HEALTHCARE-ASSOCIATED INFECTION PREVENTION
REPORTING GUIDE FOR HOSPITALS

March 2017

PURPOSE

This guide from the Pennsylvania Department of Health (Department), Healthcare-Associated Infection Prevention (HAIP) program is intended to provide a summary of information and guidance to infection prevention personnel. A brief summary of the legislation, highlights of reporting requirements and descriptions of data verification efforts are provided.

BACKGROUND

Senate Bill 968 was signed into law on July 20, 2007. Act 52 of 2007, the Health Care-Associated Infection Prevention and Control Act, amends the Medical Care Availability and Reduction of Error (MCare) Act (Act 13 of 2002) to address the reduction and prevention of healthcare-associated infections (HAIs).

Act 52 of 2007 requires all hospitals, nursing homes and ambulatory surgical centers to develop and implement an internal infection control plan. The infection control plan is submitted to the Department for review. If, at any time, the Department finds that an infection control plan does not meet the requirements of Act 52 of 2007 or any applicable laws, the facility shall modify its plan to come into compliance. Additional requirements regarding the infection control plan are outlined in Section 403 of Act 52 and in the document “Infection Control Plan Submission and Updates.”

HOSPITAL REPORTING

Act 52 of 2007 mandates that all hospitals (acute care, rehabilitation, long-term acute care, psychiatric /behavioral health, children’s and critical access) report healthcare-associated infection (HAI) data to the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN). Data is reported according to the NHSN Manual, Patient Safety Component Protocol and any subsequent editions. Pennsylvania’s hospitals submit facility-wide data on the occurrence of all reportable HAIs directly to NHSN and confer rights that allow the Pennsylvania Department of Health, the Pennsylvania Health Care Cost Containment Council (PHC4), and the Pennsylvania Patient Safety Authority (PSA) to view the information.

These infection types are:

• Bone and joint infections (BJ);
• Blood stream infections (BSI) with or without a central line (BSI associated with a central line are known as central line associated bloodstream infections [CLABSI].);
• Central nervous system infections (CNS);
• Cardiovascular system infections (CVS);
• Eye, ear, nose and throat infections (EENT);
• Gastrointestinal infections (GI);
• Lower respiratory tract infections (LRI);
• Pneumonia (PNEU) whether ventilator or non-ventilator associated;
• Reproductive tract infections (REPR);
• Skin and soft tissue infections (SST);
• Surgical site infections (SSI);
• Systemic infections (SYS); and
• Urinary tract infections (UTI) with or without a catheter (UTI associated with a urinary catheter are known as catheter-associated urinary tract infections [CAUTI]).

Hospitals are also required to collect certain denominator information to enable the calculation of HAI rates. This information includes:

• Patient days: the total number of patients in the hospital per day over the entire calendar year (total hospitalizations multiplied by the duration of each hospitalization);
• Urinary catheter days: the total number of hospitalized patients with a urinary catheter in place per day over the entire calendar year (total number of patients with a urinary catheter in place multiplied by the number of days a catheter was used for each patient);
• Central line days: the total number of hospitalized patients with a central line in place per day over the entire calendar year (total number of patients with at least one central line in place multiplied by the number of days a central line was in place for each patient); and
• Procedure denominator data (the total number of procedures performed) for cardiac procedures (CARD, CBGB, CBGC), colon procedures (COLO), hip prosthesis procedures (HPRO), abdominal hysterectomies (HYST), and knee prosthesis (KPRO).

These HAIs are defined by NHSN in the Patient Safety Component Manual. The Patient Safety Manual is divided into the following chapters:

• Chapter 2: Identifying Healthcare-associated Infections (HAI) for NHSN Surveillance
• Chapter 4: Bloodstream Infection Event (central line-associated bloodstream infection and non-central line-associated bloodstream infection)
• Chapter 6: Pneumonia (Ventilator-associated [VAP] and non-ventilator-associated Pneumonia [PNEU]) Event
• Chapter 7: Urinary Tract Infection (catheter-associated urinary tract infection [CAUTI] and non-catheter-associated urinary tract infection [UTI]) and other urinary system infection [USI]) events
• Chapter 9: Surgical Site Infection Event (SSI)
• Chapter 10: Ventilator-Associated Event (VAE)
• Chapter 12: Multidrug-Resistant Organism& Clostridium difficile Infection (MDRO/CDI) Module
• Chapter 17: CDC/NHSN Surveillance Definitions for Specific Types of Infections
• Healthcare personnel vaccination module: Influenza Vaccination Summary
In addition, various analysis resources, such as guides, training, and statistical tools that allow NHSN users to analyze their surveillance data, are also provided on the NHSN website.

Reminder: Although certain reporting required for facilities that participate in CMS Quality Reporting Programs allows for submission of data on a quarterly basis, Act 52 of 2007 requires reporting events within 24 hours of confirmation and denominator data within 30 days of the end of the month.

DO’S AND DON’T OF REPORTING DATA TO NHSN

1. DO check the NHSN Alerts page every month and correct any data omissions or errors that NHSN has identified.
2. DO report infections to NHSN within 24 hours of confirmation.
3. DO enter summary/denominator data within 30 days of the end of each month.
4. DO ensure staff are trained to properly count device days and resident days when a manual process is in place.
5. DO validate device and resident days on a regular basis to ensure these data are being counted correctly.
6. DO enter benchmarked procedures within 30 days of the end of each month.
7. DO carefully review the NHSN definitions and ensure the appropriate response to the outpatient procedure question is answered.
8. DO review locations on a regular basis to verify that the NHSN location labels are correctly entered and mapped.
9. DO update NHSN users and add new users as needed.
10. DO ensure that an active employee of the facility has the facility administrator role within NHSN to prevent the facility not having access for reporting purposes.
11. DON’T forget to read all NHSN newsletters and emails for changes/updates to reporting criteria and upgrades to the system.
12. DON’T use the NHSN event screen as a validation tool for HAI; always refer to the modules and NHSN manuals for reference.

MDRO/CDI Reporting Requirements

Acute care, long-term acute care and inpatient rehabilitation hospitals are required to report methicillin-resistant staphylococcus aureus (MRSA) and C. difficile LabID events to NHSN to comply with the U.S. Centers for Medicare and Medicaid Services (CMS) Medicare Hospital Inpatient Prospective Payment System requirements. For consistency with CMS data collection efforts and following consultation with the Patient Safety Authority and the HAI Advisory Panel, the Department is also requiring that MRSA and C. difficile LabID events be reported by these hospitals.

Hospitals should include C. difficile and MRSA LabID event reporting in their monthly reporting plan, using the facility-wide inpatient (FacWideIN) location for the entire year.

Other hospital types (critical access, children’s and psychiatric) may elect to also report inpatient facility-wide continuous C. difficile and MRSA LabID events or may report data into the
Multidrug-Resistant Organism and Clostridium difficile Infection (MDRO/CDI) Module by selecting either the infection surveillance or the LabID event protocols. Both are acceptable for critical access, children’s and psychiatric hospitals. To follow the minimum required by either protocol, a hospital must select at least one pathogen in at least one location for monitoring, either via the infection surveillance or the LabID event requirements.

- MRSA and C. difficile LabID event reporting is a different reporting pathway in NHSN, so Healthcare-Associated Infections (HAIs) and LabID events must be reported separately. Each event must be reported individually if it meets the applicable criteria, one as an HAI event and another as a LabID event.

- Written patient notification is required only for those events that meet the HAI event criteria, not for the LabID event criteria.

- Surveillance for neonatal intensive care units (NICU), well baby nurseries, specialty care nurseries (SCN), and babies in labor, delivery, recovery and post-partum (LDRP) locations must be removed from denominator counts (admissions, patient-days) when conducting surveillance for C. difficile using facility-wide monitoring.

- The patient control number is not required to be entered into the comment field for LabID events. It is still required for the HAI infections but is not needed for LabID reporting.

**Health Care Worker Influenza Vaccination**

HAIP provides guidance and assistance to hospitals for the CMS requirements and the reporting of health care personnel influenza vaccination information in the National Healthcare Safety Network (NHSN).

Acute care, long-term care, inpatient rehabilitation and inpatient psychiatric hospitals participating in the U.S. Centers for Medicare and Medicaid Services (CMS) Inpatient Prospective Payment System (IPPS) Hospital Inpatient Quality Reporting Program are required to submit summary data on influenza vaccination of health care personnel (HCP) via the NHSN for the influenza season (e.g., Oct. 1, 2016, through March 31, 2017). The Healthcare Personnel Safety Module is designed to assist staff in health care facilities to monitor influenza vaccination percentages among HCP.

Monthly reporting plans must be entered before reporting HCP influenza vaccination data. To enter a monthly reporting plan for the entire year (July 1 to June 31), log in to NHSN and select monthly reporting plan from the left hand navigation bar. Next, select add, enter, then January 2017 in the drop down menus. Place a check mark in the box “Healthcare Personnel Vaccination Module—Influenza Vaccination Summary.” This will auto-populate the monthly reporting plan for all 12 months.

HCP influenza vaccination summary reporting in NHSN consists of a single data entry screen per influenza season, and this can be entered at any time during the influenza season. Each time a user enters updated data for a particular influenza season, all previously entered data for that season will be over-written and a new modified date will be auto-filled by the system.
Although CMS will only require participation from hospitals that receive IPPS payments, the Pennsylvania Department of Health requests that this information be provided by all hospitals required to report under Act 52. Rates are displayed publicly in the Department of Health’s HAI Annual Report. Hospitals that elect not to submit their vaccination data are also noted in the HAI Annual Report.

**NHSN HCW Influenza Vaccination Resources**

The Centers for Disease Control and Prevention (CDC) provides resources such as training, protocols, data collection forms, supporting materials and frequently asked questions for health care facilities reporting health care personnel influenza vaccination to the National Healthcare Safety Network (NHSN). This information is available by facility type and can be accessed on the [NHSN website](https://www.cdc.gov/nhsn/).

The NHSN Manual for the [Healthcare Personnel Safety Component Protocol](https://www.cdc.gov/nhsn/pcp/index.html) provides instructions on correctly determining both the numerators and denominators that are required to be entered on an annual basis. HCP who are physically present in the facility for at least one working day between Oct. 1, 2016 and March 31, 2017, are included in the denominator. A guide for “Methods and Strategies Used to Collect Healthcare Personnel Influenza Vaccination Data” as well as detailed instructions on “How to View Create and Modify Dates within NHSN” are also available.

Frequently asked questions (FAQs) are provided to assist facilities with reporting HCP data to NHSN. These include:

- CMS Reporting Requirements FAQs;
- Denominator FAQs;
- Numerator FAQs; and
- General FAQs.

**Enrollment in NHSN**

Facilities not yet enrolled in NHSN should follow the steps outlined in the [enrollment information for hospitals](https://www.cdc.gov/nhsn/). There are two processes (the registration of an individual and the enrollment of the facility) required in order to have a user and a facility enroll in NHSN. The registration of an individual requires a person to complete an identity verification process through NHSN’s Security Access Management System (SAMS). This process includes:

- Completing an identity verification form;
- Two required forms of ID (one with a picture), both ID’s showing the same last name (If not, other verification may be required.);
- Notarization of form prior to return to the CDC; and
- Providing a home address in order for the SAMS grid card to be sent (as part of the identity verification process).

The SAMS card is for individual use only. This is not meant to be a facility card.
**NHSN SAMS Grid Card**

In order to report into NHSN, the hospital must complete the registration process (in order to become a user). Users receive a SAMS card in order to access the NHSN website. After receipt of the SAMS card, the designated individual may enroll the facility (to receive an NHSN ID number) and complete the NHSN consent agreement.

**NHSN Facility Administrator**

The person who enrolls a facility in NHSN is designated as the NHSN facility administrator. Only the NHSN facility administrator can reassign his/her role to another user. If the facility administrator is unavailable to make the change, the facility may formally request a reassignment in writing on facility letterhead to NHSN. The letter must include the name of the new administrator, phone number, email address and NHSN facility ID.

**NHSN Help Desk**

Questions about NHSN may be submitted by email to nhsn@cdc.gov. Be sure to include your name and NHSN assigned facility ID number, which is found on your hospitals NHSN secure data network “landing page,” located under your name. NHSN does not accept phone calls.

**DATA VERIFICATION FOR HOSPITALS**

NHSN contains certain basic data field entry checks to help ensure that these required fields reported into the system are valid.

HAIP performs additional validation of data and provides a comprehensive data integrity and verification (DIV) report to hospital infection prevention staff to ensure that the data documented in the NHSN is complete and accurate. The individualized DIV report is routinely emailed to each facility so they may see and correct any problems that may exist with their data. This report should be viewed as a quality improvement tool. It is not meant to provide extra work to hospital infection prevention staff involved in HAI reporting. Ideally, this helps the facility assure that the information regarding infections reported to NHSN is accurate and dependable. Items contained in the DIV report are identified as definite or possible errors. The definite errors must be corrected. The items noted as possible errors were identified due to inconsistencies in the data. These items need to be verified as correct or changed. Since the information in NHSN can be changed or updated at any time, a year-end review is also performed to ensure the data is complete for the annual report.

Hospitals are required to accept the conferred rights template from the Department of Health in order to view the data submitted to NHSN. This includes monthly reporting plans, event, device and MDRO data, procedure data and health care personnel influenza vaccination data. The rights template is periodically updated by HAIP based on changes in NHSN. When this occurs, hospitals must reaccept the conferred rights template for the Department of Health in NHSN.
WRITTEN NOTIFICATION (SERIOUS EVENT REPORTING)

Pursuant to Section 405(a) of the Medical Care Availability and Reduction of Error (MCARE) Act, 40 P.S. § 1303.405(a), the occurrence of a healthcare-associated infection (HAI) in a hospital is deemed a serious event, as defined in section 302 of the MCARE Act, 40 P.S. § 1303.302. Chapter 3 of the MCARE Act, 40 P.S. §§ 1303.301-1303.415, contains various provisions relating to serious events, many of which become applicable to hospitals by virtue of the MCARE Act’s deeming of an HAI as a serious event. Particularly important are the requirements in Section 308(b) of the MCARE Act, 40 P.S. § 1303.308(b) for providing written notification to a patient or available family member or designee of the occurrence of a serious event, in this case an HAI.

Healthcare-associated infections reported through the NHSN are subject to the same patient notification requirements set forth by Act 13 for all serious events. For purposes of meeting the 24-hour reporting requirement for serious events set forth by Act 13, hospitals must submit reports of HAIs to the NHSN within 24 hours of their confirmation. If confirmation of an HAI occurs over a weekend or recognized holiday, reports must be submitted by 5 p.m. on the next workday.

Since an HAI entered into the NHSN is considered a serious event, the patient/family member/responsible party must receive written notification within seven days of confirmation of the HAI.

Written patient notification is required only for those events that meet the HAI event criteria, not for the LabID event criteria.

ANNUAL REPORTS

The Department’s HAI Annual Report includes data on the overall patterns of HAIs in Pennsylvania hospitals and focuses on the three types of HAIs that are used to measure the progress in HAI reductions. These HAI types are known as benchmark HAIs. They were selected by the Department in collaboration with a statewide HAI Advisory Committee established by Act 52 based on the volume of infections and their human and economic toll and preventability. These HAI types were also selected to allow some type of measure to be established across the range of inpatient facilities present in a large, diverse state like Pennsylvania. Even the smallest hospitals are likely to use urinary catheters and to perform at least one of the seven surgical procedures. They include:

- Catheter-associated urinary tract infections (CAUTIs);
- Central line-associated bloodstream infections (CLABSIs); and
- Seven different types (CARD, CBGB, CBGC, COLO, HYST, HPRO, KPRO) of surgical site infections (SSIs).

HOSPITAL REQUIREMENT REFERENCES

HAI Technical Advisory 2015-001 (PAOTH)
HAI Technical Advisory 2015-002 (PATOS)
HAI Technical Advisory 2015-003 (CDI)
Program Memorandum No. 2013-01, Chapter 4 of the MCARE Act - Reporting Requirement Update - April 5, 2013

PA BULLETINS

Health Care Associated Infection Benchmarking Areas for Hospital under the MCARE Act; Final Notice - May 12, 2012
Health Care Associated Infection Benchmarking Areas for Hospital under the MCARE Act – Dec. 3, 2011
Reporting a Patient Identification Number – April 12, 2008
NHSN - Patient Billing Number Entry Screenshot / Health Guidance - April 2008 (PDF)
NHSN - Act 52 Announcement and PA Benchmarking / Health Announcement – Dec. 5, 2007 (PDF)
Reporting Requirements for Health Care Facilities under the MCARE Act – Dec. 22, 2007
Act 52 Introduction / Health Announcement – Nov. 14, 2007 (PDF)

PATIENT SAFETY ADVISORIES

Chapter 4 of The Medical Care Availability and Reduction of Error (MCARE) Act, 40 P.S. § 1303.403(a)(8) Infection Control Plan states that a health care facility shall have “a procedure for distribution of advisories issued under section 405(b)(4) so as to ensure easy access in each health care facility for all administrative staff, medical personnel and health care workers.”

The Pennsylvania Patient Safety Authority (PSA) as per section 405(b)(4) issues advisories to health care facilities. The PSA Pennsylvania Patient Safety Advisory Library provides important patient safety information.