

Patient Safety Component—Annual Hospital Survey

Instructions for this form are available at: http://www.cdc.gov/nhsn/forms/instr/57_103-TOI.pdf

*required for saving

Tracking #:

Facility ID:

*Survey Year:

Facility Characteristics (completed by Infection Preventionist)

*Ownership (check one):

- | | | |
|-------------------------------------|---|--|
| <input type="checkbox"/> For profit | <input type="checkbox"/> Not for profit, including church | <input type="checkbox"/> Government |
| <input type="checkbox"/> Military | <input type="checkbox"/> Veterans Affairs | <input type="checkbox"/> Physician owned |

If facility is a Hospital:

*Number of patient days: _____

*Number of admissions: _____

For any Hospital:

*Is your hospital a teaching hospital for physicians and/or physicians-in-training or nursing students? Yes No

If Yes, what type: Major Graduate Undergraduate

*Number of beds set up and staffed in the following location types (as defined by NHSN):

a. ICU (including adult, pediatric, and neonatal levels II/III, III, or higher): _____

b. All other inpatient locations: _____

Facility Microbiology Laboratory Practices (completed with input from Microbiology Laboratory Lead)

*1. Does your facility have its own on-site laboratory that performs bacterial antimicrobial susceptibility testing? Yes No

1a. If No, where is your facility's antimicrobial susceptibility testing performed? (check one)

- Affiliated medical center
- Commercial referral laboratory
- Other local/regional, non-affiliated reference laboratory

Facility Microbiology Laboratory Practices (continued)

*2. For the following organisms, indicate which methods are used for:

- (1) Primary susceptibility testing and
- (2) Secondary, supplemental, or confirmatory testing (if performed).

If your laboratory does not perform susceptibility testing, indicate the methods used at the outside laboratory.

Use the testing codes listed below the table.

Pathogen	(1) Primary	(2) Secondary	Comments
<i>Staphylococcus aureus</i>	_____	_____	_____
<i>Enterobacteriales</i>	_____	_____	_____
1 = Kirby-Bauer disk diffusion	5.1 = MicroScan WalkAway	10 = E test	
2 = Vitek (Legacy)	5.2 = MicroScan autoSCAN	12 = Vancomycin agar screen (BHI + vancomycin)	
2.1 = Vitek 2	6 = Other broth microdilution method	13 = Other (describe in Comments section)	
3.1 = BD Phoenix	7 = Agar dilution method		
4 = Sensititre			

*3. Does either the primary or secondary/supplemental antimicrobial susceptibility testing (AST) of *Pseudomonas* spp., include ceftolozane-tazobactam? Yes No N/A – no AST performed for *Pseudomonas*

*4. Has the laboratory implemented revised breakpoints recommended by CLSI for the following:

- a. Cephalosporin and monobactam breakpoints for *Enterobacteriales* in 2010 Yes No
- b. Carbapenem breakpoints for *Enterobacteriales* in 2010 Yes No
- c. Ertapenem breakpoints for *Enterobacteriales* in 2012 Yes No
- d. Carbapenem breakpoints for *Pseudomonas aeruginosa* in 2012 Yes No
- e. Fluroquinolone breakpoints for *Pseudomonas aeruginosa* in 2019 Yes No
- f. Fluroquinolone breakpoints for *Enterobacteriales* in 2019 Yes No

*5. Does the laboratory test bacterial isolates for presence of carbapenemase? (this does not include automated testing instrument expert rules) Yes No

5a. If Yes, indicate what is done if carbapenemase production is detected: (check one)

- Change susceptible carbapenem results to resistant
- Report carbapenem MIC results without an interpretation
- No changes are made in the interpretation of carbapenems, the test is used for epidemiological or infection control practices

Facility Microbiology Laboratory Practices (continued)

5b. If Yes, which test is routinely performed to detect carbapenemase: (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> PCR | <input type="checkbox"/> MBL Screen |
| <input type="checkbox"/> Modified Hodge Test | <input type="checkbox"/> Carba NP |
| <input type="checkbox"/> mCIM/CIM | <input type="checkbox"/> Rapid CARB Blue |
| <input type="checkbox"/> E test | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Cepheid, BioFire array, | |

5c. If Yes, which of the following are routinely tested for the presence of carbapenemases: (check all that apply)

- Enterobacteriales* spp. *Pseudomonas aeruginosa* *Acinetobacter baumannii*

*6. Does your facility perform extended-spectrum beta-lactamase (ESBL) testing for *E. coli* or *Klebsiella* spp. routinely or using a testing algorithm? Yes No

6a. If Yes, indicate what is done if ESBL is detected: (check one)

- Change susceptible Cefotaxime/Ceftriaxone/Cefepime results to resistant
- No changes are made in the interpretation of cephalosporins with a note of ESBL
- Suppress cephalosporin susceptibility results

*7. Where is yeast identification performed for specimens collected at your facility? (check one)

- On-site laboratory
- Affiliated medical center
- Commercial referral laboratory
- Other local/regional, non-affiliated reference laboratory
- Yeast identification not available (specifically, yeast identification is not performed onsite or at any affiliate/commercial/other laboratory) [If checked, skip questions 8-13]

Answer questions 8–13 for the laboratory that performs yeast identification for your facility:

*8. Which of the following methods are used for yeast identification? (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> MALDI-TOF MS System (Vitek MS) | <input type="checkbox"/> MicroScan |
| <input type="checkbox"/> MALDI-TOF MS System (Bruker Biotyper) | <input type="checkbox"/> Non-automated Manual Kit (for example, API 20C, RapID, Germ Tube, PNA-FISH, etc.) |
| <input type="checkbox"/> Vitek-2 | <input type="checkbox"/> DNA sequencing |
| <input type="checkbox"/> BD Phoenix | <input type="checkbox"/> Other (specify): _____ |

*9. Does the laboratory routinely use Chromagar for the identification or differentiation of *Candida* isolates?

- Yes No Unknown

Facility Microbiology Laboratory Practices (continued)

*10. *Candida* isolated from which of the following body sites are usually fully identified to the species level? (check all that apply)

- Blood
- Other normally sterile body site (for example, CSF)
- Urine
- Respiratory
- Other (specify): _____
- None are fully identified to the species level

*11. Does the laboratory employ any culture-independent diagnostic tests (CIDTs) to identify *Candida* from blood specimens?

- Yes
- No
- Unknown

11a. If yes, which culture-independent diagnostic tests (CIDTs) are used to identify *Candida* from blood specimens? (check all that apply)

- T2Candida Panel
- BioFire
- Other, specify: _____
- Unknown

*12. Are any culture-independent diagnostic tests (CIDTs) used to specifically identify *Candida auris* from clinical specimens?

- Yes
- No
- Unknown

12a. If yes, which culture-independent diagnostic tests (CIDTs) are used to identify *Candida auris* from clinical specimens? (check all that apply)

- T2Cauris Panel
- PCR
- Other, specify: _____
- Unknown

*13. Where is antifungal susceptibility testing (AFST) performed for specimens collected at your facility? (check one)

- On-site laboratory
- Other local/regional, non-affiliated reference laboratory
- AFST not available (specifically, AFST is not performed onsite or at any affiliate/commercial/other laboratory) [if selected, skip questions 14-18]
- Affiliated medical center
- Commercial referral laboratory

Answer questions 14–18 for the laboratory that performs AFST for your facility:

*14. What method is used for antifungal susceptibility testing (AFST), **excluding Amphotericin B?** (check all that apply)

- Broth microdilution
- YeastOne colorimetric microdilution
- E test
- Vitek 2 card
- Disk diffusion
- Other (specify): _____
- Unknown

Facility Microbiology Laboratory Practices (continued)

*15. What method is used for antifungal susceptibility testing (AFST) of **Amphotericin B**? (check all that apply)

- Broth microdilution YeastOne colorimetric microdilution E test Vitek 2 card
 Disk diffusion Other (specify): _____ Unknown

16. If Vitek is used for AFST, which *Candida* species do you test with it? (check all that apply)

- C. albicans* *C. parapsilosis*
 C. glabrata Other *Candida* spp.

*17. AFST is performed for which of the following antifungal drugs? (check all that apply)

- Fluconazole Caspofungin
 Voriconazole Amphotericin B
 Itraconazole Flucytosine
 Posaconazole Other, specify: _____
 Micafungin Unknown
 Anidulafungin

*18. AFST is performed on fungal isolates in which of the following situations? (check only one box per row)

	Performed automatically	Performed with a clinician's order	Not performed	Unknown
Blood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other normally sterile body site (for example, CSF)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respiratory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*19. What is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? (check one)

- Enzyme immunoassay (EIA) for toxin
 Cell cytotoxicity neutralization assay
 Nucleic acid amplification test (NAAT) (for example, PCR, LAMP)
 NAAT plus EIA, if NAAT positive (2-step algorithm)
 Glutamate dehydrogenase (GDH) antigen plus EIA for toxin (2-step algorithm)
 GDH plus NAAT (2-step algorithm)
 GDH plus EIA for toxin, followed by NAAT for discrepant results
 Toxigenic culture (*C. difficile* culture followed by detection of toxins)
 Other (specify): _____

Facility Microbiology Laboratory Practices (continued)

*20. Indicate the primary and definitive method used to identify microbes from blood cultures collected in your facility. (check one)

- MALDI-TOF MS System (Vitek MS)
- MALDI-TOF MS System (Bruker Biotyper)
- Automated Instrument (for example, Vitek, MicroScan, Phoenix, OmniLog, Sherlock, etc.)
- Non-automated Manual Kit (for example, API, Crystal, RapID, etc.)
- Rapid Identification (for example, Verigene, BioFire FilmArray, PNA-FISH, Gene Xpert, etc.)
- 16S rRNA Sequencing
- Other (specify): _____
- None

*21. Indicate any additional secondary methods used for microbe identification from blood cultures collected in your facility (for example, a rapid method that is confirmed with the primary method, a secondary method if the primary method fails to give an identification, or a method that is used in conjunction with the primary method). (check all that apply)

- MALDI-TOF MS System (Vitek MS)
- MALDI-TOF MS System (Bruker Biotyper)
- Automated Instrument (for example, Vitek, MicroScan, Phoenix, OmniLog, Sherlock, etc.)
- Non-automated Manual Kit (for example, API, Crystal, RapID, etc.)
- Rapid Identification (for example, Verigene, BioFire FilmArray, PNA-FISH, Gene Xpert, etc.)
- 16S rRNA Sequencing
- Other (specify): _____
- None

Infection Control Practices

(completed with input from Hospital Epidemiologist and/or Quality Improvement Coordinator)

*22. Number or fraction of infection preventionists (IPs) in facility:

- a. Total hours per week performing surveillance: _____
- b. Total hours per week for infection control activities other than surveillance: _____

*23. Number or fraction of full-time employees (FTEs) for a designated hospital epidemiologist (or equivalent role) affiliated with your facility: _____

*24. Is it a policy in your facility that patients infected or colonized with MRSA are routinely placed in contact precautions while these patients are in your facility? (check one)

- Yes
- No
- Not applicable: my facility never admits these patients

Infection Control Practices (continued)

24a. If Yes, check the type of patients that are routinely placed in contact precautions while in your facility (check one):

- All infected and all colonized patients
- Only all infected patients
- Only infected or colonized patients with certain characteristics (check all that apply)
 - Patients admitted to high risk settings
 - Patients at high risk for transmission

*25. Is it a policy in your facility that patients infected or colonized with VRE are routinely placed in contact precautions while these patients are in your facility? (check one)

- Yes
- No
- Not applicable: my facility never admits these patients

25a. If Yes, check the type of patients that are routinely placed in contact precautions while in your facility (check one):

- All infected and all colonized patients
- Only all infected patients
- Only infected or colonized patients with certain characteristics (check all that apply)
 - Patients admitted to high risk settings
 - Patients at high risk for transmission

*26. Is it a policy in your facility that patients infected or colonized with CRE (regardless of confirmatory testing for carbapenemase production) are routinely placed in contact precautions while these patients are in your facility? (check one)

- Yes
- No
- Not applicable: my facility never admits these patients

26a. If Yes, check the type of patients that are routinely placed in contact precautions while in your facility (check one):

- All infected and all colonized patients
- Only all infected patients
- Only infected or colonized patients with certain characteristics (check all that apply)
 - Patients admitted to high risk settings
 - Patients at high risk for transmission

Infection Control Practices (continued)

*27. Is it a policy in your facility that patients infected or colonized with suspected or confirmed ESBL-producing or extended spectrum cephalosporin resistant *Enterobacterales* are routinely placed in contact precautions while these patients are in your facility? (check one)

- Yes
- No
- Not applicable: my facility never admits these patients

27a. If Yes, check the type of patients that are routinely placed in contact precautions while in your facility (check one):

- All infected and all colonized patients
- Only all infected patients
- Only infected or colonized patients with certain characteristics (check all that apply)
 - Patients admitted to high risk settings
 - Patients at high risk for transmission

*28. Does the facility routinely perform screening testing (culture or non-culture) for CRE? *This includes screening for patients at your facility performed by public health laboratories and commercial laboratories.*

Yes No

28a. If Yes, in which situations does the facility routinely perform screening testing for CRE? (check all that apply)

- Surveillance testing at admission for all patients
- Surveillance testing of epidemiologically-linked patients of newly identified CRE patients (for example, roommates)
- Surveillance testing at admission of high-risk patients (check all that apply)
 - Patients admitted from long-term acute care (LTAC) or long-term care facility (LTCF)
 - Patients with recent (for example, within 6 months) overnight hospital stay outside the United States
 - Patients admitted to high-risk settings (for example, ICU)
 - Other high-risk patients (specify): _____
- Other (specify): _____

*29. Does the facility routinely perform screening testing (culture or non-culture) for *Candida auris*? *This includes screening for patients at your facility performed by public health laboratories and commercial laboratories.*

Yes No

29a. If Yes, in which situations does the facility routinely perform screening testing for *Candida auris*? (check all that apply)

- Surveillance testing at admission for all patients
- Surveillance testing of epidemiologically-linked patients of newly identified *Candida auris* patients (for example, roommates)
- Surveillance testing at admission of high-risk patients (check all that apply)
 - Patients admitted from long-term acute care (LTAC) or long-term care facility (LTCF)
 - Patients with recent (for example, within 6 months) overnight hospital stay outside the United States
 - Patients admitted to high-risk settings (for example, ICU)
 - Other high-risk patients (specify): _____
- Surveillance testing at admission for all patients

Infection Control Practices (continued)

29b. If Yes, what method is routinely used by the lab conducting *Candida auris* testing of screening swabs from your facility?

- Culture-based methods
- PCR
- Other (specify): _____

*30. Does the facility routinely perform screening testing (culture or non-culture) for MRSA for any patients admitted to non-NICU settings? Yes No

30a. If yes, in which situations does the facility routinely perform screening testing for MRSA for non-NICU settings? (check all that apply)

- Surveillance testing at admission for all patients
- Surveillance testing at admission of high-risk patients (for example, admitted from long-term acute care [LTAC] or long-term care facility [LTCF])
- Surveillance testing at admission of patients admitted to high-risk settings (for example, ICU)
- Surveillance testing of pre-operative patients to prevent surgical site infections
- Other (specify): _____

*31. Does the facility routinely perform screening testing (culture or non-culture) for MRSA for any patients admitted to NICU settings? Yes No

31a. If yes, in which situations does the facility routinely perform screening testing for MRSA for NICU settings? (check all that apply)

- Surveillance testing at admission for all transferred patients
- Surveillance testing of patients from known MRSA positive mothers
- Surveillance testing of high-risk patients (for example, infants born premature)
- Routine active surveillance testing (specifically, point prevalence surveys)
- Other (specify): _____

*32. Does your facility have a policy to routinely use chlorhexidine bathing for any adult patients to prevent infection or transmission of MDROs at your facility? Yes No N/A, Children's Hospital

32a. If yes, indicate which patients: (select all that apply)

- | | | |
|---|---|--|
| <input type="checkbox"/> ICU patients: | <input type="checkbox"/> Patients outside the ICU: | <input type="checkbox"/> Pre-operatively for patients undergoing surgery |
| <input type="radio"/> All ICU patients | <input type="radio"/> All patients outside the ICU | |
| <input type="radio"/> Subset of ICU patients | <input type="radio"/> Subset of patients outside the ICU | |
| <input type="checkbox"/> Patients with central venous catheter or midline catheters | <input type="checkbox"/> Patients with central venous catheter or midline catheters | |
| <input type="checkbox"/> Others, specify: _____ | <input type="checkbox"/> Others, specify: _____ | |

Infection Control Practices (continued)

*33. Does the facility have a policy to routinely use a combination of topical chlorhexidine AND an intranasal anti-staphylococcal agent (mupirocin, iodophor, or an alcohol based intranasal agent) for any adult patients to prevent healthcare-associated infections or reduce transmission of resistant pathogens? Yes No N/A, Children's Hospital

33a. If yes, indicate which patients: (select all that apply)

- | | | |
|--|--|--|
| <input type="checkbox"/> ICU patients: | <input type="checkbox"/> Patients outside the ICU: | <input type="checkbox"/> Pre-operatively for patients undergoing surgery |
| <input type="radio"/> All ICU patients | <input type="radio"/> Patients who are known to be colonized or infected with MRSA | |
| <input type="radio"/> ICU patients who are known to be colonized or infected with MRSA | <input type="radio"/> Patients with central venous catheters or midline catheters | |
| <input type="radio"/> Other ICU patients, specify:
_____ | <input type="radio"/> Other non-ICU patients, specify:
_____ | |

Facility Neonatal or Newborn Patient Care Practices and Admissions Information

*34. Was this section completed in collaboration with your facility's neonatal or newborn patient care team? For example, was input sought from a neonatal or newborn patient care team member, such as a NICU Medical Director, Lead Neonatal Physician, Neonatal Nurse Manager, Lead Neonatal Nurse Practitioner?

- Yes
- No
- N/A, my facility does not provide neonatal or newborn patient care services at any level (specifically, my facility does **not** provide delivery services, Level 1 well newborn care, Level II special care, or neonatal intensive care)

If N/A was selected in question 34 above, questions 35–39 below do not apply to your facility and should be skipped. If your facility does care for neonates or newborns (at any level), complete questions below.

Questions should be answered based on the policies and practices that were in place for the majority of the last full calendar year.

*35. Excluding Level I units (well newborn nurseries), record the number of neonatal admissions to Special Care Nurseries (Level II) and Intensive Care Units (Level II/III, Level III, Level IV):

- a. Inborn Admissions: _____
- b. Outborn Admissions: _____

*36. Excluding Level I units (well newborn nurseries), record the number of neonatal admissions (both inborn and outborn) to Special Care (Level II) and Intensive Care (Level II/III, Level III, Level IV) in each of following birth weight categories:

- | | |
|---|--------------------------------|
| a. Less than or equal to 750 grams: _____ | d. 1501-2500 grams: _____ |
| b. 751-1000 grams: _____ | e. More than 2500 grams: _____ |
| c. 1001-1500 grams: _____ | |

*37. Does your facility provide Level III (or higher) neonatal intensive care as defined by the American Academy of Pediatrics (for example, capable of providing sustained life support, comprehensive care for infants born <32 weeks gestation and weighing <1500 grams, a full range of respiratory support that may include conventional and/or high-frequency ventilation)?

Neonatal or Newborn Patient Care Practices and Admissions (continued)

*38. Does your facility accept neonates as transfers for any of the following procedures: Omphalocele repair; ventriculoperitoneal shunt; tracheoesophageal fistula (TEF)/esophageal atresia repair; bowel resection/reanastomosis; meningomyelocele repair; cardiac catheterization?

- Yes No

To help us better understand your facility's practices and protocols for administering antimicrobials to newborns, answer the following questions:

*39. If babies are roomed with their mother in a labor and delivery or postpartum ward and are administered oral or parenteral antimicrobials, such as ampicillin, what location is the medication administration attributed to in the electronic medication administration record (eMAR) system and/or bar code medication administration (BCMA) system?

Ask your clinical pharmacist to review the eMAR system and/or BCMA system to determine this and select all that apply:

- a. Level I Well Newborn Nursery
- b. Labor and Delivery Ward, Postpartum Ward, or Labor, Delivery, Recovery, Postpartum Suite
- c. My facility requires that babies receiving antimicrobials **intravenously** (IV) are transferred out of their mother's room in order for IV antimicrobials to be administered (babies receiving oral or intramuscular antimicrobials may remain in their mother's room for antimicrobial administration)
- d. My facility requires that babies receiving oral **and/or** intramuscular antimicrobials are transferred out of their mother's room in order for antimicrobials to be administered
- e. N/A my facility does not provide delivery services

39a. If answer choice **c.** or **d.** was selected above, to which neonatal unit would a baby be transferred in order to receive oral or parenteral antimicrobials (select all that apply):

- Level I Well Newborn Nursery separate from the mother's room
- Level II Special Care Nursery
- Level II/III or higher Neonatal Intensive Care Unit

Antibiotic Stewardship Practices

(completed with input from Physician and Pharmacist Stewardship Leaders)

*40. Did the antibiotic stewardship leader(s) participate in responding to these questions? (Check one.)

- Yes, pharmacist lead
- Yes, physician lead
- Yes, both pharmacist and physician leads
- Yes, other lead
- No

Antibiotic Stewardship Practices (continued)

*41. Facility leadership has demonstrated commitment to antibiotic stewardship efforts by: (Check all that apply.)

- Providing stewardship program leader(s) dedicated time to manage the program and conduct daily stewardship interventions.
- Allocating resources (for example, IT support, training for stewardship team) to support antibiotic stewardship efforts.
- Having a senior executive that serves as a point of contact or “champion” to help ensure the program has resources and support to accomplish its mission.
- Presenting information on stewardship activities and outcomes to facility leadership and/or board at least annually.
- Ensuring the stewardship program has an opportunity to discuss resource needs with facility leadership and/or board at least annually.
- Communicating to staff about stewardship activities, via email, newsletters, events, or other avenues.
- Providing opportunities for hospital staff training and development on antibiotic stewardship.
- Providing a formal statement of support for antibiotic stewardship (for example, a written policy or statement approved by the board).
- Ensuring that staff from key support departments and groups (for example, IT and hospital medicine) are contributing to stewardship activities.
- None of the above

*42. Our facility has a leader or co-leaders responsible for antibiotic stewardship program management and outcomes.

Yes No

42a. If Yes, what is the position of this leader? (Check one.)

- Physician
- Pharmacist
- Co-led by both Pharmacist and Physician
- Other (for example, RN, PA, NP, etc.; specify): _____

42b. If Physician or Co-led is selected, which of the following describes your antibiotic stewardship **physician** leader? (Check all that apply.)

- Has antibiotic stewardship responsibilities in their contract job description, or performance review
- Is physically on-site in your facility (either part-time or full-time)
- Completed an ID fellowship
- Completed a certificate program on antibiotic stewardship
- Completed other training(s) (for example, conferences or online modules) on antibiotic stewardship
- None of the above

Antibiotic Stewardship Practices (continued)

42c. If 'Has antibiotic stewardship responsibilities in their contract or job description' is selected (for physician (co) leader): What percentage of time for antibiotic stewardship activities is specified in the **physician (co) leader's contract or job description?** (Check one.)

- | | |
|---------------------------------|--|
| <input type="checkbox"/> 1-10% | <input type="checkbox"/> 51-75% |
| <input type="checkbox"/> 11-25% | <input type="checkbox"/> 76-100% |
| <input type="checkbox"/> 26-50% | <input type="checkbox"/> Not specified |

42d. If Physician or Co-led is selected: **In an average week**, what percentage of time does the **physician (co) leader spend** on antibiotic stewardship activities in your facility? (Check one.)

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> 1-10 | <input type="checkbox"/> 51-75% |
| <input type="checkbox"/> 11-25% | <input type="checkbox"/> 76-100% |
| <input type="checkbox"/> 26-50% | |

42e. If Pharmacist or Co-led is selected, which of the following describes your antibiotic stewardship **pharmacist leader?** (Check all that apply.)

- Has antibiotic stewardship responsibilities in their contract, job description, or performance review
- Is physically on-site in your facility (either part-time or full-time)
- Completed a PGY2 ID residency and/or ID fellowship
- Completed a certificate program on antibiotic stewardship
- Completed other training(s) (for example, conferences or online modules) on antibiotic stewardship
- None of the above

42f. If 'Has antibiotic stewardship responsibilities in their contract or job description' is selected (for pharmacist (co) leader): What percent time for antibiotic stewardship activities is specified in the **pharmacist (co) leader's contract or job description?** (Check one)

- | | |
|---------------------------------|--|
| <input type="checkbox"/> 1-10% | <input type="checkbox"/> 76-100% |
| <input type="checkbox"/> 11-25% | |
| <input type="checkbox"/> 26-50% | <input type="checkbox"/> Not specified |
| <input type="checkbox"/> 51-75% | |

42g. If 'Pharmacist' or 'Co-led' is selected: **In an average week**, what percentage of time does the **pharmacist (co) leader spend** on antibiotic stewardship activities in your facility? (Check one)

- | | |
|---------------------------------|----------------------------------|
| <input type="checkbox"/> 1-10% | <input type="checkbox"/> 76-100% |
| <input type="checkbox"/> 11-25% | |
| <input type="checkbox"/> 26-50% | |
| <input type="checkbox"/> 51-75% | |

42h. If Pharmacist or Other is selected: Does your facility have a designated physician who can serve as a point of contact and support for the non-physician leader?

- Yes No

42i. If a pharmacist is **not** the leader or co-leader for the program, is there at least one pharmacist responsible for improving antibiotic use at your facility?

- Yes No

Antibiotic Stewardship Practices (continued)

*43. Our facility has the following priority antibiotic stewardship interventions: (Check all that apply)

- Prospective audit and feedback for specific antibiotic agents

43a. If Prospective audit and feedback is selected: For which categories of antimicrobials? Answer for the following categories of antimicrobials, *whether or not* they are on formulary. (Check all that apply)

- Cefepime, ceftazidime, or piperacillin/tazobactam
- Vancomycin (intravenous)
- Ertapenem, imipenem/cilastatin, or meropenem
- Ceftazidime/avibactam, ceftolozane/tazobactam, meropenem/vaborbactam, imipenem-cilastatin/relebactam, or cefiderocol
- Fluoroquinolones
- Daptomycin, linezolid, or other newer anti-MRSA agents
- Eravacycline or omadacycline
- Lefamulin
- Aminoglycosides
- Colistin or polymyxin B
- Anidulafungin, caspofungin, or micafungin
- Isavuconazole, posaconazole, or voriconazole
- Amphotericin B and/or lipid-based amphotericin B
- None of the above

43b. If Prospective audit and feedback is selected: Our antibiotic stewardship program monitors prospective audit and feedback interventions (for example, by tracking antibiotic use, types of interventions, acceptance of recommendations).

Yes No

- Preauthorization for specific antibiotic agents.

43c. If Preauthorization is selected: For which categories of antimicrobials? Only answer for categories of antimicrobials that are **on formulary**. (Check all that apply)

- Cefepime, ceftazidime, or piperacillin/tazobactam
- Vancomycin (intravenous)
- Ertapenem, imipenem/cilastatin, or meropenem
- Ceftazidime/avibactam, ceftolozane/tazobactam, meropenem/vaborbactam, imipenem-cilastatin/relebactam, or cefiderocol
- Fluoroquinolones
- Daptomycin, linezolid, or other newer anti-MRSA agents
- Eravacycline or omadacycline
- Lefamulin
- Aminoglycosides

Antibiotic Stewardship Practices (continued)

- Colistin or polymyxin B
- Anidulafungin, caspofungin, or micafungin
- Isavuconazole, posaconazole, or voriconazole
- Amphotericin B and/or lipid-based amphotericin B
- None of the above

43d. If Preauthorization is selected: Our antibiotic stewardship program monitors preauthorization interventions (for example, by tracking which agents are requested for which conditions).

Yes No

Facility-specific treatment recommendations, based on national guidelines and local pathogen susceptibilities, to assist with antibiotic selection for common clinical conditions (for example, community-acquired pneumonia, urinary tract infection, skin and soft tissue infection).

43e. If Facility-specific treatment recommendations is selected: For which common clinical conditions?

- Community-acquired pneumonia
- Urinary tract infection
- Skin and soft tissue infection
- None of the above

43f. If Facility-specific treatment recommendations is selected: Our stewardship program monitors adherence to our facility's treatment recommendations for antibiotic selection for common clinical conditions (for example, community-acquired pneumonia, urinary tract infection, skin and soft tissue infection).

Yes No

43g. If Yes: For which common clinical conditions?

- Community-acquired pneumonia
- Urinary tract infection
- Skin and soft tissue infection
- None of the above

None of the above

*44. Our facility has a policy or formal procedure for other interventions to ensure optimal use of antibiotics: (Check all that apply.)

- Early administration of effective antibiotics to optimize the treatment of sepsis
- Treatment protocols for *Staphylococcus aureus* bloodstream infection
- Stopping unnecessary antibiotic(s) in new cases of *Clostridioides difficile* infection (CDI)
- Review of culture-proven invasive (for example, bloodstream) infections
- Review of planned outpatient parenteral antibiotic therapy (OPAT)
- The treating team to review antibiotics 48-72 hours after initial order (specifically, antibiotic time-out).
- Assess and clarify documented penicillin allergy
- Using the shortest effective duration of antibiotics at discharge for common clinical conditions (for example, community-acquired pneumonia, urinary tract infections, skin, and soft tissue infections)
- None of the above

Antibiotic Stewardship Practices (continued)

44a. If 'Using the shortest effective duration of antibiotics at discharge for common clinical conditions' is selected: Our stewardship program monitors adherence in using the shortest effective duration of antibiotics at discharge for common clinical conditions (for example, community-acquired pneumonia, urinary tract infections, skin and soft tissue infections), at least annually.

Yes No

*45. Our facility has in place the following specific 'pharmacy-based' interventions: (Check all that apply)

- Pharmacy-driven changes from intravenous to oral antibiotics without a physician's order (for example, hospital-approved protocol)
- Alerts to providers about potentially duplicative antibiotic spectra (for example, multiple antibiotics to treat anaerobes)
- Automatic antibiotic stop orders in specific situations (for example, surgical prophylaxis)
- None of the above

*46. Our stewardship program has engaged bedside nurses in actions to optimize antibiotic use.

Yes No

46a. If Yes is selected: Our facility has in place the following specific 'nursing-based' interventions: (Check all that apply.)

- Nurses receive training on appropriate criteria for sending urine and/or respiratory cultures.
- Nurses initiate discussions with the treating team on switching from intravenous to oral antibiotics.
- Nurses initiate antibiotic time-out discussions with the treating team.
- Nurses track antibiotic duration of therapy
- None of the above

46b. If 'Nurses track antibiotic duration of therapy' is selected: Is that information available at the bedside (for example, on a whiteboard in the room)?

Yes No

*47. Our stewardship program monitors: (Check all that apply.)

- Antibiotic resistance patterns (either facility- or region-specific), at least annually
- Clostridioides difficile* infections (or *C. difficile* LabID events), at least annually
- Antibiotic use in days of therapy (DOT) per 1000 patient days or days present, at least quarterly
- Antibiotic use in defined daily doses (DDD) per 1000 patient days, at least quarterly
- Antibiotic expenditures (specifically, purchasing costs), at least quarterly
- Antibiotic use in some other way, at least annually (specify): _____
- None of the above

*48. Our stewardship team provides the following antibiotic use reports to prescribers, at least annually: (Check all that apply.)

- Individual, prescriber-level reports
- Unit- or service-specific reports
- None of the above

Antibiotic Stewardship Practices (continued)

48a. If 'Individual, prescriber-level reports' or 'Unit- or service-specific reports' is selected: Our stewardship program uses these reports to target feedback to prescribers about how they can improve their antibiotic prescribing, at least annually.

Yes No

*49. Our facility distributes an antibiogram to prescribers, at least annually

Yes No

*50. Information on antibiotic use, antibiotic resistance, and stewardship efforts is reported to hospital staff, at least annually.

Yes No

*51. Which of the following groups receive education on optimal prescribing, adverse reactions from antibiotics, and antibiotic resistance (for example, Grand Rounds, in-service training, direct instruction) at least annually? (Check all that apply.)

- Prescribers
- Nursing staff
- Pharmacists
- None of the above

*52. Are patients provided education on important side effects of prescribed antibiotics?

Yes No

52a. If 'Yes' is selected: How is education to patients on side effects shared? (Check all that apply.)

- Discharge paperwork
- Verbally by nurse
- Verbally by pharmacist
- Verbally by physician
- None of the above

Optional Antibiotic Stewardship Practices Questions

Responses to the following questions are not required to complete the annual survey.

Provide additional information about your facility's antibiotic stewardship activities and leadership.

53. Antibiotic stewardship activities are integrated into quality improvement and/or patient safety initiatives.

Yes No

54. Our facility accesses targeted remote stewardship expertise (for example, tele-stewardship to obtain facility-specific support for our antibiotic stewardship efforts).

Yes No

55. Our stewardship program works with the microbiology laboratory to implement the following interventions: (Check all that apply)

- Selective reporting of antimicrobial susceptibility testing results
- Placing comments in microbiology reports to improve prescribing
- None of the above

Optional Antibiotic Stewardship Practices (continued)

56. Which committees or leadership entities provide oversight of your facility's antibiotic stewardship efforts? (Check all that apply.)

- | | |
|--|---|
| <input type="checkbox"/> Pharmacy director | <input type="checkbox"/> Executive leadership (for example, CEO, CMO) |
| <input type="checkbox"/> Pharmacy & therapeutics | <input type="checkbox"/> Hospital board |
| <input type="checkbox"/> Patient safety | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Quality improvement | <input type="checkbox"/> None |

Sepsis Management and Practices

*57. Our facility has a committee charged with monitoring and reviewing sepsis care and/or outcomes.

Yes No

57a. If Yes, the responsibilities of this committee include the following: (Check all that apply)

- Monitor and review compliance with Centers for Medicare & Medicaid SEP-1 measure.
- Monitor and review effectiveness of early sepsis identification strategies
- Update sepsis identification and management protocols based on current evidence
- Monitor and review outcomes among patients with sepsis
- Develop educational materials for facility staff to improving sepsis care
- Monitor and review antimicrobial use in sepsis care

57b. If Yes, this committee includes representatives with the following backgrounds (Check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Physician | <input type="checkbox"/> Phlebotomy |
| <input type="checkbox"/> Nurse | <input type="checkbox"/> Laboratory staff member |
| <input type="checkbox"/> Pharmacist | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Advanced Practice Provider (for example, Physician Assistant, Nurse Practitioner) | |

57c. If Yes, this committee includes representatives from the following hospital locations or services (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Emergency Department | <input type="checkbox"/> Infectious Disease |
| <input type="checkbox"/> Hospital Medicine | <input type="checkbox"/> Antimicrobial Stewardship |
| <input type="checkbox"/> Neonatal Intensive Care | <input type="checkbox"/> Pharmacy |
| <input type="checkbox"/> Critical Care / Intensive Care (excluding Neonatal Intensive Care) | <input type="checkbox"/> Laboratory |
| <input type="checkbox"/> Labor and Delivery | <input type="checkbox"/> Information Technology |
| <input type="checkbox"/> Pediatrics | <input type="checkbox"/> Other _____ |

Sepsis Management and Practices

*58. Facility leadership has demonstrated commitment to improving sepsis care by: (Check all that apply.)

- Providing sepsis program leader(s) dedicated time to manage a sepsis program and conduct daily activities.
- Allocating resources (for example, information technology or data analyst support, training for stewardship team) to support sepsis efforts.
- Having a senior executive that serves as a point of contact or “champion” to help ensure the program has resources and support to accomplish its mission.
- Presenting information on sepsis activities and outcomes to facility leadership and/or board at least annually.
- Ensuring the sepsis program has an opportunity to discuss resource needs with facility leadership and/or board at least annually.
- Communicating to staff about sepsis activities, via email, newsletters, events, or other avenues.
- Providing opportunities for hospital staff training on sepsis protocols.
- Ensuring that staff from key support departments and groups (for example, IT and Emergency Medicine) are contributing to sepsis activities.
- None of the above

*59. Our facility uses the following approaches to assist in the rapid identification of patients with sepsis: (Check all that apply.)

- Electronic Health Record (EHR)-generated alert based on Systemic Inflammatory Response Syndrome (SIRS) criteria
- EHR-generated alert based on qSOFA (Quick SOFA) criteria
- EHR-generated alert based on a predictive model
- EHR-generated alert using other criteria not already specified
- Manual screening (for example, use of a checklist) using Systemic Inflammatory Response Syndrome (SIRS) or similar criteria
- No standardized process
- Other _____

*60. Our facility uses the following approaches to assist in the management of patients with sepsis: (Check all that apply.)

- Protocols that help identify and tailor care for patients with septic shock (for example, vasopressor orders)
- Protocols that prompt the ordering of sepsis diagnostic tests such as blood cultures, lactate, urinalysis, chest radiography, etc.
- Protocols that prompt the ordering of preferred antimicrobial treatment regimens for sepsis and/or underlying infection types.
- Protocols that prompt the ordering of intravenous fluids.
- Protocols that prompt the reassessment of resuscitative efforts.
- Protocols that are tailored to specific populations (for example, neonates, pregnant, oncology, or neutropenic patients, etc.)
- Automated systems (for example, EHR timers, prompts, or dashboards) that facilitate compliance with time-sensitive aspects of sepsis care.
- No standardized sepsis protocols or automated systems for sepsis care prompting or monitoring
- Other systematic approach _____

Facility Water Management Program (WMP) (Completed with input from WMP team members.)

*61. Does your facility have a water management program (WMP) to prevent the growth and transmission of *Legionella* and other opportunistic waterborne pathogens (for example, *Pseudomonas*, *Acinetobacter*, *Burkholderia*, *Stenotrophomonas*, nontuberculous mycobacteria, and fungi)?

Yes No

61a. If Yes, who is represented on your facility WMP team? (Check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Hospital Epidemiologist/ Infection Preventionist | <input type="checkbox"/> Compliance/ Safety Officer |
| <input type="checkbox"/> Hospital Administrator/Leadership | <input type="checkbox"/> Risk/Quality Management Staff |
| <input type="checkbox"/> Facilities Manager/ Engineer | <input type="checkbox"/> Infectious Disease Clinician |
| <input type="checkbox"/> Maintenance Staff | <input type="checkbox"/> Consultant |
| <input type="checkbox"/> Equipment/Chemical Acquisition/Supplier | <input type="checkbox"/> Laboratory Staff |
| <input type="checkbox"/> Environmental Services | <input type="checkbox"/> Other (specify): _____ |

*62. Has your facility ever conducted an environmental assessment to identify where *Legionella* and other opportunistic waterborne pathogens could grow and spread in the facility water system (for example, piping infrastructure)? This may include a description of building water systems using text or basic diagrams that map all water supply sources, treatment systems, processing steps, control measures, and end-use points.

Yes No

62a. If Yes, when was the most recent assessment conducted? (Check one)

- | | | |
|--|--|---|
| <input type="checkbox"/> Within the most recent year
(≤ 1 year ago) | <input type="checkbox"/> Between 1 and 3 years ago
(> 1 year and ≤ 3 years) | <input type="checkbox"/> More than 3 years ago
(> 3 years) |
|--|--|---|

*63. Has your facility ever conducted a water infection control risk assessment (WICRA) to evaluate water sources, modes of transmission, patient susceptibility, patient exposure, and/or program preparedness? An example WICRA tool can be accessed at <https://www.cdc.gov/hai/pdfs/prevent/water-assessment-tool-508.pdf>

Yes No

63a If Yes, when was the most recent assessment conducted? (Check one)

- | | | |
|--|--|---|
| <input type="checkbox"/> Within the most recent year
(≤ 1 year ago) | <input type="checkbox"/> Between 1 and 3 years ago
(> 1 year and ≤ 3 years) | <input type="checkbox"/> More than 3 years ago
(> 3 years) |
|--|--|---|

Facility Water Management Program (WMP) (continued)

*64. Does your facility regularly monitor the following parameters in the building water system(s)?

Disinfectant (such as residual chlorine): Yes No

64a. If Yes, does your facility have a plan for corrective actions when disinfectant(s) are not within acceptable limits as determined by the water management program? Yes No

Water temperature: Yes No

64b. If Yes, does your facility have a plan for corrective actions when water temperatures are not within acceptable limits as determined by the water management program? Yes No

Water pH: Yes No

64c. If Yes, does your facility have a plan for corrective actions when water pH is not within acceptable limits as determined by the water management program? Yes No

Heterotrophic plate counts (HPC) testing: Yes No

64d. If Yes, does your facility have a plan for corrective actions when heterotrophic plate counts are not within acceptable limits as determined by the water management program? Yes No

Specific environmental *Legionella* testing: Yes No

64e. If Yes, does your facility have a plan for corrective actions when environmental tests for *Legionella* are not within acceptable limits as determined by the water management program? Yes No

Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

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