

**HAI & ANTIMICROBIAL USE PREVALENCE SURVEY
ANTIMICROBIAL QUALITY ASSESSMENT (AQUA) FORM 2: GENERAL PATIENT ASSESSMENT**

CDC ID: _____ - _____

Date: ____ / ____ / ____

Data collector initials: _____

Healthcare exposures

1. Indicate the location from which the patient was admitted to the survey hospital (check one):

Private residence Long term care/SNF LTACH Another acute care hospital Homeless

Incarcerated

Other _____ Unknown

2. In the 30 days prior to admission to the survey hospital, did the patient receive (check all that apply):

IV antimicrobials Cancer chemotherapy Wound care Chronic hemodialysis Surgery

None Unknown COVID-19 specific treatment

3. Was the patient hospitalized in an acute care hospital for ≥2 days in the 90 days prior to this admission?

Yes No Unknown

Antimicrobial allergies

4. Is an antimicrobial drug allergy recorded in the medical record? Yes No Unknown

4a. If yes, specify drug class or classes to which patient is allergic, and reaction(s):

| Drug class | Nausea, vomiting and/or diarrhea | Hives or urticaria | Other skin rash | Wheezing, throat tightness, trouble breathing | Angio-edema or face swelling | Anaphylaxis | Not specified | Other (specify) |
|---|----------------------------------|------------------------------|------------------------------|---|------------------------------|------------------------------|------------------------------|------------------------------------|
| <input type="checkbox"/> Penicillins | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Cephalosporins | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Sulfa drugs | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Macrolides | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Fluoroquinolones | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Vancomycin | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |
| <input type="checkbox"/> Other (specify): | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes | <input type="checkbox"/> Yes _____ |

Underlying conditions

5. Check all that apply: None: Unknown:

- | | |
|---|---|
| <input type="checkbox"/> AIDS | <input type="checkbox"/> Kidney stones/nephrolithiasis |
| <input type="checkbox"/> Alcoholism in past year | <input type="checkbox"/> Leukemia |
| <input type="checkbox"/> Asplenia | <input type="checkbox"/> Lymphoma or multiple myeloma |
| <input type="checkbox"/> Asthma | <input type="checkbox"/> MRSA colonization or infection history |
| <input type="checkbox"/> Cerebrovascular disease/stroke (except hemiplegia) | <input type="checkbox"/> Myocardial infarction |
| <input type="checkbox"/> Chronic cognitive deficit | <input type="checkbox"/> Neutropenia (absolute neutrophil count <500 cells / μL) |
| <input type="checkbox"/> Chronic kidney disease | <input type="checkbox"/> Peptic ulcer disease |
| <input type="checkbox"/> Chronic liver disease | <input type="checkbox"/> Peripheral vascular disease |
| <input type="checkbox"/> Chronic obstructive pulmonary disease (COPD)/emphysema | <input type="checkbox"/> Pregnancy |
| <input type="checkbox"/> Chronic lung disease (other than COPD/emphysema, asthma) | <input type="checkbox"/> Recurrent cystitis or urinary tract infection |
| <input type="checkbox"/> Chronic steroid or other immunosuppressive therapy | <input type="checkbox"/> Sickle cell disease |
| <input type="checkbox"/> Congenital urinary tract abnormality (not VUR) | <input type="checkbox"/> Smoking in home or living environment (other than patient) |
| <input type="checkbox"/> Congenital heart disease | <input type="checkbox"/> Smoking in past year (patient) |
| <input type="checkbox"/> Congestive heart failure | <input type="checkbox"/> Solid tumor malignancy, metastatic (not urologic/renal) |

- | | |
|--|--|
| <input type="checkbox"/> Connective tissue disease | <input type="checkbox"/> Solid tumor malignancy, not metastatic (not urologic/renal) |
| <input type="checkbox"/> Cystic fibrosis | <input type="checkbox"/> Spinal cord injury or paraplegia or quadriplegia |
| <input type="checkbox"/> Dementia | <input type="checkbox"/> Transplant, hematopoietic stem cell or bone marrow |
| <input type="checkbox"/> Diabetes mellitus with complications | <input type="checkbox"/> Transplant, solid organ |
| <input type="checkbox"/> Diabetes mellitus without complications | <input type="checkbox"/> Ureteral stent |
| <input type="checkbox"/> Hemiplegia | <input type="checkbox"/> Urinary tract abnormality, not otherwise specified |
| <input type="checkbox"/> HIV without AIDS | <input type="checkbox"/> Urostomy or nephrostomy |
| <input type="checkbox"/> IVDU in past year | <input type="checkbox"/> Urologic or renal malignancy |
| | <input type="checkbox"/> Vesicoureteral reflux (VUR) |

Infections present during the hospitalization (Do not use NHSN definitions; use information documented in medical records)

6. Complete table: No infections:

| No. | Infection (code) | Onset date | Signs and symptoms documented in medical record (check all that apply) | | | | | | Was infection treated with antimicrobials? |
|-----|--|--|--|---|---|---|--|--|--|
| 1 | _____ SSI? <input type="checkbox"/> Y COVID-19? <input type="checkbox"/> Y | <input type="checkbox"/> Before hospitalization <input type="checkbox"/> Hospital days 1-2 <input type="checkbox"/> On/after hosp day 3 <input type="checkbox"/> In hospital, day unk <input type="checkbox"/> Unknown | <input type="checkbox"/> Cough or dyspnea <input type="checkbox"/> Diarrhea <input type="checkbox"/> Fever <input type="checkbox"/> Hypotension <input type="checkbox"/> Unknown | <input type="checkbox"/> Mental status change <input type="checkbox"/> Nausea or vomiting <input type="checkbox"/> Pain at infection site <input type="checkbox"/> Positive imaging <input type="checkbox"/> None | <input type="checkbox"/> Pus, drainage, abscess <input type="checkbox"/> Redness or swelling <input type="checkbox"/> Urinary frequency <input type="checkbox"/> Urinary urgency <input type="checkbox"/> Other _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | | | |
| 2 | _____ SSI? <input type="checkbox"/> Y COVID-19? <input type="checkbox"/> Y | <input type="checkbox"/> Before hospitalization <input type="checkbox"/> Hospital days 1-2 <input type="checkbox"/> On/after hosp day 3 <input type="checkbox"/> In hospital, day unk <input type="checkbox"/> Unknown | <input type="checkbox"/> Cough or dyspnea <input type="checkbox"/> Diarrhea <input type="checkbox"/> Fever <input type="checkbox"/> Hypotension <input type="checkbox"/> Unknown | <input type="checkbox"/> Mental status change <input type="checkbox"/> Nausea or vomiting <input type="checkbox"/> Pain at infection site <input type="checkbox"/> Positive imaging <input type="checkbox"/> None | <input type="checkbox"/> Pus, drainage, abscess <input type="checkbox"/> Redness or swelling <input type="checkbox"/> Urinary frequency <input type="checkbox"/> Urinary urgency <input type="checkbox"/> Other _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | | | |
| 3 | _____ SSI? <input type="checkbox"/> Y COVID-19? <input type="checkbox"/> Y | <input type="checkbox"/> Before hospitalization <input type="checkbox"/> Hospital days 1-2 <input type="checkbox"/> On/after hosp day 3 <input type="checkbox"/> In hospital, day unk <input type="checkbox"/> Unknown | <input type="checkbox"/> Cough or dyspnea <input type="checkbox"/> Diarrhea <input type="checkbox"/> Fever <input type="checkbox"/> Hypotension <input type="checkbox"/> Unknown | <input type="checkbox"/> Mental status change <input type="checkbox"/> Nausea or vomiting <input type="checkbox"/> Pain at infection site <input type="checkbox"/> Positive imaging <input type="checkbox"/> None | <input type="checkbox"/> Pus, drainage, abscess <input type="checkbox"/> Redness or swelling <input type="checkbox"/> Urinary frequency <input type="checkbox"/> Urinary urgency <input type="checkbox"/> Other _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | | | |
| 4 | _____ SSI? <input type="checkbox"/> Y COVID-19? <input type="checkbox"/> Y | <input type="checkbox"/> Before hospitalization <input type="checkbox"/> Hospital days 1-2 <input type="checkbox"/> On/after hosp day 3 <input type="checkbox"/> In hospital, day unk <input type="checkbox"/> Unknown | <input type="checkbox"/> Cough or dyspnea <input type="checkbox"/> Diarrhea <input type="checkbox"/> Fever <input type="checkbox"/> Hypotension <input type="checkbox"/> Unknown | <input type="checkbox"/> Mental status change <input type="checkbox"/> Nausea or vomiting <input type="checkbox"/> Pain at infection site <input type="checkbox"/> Positive imaging <input type="checkbox"/> None | <input type="checkbox"/> Pus, drainage, abscess <input type="checkbox"/> Redness or swelling <input type="checkbox"/> Urinary frequency <input type="checkbox"/> Urinary urgency <input type="checkbox"/> Other _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | | | |

More infections than fit in the table:

Infection codes: BJI, BSI, CDI, CNS, CVI, DIS, ENT, GTI, HEB, IAB, LRI, PNE, REP, SST, UND, UNK, UTI

Severity of illness

7. Was the patient in an ICU at any time during the hospitalization? Yes No Unknown

7a. If yes, enter the dates of the first ICU admission during the hospitalization:

ICU admission date: ____ / ____ / ____ or Unknown ICU discharge date: ____ / ____ / ____ or Unknown

8. Complete the table using data from the first 24-hour period of treatment during the hospitalization:

| Parameter | First day, CAP treatment: ___ / ___ / ___ or <input type="checkbox"/> NA | First day, IV vancomycin: ___ / ___ / ___ or <input type="checkbox"/> NA | First day, fluoroquinolone: ___ / ___ / ___ or <input type="checkbox"/> NA | First day, UTI treatment ___ / ___ / ___ or <input type="checkbox"/> |
|--------------------------------|---|---|---|---|
| Temperature: | | | | |
| Highest: | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk |
| Lowest: | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk | ___ °C <input type="checkbox"/> °F or <input type="checkbox"/> Unk |
| Heart rate: | | | | |
| Highest: | ___ bpm or <input type="checkbox"/> Unk |
| Lowest: | ___ bpm or <input type="checkbox"/> Unk |
| Respiratory: | | | | |
| Highest resp rate: | ___ bpm or <input type="checkbox"/> Unk |
| Lowest PaCO ₂ : | ___ mmHg or <input type="checkbox"/> Unk |
| Mechanical vent: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk |
| Blood pressure: | | | | |
| Lowest systolic BP: | ___ mmHg or <input type="checkbox"/> Unk |
| Lowest mean arterial pressure: | ___ mmHg or <input type="checkbox"/> Unk |
| On vasopressors: | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk |
| WBC count: | | | | |
| Highest: | ___ cells/mm ³ or <input type="checkbox"/> Unk |
| Lowest: | ___ cells/mm ³ or <input type="checkbox"/> Unk |
| Highest %bands: | ___ % or <input type="checkbox"/> Unk |
| Lactate | ___ <input type="checkbox"/> mg/dL <input type="checkbox"/> mmol/L or <input type="checkbox"/> Unk | ___ <input type="checkbox"/> mg/dL <input type="checkbox"/> mmol/L or <input type="checkbox"/> Unk | ___ <input type="checkbox"/> mg/dL <input type="checkbox"/> mmol/L or <input type="checkbox"/> Unk | ___ <input type="checkbox"/> mg/dL <input type="checkbox"/> mmol/L or <input type="checkbox"/> Unk |

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