CDC/NHSN Patient Safety Component Manual

Summary of Updates, January 2020

Below is a summary of significant modifications for the NHSN Patient Safety Component Manual, which will go into effect January 1, 2020. Chapters not listed are without significant changes.

Modifications affecting > 1 chapter (module)

Addition:

- Under the *Denominator* section a reminder, when moving to a new electronic capture of denominator data to validate the new electronic data against manually-collected denominator counts (not the previously used electronic counts) to assure the new electronically-collected data is within 5% of manual counts.

Clarifications:

- Date admitted to facility clarified as first calendar day patient is in an inpatient location (Hospital Day 1).
- The analysis sections were expanded to include further clarification of analytic options and summary measure definitions.

Chapter 2: Identifying HAIs in NHSN

Addition:

- **MBI RIT Exception** – A non-MBI organism is NOT assigned to an MBI-LCBI (primary BSI) event when a blood culture with the non-MBI organism is collected during a BSI (MBI-LCBI)-RIT and also deemed secondary to an NHSN site-specific infection. The MBI-LCBI designation will not change to an LCBI event.

Clarification:

- Added < 65 years of age to all SUTI examples.

Deletion:

- Deleted the following since users have the ability to add three organisms to SUTI: "SUTIs can only have two organisms entered according to NHSN application rules. However, if yes is selected for the secondary BSI field, the third pathogen field will become available for data entry."

Chapter 3: Monthly Reporting Plan

Addition:

- Surveys must be completed by March 1st each year. After March 1st, facilities will be prevented from entering new monthly reporting plans until completion of the applicable survey(s).

Chapter 4: Bloodstream Infection

Additions:

- MBI LCBI RIT example where a non-MBI organism is identified in blood during the MBI LCBI RIT. If the organism can be deemed secondary to a site-specific infection, the positive blood culture is added as an organism for the site specific event and **is not added** to the MBI LCBI event. When this occurs the MBI LCBI determination is not changed to an LCBI.

- Reporting Exclusions when making a CLABSI determination: Starting in 2020 reporting of any in-plan event meeting one of the following exclusions is required. In each instance the respective data field should be marked "Yes," and the central-line field should be marked "Yes." These exclusions are also listed within the Analysis section.

    - Extracorporeal life support (ECMO) or Ventricular Assist Device (VAD)
    - Patient self-injection
    - Epidermolysis bullosa (EB) or Munchausen Syndrome by Proxy (MSBP)
    - Pus at the vascular access site
    - Group B *Streptococcus* in the first 6 days of life

- PJI-3 added to **Table B1: Secondary BSI Guide** under Scenario 1
- New guidance is provided on the use of non-culture based testing methodologies (NCT) to identify a laboratory confirmed bloodstream infection (LCBI). The guidance incorporates additional information that may be provided by blood cultures collected in a specific timeframe surrounding the collection of the blood specimen for NCT. Therefore, the following modifications are made:
    - LCBI-1: Note: If blood is collected for culture within 2 days before, or 1 day after the NCT, disregard the result of the NCT and use only the result of the blood CULTURE to make an LCBI-1 surveillance determination. If no blood is collected for culture within this time period, use the result of the NCT for LCBI surveillance determination.

    - LCBI 2 and 3: Due to the complexity of LCBI-2 and LCBI-3 definitions, NCT methodologies will no longer be used to meet these criteria. Starting in 2020, the definition is revised to read (see underlined text):

        Patient of any age has at least ***one*** of the following signs or symptoms:
        Fever (>38.0°C), chills, or hypotension
        OR
        Patient ≤ 1 year of age has at least ***one*** of the following signs or symptoms:
        fever (>38.0°C), hypothermia (<36.0°C), apnea, or bradycardia
        AND
        Organism(s) identified in blood is not related to an infection at another site (See Appendix B: Secondary BSI Guide).
        AND
        The same NHSN common commensal is identified **by culture from two or more blood specimens collected on separate occasions** (see Blood Specimen Collection).

Common Commensal organisms include, but not are not limited to, diphtheroids (*Corynebacterium* spp. not *C. diphtheria*), *Bacillus* spp. (not *B. anthracis)*, *Propionibacterium* spp., coagulase-negative staphylococci (including *S. epidermidis)*, viridans group streptococci, *Aerococcus* spp. *Micrococcus* spp. and *Rhodococcus* spp. For a full list of common commensals, see the Common Commensal tab of the NHSN Organisms List.

Deletion:

- Removal of Table 3: Reporting Exclusions when making a CLABSI determination: Starting in 2020 reporting of any in-plan event meeting one of the following exclusions is required. In each instance the respective data field should be marked "Yes" and **the central line field should be marked "Yes" if an eligible central line was present.**

    - Extracorporeal life support (ECMO) or Ventricular Assist Device (VAD)
    - Patient self-injection
    - Epidermolysis bullosa (EB) or Munchausen Syndrome by Proxy (MSBP)
    - Pus at the vascular access site
    - Group B *Streptococcus*

Chapter 6: Pneumonia

Addition:

- Addition of the use of descriptors "many" and "numerous" as a means of meeting the quantitative thresholds using semi-quantitative results for both purulent respiratory secretions and culture results (Table 5).

Clarifications:

- PNU3 algorithm (Table 4), clarifies that identification of all Candida and yeast not otherwise specified is not eligible for use in meeting the second bullet under the *Laboratory* requirement column.
- Footnotes to Algorithms and Flow Diagrams: Footnote 10 provides clarification on routes of steroid administration which are limited to enterally or parenterally-administered and exclude inhaled and topical administrations.

Chapter 7: Urinary Tract Infection

Clarification:

- Under *Definitions* section *Note* instruction has removed the words "is a primary site infection." The *Note* now reads *UTI cannot be considered secondary to another site of infection*. The meaning remains the same.

Chapter 9: Surgical Site Infection (SSI) Event

Clarifications:

- "Scope":
  - ICD-10-PCS table updated to better assist users with answering the Scope question.
  - Clarification provided related to CPT codes and answering the Scope question.
- SSI Event Reporting Instruction #3 updated to provide clarification related to application of the PATOS reporting instruction:
  - The term 'abscess' was removed from the PATOS explanation – this term is considered redundant as an abscess is considered evidence of infection. The term 'abscess' is provided as an example of evidence of infection within this instruction.
  - Clarification made to state that 'evidence of infection must be noted intraoperatively and documented within the narrative portion of the operative note or report of surgery'.
  - Note added to reinforce that wound class cannot be used for PATOS determination.
- The analysis section was expanded to include the following:
  - An outline of the report types available for SSI data
  - Clarifying information about the SSI standardized infection ratio (SIR)
  - A list of analysis resources to guide report selection and support the user's data analysis process.

Chapter 10: Ventilator- Associated Event (VAE)

Additions:

- Addition of the use of descriptors "many" and "numerous" as a means of meeting the quantitative thresholds using semi-quantitative results for both purulent respiratory secretions and culture results (Table 2).
- Example added to Daily Minimum FiO_2
- Update to the Appendix List of Eligible Antimicrobial Agents includes the following:
  - Agents added: Plazomicin, Eravacycline, Omadacycline, Baloxavir marboxil
  - Agents removed: Ceftizoxime , Sulfisoxazole, Telithromycin, Ticarcillin/Clavulanate

Chapter 11: Pediatric Ventilator-Associated Event (PedVAE)

Additions:

- Example added to Daily Minimum FiO_2
- Update to the Appendix List of Eligible Antimicrobial Agents includes the following:
  - Agents added: Plazomicin, Eravacycline, Omadacycline, Baloxavir marboxil
  - Agents removed: Ceftizoxime , Sulfisoxazole, Telithromycin, Ticarcillin/Clavulanate

Chapter 12: MDRO & CDI

Additions:

- *Klebsiella aerogenes* added to CRE definition used for LabID event reporting.
- An improvement has been made to the de-duplication algorithms used for the MRSA bacteremia SIR numerator. This improvement adjusts the de-duplication that occurs in rare scenarios when a single patient has multiple positive MRSA bacteremia events that cross multiple units within the facility and

multiple calendar months. A positive MRSA bacteremia will not be counted in the SIR if the patient had a prior positive MRSA bacteremia in the previous 14 days.
- A new CDI prevalence rate has been added: Combined Outpatient Prevalence Rate for ED and 24 hour Observation Locations. This rate has been added for informational purposes only and is *not* used in the risk adjustment calculations for the SIR.
- FacWideIN MRSA bacteremia and CDI SIR reports for CMS Quality Reporting Programs are available for PPS-exempt cancer hospitals.

Clarifications:

- Clarifying language added to 'Unique blood source' definition
- The MRSA bacteremia SIR reports that are located in the "CMS Reports" analysis folder for Inpatient Rehabilitation Facilities (IRFs) and Long-term Acute Care Hospitals (LTACHs) will not contain data beyond 2018 Q3.
- Additional guidance and examples have been provided to assist users in accurate reporting of primary CDI test type method. This clarification will assist facilities that use a conditional single-step or conditional multi-step testing algorithms.

Chapter 14: Antimicrobial Use and Resistance

Additions:

- Information for neonatal Standardized Antimicrobial Administration Ratios (SAARs).
- Variables for inclusion in AU CDA files for vendor synthetic data set validation shown in Appendix A.
- Updated antimicrobials included in AU CDA files:
    - Agents added: Amikacin liposomal, Baloxavir Marboxil, Colistin, Eravacycline, Omadacycline, Plazomicin
    - Agents removed: Cefditoren, Ceftibuten, Ceftizoxime, Sulfisoxazole, Telithromycin, Ticarcillin/Clavulanate
- For AR Option reporting, *Enterobacter aerogenes* was renamed *Klebsiella aerogenes* and Group B *Streptococcus* was renamed *Streptococcus agalactiae*.
    - Phenotype definitions list in Appendix I have been updated accordingly.

Clarifications:

- Facilities should wait at least seven calendar days following the completion of the month before submitting AR Option event data to ensure all susceptibility testing has been completed and reported back to the Electronic Health Record system.
- For AR Event reporting, if the patient was discharged from the ED then later admitted on a subsequent calendar day, any specimens collected during the first ED visit should use the original encounter date as the admission date for that AR Event.

Chapter 15: Locations

Additions:

- The following guidance has been added to the Patient Mix section:
    - Admission/transfer diagnosis can also be used to determine location mapping if billing data is not available. Facilities, when possible, should use 1 years' worth of data to make this determination. If that is not available, a shorter period of at least 3 months is acceptable, but every effort should be made to collect and analyze greater periods of time in the future.
    - Acuity billing data is considered the most accurate depiction of the patient's illness and reason for being admitted to a particular unit.
- The following new NHSN location type has been added: Level IV Neonatal Intensive Care Unit (NICU). These are level NICUs that have the following capabilities in addition to Level III capabilities:
    - Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions
    - Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists, and pediatric subspecialists at the site
    - Facilitate transport and provide outreach education

Chapter 16: Key Terms

Additions:

- **Equivocal imaging** - Findings from medical imaging studies that do not conclusively identify an infection or infectious process. Imaging findings such as these require additional conclusive clinical evidence that an infection is present, specifically physician documentation of antimicrobial therapy for treating the infection or infectious process.
- **Physician** - For purpose of NHSN surveillance, the term physician includes physician or physician's designee, specifically, nurse practitioner or physician's assistant.

Clarification:

- **Gross anatomical exam** - updated to align with the definition that is included in FAQs: Miscellaneous found at https://www.cdc.gov/nhsn/faqs/faqs-miscellaneous.html#q25 .
    - Phrase "*findings elicited*" on physical examination was inserted.
    - Note to explain that imaging test evidence cannot be used to meet gross anatomic evidence of infection.

Chapter 17: Surveillance Definitions

Additions:

- Under Notes section, the following statement added: For NHSN reporting purposes, the term, "organism(s)", in this chapter includes viruses.

- **ENDO:** Cardiac vegetation definition expanded to include the following: positive culture from a cardiac valve, pacemaker/defibrillator lead or ventricular assist device (VAD) components within the heart.
- **BURN, SKIN and ST** reporting instruction added: BURN criteria should not be used to identify infections in burn wounds that have been grafted. In the setting of a skin graft over a burn wound, use the SKIN or ST criteria.

Clarification:

- **ENDO:** the word, "matching" added to elements ENDO 4a and 5a to clarify the need for ≥2 matching blood cultures with typical infectious endocarditis organism(s).

Deletion:

- **EPIS** comment removed: Episiotomy is not considered an operative procedure in NHSN.