HEALTHCARE-ASSOCIATED INFECTION (HAI) DEFINITIONS

The following are definitions used in healthcare-associated infections, derived from the National Healthcare Safety Network (NHSN) and APIC.

- **Active Surveillance Cultures (ACS):** Another form of MDRO surveillance used to identify asymptomatic colonization with a targeted MDRO. For some MDROs, detection of colonization may be delayed or missed completely if only passive surveillance of clinical infections is used to identify colonized patients.

- **Ambulatory care:** Healthcare rendered for acute or chronic diseases and for surgical interventions where a patient’s length of stay is less than 24 hours.

- **Candidemia:** Presence of candida in the bloodstream. Central venous catheters, broad spectrum antibiotics, and intravenous drug use are risk factors.

- **Carbapenem-resistant Enterobacteriaceae (CRE):** A Gram-negative bacillus of the Enterobacteriaceae genus with non-susceptibility (intermediate or resistant) to one or more of the carbapenems (doripenem, ertapenem, imipenem, or meropenem). Other definitional criteria may exist, depending on the state or agency (e.g., 3rd generation cephalosporin resistance).

- **Central venous catheter (CVC):** A central venous catheter is a thin tube placed into a vessel for medication delivery, blood draws, or monitoring that travels to a blood vessel and terminates close to the heart or one of the great vessels. A CVC can be temporary (non-tunneled; peripherally-inserted central catheter (PICC)) or permanent (tunneled, implanted; Hickman®, Broviac®).

- **Clostridium difficile:** A gram-positive bacillus with spore phase thus enabling it to survive a wide-range of environmental conditions. Toxin A or B produced by this bacteria causes diarrhea, colitis, pseudomembranous colitis, and even death.

- **Cohort for MDRO:** Placement of residents/patients colonized or infected with MDR Ab in rooms (cohorted) with other MDRO residents/patients.

- **Cohort staffing related to MDRO:** Assignment of personnel to care only for residents/patients known to be colonized or infected with MDRO.

- **Colonization:** Positive culture for organism from a sterile or non-sterile site without symptoms of acute infection (Surveillance Definitions of Infection, Stone et al (pdf)).

- **Contact Precautions:** Transmission-based Precautions method recommended by the Centers for Disease Control and Prevention (CDC). This method requires barrier precautions and personal protective equipment (PPE) for direct contact with residents/patients or contaminated equipment.
• **Contamination:** Presence of a potentially infectious agent on a surface, on a material, or in a fluid.

• **Device Days:** A daily count of the number of patients with a specific device in the patient care location during a time period. To calculate device days, for each day of the month, at the same time each day, record the number of patients who have the specific device (e.g., central line, ventilator, or indwelling urinary catheter).

• **Endemic:** A baseline rate established by ongoing surveillance of the usual frequency of an organism, infection or disease in a given setting.

• **Environmental Prevalence Survey:** Collection of swabs for culture to identify bacteria of concern in a healthcare facility environment at a single time point. Determine the surfaces or medical equipment to be sampled based on findings from the epidemiologic investigation or known risk of transmission.

• **Epidemic:** A higher incidence than usual of an organism, infection or disease in a defined population in a given period of time.

• **Healthcare-associated infection (HAI):** An infection that develops in a patient/resident in a healthcare setting, and the infection is not present or incubating at the time of admission.

• **Incidence:** Number of new cases of specified disease colonization or infection identified in a specific population in a given time period. New cases can be defined as occurring two days or more after admission to the facility.

• **Infected:** Positive culture for organism from a sterile or non-sterile site in addition to symptoms of acute infection.

• **Long-term care facility (LTCF):** A healthcare setting that provides rehabilitative, restorative, and/or ongoing skilled nursing care to patients or residents in need of assistance with activities of daily living. Long-term care facilities include nursing homes, rehabilitation facilities, inpatient behavioral health facilities, and long-term chronic care hospitals.

• **Long-term acute care hospital (LTACH):** A healthcare setting that manages complex medical care and rehabilitation of patients with multiple acute healthcare needs.

• **Multidrug-resistant organism (MDRO):** A bacterium with limited treatment options because of resistance to several classes of antibiotics.

• **MDR Acinetobacter baumannii (MDR Ab):** *A. baumannii* (a Gram-negative bacillus) with multidrug resistance to more than two of the following five drug classes: antipseudomonal cephalosporins (ceftazidime or cefepime), antipseudomonal carbapenems (imipenem or meropenem), ampicillin/sulbactam, fluoroquinolones (ciprofloxacin or levofloxacin), and
aminoglycosides (Gentamicin, tobramycin, or amikacin). *Readers may wish to refer to a local antibiogram when defining multidrug-resistant Ab in their own facilities.*

- **National Healthcare Safety Network (NHSN):** A national surveillance system for the reporting of healthcare associated infections, patient safety outcomes, and other healthcare process measures. Maintained by the Centers for Disease Control and Prevention (CDC).

- **Outbreak:** An increase in the incidence of disease cases in a healthcare setting above the endemic level, or a cluster of new disease cases that are epidemiologically linked.

- **Pan-drug resistant *Acinetobacter baumannii***: *A. baumannii* with additional antimicrobial resistance in all drug classes, plus resistance to polymyxin and/or colistin. (Note there is no standardized definition of pan resistant *Acinetobacter baumannii*).

- **Patient days:** A daily count of the number of patients in the patient care location during a time period. To calculate patient days, for each day of the month, at the same time each day, record the number of patients.

- **Patient Prevalence Survey:** Collection of patient swab specimens for culture to identify bacteria of concern in a healthcare facility. Determine the population to be sampled at a single time-point based upon the place(s) and time(s) of concern from findings from the epidemiologic investigation (e.g., all current inpatients in Unit 3; all patients who underwent wound care in this clinic during the past week).

- **Personal Protective Equipment (PPE):** Gowns, gloves, and mask with splash guard.

- **Present on admission (POA):** If all of the elements of an infection definition are present during the two calendar days before the day of admission, the first day of admission (day 1) and/or the day after admission (day 2) and are documented in the medical chart, the infection would be considered POA. Infections that are POA should not be reported as HAIs.

- **Prevalence:** The total number of patients with infection or colonization because of a specified disease in a given population at a point in time.

- **Reservoir:** Any animate or inanimate surface in which an infectious agent may survive to become a source of transmission to a susceptible host.

- **Standardized Infection Ratio (SIR):** Summary measure used to track HAIs over time. It compares the number of reported HAIs to the number of predicted HAIs, based on NHSN baseline data. The SIR adjusts for several factors that may impact the risk of acquiring an HAI.

- **Staphylococcus aureus:** Gram-positive coccus that can have acquired resistance to methicillin (MRSA) or not (MSSA).
- **Standard Precautions**: Precautions taken to protect against exposure to blood and potentially infectious body fluids when caring for patients/residents. These precautions are always taken without regard for the diagnosis or perceived diagnosis and are never discontinued.

- **Surveillance**: The ongoing systematic collection, analysis and interpretation of healthcare data.

- **Surveillance cultures**: Those cultures reported as part of infection prevention and control surveillance such as stool cultures for vancomycin-resistant enterococci (VRE) and/or nasal swabs for methicillin-resistant Staphylococcus aureus (MRSA) surveillance, not for use in patient diagnosis. Also called active surveillance cultures or testing (ASC/AST).

- **Terminal cleaning**: Comprehensive, deep cleaning of a patient room at the time of discharge from the healthcare setting or termination of transmission-based precautions based on the policy of the facility.

- **Urinary catheter**: A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a drainage bag (including leg bags) (Foley catheters).

- **Vancomycin resistant *Enterococcus* spp. (VRE)**: Usually *E. faecium* or *E. faecalis* which carry resistance genes to vancomycin antibiotic