2015 OPERATIONAL MANUAL

Emerging Infections Program Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey

Primary Team Instructions

Version 2015.04.30

TABLE OF CONTENTS

***NOTE:** This document contains only the sections of the complete Operational Manual that are relevant to the Primary Team's responsiblities in this survey. Some sections, appendices, and forms have been removed as they are not relevant to the major activities of the Primary Team. If you have questions about the complete Operational Manual, please contact your EIP Team.*

Section	*Page*
References	2
Introduction to the prevalence survey	2
Prevalence survey teams	3
Patient population	3
Overview of survey procedures	4
Overview of data collection	7
Instructions for completing Patient Information Form	8
What to do with completed forms	14
Appendix 1: CDC location mapping codes and process	16
Appendix 3: Antimicrobial drug list	31

References used in preparing this manual:

1) The National Healthcare Safety Network (NHSN) acute care hospital healthcare-associated infection (HAI) surveillance protocols, CDC locations, and other supporting materials, available at http://www.cdc.gov/nhsn/acute-care-hospital/index.html. Whenever possible and appropriate, language from the NHSN surveillance protocols and supporting materials appears verbatim (or with minimal modification) in this manual.
2) Operational manual for the Four Country (England, Wales, Northern Ireland, Republic of Ireland) Healthcare Associated Infection Prevalence Survey 2006, Hospital Infection Society and Infection Control Nurses Association. Survey results presented in: Smyth ETM, McIlvenny G, Enstone JE, et al. Four Country Healthcare Associated Infection Prevalence Survey 2006: overview of the results. J Hosp Infect 2008;69:230-48.
3) Operational manual for the Jacksonville Healthcare-Associated Infections Prevalence Survey Pilot 2009, Jacksonville, FL, Version 6, June 29, 2009.
4) Operational manual for the Emerging Infections Program Phase 2 Limited Roll-Out Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey, Version 4, June 17, 2010.
5) Emerging Infections Program Phase 3 Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey protocol, Version 4a, March 22, 2011.
6) European Centre for Disease Prevention and Control. Point prevalence survey of healthcare-associated infections and antimicrobial use in Eurooean acute care hospitals—protocol version 4.3. Stockholm: ECDC; 2012.

INTRODUCTION: PREVALENCE SURVEY DESIGN OVERVIEW

This manual contains instructions for performing the Emerging Infections Program (EIP) Healthcare-Associated Infections (HAI) and Antimicrobial Use Prevalence Survey and completing the data collection forms.

The project has been designed as a point prevalence survey, to be conducted on a single day in each participating hospital. Hospital types included in the survey are general acute care hospitals, including general acute care pediatric hospitals. Hospitals participating in the Phase 3 (2011) survey were randomly selected and recruited for participation in each EIP site from 3 bed size strata: small, medium, and large. The numbers of hospitals recruited in each of these strata attempted to approximate the distribution of hospitals in these bed size categories across the entire EIP catchment area (combined catchment areas of the 10 EIP sites). For the Phase 4 (2015) survey, EIP sites will attempt to engage all hospitals that participated in Phase 3. EIP sites with fewer than 20 hospitals participating in the Phase 3 survey are encouraged to attempt to engage additional hospitals for the Phase 4 survey, as resources permit, up to a maximum of 25 hospitals.

Each participating hospital will select its own survey date. Where possible, hospital survey dates will occur during the period from May 1 through September 11, 2015. Because this is a point prevalence survey, all data collection will remain restricted to information present (or cultures or other testing on specimens collected) on or prior to the survey date. Medical record review will be performed on the survey date by trained hospital staff (called the Primary Team or PT) to collect basic demographic, risk factor, and antimicrobial use data for a random sample of acute care inpatients. Each EIP site will have a trained team of survey personnel (the EIP Team, or EIPT) that may assist the PT with its data collection or perform this data collection instead of the PT, where needed. Basic demographic, risk factor, and antimicrobial use data collected on the survey date by the PT should be transmitted to EIPTs within 30 days following the survey date.

The EIPTs will identify patients needing additional medical record review (i.e. those patients identified by the PTs as receiving or being scheduled to receive antimicrobial therapy on the survey date or the calendar day prior to the survey date). EIPTs will request and review medical records of these patients to make HAI determinations and collect antimicrobial use data, including data to use in evaluating the quality and antimicrobial drug prescribing. EIPTs will enter all survey data into a web-based electronic data management system developed by CDC. It is recommended that EIPTs begin requesting medical records

and performing the antimicrobial use and HAI data collection as soon as possible, at a time point when it can be anticipated that most patients will have been discharged from the hospital and medical records will be available for review; for example, approximately 45 days following each hospital's survey date. The goal date for completion of all survey data collection and entry is June 30, 2016.

PREVALENCE SURVEY TEAMS

As noted above, primary data collection for the prevalence survey will be conducted by 2 teams: Primary Teams (PTs) and EIP Teams (EIPTs).

The PT is the team that each participating hospital assembles for the purposes of conducting prevalence survey activities. The number, experience, and expertise of team members will vary from hospital to hospital, although it is recommended that the PT leader be an infection preventionist. Other team members will be determined by the PT leader. These individuals may be Registered Nurses or other hospital personnel without specific infection prevention experience, as long as these team members: 1) possess appropriate credentials and permissions to review patient medical records as required by the facility; 2) have participated in prevalence survey training conducted by EIP sites and/or CDC; and 3) receive adequate supervision by the PT leader. The PT will collect basic demographic and limited clinical data on patients selected for inclusion in the survey. The EIPT may assist the PT in these survey date activities, to the extent determined upon by the PT and EIPT, by providing support or participating in data collection.

The EIPT is the team composed of EIP epidemiologists/surveillance officers and led by the EIP survey coordinator. In some EIP sites, this team may also include other designated, qualified individuals, as deemed appropriate by the EIP survey coordinator. EIPT members will participate in prevalence survey training conducted by CDC. The EIPT will assist the PT with hospital acute care unit mapping to NHSN location codes, training, and patient selection activities, and may also assist the PT with its portion of the survey data collection or collect these data instead of the PT. The EIPT will also perform retrospective medical record review of surveyed patients to identify HAIs and to assess antimicrobial use and prescribing quality.

PATIENT POPULATION

The prevalence survey will include patients of any age admitted to acute care areas of participating hospitals. Acute care areas of participating hospitals include labor and delivery (LD) units, labor-delivery-recovery-postpartum (LDRP) units, and newborn nurseries housing well newborns. Newborns rooming in with mothers on LDRP or postpartum (PP) units are also included. There is no required duration of hospitalization for a patient to be included in the study (except in the case of patients on observation status, who are eligible for inclusion in the survey if they have been in the hospital for ≥ 24 hours at the time of the survey).

Do not include patients in the following categories:

- Patients in non-acute care areas of the hospital.
- Patients in non-admission areas of the hospital.
- Patients in psychiatric units (units providing care for patients whose primary condition is psychiatric).
- Patients in rehabilitation units (units for patients whose primary reason for hospitalization is to receive physical therapy or rehabilitative therapy).
- Patients in skilled nursing care units.
- Patients undergoing same-day treatment or surgery.
- Patients seen as outpatients, whether for 23-hour observation, diagnosis, or therapy (e.g. chemotherapy, dialysis, or cardiac catheterization).
- Patients in the Emergency Department.
- Patients in hospice units.

Ideally, all acute care patients in participating hospitals would be included in the survey. However, in many instances this is not practical. Therefore, a random sample of acute care patients from each participating hospital will be included. The process for selecting the random sample of patients is described below. The size of the random sample will depend on the staffed bed size of the hospital:

- Small hospitals will have a target sample size of 75 patients.
- Medium hospitals will have a target sample size of 75 patients.
- Large hospitals will have a target sample size of 100 patients.

OVERVIEW OF SURVEY PROCEDURES FOR PRIMARY TEAMS

Primary Teams

1) Each hospital should designate a PT leader in advance of the survey date. The PT leader is responsible for coordinating all prevalence survey activities at that facility and for supervising and organizing the efforts of the PT.

2) The PT leader and EIPT will work together to establish the hospital's survey date and training date(s).

3) The PT leader, with assistance from the EIPT and other hospital staff as needed, will coordinate completion of the "Healthcare Facility Assessment" (HFA, a hospital questionnaire pertaining to hospital characteristics and infection control and antimicrobial stewardship policies and practices) during the month prior to the survey date. The HFA is completed once by each hospital participating in the survey. The completed HFA is submitted to the EIPT, ensuring that precautions are taken (in accordance with local and state regulations) to protect the confidentiality of the information recorded on the HFA.

4) In advance of the survey date, the PT leader will send a list of the participating facility's acute care inpatient units to the EIPT along with the corresponding NHSN location codes to which the units are mapped. In those uncommon situations in which a hospital's inpatient units are not already mapped to NHSN location codes, or are mapped to codes that were not used in the Phase 3 (2011) survey, the EIPT will work with CDC staff to map each acute care inpatient unit to the correct NHSN location code (see Appendix 1).

5) The PT leader will submit a list of acute care bed numbers to the EIPT approximately 2-3 weeks in advance of the survey date. This bed number list should, whenever possible, be formatted in Microsoft Excel, with columns for acute care unit name, CDC location code, and bed number. Bed numbers should represent unique hospital beds (and, therefore, in most cases unique patients).

6) Approximately one week prior to the survey, the PT leader will receive a randomly-sorted acute care bed number list from the EIPT. This list should include the following information for each acute care bed number: the hospital unit on which the bed is located, the CDC location code for that unit, and the CDC ID code assigned to that bed number. The list should also make note of the target sample size for that hospital, based on the hospital's bed size category.

   Note for small hospitals: If the number of staffed beds in a small hospital is less than 75, then the goal will be for the PT to survey all patients in that hospital on the survey date. For example, if Hospital CC has 50 staffed beds, Hospital CC would have a sample size goal of 50 patients on the survey date. If 45 eligible acute care patients were in Hospital CC on the morning of the survey date (i.e. 5 beds were empty), the PT should attempt to survey all 45 patients. Also, in hospitals where the number of staffed beds may be greater than 75 but the number of eligible patients on the survey date turns out to be less than 75, the PT should attempt to survey all eligible patients.

7) CDC ID codes should be pre-assigned to bed numbers prior to the survey by the EIPT or the PT. Each code will be a 7-digit, alpha-numeric code starting with the state's two-letter abbreviation, followed by a two-letter facility identifier and 3 numbers (example, CA-AA001). The two-letter facility identifier will be assigned by the EIPT.

   Example of CDC ID code assignment: Hospital AA in CA is a small hospital with a target sample size of 75 patients. The CA EIPT member assigned to Hospital AA provides the PT leader with the hospital two-letter code (AA), and patient numbers from 1 to 150 (depending on the size of the hospital, it may be prudent to provide more patient numbers to accommodate empty beds, ineligible patients, etc.). Therefore, CDC ID codes in Hospital AA will be CA-AA001 through CA-AA150. Hospital BB, also in CA, is a large hospital and therefore has a target sample size of 100. The CA EIPT member gives the Hospital BB PT leader the hospital two-letter code (BB) and patient numbers from 1 to 200 (to accommodate situations where there are empty beds, ineligible patients, etc.). Therefore, Hospital BB's CDC ID codes will be CA-BB001 through CA-BB200.

8) On the morning of the survey, the PT leader will print out the hospital census for that day. The census should be generated between 12:00 am (2400 or 0000 hours) and 08:00 am (0800 hours) on the survey date. The PT will match the randomly-sorted acute care bed number list with the morning census to identify the patients to be surveyed. For example, if the first bed number on the randomly-sorted bed number list is bed 100 on the 2 North patient care unit, then the PT will use the morning census to identify the patient occupying bed 100 on the 2 North unit. That patient will be included in the survey, unless initial review of the patient's record reveals that the patient is not an acute care patient eligible for inclusion in the survey. Once the randomly-sorted bed numbers are matched to the morning census, the CDC ID codes are used as unique identifiers for the patients occupying those acute care bed numbers randomly selected for inclusion in the survey.

9) The PT (or the EIPT) must complete page 1 of the Patient Information Form (PIF) for each patient included in the minimum sample size goal. In the Hospital AA example, a small hospital, the PT needs to complete page 1 of the PIF for each patient occupying one of the first 75 bed numbers on the randomly-sorted acute care bed number list on the morning of the survey, assuming that each of the patients occupying those 75 bed numbers is eligible for the survey (i.e. are eligible acute care inpatients) and their medical records are available. Page 2 of the PIF consists of discharge and outcome information, and will be completed by the PT (or EIPT) at a later date.

10) Special circumstances that may arise include the following: (1) a patient occupying a bed selected for inclusion in the survey is not eligible for the survey; (2) the patient's medical record is unavailable at the time of the survey; and (3) a bed selected for inclusion in the survey is empty at the time of the survey. Circumstance (2) is likely to be a problem primarily in facilities where PTs need to review paper medical records to complete PIFs. Several special circumstances are addressed below:

    a) What if I go to review the medical record of a patient occupying a bed selected for inclusion in the survey, and I discover that the patient is actually a patient on observation status?

       Answer: If the patient is an observation-status patient who has been in the hospital for at least 24 hours, include that patient in the survey. If the patient is an observation-status patient who has been in the hospital for < 24 hours, exclude that patient and move on to the next patient/bed number on your list.

       - *NOTE: If you are completing the PIF retrospectively, the patient must have been in the hospital for at least 24 hours as of 5 pm (1700 hrs) on the survey date to be eligible for inclusion.*

b) What should I do if I travel to a unit to review a patient selected for inclusion in the survey, but the patient is off the floor and the medical record is not available?

Answer: This situation is probably only applicable to situations where paper medical records are being reviewed on the survey date. In these cases, the PT (or EIPT) should make a second attempt to review that patient's chart at a later time on the survey date. If the patient record is still not available on the second attempt, then the PT (or EIPT) can skip that patient and not include that patient in the survey.

- *NOTE: For hospitals with electronic health records, this will not affect your ability to review the electronic record and complete the PIF.*

c) What should I do if a patient selected for inclusion in the survey dies or is discharged from the hospital between the time the morning census was generated and the time I travel to the unit to review the medical record?

Answer: This situation is primarily applicable to situations where paper medical records are being reviewed on the survey date. If a patient selected for inclusion in the survey has been discharged or has died between the time the morning census list is generated and the time the PT (or EIPT) reviews that patient's medical record on the survey date, the PT may skip that patient and not include that patient in the survey ***if the medical record is not available****. If, however, the patient's record is still available, and it can be confirmed that the patient was in the hospital, was an eligible acute care inpatient, and occupied the selected acute care bed number for some period of time on the survey date, the patient should be included in the survey and page 1 of the PIF should be completed.*

- *NOTE: For hospitals with electronic health records, if you can confirm that the patient was an eligible acute care inpatient and occupied the selected bed number for some period of time on the survey date during usual working hours, the patient is included in the survey and a PIF is completed.*

d) What should I do if a patient selected for inclusion in the survey is transferred to another bed in my hospital between the time the morning census was generated and the time I travel to the unit to review the medical record?

Answer: This situation is primarily applicable to situations where paper medical records are being reviewed on the survey date. In this circumstance, you will need to skip that patient. Do not "follow" the patient to their new location in the hospital. Also, if the patient's original bed number (the bed number selected for inclusion in the survey) is now occupied by a different patient than the patient on the morning census list, DO NOT review the record of the patient who is now occupying the bed. You should move to the next acute care bed number and patient on your randomly-sorted bed number list.

- *NOTE: For hospitals with electronic health records, if you can confirm that the patient was an eligible acute care inpatient and occupied the selected bed number for some period of time on the survey date during usual working hours the patient is included in the survey and a PIF is completed.*

e) What should I do if I discover that a bed number selected for inclusion in the survey is empty at the time of the survey?

Answer: You should simply skip that bed number and move on to the next bed number on your list. Of course, you will need to replace that empty bed number with another bed number on your randomly-sorted list, and the process for doing this is described in the answer to the next question.

f) What should I do if I get to my minimum goal sample size on my list, but I realize that I have had to skip a few patients for the reasons noted above (e.g., medical records were not available, beds were empty, etc.), and so I haven't actually completed my minimum goal number of PIFs?

*Answer: Let's consider an example. You are a PT member in Hospital BB, considered a large hospital for the purposes of the prevalence survey. You know that your minimum sample size goal for the prevalence survey is 100 patients. You have reached the 100th acute care bed number on your randomly-sorted bed number list, and you realize that you have only been able to complete page 1 of 95 PIFs, since 3 patients' medical records were not available and 2 bed numbers were empty. In this case, you should simply continue **in order** down your randomly-sorted acute care bed number list until you are able to complete 5 more PIFs (page 1). That will give you your minimum goal sample size of 100. It is very important to continue down your randomly-sorted list **in order**—do not skip around on your list to select the replacement bed numbers.*

11) The PT leader (or EIPT) should ensure that all PIFs (page 1) are filled out completely. It is strongly recommended that page 1 of the PIFs be completed on the survey date. Page 2 of the PIF will need to be completed retrospectively because it consists of discharge and outcome information. The PT leader should maintain the linkages between CDC ID codes and patient identifiers until the EIPT notifies the PT leader that project activities are complete and the linkages can be destroyed (as long as this is in accordance with local and state rules and regulations). The PT leader can maintain the linkages by making sure to fill out the top portion of the PIF (the "Identifiers" section), making a copy of each PIF, and storing these forms in a secure location at the participating facility, according to local institutional review board (IRB) and/or hospital regulations.

12) The PT leader should submit all original, completed PIFs to the EIPT within 30 days after the survey date, keeping in mind that these forms contain patient identifiers. All necessary precautions, according to each participating facility's and/or state's requirements, should be taken to ensure patient privacy and confidentiality.

13) EIPTs should review all PIFs for completeness, including page 2 (discharge and outcome information). EIPTs should ensure that any incomplete fields on the PIF are completed in a timely manner, either through EIPT retrospective medical record review or through follow-up with the PT.

DATA COLLECTION OVERVIEW

NOTE regarding sources of data: This project includes hospital-specific forms and patient-specific forms. The hospital-specific forms are completed by PTs and EIPTs, and may involve consultation with hospital staff other than PT members to gather information on basic hospital characteristics and infection control and antimicrobial stewardship policies and practices. The patient-specific forms rely only on existing data sources (e.g., medical records, nursing records, and laboratory reports). There is no direct interaction with patients. Patients are not interviewed. Acceptable sources of data include: electronic or paper medical records, radiology or laboratory reports, census lists, lists of patients with selected medical devices, etc.

There are multiple survey forms that are completed by the Primary Teams and/or the EIP Teams.

There is one hospital-level form that is completed by the Primary Team and/or other hospital staff:

1) Healthcare Facility Assessment (HFA), completed by each hospital's PT (and/or other hospital staff where appropriate) one time during the month before each hospital's survey date.

There is one patient-level form that is completed by the Primary Team and/or the EIP Team:

1) Patient Information Form (PIF), 2-page form completed by PTs and/or EIPTs for all surveyed patients. Page 2 (discharge and outcome information) is usually completed by the EIP Team.

There are additional forms completed by the EIP Team:

1) EIP Healthcare Facility Assessment (EIP HFA), 1-page form completed by EIPTs one time during the month before each hospital's survey date.
2) Antimicrobial Use Form (AUF), 2-page form completed by EIPTs for patients identified on page 1 of the PIF as receiving or being scheduled to receive antimicrobial drugs on the survey date or the day prior to the survey date (or for whom antimicrobial data are unknown).
3) Antimicrobial Quality Assessment (AQUA) Forms:
    a. Case Eligibility Form (AQUA Form 1), 2-page form completed by EIPTs for patients who meet certain criteria based on data recorded on the AUF.
    b. General Patient Assessment Form (AQUA Form 2), 2-page form completed by EIPTs for patients who are deemed eligible for one or more AQUA events, based on information recorded on the Case Eligibility Form.
    c. Vancomycin Form (AQUA Form 3a), 2-page form completed by EIPTs for patients deemed eligible for this AQUA event based on information recorded on the Case Eligibility Form.
    d. Fluoroquinolone Form (AQUA Form 3b), 3-page form completed by EIPTs for patients deemed eligible for this AQUA event based on information recorded on the Case Eligibility Form.
    e. Community-Acquired Pneumonia (CAP) Form (AQUA Form 3c), 4-page form completed by EIPTs for patients deemed eligible for this AQUA event based on information recorded on the Case Eligibility Form.
    f. Urinary Tract Infection (UTI) Form (AQUA Form 3d), 3-page form completed by EIPTs for patients deemed eligible for this AQUA event based on information recorded on the Case Eligibility Form.
4) HAI Form (HAIF), 2-page form completed by EIPTs for patients identified on the AUF as receiving antimicrobial drug(s) for treatment of active infection or for unknown rationale.

The PT role in survey data collection is described in more detail below.

Primary Team Data Collection

Data Collection Tools

Data collection should be completed using the HFA and the PIF. The HFA can be completed manually, using black or blue ink, or can be completed electronically as a fillable PDF. The PIF should be completed manually using black or blue ink. Record dates, identification numbers, and codes where indicated. When making a selection(s) among answer choices, place **"X"** in the appropriate box or boxes.

Timeline for Completing Data Collection

Each hospital will work with their EIPT to select a single survey date between May 1 and September 11, 2015. The HFA should be completed and submitted to the EIPT during the month prior to the survey date. Surveys should be conducted on a weekday, Monday through Friday, during normal working hours. The PT is strongly encouraged to complete its data collection activities on the survey date, with the exception of page 2 of the PIF (discharge and outcome information). Data collection on page 1 of the PIF must remain restricted to information present on or prior to the survey date. PTs should provide their completed forms to the EIPT within 30 days of the survey date.

Data Collected

The PTs will complete the PIF for every patient included in the survey. In some cases the EIPT will assist or will complete the PIF in lieu of the PT. The PIF is a 2-page form. Page 1 of the form is divided into 5 sections: Identifiers, Demographic information, Weight and height, Devices, and Antimicrobials. This page of the form should ideally be completed on the survey date itself, using information in the medical record from the survey date or the day prior to the survey date (as noted above). Page 2 of the form has one section: Follow-up information (hospital discharge date and patient outcome). This page of the form must

be completed retrospectively for all surveyed patients. PTs and EIPTs should decide how to ensure completion of Page 2 for all surveyed patients. PIF Identifiers are collected and kept at the local hospital. Identifiers are also provided to the EIPT so that the EIPT can complete its data collection activities. Patient identifiers such as name, date of birth, and medical record number are not transmitted to CDC. Dates such as admission date and survey date are transmitted to CDC. Detailed instructions about how to answer each item in the PIF are provided below.

Patient Confidentiality Protection

All eligible patients will be assigned a unique identification code (called the "CDC ID"). This code does not incorporate personally identifying information. Each code will be a 7-digit, alpha-numeric code starting with the state's two-letter abbreviation, followed by a two-letter facility identifier and 3 numbers (example, CA-AA001). The two-letter facility identifier will be assigned by the EIPT. CDC ID codes will be assigned prior to review of medical records. If bed numbers included in the random sample are not occupied, or patients are subsequently found to be ineligible for inclusion in the study, CDC ID codes will not be re-used or re-assigned to other patients.

The linkages between patient identifiers and CDC ID codes will be maintained at the participating hospital and EIP site until the conclusion of project activities, at which time the linkages should be destroyed. Data collected during the course of the project, whether identifiable or de-identified, must be stored in secure locations according to local and state regulations. Where necessary, participating hospitals and EIP sites will obtain institutional review board (IRB) approval and/or other appropriate approvals to perform the prevalence survey.

INSTRUCTIONS FOR COMPLETING DATA COLLECTION FORMS

Patient Information Form (PIF, completed by PTs and/or EIPTs)

Data Field	*Instructions*
CDC ID	Record CDC identification code.
Survey Date	Enter the date in mm/dd/yyyy format.
Data collector initials	Enter data collector's initials.
If data collected on survey date, enter data collection time	Self-explanatory. Indicate the time at which data collection began for that particular PIF, and check "am" or "pm."
OR ☐Data collected retrospectively	If data collection was not done on the survey date but rather was done after the survey date, check this box. When data are collected retrospectively, use only information present, specimens collected, and tests performed up until 1700 hours (5:00 pm) on the survey date.

Section I. Identifiers – ***information in Section I is not submitted to CDC***

Data Field	*Instructions*
Patient name	Enter last name, first name, middle initial.
Date of birth	Enter in mm/dd/yyyy format.
Hospital name	Enter the name of the hospital.
Hospital unit name	Enter the name of the hospital unit on which the patient is housed at the time of the survey.
Room no.	Enter the number of the room occupied by the patient at the time of the survey.
Medical record no.	Enter the medical record number.

Section II. Demographic information

Data Field	*Instructions*
Age	Record the patient's age on the survey date. Age may be noted on the medical record "face sheet." If patient's age is less than 30 days, indicate age in days and check the "dys" box. If patient's age is 30 days

Data Field	*Instructions*
	to 11 months, indicate age in months. If patient is 12 months or older, indicate age in years. Examples: 34 days of age should be coded as Age=1 and the box for “mos” should be checked. 14 months of age should be coded as Age=1 and the box for “yrs” should be checked.
Admission date	Enter the date the patient was admitted to the hospital. Use mm/dd/yyyy format. Admission date may be noted on the medical record “face sheet.” You should enter the actual hospital admission date, even in circumstances where the patient has stayed overnight in the Emergency Department waiting for admission. Note that in other data fields on the survey forms, special instructions are provided for how to handle data collected in the Emergency Department on the day prior to inpatient admission. On occasion you may encounter a patient who is on “observation” status and not officially a hospital inpatient. These patients qualiify for inclusion in the survey if they are in an acute care unit inpatient bed and they have been in the hospital for ≥24 hours at the time of the survey. Because they are not considered hospital inpatients, there may not be a hospital admission date. In these cases, enter the date that the patient was brought to the acute care inpatient bed as the admission date for the purposes of the prevalence survey.
Gender	Check the appropriate box: M=male, F=female, as noted on the medical record “face sheet.” Enter the biological sex of the patient at the time of birth.
CDC location code	The CDC location code identifies the type of inpatient unit on which the patient is housed on the survey date. CDC location codes appear in Appendix 1. Hospital units should be mapped to the appropriate CDC location codes in advance of the survey date. The CDC location code for the unit of each bed number selected for inclusion in the survey should appear on the randomly-sorted bed number list that the EIPT provides to the PT to use on the survey date. Record this code on the PIF. Only one CDC location should be recorded on the PIF. If bed numbers from heterogeneous units (those units with multiple patient types, and with no single patient type comprising 80% or more of the unit’s population) are included on the randomly sorted bed number list, and there are multiple possible CDC location codes that could potentially be assigned, depending upon the type of patient occupying the bed on the day of the survey, you should select the single most appropriate code based on the type of patient or the clinical service to which the patient was admitted. For example, Bed 100 on Unit 6 East is included in the survey. 6 East is a unit with the following patient types: 30% general medicine, 40% orthopedic surgery, 30% hematology/oncology. On the randomly-sorted bed number list, the CDC location column has the following entry: “W-M or W-ORT orW-ONCHONC.” You should evaluate the medical record for the patient in Bed 100 on the day of the survey and record ONE CDC location code based on the patient type or clinical service. If the patient is admitted to the medical service for treatment of pneumonia, for example, you would record only “W-M” on the PIF.
Race	Race of patient as noted in the medical record. Race may be noted on the medical record “face sheet.” Multiple boxes can be checked. Do not make assumptions based on name or native language. If race is unknown, please check “unknown”.

Data Field	*Instructions*
	The minimum categories for the Federal statistics of race data are defined as follows: • American Indian or Alaskan Native: A person having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment. • Asian: A person having origins in any of the original people of the Far East, Southeast Asia, or the Indian subcontinent. Can include the following: Cambodia, China, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. • Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American". • Native Hawaiian or other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. • White: A person having origins in any of the original peoples of Europe, the Middle East, or North Asia. Note: "Race" instructions modified from 2014 EIP Case Report Form Instructions, revised 1/14/2014. (see OMB Standards for Data on Race and Ethnicity, as published in 1997 Federal Register, http://www.whitehouse.gov/omb/fedreg_1997standards/)
Ethnicity	Ethnicity of patient as noted in medical record. Ethnicity may be indicated on the medical record "face sheet." Indicate ethnicity EVEN IF race is already indicated. Hispanic or Latino ethnicity indicates a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. For example, many whites are also Hispanic or Latino. Do not make assumptions based on name or native language. If not noted or unsure, check "unknown." *Note: Some institutions combine race/ethnic coding. For example, they might define a person's race as "Hispanic or Latino". In this case race would be coded "unknown" on the PIF, and ethnicity would be "Hispanic or Latino". If "Caucasian" is indicated in the medical record, race should be coded as "White" and ethnicity should be coded as "Not Hispanic or Latino." Note: "Ethnicity" instructions modified from 2014 EIP Case Report Form Instructions, revised 1/14/2014. (see OMB Standards for Data on Race and Ethnicity, as published in 1997 Federal Register, http://www.whitehouse.gov/omb/fedreg_1997standards/)
Primary Payer	Check the primary type of health insurance as noted in the hospital chart. If a patient's insurance status changes during hospitalization, indicate insurance status at time of admission. If insurance type is not noted in the chart or unknown, check "Unknown." Clarifications of insurance types:

Data Field	*Instructions*
	Medicare: the national health insurance program for people 65 years and older (also covers some people under the age of 65 with disabilities and people with end-stage renal disease). Medicaid: program that pays for medical assistance for certain people with low incomes and resources. State assistance programs are those state programs that provide medical coverage to individuals who are otherwise uninsured, uninsurable or those with special health care needs. Private insurance: patient receives and pays for medical care as part of a private or managed care system. Self-pay: patient pays out of pocket at the time of service. Include patients without insurance coverage in this category. No charge: patient (and/or insurance company) was not billed for medical services. This is uncommon. Other: health insurance or health care coverage not meeting the above categories; for example, Tricare for active duty military. Unknown: patient's primary payer unable to be determined from information present in the medical record.

Section III. Weight and height

NOTE: Sources of Body Mass Index (BMI), height and weight information include medication administration or other pharmacy records, vital signs flow sheets, and admission and progress notes.

Data Field	*Instructions*
For infants in neonatal locations: **Birthweight:**	For infants (less than 12 months of age) in neonatal locations only (defined as locations coded as CC-NURS, CCS-NURS, S-NURS, W-NURS, W-LDRP), record the birthweight in pounds and ounces or in grams. If the birthweight cannot be located in the medical record, check "Birthweight unknown."
For other patients: **BMI:** **Height: (if BMI unknown)** **Weight: (if BMI unknown)**	For patients who are 12 months of age and older, regardless of hospital location, enter the Body Mass Index (BMI) recorded on the day of the survey. If there is no BMI on the survey date, enter the BMI that is recorded closest to the survey date, BEFORE the survey date. For example, if the patient is surveyed on August 10, and the patient has a BMI of 22.7 on August 1, BMI 22.5 on August 5, and BMI 22.2 on August 11, you will record a BMI of 22.5 since August 5 is the closest date to the survey date that is BEFORE the survey date. If the patient has no BMI recorded on the survey date or before the survey date, check "Unknown" and enter the patient's height (in feet and inches or in centimeters) and weight (in pounds and ounces or in kilograms). You may use height and weight data recorded on different days, as long as those days are the survey date or a day prior to the survey date. Use height and weight data recorded on the survey date whenever possible; if no weight information is available on the survey date, record height and weight closest in time to the survey date, BEFORE the survey date (going as far back as the survey hospital admission date if necessary). If there is no height or weight information in the medical record on the survey date or on days prior to the survey date, check "Unknown."

Section IV: Devices *(in place on the survey date)*

NOTE: Information on devices (urinary catheters, ventilators and central lines) may be found in nursing notes and patients' daily flow sheets (e.g., sheets that include information on vital signs, fluid balance, nursing assessments, operating room flow sheets, etc.). Progress notes and procedure notes may also contain information on device use. Ventilator information may be found in respiratory therapy notes and in intensive care unit flow sheets in sections documenting the patient's respiratory status. Finally, some record systems (particularly electronic record systems) may have a specific location where information on the presence and status of medical devices is recorded. There is no minimum duration the device must have been in place.

Data Field	***Instructions***
Urinary catheter	Check "yes" if the patient has an indwelling urethral catheter (also called a Foley catheter) on the survey date. Otherwise, check "no." Check "no" for patients who receive intermittent catheterization or "straight" catheterization. Check "no" for patients with nephrostomy tubes or suprapubic catheters. A urinary catheter is defined as "A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a closed collection system; also called a Foley catheter." It does not include straight in-and-out catheters, suprapubic catheters, or nephrostomy tubes. Check "unknown" only if portions of the medical record are missing and this information cannot be ascertained (this should be uncommon).
Ventilator	Check "yes" if the patient has a device to assist or control respiration through a tracheostomy or by endotracheal intubation on the survey date. Otherwise, check "no." A ventilator is defined as "A device to assist or control respiration, inclusive of the weaning period, through a tracheostomy or by endotracheal intubation. NOTE: Lung expansion devices such as intermittent positive pressure breathing (IPPB); nasal positive end-expiratory pressure (PEEP); continuous nasal positive airway pressure (CPAP, hypoCPAP) are not considered ventilators unless delivered via tracheostomy or endotracheal intubation (e.g., ET-CPAP)." Check "unknown" only if portions of the medical record are missing and this information cannot be ascertained (this should be uncommon).
Central line	Check "yes" if the patient has a central line in place on the survey date. Otherwise, check "no." A central line is defined as:"An intravascular catheter that terminates at or close to the heart or in one of the great vessels which is used for infusion, withdrawal of blood, or hemodynamic monitoring. The following are considered great vessels for the purpose of reporting central-line infections: aorta, pulmonary artery, superior vena cava, inferior vena cava, brachiocephalic veins, internal jugular veins, subclavian veins, external iliac veins, common iliac veins, and femoral veins." NOTE: Neither the insertion site nor the type of device may be used to determine if a line qualifies as a central line. The device must terminate in one of these vessels or in or near the heart, and be used for one of the purposes outlined above, to qualify as a central line. NOTE: At times an intravascular line may migrate from its original great vessel location. Subsequent to the original confirmation, ongoing

	confirmation that a line resides in a great vessel is not required. Therefore, once a line is identified to be a central line, it is considered a central line until discontinuation, regardless of migration. NOTE: An introducer is considered an intravascular catheter, and depending on the location of its tip and use, may be a central line. NOTE: Pacemaker wires and other nonlumened devices inserted into central blood vessels or the heart are not considered central lines, because fluids are not infused, pushed, nor withdrawn through such devices. NOTE: In neonates, the umbilical artery/vein is considered a great vessel. NOTE: The following devices are not considered central lines: extracorporeal membrane oxygenation (ECMO), femoral arterial catheters, intraaortic balloon pump (IABP) devices, and hemodialysis reliable outflow (HeRO) dialysis catheters. If the patient has a central line, check "yes," and indicate whether the patient has 1 central line, more than 1 central line, or an unknown number of central lines in place on the survey date. NOTE: Indicate the number of individual central lines, NOT the number of lumens (for example, if the patient has one double-lumen central line in place, you will check the box to indicate that the patient has 1 central line). Check "unknown" only if portions of the medical record are missing and this information cannot be ascertained (this should be uncommon).

Section V. Antimicrobials

NOTE: Use the paper or electronic Medication Administration Record (MAR) (including the Emergency Department MAR and the inpatient MAR) and operating room flow sheets (on which surgical prophylaxis antibiotics may be recorded) to determine whether patients are being administered or are scheduled to be administered antimicrobials.

Data field	***Instructions***
Antimicrobials administered or scheduled to be administered: **On the survey date:** **On the day before the survey date:**	This question should be answered for every patient included in the survey. Check "yes" if the patient was administered or was scheduled to be administered at least one dose of an antimicrobial drug. Acceptable antimicrobials are those that appear in Appendix 3 that are administered (or are scheduled to be administered) by any of the following routes: IV, IM, orally, enterally, or via inhalation. Make sure to indicate whether the patient was administered or scheduled to be administered antimicrobials on the survey date AND on the day before the survey date (one response for each day). Check "unknown" only if portions of the medical record are missing and this information cannot be ascertained (this should be uncommon).

Patient Information Form page 2 (PIF, completed by PTs and/or EIPTs)

Data Field	***Instructions***
CDC ID	Record CDC identification code.
Data collector initials	Enter data collector's initials.

Section VI. Follow-up information

NOTE: In many instances, EIP Teams will collect this information. Check with your EIP Team to determine if/when the PT will complete this section of the form.

NOTE: Data collectors should attempt to ascertain hospital discharge date and patient outcome at the time of discharge for all patients included in the survey, unless 6 months has elapsed since the survey date and the patient is still in the hospital (same hospitalization that includes the survey date). Once 6 months have passed since the survey date, attempts to collect discharge and outcome information may stop.

Data field	***Instructions***
Enter date of follow-up data collection:	Enter using mm/dd/yyyy format.
Hospital discharge date	Enter using mm/dd/yyyy format. If the patient was discharged but records are not available to determine the specific discharge date, check "unknown." If the patient is still in the hospital at the time of follow-up, and 6 months have passed since the survey date, check the "still in hospital" box. If 6 months have not passed since the survey date, wait until 6 months have passed before completing the follow-up information section for the patient.
Patient outcome at time of hospital discharge	Indicate whether the patient was alive at discharge (survived), died, or if the outcome is unknown. If the patient is still in the hospital at the time of follow-up, and 6 months have passed since the survey date, check the "still in hospital" box. If 6 months have not passed since the survey date, wait until 6 months have passed before completing the follow-up information section for the patient.

WHAT TO DO WITH COMPLETED FORMS

Primary Teams:

1) Copy the Healthcare Facility Assessment (HFA) once it is completed.
2) Copy each Patient Information Form (PIF) once it is completed.
3) Submit the original HFA and the PIFs to the EIPT according to arrangements made with the EIPT, in accordance with local and/or state guidelines and with all necessary precautions taken to protect patient identifiers.
4) Store copies of the HFA and PIFs in a secure location at the survey hospital in the care of the PT, in accordance with local and/or state guidelines.
5) Once the EIPT has been notified by CDC that all project activities are complete, the forms may be destroyed as long as this is in accordance with local guidelines. In some instances, IRBs may require that forms be maintained for longer periods of time. Check with your IRB for further information and guidance.

APPENDIX 1: CDC PATIENT LOCATIONS AND MAPPING PROCESS

NOTE: Locations with asterisks (*) represent locations that were not used in the Phase 3 2011 survey, but should be used where appropriate in the 2015 survey.

CDC Patient Location/Service	*Code*	*Description*
Inpatient Adult Critical Care		
Burn Critical Care	CC-B	Critical care area specializing in the care of patients with significant/major burns.
Medical Cardiac Critical Care	CC-C	Critical care area specializing in the care of patients with serious heart problems that do not require heart surgery.
Medical Critical Care	CC-M	Critical care area for patients who are being treated for nonsurgical conditions.
Medical/Surgical Critical Care	CC-MS	An area where critically ill patients with medical and/or surgical conditions are managed.
Neurologic Critical Care	CC-N	Critical care area for the care of patients with life-threatening neurologic diseases.
Neurosurgical Critical Care	CC-NS	Critical care area for the surgical management of patients with severe neurologic diseases or those at risk for neurologic injury as a result of surgery.
*ONC Medical Critical Care	CC-ONCM	Critical care area for the care of oncology patients who are being treated for nonsurgical conditions related to their malignancy. (CC-ONCM maps to 2011 CC-M location code).
*ONC Surgical Critical Care	CC-ONCS	Critical care area for the evaluation and management of oncology patients with serious illness before and/or after cancer-related surgery. (CC-ONCS maps to 2011 CC-S location code).
*ONC Medical-Surgical Critical Care	CC-ONCMS	Critical care area for the care of oncology patients with medical and/or surgical conditions related to their malignancy. (CC-ONCMS maps to 2011 CC-MS location code).
Prenatal Critical Care	CC-PNATL	Critical care area for the care of pregnant patients with complex medical or obstetric problems requiring a high level of care to prevent the loss of the fetus and to protect the life of the mother.

CDC Patient Location/Service	*Code*	*Description*
Respiratory Critical Care	CC-R	Critical care area for the evaluation and treatment of patients with severe respiratory conditions.
Surgical Cardiothoracic Critical Care	CC-CT	Critical care area specializing in the care of patients following cardiac and thoracic surgery.
Surgical Critical Care	CC-S	Critical care area for the evaluation and management of patients with serious illness before and/or after surgery.
Trauma Critical Care	CC-T	Critical care area specializing in the care of patients who require a high level of monitoring and/or intervention following trauma or during critical illness related to trauma.
Neonatal Units		
Well Baby Nursery (Level I)	W-NURS	Hospital area for evaluation and postnatal care of healthy newborns. May include neonatal resuscitation and stabilization of ill newborns until transfer to a facility at which specialty neonatal care is provided.
Step down Neonatal Nursery (Level II)	S-NURS	The capabilities of Level II, listed below, are from the American Academy of Pediatrics definitions of levels of neonatal care[1]. <u>Level II special care nursery</u> Level I capabilities plus: • Provide care for infants born ≥32 wk gestation and weighing ≥1500 g who have physiologic immaturity or who are moderately ill with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis • Provide care for infants convalescing after intensive care • Provide mechanical ventilation for brief duration (<24 h) or continuous positive airway pressure or both • Stabilize infants born before 32 wk gestation and weighing less than 1500 g until transfer to a neonatal intensive care facility.
Neonatal Critical Care (Level II/III)	CCS-NURS	Combined nursery housing both Level II and III newborns and infants.

CDC Patient Location/Service	*Code*	*Description*
Neonatal Critical Care (Level III)	CC-NURS	A hospital neonatal intensive care unit (NICU) organized with personnel and equipment to provide continuous life support and comprehensive care for extremely high-risk newborn infants and those with complex and critical illness. NOTE: The capabilities of Level III and Level IV, listed below, are from the American Academy of Pediatrics definitions of levels of neonatal care.[1] **NOTE: These classifications are all considered Level III NICUs for the purposes of the prevalence survey (and for NHSN).** <u>Additional details on Level III NICU</u>: Level II capabilities plus: • Provide sustained life support • Provide comprehensive care for infants born < 32 wks gestation and weighing <1500 g and infants born at all gestational ages and birth weights with critical illness • Provide prompt and readily available access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists, and pediatric opthalmologists • Provide a full range of respiratory support that may include conventional and/or high-frequency ventilation and inhaled nitric oxide • Perform advanced imaging, with interpretation on an urgent basis, including computed tomography, MRI, and echocardiography <u>Additional details on Level IV Regional NICU:</u> Level III capabilities plus: • Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions

CDC Patient Location/Service	*Code*	*Description*
		• Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists, and pediatric subspecialists at the site • Facilitate transport and provide outreach education.
Pediatric Critical Care		
*ONC Pediatric Critical Care	CC-ONCPED	Critical care area for the care of oncology patients ≤ 18 years old who are being treated for surgical or nonsurgical conditions related to their malignancy. (CC-ONCPED maps to 2011 CC-MSPED location code).
Pediatric Burn Critical Care	CC-BPED	Critical care area specializing in the care of patients ≤ 18 years old with significant/major burns
Pediatric Cardiothoracic Critical Care	CC-CTPED	Critical care area specializing in the care of patients ≤ 18 years old following cardiac and thoracic surgery.
Pediatric Medical Critical Care	CC-MPED	Critical care area for patients ≤ 18 years old who are being treated for nonsurgical conditions. In the NNIS system, this was called Pediatric ICU (PICU).
Pediatric Medical/Surgical Critical Care	CC-MSPED	An area where critically ill patients ≤ 18 years old with medical and/or surgical conditions are managed.
Pediatric Neurology Critical Care	CC-NPED	Critical care area for patients ≤ 18 years old specializing in treating life-threatening neurological diseases.
Pediatric Neurosurgical Critical Care	CC-NSPED	Critical care area specializing in the surgical management of patients ≤ 18 years old with severe neurological diseases or those at risk for neurological injury as a result of surgery.
Pediatric Respiratory Critical Care	CC-RPED	Critical care area for the evaluation and treatment of the patients ≤ 18 years old with severe respiratory conditions.
Pediatric Surgical Critical Care	CC-SPED	Critical care area for the evaluation and management of patients ≤ 18 years old with serious illness before and/or after surgery.
Pediatric Trauma Critical Care	CC-TPED	Critical care area specializing in the care of patients ≤ 18 years old who require a high level of monitoring and/or intervention following trauma or during critical illness related to trauma.
Inpatient Specialty Care Areas		

CDC Patient Location/Service	*Code*	*Description*
Long Term Acute Care (LTAC)	SCA-LTAC	Area that provides acute care services to patients suffering medically complex conditions, or patients who have suffered recent catastrophic illness or injury and require an extended stay in an acute care environment.
Inpatient Acute Dialysis Unit	SCA-DIAL	Hospital specialty care area for patients who require acute dialysis as a temporary measure.
Solid Organ Transplant SCA	SCA-SOTP	Hospital specialty area for the postoperative care of patients who have had a solid organ transplant (e.g., heart/lung, kidney, liver, pancreas)
Pediatric Dialysis SCA	SCA-DIALPED	Hospital specialty care area for patients ≤ 18 years old who require acute dialysis as part of their care. These patients may be chronic or acute dialysis patients.
Pediatric Long Term Acute Care (LTAC)	SCA-LTACPED	Area that provides acute care services to patients ≤ 18 years old suffering medically complex conditions, or who suffered recent catastrophic illness or injury and require an extended stay in an acute care environment.
Pediatric Solid Organ Transplant SCA	SCA-SOTPPED	Hospital specialty area for the postoperative care of patients ≤ 18 years old who have had a solid organ transplant (e.g., heart/lung, kidney, liver, pancreas).
Adult Wards		
Antenatal Care Ward	W-ANT	Hospital area for observation, evaluation, treatment or surgery of high risk pregnancy patients.
Inpatient Burn Ward	W-B	Hospital area for evaluation and treatment of patients who have burns.
Inpatient Ear/Nose/Throat Ward	W-ENT	Hospital area for the evaluation, treatment, or surgery of patients with ear, nose, or throat disorders
Inpatient Gastrointestinal Ward	W-GI	Hospital area for evaluation, treatment or surgery of patients with disorders of the gastrointestinal tract.
Inpatient Genitourinary Ward	W-GU	Hospital area for the evaluation, treatment or surgery of patients with disorders of the genitourinary system.
Inpatient Gerontology Ward	W-GNT	Hospital area for the evaluation, treatment or surgery of patients with age-related diseases.

CDC Patient Location/Service	*Code*	*Description*
Inpatient Gynecology Ward	W-GYN	Hospital area for the evaluation, treatment, or surgery of female patients with reproductive tract disorders.
Inpatient Jail Unit	W-J	Overnight stay patient care area of a hospital or correctional facility used only for those who are in custody of law enforcement during their treatment.
Labor and Delivery Ward	W-LD	Hospital area where women labor and give birth.
Labor, Delivery, Recovery, Postpartum Room (LDRP)	W-LDRP	Hospital suite used for labor, delivery, recovery and post partum (LDRP) – all within the same suite.
Inpatient Medical Ward	W-M	Hospital area for the evaluation and treatment of patients with medical conditions or disorders.
Inpatient Medical/Surgical Ward	W-MS	Hospital area for the evaluation of patients with medical and/or surgical conditions.
Inpatient Neurology Ward	W-N	Hospital inpatient area where patients with neurological disorders are evaluated and treated.
Inpatient Neurosurgical Ward	W-NS	Hospital area for care of patients whose primary reason for admission is to have neurosurgery or to be cared for by a neurosurgeon after head or spinal trauma.
Inpatient Ophthalmology Ward	W-OPH	Hospital area for care of patients whose primary reason for admission is to have eye surgery or to be cared for by an ophthalmologist after eye trauma.
Inpatient Orthopedic Ward	W-ORT	Hospital area for evaluation, treatment or surgery on bones, joints, and associated structures by an orthopedist.
Inpatient Orthopedic Trauma Ward	W-TORT	Hospital inpatient area where patients with orthopedic injuries or disorders are evaluated and treated.
Inpatient Plastic Surgery Ward	W-PLS	Hospital area for the care of patients who have reconstructive surgery performed by a plastic surgeon.
Inpatient Postpartum Ward	W-PP	Hospital area for the patient who is recovering from childbirth.
Inpatient Pulmonary Ward	W-PULM	Hospital area where patients with respiratory system conditions or disorders are evaluated and treated.
Stroke (Acute) Unit	W-STRK	Hospital area for evaluation, stabilization and treatment of

CDC Patient Location/Service	*Code*	*Description*
		patients who have experienced an acute stroke.
Inpatient Surgical Ward	W-S	Hospital area for evaluation and treatment of patients who have undergone a surgical procedure.
Telemetry Unit	W-TELE	Hospital area dedicated to providing evaluation and treatment of patients requiring continuous cardiac monitoring.
Inpatient Vascular Surgery Ward	W-VS	Hospital area for evaluation and treatment of patients who have undergone vascular surgery.
ONC Leukemia Ward	W-ONCLEUK	Area for the evaluation and treatment of patients with leukemia. (W-ONCLEUK maps to 2011 SCA-HONC location code).
ONC Lymphoma Ward	W-ONCLYMPH	Area for the evaluation and treatment of patients with lymphoma. (W-ONCLYMPH maps to 2011 SCA-HONC location code).
ONC Leukemia/Lymphoma Ward	W-ONCLL	Area for the evaluation and treatment of patients with leukemia and/or lymphoma.(W-ONCLL maps to 2011 SCA-HONC location code).
ONC Solid Tumor Ward	W-ONCST	Area for the evaluation and treatment of patients with solid tumors. (W-ONCST maps to 2011 SCA-HONC location code).
ONC Hematopoietic Stem Cell Transplant Ward	W-ONCHSCT	Area for the evaluation and treatment of patients who undergo stem cell transplant for the treatment of cancers and/or blood or immune system disorders. (W-ONCHSCT maps to 2011 SCA-BMT location code).
ONC General Hematology/Oncology Ward	W-ONCHONC	Area for the evaluation and treatment of patients with cancer and/or blood disorders. (W-ONCHONC maps to 2011 SCA-HONC location code).
Pediatric Wards		
Inpatient Pediatric Burn Ward	W-BPED	Hospital area specializing in the evaluation and treatment of patients ≤18 years who have tissue injury caused by burns.
Inpatient Pediatric Ear, Nose, Throat	W-ENTPED	Hospital area for evaluation and management of patients ≤18 years old with disorders of the ear, nose and/or throat.
Inpatient Pediatric Genitourinary	W-GUPED	Hospital inpatient area where patients ≤ 18 years old with disorders of the genitourinary system are evaluated and treated.

CDC Patient Location/Service	*Code*	*Description*
Inpatient Pediatric Medical Ward	W-MPED	Hospital inpatient area where patients ≤ 18 years old with medical conditions or disorders are evaluated and treated.
Inpatient Pediatric Medical-Surgical Ward	W-MSPED	Hospital inpatient area where patients ≤ 18 years old with medical and/or surgical conditions are managed.
Inpatient Pediatric Neurology Ward	W-NPED	Hospital inpatient area where patients ≤ 18 years old with neurological disorders are evaluated and treated.
Inpatient Pediatric Neurosurgical Ward	W-NSPED	Hospital area for care of patients ≤ 18 years old whose primary reason for admission is to have neurosurgery or to be cared for by a neurosurgeon after head or spinal trauma.
Inpatient Pediatric Orthopedic Ward	W-ORTPED	Hospital area where patients ≤ 18 years old with orthopedic injuries or disorders are evaluated and treated.
Inpatient Pediatric Surgical Ward	W-SPED	Hospital area for evaluation and treatment of patients ≤ 18 years old who have undergone a surgical procedure.
ONC Pediatric Hematopoietic Stem Cell Transplant Ward	W-ONCHSCTPED	Area for care of patients ≤ 18 years old who undergo stem cell transplant for the treatment of cancers and/or blood or immune system disorders. (W-ONCHSCTPED maps to 2011 SCA-BMTPED location code).
ONC Pediatric Hematology/Oncology Ward	W-ONCHONCPED	Area for care of patients ≤ 18 years old with cancer and/or blood disorders. (W-ONCHONCPED maps to 2011 SCA-HONCPED location code).
Step Down Units		
Adult step Down Unit	STEP	Hospital area for adult patients that are hemodynamically stable who can benefit from close supervision and monitoring, such as frequent pulmonary toilet, vital signs, and/or neurological and neurovascular checks.
Pediatric Step Down Unit	STEP-PED	Patients ≤ 18 years old that are hemodynamically stable who can benefit from close supervision and monitoring, such as frequent pulmonary toilet, vital signs, and/or neurological and neurovascular checks.
ONC Step Down Unit	STEP-ONC	Area for oncology patients who are hemodynamically stable and can

CDC Patient Location/Service	*Code*	*Description*
		benefit from close supervision and monitoring such as frequent pulmonary toilet, vital signs, and/or neurologic and neurovascular checks, (STEP-ONC maps to 2011 STEP or STEP-PED location codes).
Mixed Acuity Units		
Adult Mixed Acuity Unit	MIX-ADULT	Hospital area for the evaluation and treatment of adult patients whose conditions are of varying levels of acuity (e.g., critical care, ward-level care, step-down type care, etc.). Such a care area may be comprised of patients followed by different hospital services (e.g., coronary, medical, surgical, etc.). This care area may or may not include "acuity adaptable" or "universal" beds (i.e., this model of patient care allows a patient to stay in same bed during all phases of his care, from critical care through lower levels of care)
Mixed Age Mixed Acuity Ward	MIX-ALL	Hospital area for the evaluation and treatment of a mixture of adult and pediatric patients whose conditions are of varying levels of acuity (e.g., critical care, ward-level care, step-down type care, etc.). Such a care area may be comprised of patients followed by different hospital services (e.g., coronary, medical, surgical, etc.). This care area may or may not include "acuity adaptable" or "universal" beds (i.e., this model of patient care allows a patient to stay in same bed during all phases of his care, from critical care through lower levels of care)
Pediatric Mixed Acuity Unit (NOTE: If patients are of mixed age, use Mixed Age, Mixed Acuity Ward)	MIX-PED	Hospital area for the evaluation and treatment of patients ≤ 18 years old whose conditions are of varying levels of acuity (e.g., critical care, ward-level care, step-down type care, etc.). Such a care area may be comprised of patients followed by different hospital services (e.g., coronary, medical, surgical, etc.). This care area may or may not include "acuity adaptable" or "universal" beds (i.e., this model of patient care allows a patient to stay in same bed during all phases of his

CDC Patient Location/Service	*Code*	*Description*
		care, from critical care through lower levels of care).
ONC Mixed Acuity Unit (all ages)	MIX-ONC	Area for the evaluation and treatment of mixed adult and pediatric oncology patients whose conditions are of varying levels of acuity (e.g., critical care, ward-level care, step-down type care, etc.). This care area may or may not include “acuity adaptable” or universal beds (i.e. this model of patient care allows a patient to stay in the same bed during all phases of care, from critical care through lower levels of care). (MIX-ONC maps to 2011 MIX-ALL location code).

[1]American Academy of Pediatrics. Policy Statement Levels of Neonatal Care. Pediatrics 2012; 130 (3): 587-597.

APPENDIX 1 (CONTINUED): MAPPING HOSPITAL UNITS TO CDC LOCATIONS

1) Start the mapping process approximately 4 weeks prior to your hospitals' survey dates, if possible.

2) Because of current reporting requirements, many hospitals will have already mapped all of their adult and pediatric medical, medical-surgical, and surgical wards and their adult, pediatric, and neonatal intensive care units to NHSN location codes. However, you may still need to help hospitals map their other acute care inpatient units because the prevalence survey is hospital-wide and includes all acute care inpatient units, not just those listed above.

3) The key to accurate mapping is adhering to the NHSN definition of "CDC location" and the "80% Rule":

   A CDC location is "A CDC-defined designation given to a patient care area housing patients who have similar disease conditions or who are receiving care for similar medical or surgical specialties. Each facility location that is monitored is 'mapped' to one CDC Location. The specific CDC Location code is determined by the type of patients cared for in that area according to the **80% Rule**. That is, if 80% of patients are of a certain type (e.g., pediatric patients with orthopedic problems) then that area is designated as that type of location (in this case, an Inpatient Pediatric Orthopedic Ward). "

4) Ask your hospital contacts to send you lists (in Microsoft Word, Excel, or any other format you find useful) of ALL of the units in their facilities that could house eligible acute care inpatients on the survey date. Make sure that labor & delivery units, postpartum units and newborn nurseries are included. Make sure that any mixed acuity (or mixed age mixed acuity) units are also included. Your hospital contacts should include the CDC location codes for these units, where available, or for units that are not mapped to CDC location codes (or where there is concern that mapping may not have been done correctly), brief descriptions of each unit (with specific percentages of different patient types), and whether each unit is already mapped to a CDC location (and what the CDC location is). An example of a list is as follows.

Unit Name	***Unit Description***	***Already Mapped to CDC Location?***
3 South	20% general surgical patients, 80% general orthopedic surgery patients	Yes— Adult orthopedic ward (W-ORT)
3 West	10% general surgery patients, 10% general orthopedic surgery patients, 80% orthopedic trauma patients	Yes— Adult ortho trauma ward (W-TORT)
2 North ICU	50% medical stepdown, 50% medical critical care	Yes—split by bed assignment into Step Down Unit (adult--STEP) and Medical Critical Care (CC-M)
6 East	100% labor and delivery	Yes— W-LD
6 North	100% well baby nursery	Yes— Newborn nursery (W-NURS)
5 South	20% autologous hematopoietic stem cell transplant, 10% adult hematology-oncology, 10% solid organ transplant, 60% general medical	Yes— Location assigned depending on specialty (stem cell transplant patients assigned to SCA-BMT, heme/onc patients to SCA-HONC, solid organ transplant patients to SCA-

Unit Name	*Unit Description*	*Already Mapped to CDC Location?*
		SOTP, and general medical patients to W-M)

5) You do not need to do a comprehensive review and re-mapping of units that the hospital has already mapped to CDC locations, unless there is concern that the hospital did not use correct procedures when assigning CDC location codes.

6) For hospitals and units that are not already mapped, go ahead and map them to the appropriate CDC locations using the 80% rule and assigning the location codes outlined above in the Appendix 1 table. You can use any CDC location listed in the table, including those locations that are new for the 2015 survey. Please note that behavioral/psychiatric in acute care hospitals are NOT included in the survey.

7) For units with heterogeneous patient populations, it is preferable to use the "virtual location" approach. Virtual locations are created when a hospital is unable to meet the 80% rule for location designation in a single physical unit, and data are therefore reported using location designations for each of the major, specific patient types in that unit. The use of virtual locations is recommended only for those physical units that are geographically split by patient service or those in which beds are designated by service. For example, a facility has an ICU – called 5 West – that is comprised of approximately 50% neurology patients and 50% neurosurgery patients. Additionally, the neurology patients are housed in beds 1 thru 10 and the neurosurgery patients are housed in beds 11 thru 20. Rather than map as a medical/surgical critical care unit, 2 locations are used:

   5WEST_N: Neurologic Critical Care (10 beds)
   5WEST_NS: Neurosurgical Critical Care (10 beds)

   In the 5 South example from the sample table above, patients could be assigned any of 4 different CDC locations depending on the patient's primary problem. For example, a hematopoietic stem cell transplant recipient admitted to 5 South would be assigned the W-ONCHSCT CDC location, while a patient admitted for acute renal failure to the general medicine service would be assigned the W-M CDC location.

Here are some additional examples from NHSN location mapping guidance:

Example 1: An ICU that is 85% Burn patients, 15% Trauma
CDC Location: Burn Critical Care (CC-B)
Why? Meets 80% rule for critical care acuity level and 80% rule for specific service (burn)

Example 2: An ICU that is 55% medical and 45% Surgical
CDC Location: Medical/Surgical Critical Care (CC-MS)
Why? Meets 80% rule for critical care acuity level and does not meet the 60% rule for designation as either medical or surgical service level alone, therefore, use combined medical/surgical designation

Example 3: A unit that is comprised of 60% medical inpatients and 40% general observation patients
CDC Location: Medical Ward (W-M)
Why? This is a special scenario due to the mix of inpatients and outpatients in this unit. A location where at least 51% of the patients have been formally admitted to the facility should be mapped as in inpatient unit, rather than an outpatient observation unit. The 60% rule for general service and the 80% rule for specific service still apply when deciding on the specific type of inpatient location to use; this location met the 60% rule for medical service. Note that for the prevalence survey, observation patients should be included in the survey if they have been in the hospital for ≥24 hours in an acute care inpatient location

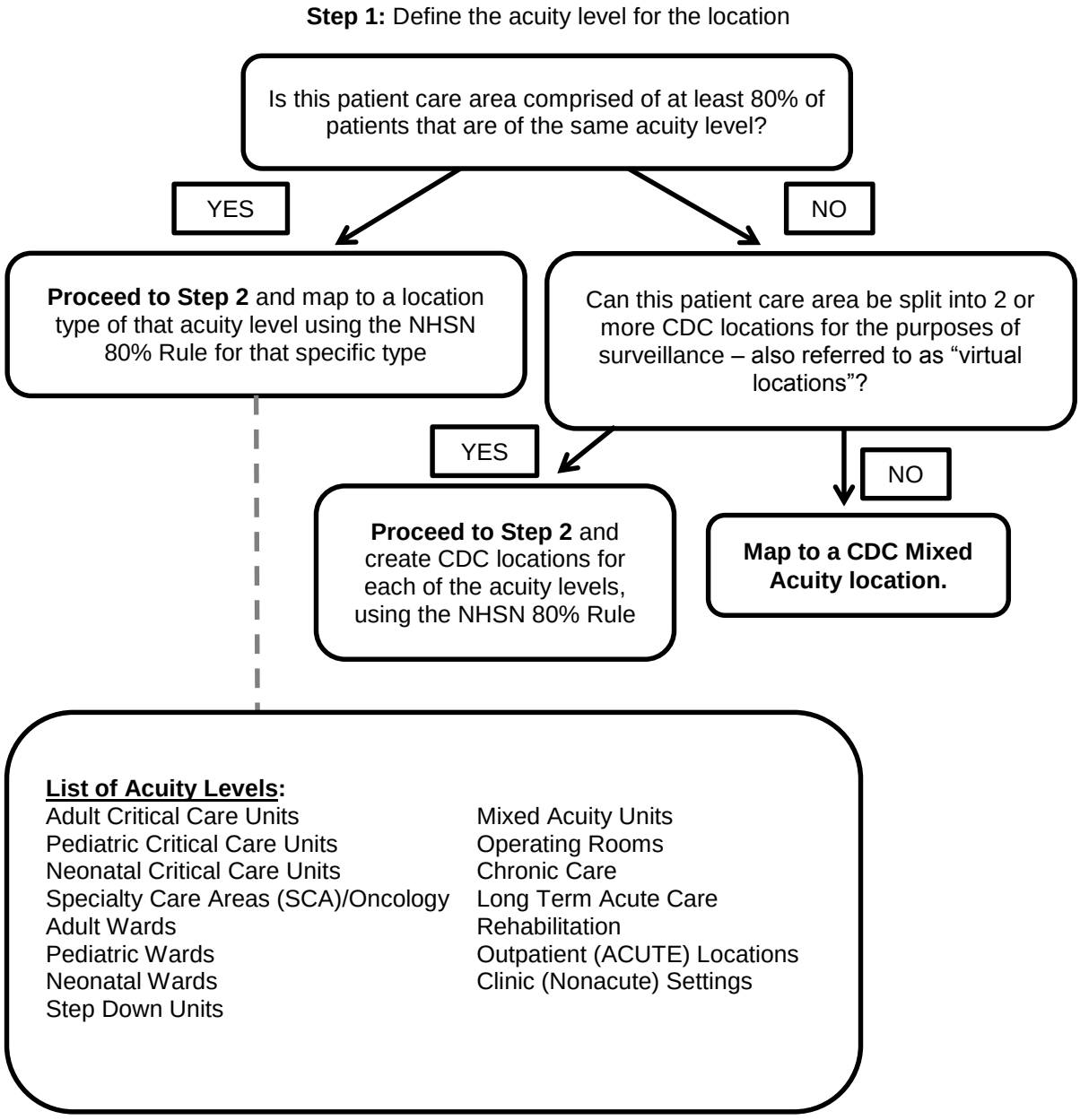
Example 4: An ICU that is 40% Neurosurgical, 40% Surgical, and 20% Medical

Option 1 - Single CDC Location: Surgical Critical Care (CC-S)
Why? Meets 80% rule for critical care acuity level and does not meet the 80% rule for a specific service level alone, but when surgical patients are combined, that total does equal 80%.
Option 2 - Multiple CDC Virtual Locations: Neurosurgical Critical Care (CC-NS) and Surgical Critical Care (CC-S), with the medical patients reported with the Surgical Critical Care location since the general surgical designation is the least specific of the two.
Why? By splitting this unit into 2 virtual locations, each meets the 80% rule for critical care acuity level and one meets the 80% rule for designation as Neurosurgical Critical Care, while the other meets the 60% rule as general surgical service (when combining surgical and medical patients).

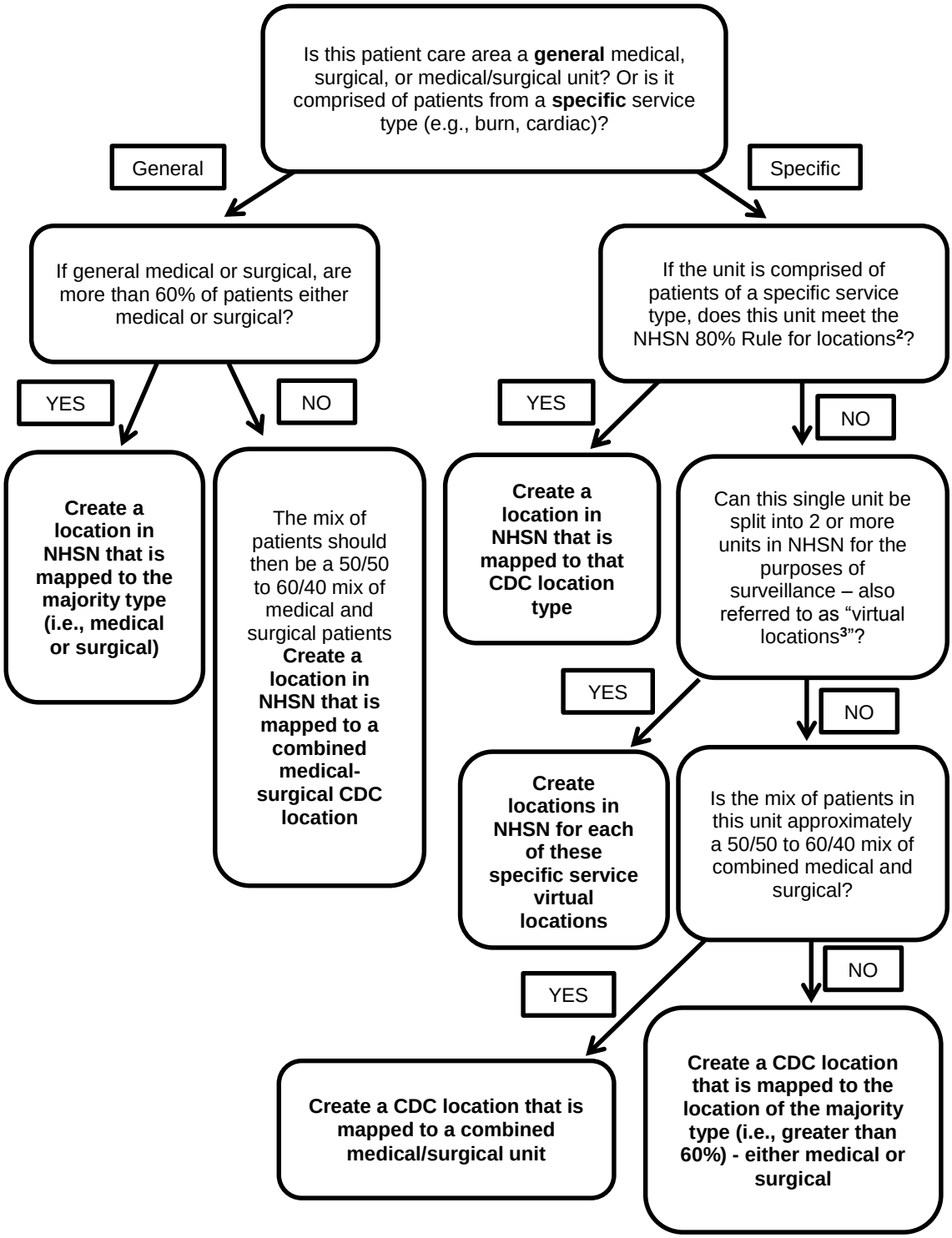
Example 5: A unit that is comprised of 60% Medical ICU and 40% Step-Down patients
Option 1 - Single CDC Location: Mixed Acuity Unit (MIX-ADULT)
Why? This location is not comprised of at least 80% of the patients of the same acuity level and therefore meets the single location definition of a mixed acuity unit. Note that this location is not considered an ICU location type for the purposes of NHSN reporting and therefore, would not be included in any ICU-specific reporting requirements.
Option 2 - Multiple CDC Virtual Locations: Medical Critical Care (CC-M) and Step-Down Unit (STEP)
Why? By splitting this unit into 2 virtual locations, each meets the 80% rule for the appropriate acuity level and each meets the 80% rule for type of service.

Example 6: A pediatric ward that is comprised of 70% neurosurgical patients and 30% orthopedic patients
Option 1 - Single CDC Location: Pediatric Surgical Ward (W-SPED)
Why? Meets 80% rule for ward-level acuity and does not meet the 80% rule for a specific service level alone, but meets the 60% rule for general surgical service.
Option 2 - Multiple CDC Virtual Locations: Pediatric Neurosurgical Ward (W-NSPED) and Pediatric Orthopedic Ward (W-ORTPED)
Why? By splitting this unit into 2 virtual locations, each meets the 80% rule for the appropriate acuity level and each meets the 80% rule for type of service.

Flow diagram for CDC location mapping from NHSN guidance:



Step 2: Define the type of service for the location



APPENDIX 3: ANTIMICROBIAL DRUG LIST

NOTE: This table includes generic and brand names of antimicrobial drugs arranged in alphabetical order.

Drug name
5-FC
Abelcet
acyclovir
amantadine
Ambisome
amikacin
Amikin
amoxicillin
amoxicillin/clavulanic acid
amoxicillin, clarithromycin, lansoprazole
Amoxil
amphotericin B cholesteryl sulfate complex
amphotericin B deoxycholate
amphotericin B lipid complex
amphotericin B liposome
Amphotec
ampicillin
ampicillin/sulbactam
Ancef
Ancobon
anidulafungin
Augmentin
Avelox
Avycaz
Azactam
azithromycin
aztreonam
Bactrim
Benzathine benzylpenicillin
benzylpenicillin
Biaxin
Bicillin C-R
Bicillin L-A
Bio-Statin
Bismuth subcitrate, metronidazole, tetracycline

Drug name
Bismuth subsalicylate, metronidazole, tetracyline
Cancidas
caspofungin
Cayston
Ceclor
Cedax
cefaclor
cefadroxil
cefazolin
cefdinir
cefditoren
cefepime
cefixime
Cefizox
Cefotan
cefotetan
cefotaxime
cefoxitin
cefpodoxime
cefprozil
ceftibuten
Ceftin
ceftaroline
ceftazidime
ceftazidime/avibactam
ceftizoxime
ceftolozane/tazobactam
ceftriaxone
cefuroxime
Cefzil
cephalexin
chloramphenicol
cidofovir
Cipro
ciprofloxacin
Claforan

Drug name
clarithromycin
Cleocin
clindamycin
clotrimazole
colistin
colistimethate sodium
Cotrimaxozole
Cresemba
Cubicin
Cytovene
dalbavancin
Dalvance
dapsone
daptomycin
dicloxacillin
Dificid
Diflucan
Doribax
doripenem
doxycycline
Duricef
Dynapen
Eraxis
ertapenem
EryPed
Ery-Tab
Erythrocin
erythromycin
erythromycin ethylsuccinate and sulfisoxazole acetyl
ethambutol
Factive
famciclovir
Famvir
Fasigyn
fidaxomicin
Flagyl
Floxin
fluconazole
flucytosine
Flumadine

Drug name
Fortaz
foscarnet
Foscavir
fosfomycin
Fungizone
ganciclovir
Garamycin
gemifloxacin
gentamicin
griseofulvin
Helidac
Hiprex
imipenem/cilastatin
Invanz
isavuconazonium sulfate (isavuconazole)
isoniazid
isoniazid and rifampin
isoniazid, pyrazinamide, and rifampin
itraconazole
kanamycin
Kantrex
Keflex
Ketek
ketoconazole
Lamisil
Levaquin
levofloxacin
linezolid
Macrobid
Macrodantin
Maxipime
Mefoxin
meropenem
Merrem
methenamine
metronidazole
micafungin
miconazole
Minocin
minocycline

Drug name
Monurol
Moxatag
moxifloxacin
Mycamine
Mycelex
Mycobutin
Mycostatin
nafcillin
Nallpen
neomycin
Nilstat
nitrofurantoin
Nizoral
norfloxacin
Noroxin
Noxafil
nystatin
ofloxacin
Omnipen
Omnicef
Oravig
Orbactiv
oritavancin
oseltamivir
oxacillin
penicillin G
penicillin G benzathine
penicillin G benzathine and penicillin G procaine
penicillin G potassium
penicillin G procaine
penicillin G sodium
penicillin V
penicillin V potassium
pentamidine isethionate
peramivir
Permapen
phenoxymethylpenicillin
piperacillin
piperacillin/tazobactam
polymyxin B

Drug name
posaconazole
pyrazinamide
Prevpac
Priftin
Primaxin
Primsol
Principen
Proquin XR
Pylera
quinupristin/dalfopristin
Raniclor
Rapivab
Relenza
ribavirin
rifabutin
Rifadin
Rifamate
rifampin
rifapentine
Rifater
rifaximin
Rimactane
rimantadine
Rocephin
Septra
Sivextro
spectinomycin
Spectracef
Sporanox
streptomycin
sulfisoxazole
sulfamethoxazole/trimethoprim
Suprax
Symmetrel
Synercid
Tamiflu
Tazicef
tedizolid
Teflaro
telavancin

Drug name
telithromycin
terbinafine
tetracycline
ticarcillin/clavulanate
tigecycline
Timentin
Tindamax
tinidazole
Tobi
tobramycin
trimethoprim
trimethoprim/sulfamethoxazole
Trimox
Trobicin
Tygacil
Unasyn
Unipen
Urex
valacyclovir
Valcyte
valganciclovir
Valtrex
vancomycin
Vancocin
Vantin
Vfend
Vibativ
Vistide
voriconazole
Xifaxan
zanamivir
Zerbaxa
Zinacef
Zithromax
Zmax
Zosyn
Zovirax
Zyvox