, alcohol-free mouthwash, pre soaped oral swabs, and alcohol-free mouth rinses.

Positioning is key. Never attempt to clean the mouth when the patient is lying down. Sitting or standing is best.

Make sure your own hands are cleaned and gloved.

If the patient is apprehensive or reluctant, approach directly and slowly, make eye contact, and explain your goal of helping to clean the mouth. Encourage the patient to hold the brush and participate. Offer smiles and be patient. It can take an hour to clean a badly neglected mouth coated in hardened bacteria.

PROTECTING PATIENTS FROM INFLUENZA

Influenza can be introduced into a facility via newly admitted patients, health care staff, or visitors. To protect patients, a multi-faceted approach is needed that includes vaccination, testing, infection control measures, antiviral treatment and antiviral chemoprophylaxis.

VACCINATION

Vaccinations should be routinely provided to all patients and healthcare staff.

If possible, all patients should receive inactivated influenza vaccine IIV annually before the start of flu season. In most years, vaccines become available to long term care facilities beginning in September, and should be offered to patients by the end of October. But keep in mind, even vaccines administered in December or later may often be in time. In some years, flu activity does not occur until February or March.

If a new patient is admitted after the vaccinations are done, present educational materials and discuss the benefits of vaccination on admission. CMS requires all nursing homes participating in Medicare and Medicaid to offer influenza and pneumococcal vaccinations to all patients and document the results.

All healthcare personnel should also get vaccinated yearly, in order to reduce transmission and curb absenteeism, according to the CDC.

TESTING

When any patient shows signs of acute respiratory illness or other influenza symptoms, surveillance is important to assess the scope of the problem.

INFLUENZA OUTBREAK CONTROL MEASURES

When two cases of laboratory-confirmed influenza are identified within 72 hours, outbreak control measures should be implement ASAP. These include daily active surveillance until at least once week after the last laboratory-confirmed case.

Test using a molecular assay, make sure the laboratory produces results quickly, and notify local and state public health officials.

Also implement contact and droplet precautions, including gloving and gowning when caring for an affected patient, removing gowns and gloves and washing hands after treating the affected patient, and rigorously adhere to hand hygiene protocols after touching the affected patient's environment.

Droplet precautions include placing ill patients in a private room or cohorting. Using a facemask upon entering the ill patient's room, having the patient wear a facemask when being transported

outside the room, and flagging the patient's illness to all those in other departments who may come in contact with the ill patient.

These precautions should all be continued as long as the affected patient is on antiviral therapy.

ANTIVIRAL THERAPY

Consult your staff physician or infectious disease physician about implementing antiviral therapy when any patient has a confirmed or suspected case of influenza. Also, consult your medical staff about providing antiviral therapy to all exposed patients on units or floors with influenza cases. The CDC recommends antiviral chemoprophylaxis for a minimum of two weeks, and continuing for at least 7 days after the last known laboratory confirmed influenza case.

ADDITIONAL INFECTION CONTROL MEASURES DURING AN OUTBREAK

1. Strive to keep affected patients in their own rooms, and serve their meals to them there.
2. Limit the number of large group activities until the outbreak is over.
3. Limit visiting, particularly visiting by children.
4. Monitor staff absenteeism and insist that any staff with flu-like symptoms stay home until at least 24 hours after symptoms have passed.

For more information, consult CDC guidelines.

PROTECTING A FACILITY AND ITS PATIENTS FROM LEGIONELLA BACTERIA

Legionnaires' Disease is a severe, sometimes fatal pneumonia generally caused by exposure to aerosolized droplets of water contaminated with Legionella bacteria. This problem is more prevalent in long term care facilities than almost anywhere else, and the incidence of Legionella-related disease has increased 5.5 times in the U.S. since 2000.

Centers for Medicare and Medicaid (CMS) expects hospitals and long-term care facilities that are certified by Medicare to have water management policies and testing protocols in place.

In 2015 the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) published an industry standard for building water systems. In 2016, the CDC developed a tool kit to facilitate the implementation of this ASHRAE standard. Every long-term care administrator responsible for infection prevention should consult this toolkit. See www.cdc.gov/legionella/maintenance/wmp-toolkt.html.

Facilities will be expected to:

1. Conduct a facility–wide risk assessment to identify where Legionella and other opportunistic pathogens could grow in the facility water system.
2. Implement a water management program including temperature control, disinfectant level control, and environmental testing for pathogens.
3. Keep meticulous documentation on testing and corrective actions taken to ensure regulatory compliance and legal liability reduction.
4. These requirements are based on the CMS clarifying memorandum issued July 6, 2018.

Although periodic water testing in the absence of a reported case is not required, RID recommends routine testing of the environment, as well as any patients showing pneumonia like symptoms.

Legionella-caused disease is often misdiagnosed because the symptoms closely resemble classic pneumonia.

Regular water testing and follow-up also help protect the facility from liability in the event of an outbreak. You do not know if you have the bacteria in your water system if you do not test. It is like having your patients as the canaries in the coal mine.

If your facility does not have staff experts in water management, there are numerous companies that can periodically test, remotely monitor, and keep documentation on your facility's water quality and discuss proven water treatment methods such as copper silver ionization.

RID recommends copper silver ionization because it requires no chemicals, relies on no products unsafe for handling by your staff, and poses no wear and tear on your plumbing system.