NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

Measure Information Form

Measure Set: Surgical Care Improvement Project (SCIP)

Set Measure ID #: SCIP-Inf-2

<table>
<thead>
<tr>
<th>Set Measure ID#</th>
<th>Performance Measure Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIP-Inf-2a</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Overall Rate</td>
</tr>
<tr>
<td>SCIP-Inf-2b</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - CABG</td>
</tr>
<tr>
<td>SCIP-Inf-2c</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Other Cardiac Surgery</td>
</tr>
<tr>
<td>SCIP-Inf-2d</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Hip Arthroplasty</td>
</tr>
<tr>
<td>SCIP-Inf-2e</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Knee Arthroplasty</td>
</tr>
<tr>
<td>SCIP-Inf-2f</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Colon Surgery</td>
</tr>
<tr>
<td>SCIP-Inf-2g</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Hysterectomy</td>
</tr>
<tr>
<td>SCIP-Inf-2h</td>
<td>Prophylactic Antibiotic Selection for Surgical Patients - Vascular Surgery</td>
</tr>
</tbody>
</table>

Performance Measure Name: Prophylactic Antibiotic Selection for Surgical Patients

Description: Surgical patients who received prophylactic antibiotics consistent with current guidelines (specific to each type of surgical procedure).

Rationale: A goal of prophylaxis with antibiotics is to use an agent that is safe, cost-effective, and has a spectrum of action that covers most of the probable intraoperative contaminants for the operation. First or second-generation cephalosporins satisfy these criteria for most operations, although anaerobic coverage is needed for colon surgery. Vancomycin is not recommended for routine use because of the potential for development of antibiotic resistance, but is acceptable if a patient is allergic to beta-lactams, as are fluoroquinolones and clindamycin in selected situations.

Type of Measure: Process

Improvement Noted As: An increase in the rate.

Numerator Statement: Number of surgical patients who received prophylactic antibiotics recommended for their specific surgical procedure.

  Included populations: Not Applicable

  Excluded Populations: None
**Data Elements:**
- Antibiotic Administration Route
- Antibiotic Allergy
- Antibiotic Name
- Oral Antibiotics
- Vancomycin

The antibiotic regimens described in the table which follows later in this section reflect the combined, published recommendations of the American Society of Health-System Pharmacists, the Medical Letter, the Infectious Diseases Society of America, the Sanford Guide to Antimicrobial Therapy 2009, and the Surgical Infection Society.

**Denominator Statement:** All selected surgical patients with no evidence of prior infection.

**Included Populations:**
- An ICD-9-CM Principal Procedure Code of selected surgeries (as defined in Appendix A, Table 5.10 for ICD-9-CM codes).
- **AND**
- An ICD-9-CM Principal Procedure Code of selected surgeries (as defined in Appendix A, Table 5.01-5.08 for ICD-9-CM codes).

**Excluded Populations:**
- Patients less than 18 years of age
- Patients who have a length of Stay greater than 120 days
- Patients who had a principal diagnosis suggestive of preoperative infectious diseases (as defined in Appendix A, Table 5.09 for ICD-9-CM codes)
- Patients whose ICD-9-CM principal procedure was performed entirely by Laparoscope
- Patients enrolled in clinical trials
- Patients whose ICD-9-CM principal procedure occurred prior to the date of admission
- Patients with physician/advanced practice nurse/physician assistant (physician/APN/PA) documented infection prior to surgical procedure of interest
- Patients who expired perioperatively
- Patients who were receiving antibiotics more than 24 hours prior to surgery (except colon surgery patients taking oral prophylactic antibiotics)
- Patients who were receiving antibiotics within 24 hours prior to arrival (except colon surgery patients taking oral prophylactic antibiotics)
- Patients who did not receive any antibiotics before or during surgery, or within 24 hours after Anesthesia End Time (i.e., patient did not receive prophylactic antibiotics)
- Patients who did not receive any antibiotics during this hospitalization
Data Elements:
- Anesthesia End Date
- Anesthesia End Time
- Anesthesia Start Date
- Admission Date
- Antibiotic Administration Date
- Antibiotic Administration Time
- Antibiotic Received
- Birthdate
- Clinical Trial
- Discharge Date
- ICD-9-CM Principal Diagnosis Code
- ICD-9-CM Principal Procedure Code
- Infection Prior to Anesthesia
- Laparoscope
- Perioperative Death
- Surgical Incision Date
- Surgical Incision Time

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Abstracted antibiotics are those administered from the time of arrival through the first 48 hours (72 hours for CABG or Other Cardiac Surgery) after the Anesthesia End Time. Refer to Appendix C, Table 2.1, which contains a complete listing of antibiotics.

Measure Analysis Suggestions: Consideration may be given to relating this measure to SCIP-Inf-1 and SCIP-Inf-3 in order to evaluate which aspects of antibiotic prophylaxis would most benefit from an improvement effort. The process owners for selection of appropriate antibiotics could include physicians/APNs/PAs and hospital committees (e.g., QA, Infection Control, Pharmacy and Therapeutics, Surgical Section Subcommittees, etc.) any of which may choose to address this physician/APN/PA practice issue as part of a larger surgical infection prevention initiative.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications Section.

Data Reported As: Overall aggregate rate for all surgeries and stratified rates by data element ICD-9-CM Principal Procedure Code, generated from count data reported as a proportion.

Selected References:
- Bratzler DW, Houck PM, for the Surgical Infection Prevention Guidelines Writers Group. Antimicrobial prophylaxis for surgery: An advisory statement from the
Specifications Manual for National Hospital Inpatient Quality Measures
Discharges 10-01-10 (4Q10) through 03-31-11 (1Q11)


### Prophylactic Antibiotic Regimen Selection for Surgery

<table>
<thead>
<tr>
<th>Surgical Procedure</th>
<th>Approved Antibiotics</th>
</tr>
</thead>
</table>
| **CABG, Other Cardiac or Vascular** | Cefazolin, Cefuroxime, Table 3.1 or Vancomycin $^1$ Table 3.8  
If β-lactam allergy: Vancomycin$^2$ Table 3.8 or Clindamycin$^2$ Table 3.9 |
| **Hip/Knee Arthroplasty**        | Cefazolin or Cefuroxime Table 3.2 or Vancomycin$^1$ Table 3.8  
If β-lactam allergy: Vancomycin$^2$ Table 3.8 or Clindamycin$^2$ Table 3.9 |
| **Colon**                        | Cefotetan, Cefoxitin, Ampicillin/Sulbactam Table 3.5, or Ertapenem$^3$ Table 3.6b  
OR Cefazolin or Cefuroxime Table 3.2 + Metronidazole Table 3.6a  
If β-lactam allergy: Clindamycin Table 3.9 + Aminoglycoside Table 2.11  
or Clindamycin Table 3.9 + Quinolone Table 3.12, or Clindamycin Table 3.9 + Aztreonam Table 2.7  
OR Metronidazole Table 3.6a with Aminoglycoside Table 2.11, or Metronidazole Table 3.6a + Quinolone Table 3.12 |
| **Hysterectomy**                 | Cefotetan, Cefazolin, Cefoxitin, Cefuroxime, or Ampicillin/Sulbactam Table 3.7  
If β-lactam allergy: Clindamycin Table 3.9 + Aminoglycoside Table 2.11  
or Clindamycin Table 3.9 + Quinolone Table 3.12 or Clindamycin Table 3.9 + Aztreonam Table 2.7  
OR Metronidazole Table 3.6a + Aminoglycoside Table 2.11 or Metronidazole Table 3.6a + Quinolone Table 3.12 |

### Special Considerations:

1. Vancomycin is acceptable with a physician/APN/PA/pharmacist documented justification for its use (see data element *Vancomycin*).  
2. For cardiac, orthopedic, and vascular surgery, if the patient is allergic to beta-lactam antibiotics, Vancomycin or Clindamycin are acceptable substitutes.  
3. A single dose of ertapenem is recommended for colon procedures.
**SCIP-Inf-2: Prophylactic Antibiotic Selection for Surgical Patients**

**Numerator:** Number of surgical patients who received prophylactic antibiotics recommended for their specific surgical procedure.

**Denominator:** All selected surgical patients with no evidence of prior infection.

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**Variable Key:**
- Patient Age
- Antibiotic Days
- Antibiotic Timing
- Surgery Days

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### Stratification Table:

<table>
<thead>
<tr>
<th>Set</th>
<th>Stratified By <em>ICD-9-CM Principal Procedure Code</em></th>
<th>(Allowable Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIP-Inf2a</td>
<td>Overall Rate</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2b</td>
<td>CABG Table 5.01</td>
<td>**</td>
</tr>
<tr>
<td>SCIP-Inf2c</td>
<td>Other Cardiac Surgery Table 5.02</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2d</td>
<td>Hip Arthroplasty Table 5.04</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2e</td>
<td>Knee Arthroplasty Table 5.05</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2f</td>
<td>Colon Surgery Table 5.03</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2g</td>
<td>Hysterectomy Table 5.06 Or 5.07</td>
<td></td>
</tr>
<tr>
<td>SCIP-Inf2h</td>
<td>Vascular Surgery Table 5.08</td>
<td></td>
</tr>
</tbody>
</table>

* This refers to the data element 'ICD-9-CM Principal Procedure Code'. Each case will be stratified according to the principal procedure code, after the Category Assignments are completed and the overall rate is calculated. ** No allowable value exists for the overall rate. It includes all procedures on Tables 5.01 to 5.08.

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**Specifications Manual for National Hospital Inpatient Quality Measures**

Discharges **10-01-10 (4Q10) through 03-31-11 (1Q11)**

SCIP-Inf-2-6
<table>
<thead>
<tr>
<th>Antibiotic Name</th>
<th>Antibiotic Administration Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Table 2.1</td>
<td>=3,10 for all antibiotic doses</td>
</tr>
<tr>
<td>=1,2 for any antibiotic dose</td>
<td>Proceed only with antibiotic doses on Table 2.1 that are administered via routes ‘1’ or ‘2’.</td>
</tr>
</tbody>
</table>

**Antibiotic Days I** = Surgical Incision Date - Antibiotic Administration Date (in days)

- For any antibiotic dose: ≥1
- For all antibiotic doses: ≤0

**Antibiotic Administration Time**

- Non-UTD date for at least one antibiotic dose
- Non-UTD time for at least one antibiotic dose

**Antibiotic Timing I** = Surgical Incision Date and Surgical Incision Time - Antibiotic Administration Date and Antibiotic Administration Time (in minutes).

Note: The front-end edits reject cases containing invalid data and/or an incomplete Antibiotic Grid. A complete Antibiotic Grid requires all data elements in the row to contain either a valid value and/or ‘UTD’.

Specifications Manual for National Hospital Inpatient Quality Measures
Discharges 10-01-10 (4Q10) through 03-31-11 (1Q11)  SCIP-Inf-2-8
Anesthesia End Date

- Missing
- = UTD
- Non-UTD Value

Antibiotic Days II = Antibiotic Administration Date - Anesthesia End Date (in days)

Antibiotic Days II ≤ 0 for all doses of all Antibiotics

Initial Abxday flag = No' for each antibiotic doses.
Set Abxday flag = 'Yes' for each antibiotic dose where Antibiotic Days II ≤ 0.

Antibiotic Administration Time

- Missing
- = UTD
- Non-UTD Value

Antibiotic Administration Time = UTD for all antibiotic doses

Abxday flag = No for All Doses

Antibiotic Timing II = Antibiotic Administration Date and Antibiotic Administration Time - Anesthesia End Date and Anesthesia End Time (in minutes).
Calculate Antibiotic Timing II for all antibiotic doses with non-UTD date and time. Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag = Yes.

Antibiotic Timing II > 1440 minutes for all doses of all Antibiotics with non-UTD date and time.
Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag = Yes.

Antibiotic Timing II ≤ 1440 minutes for at least one dose of ANY Antibiotic. Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag = Yes.

For each case, proceed ONLY with those antibiotic doses that satisfy at least one of the following conditions:

- Antibiotic Timing II ≤ 1440.
- Abxday flag = Y
Note: For each case include only those antibiotics with routes IV for further processing.
Specifications Manual for National Hospital Inpatient Quality Measures
Discharges 10-01-10 (4Q10) through 03-31-11 (1Q11)

STOP here for CMS. CONTINUE to "N" for The Joint Commission.
For all Stratified Measures (b-h) Not in Measure Population

Overall Rate Category Assignment

= B or X

= D or E

ICD-9-CM Principal Procedure Code

On Table 5.01

On Table 5.02 or 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08

Set the Measure Category Assignment for the strata measures (SCIP-Inf-2b through SCIP-Inf-2h) = 'B'

For Stratified Measure SCIP-Inf-2b

Set the Measure Category Assignment for measure SCIP-Inf-2b = the Measure Category Assignment for measure SCIP-Inf-2a

For Stratified Measure SCIP-Inf-2c

Set the Measure Category Assignment for measure SCIP-Inf-2c = the Measure Category Assignment for measure SCIP-Inf-2a

For Stratified Measure SCIP-Inf-2d

Set the Measure Category Assignment for measure SCIP-Inf-2d = the Measure Category Assignment for measure SCIP-Inf-2a

Overall Rate Category Assignment

= B or X

= D or E

ICD-9-CM Principal Procedure Code

On Table 5.01

On Table 5.02 or 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08

Set the Measure Category Assignment for the strata measures (SCIP-Inf-2b through SCIP-Inf-2h) = 'B'

For Stratified Measure SCIP-Inf-2b

Set the Measure Category Assignment for measure SCIP-Inf-2b = the Measure Category Assignment for measure SCIP-Inf-2a

For Stratified Measure SCIP-Inf-2c

Set the Measure Category Assignment for measure SCIP-Inf-2c = the Measure Category Assignment for measure SCIP-Inf-2a

For Stratified Measure SCIP-Inf-2d

Set the Measure Category Assignment for measure SCIP-Inf-2d = the Measure Category Assignment for measure SCIP-Inf-2a

Note: Initialize the Measure Category Assignment for each strata measure (b-g) = 'B'.

Do not change the Measure Category Assignment that was already calculated for the overall rate (SCIP-Inf-2a).

The rest of the algorithm will reset the appropriate Measure Category Assignment to be equal to the overall rate's (SCIP-Inf-2a) Measure Category Assignment.
Set the Measure Category Assignment for measure SCIP-Inf-2e = the Measure Category Assignment for measure SCIP-Inf-2a

Set the Measure Category Assignment for measure SCIP-Inf-2f = the Measure Category Assignment for measure SCIP-Inf-2a

Set the Measure Category Assignment for measure SCIP-Inf-2g = the Measure Category Assignment for measure SCIP-Inf-2a

Set the Measure Category Assignment for measure SCIP-Inf-2h = the Measure Category Assignment for measure SCIP-Inf-2a
SCIP-Infection (Inf)-2: Prophylactic Antibiotics Selection for Surgical Patients

**Numerator:** Number of surgical patients who received prophylactic antibiotics recommended for their specific surgical procedure.

**Denominator:** All selected surgical patients with no evidence of prior infection.

**Variable Key:** Patient Age, Antibiotic Days I, Antibiotic Timing I, Antibiotic Days II, Antibiotic Timing II, Surgery Days

**Stratification Table**

The Stratification Table includes the Set Number, Stratified By, and the Principal Procedure Code (Allowable Value). The Principal Procedure Code refers to the data element ICD-9-CM Principal Procedure Code. Each case will be stratified according to the principal procedure code, after the Category Assignments are completed and the overall rate is calculated.

<table>
<thead>
<tr>
<th>Set Number</th>
<th>Stratified By the Overall Rate</th>
<th>Principal Procedure Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIP-INF 2a</td>
<td>Overall Rate</td>
<td>No allowable value exists for the overall rate. It includes all procedures on Tables 5.01 to 5.08.</td>
</tr>
<tr>
<td>SCIP-INF 2b</td>
<td>Coronary Artery Bypass Graft (CABG)</td>
<td>Table 5.01</td>
</tr>
<tr>
<td>SCIP-INF 2c</td>
<td>Other Cardiac Surgery</td>
<td>Table 5.02</td>
</tr>
<tr>
<td>SCIP-INF 2d</td>
<td>Hip Arthroplasty</td>
<td>Table 5.04</td>
</tr>
<tr>
<td>SCIP-INF 2e</td>
<td>Knee Arthroplasty</td>
<td>Table 5.05</td>
</tr>
<tr>
<td>SCIP-INF 2f</td>
<td>Colon Surgery</td>
<td>Table 5.03</td>
</tr>
<tr>
<td>SCIP-INF 2g</td>
<td>Hysterectomy</td>
<td>Table 5.06 or Table 5.07</td>
</tr>
<tr>
<td>SCIP-INF 2h</td>
<td>Vascular Surgery</td>
<td>Table 5.08</td>
</tr>
</tbody>
</table>

1. Start processing. Run cases that are included in the Surgical Care Improvement Project (SCIP) Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Calculate Patient Age. The Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age.

3. Check Patient Age
   a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for Centers for Medicare and Medicaid Services (CMS). Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Patient Age is greater than or equal to 18 years, continue processing and proceed to ICD-9-CM Principal Procedure Code.
4. Check ICD-9-CM Principal Procedure Code  
   a. If the ICD-9-CM Principal Procedure Code is not on Table 5.01 or 5.02 or 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.  
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.01 or 5.02 or 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08, continue processing and proceed to recheck ICD-9-CM Principal Diagnosis Code.

5. Check ICD-9-CM Principal Diagnosis Code  
   a. If the ICD-9-CM Principal Diagnosis Code is on Table 5.09, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.  
   b. If the ICD-9-CM Principal Diagnosis Code is not on Table 5.09, continue processing and proceed to Laparoscope.

6. Check Laparoscope  
   a. If Laparoscope is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.  
   b. If Laparoscope equals 1 or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.  
   c. If Laparoscope equals 2, continue processing and proceed to Clinical Trial.

7. Check Clinical Trial  
   a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.  
   b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
c. If Clinical Trial equals No, continue processing and proceed to Anesthesia Start Date.

8. Check Anesthesia Start Date
   a. If the Anesthesia Start Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Anesthesia Start Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If Anesthesia Start Date equals a Non Unable To Determine Value, continue processing and proceed to the Surgery Days calculation.

9. Calculate Surgery Days. Surgery Days, in days, is equal to the Anesthesia Start Date minus the Admission Date.

10. Check Surgery Days
    a. If the Surgery Days is less than zero, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
    b. If the Surgery Days is greater than or equal to zero, continue processing and proceed to Infection Prior to Anesthesia.

11. Check Infection Prior to Anesthesia
    a. If Infection Prior to Anesthesia is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
    b. If Infection Prior to Anesthesia equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
    c. If Infection Prior to Anesthesia equals No, continue processing and proceed to Perioperative Death.

12. Check Perioperative Death
    a. If Perioperative Death is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS.
Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

b. If Perioperative Death equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

c. If Perioperative Death equals No, continue processing and proceed to Surgical Incision Date.

13. **Check Surgical Incision Date**

   a. If the Surgical Incision Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

   b. If the Surgical Incision Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

   c. If Surgical Incision Date equals a Non Unable To Determine Value, continue processing and proceed to Antibiotic Received.

14. **Check Antibiotic Received**

   a. If Antibiotic Received equals 1 or 2, continue processing and proceed to recheck ICD-9-CM Principal Procedure Code

   b. If Antibiotic Received equals 4, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

   c. If Antibiotic Received equals 3, continue processing and proceed to step 18 and check Antibiotic Name. Do not check ICD-9-CM Principal Procedure Code, Oral Antibiotics or Antibiotic Received.

15. **Recheck ICD-9-CM Principal Procedure Code only if Antibiotic Received equals 1 or 2**

   a. If the ICD-9-CM Principal Procedure Code is not on Table 5.03, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03, continue processing and proceed to check Oral Antibiotics.
16. Check Oral Antibiotics
   a. If Oral Antibiotics is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Oral Antibiotics equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If Oral Antibiotics equals Yes, continue processing and proceed to recheck Antibiotic Received.

17. Recheck Antibiotic Received
   a. If Antibiotic Received equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Antibiotic Received equals 2, continue processing and proceed to Antibiotic Name.

18. Check Antibiotic Name
   a. If the Antibiotic Grid is not populated, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission. Note: The front-end edits reject cases containing invalid data and/or an incomplete Antibiotic Grid. A complete Antibiotic Grid requires all data elements in the row to contain either a valid value and/or Unable to Determine.
   b. If the Antibiotic Name is on Table 2.1, continue processing and proceed to Antibiotic Administration Route.

19. Check Antibiotic Administration Route
   a. If the Antibiotic Administration Route is equal to 3 or 10 for all antibiotic doses, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Administration Route is equal to 1 or 2 for any antibiotic dose, continue processing and proceed to Antibiotic Administration Date. Proceed only with antibiotic doses on Table 2.1 that are administered via routes 1 or 2.
20. **Check Antibiotic Administration Date**
   a. If the Antibiotic Administration Date is equal to Unable to Determine for all antibiotic doses, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Administration Date is equal to a Non Unable to Determine date for at least one antibiotic dose, continue processing and proceed to the Antibiotic Days I calculation. Note: Proceed only with antibiotic doses that have an associated Non Unable to Determine date.

21. **Calculate Antibiotic Days I**. Antibiotic Days I, in days, is equal to the Surgical Incision Date minus the Antibiotic Administration Date.

22. **Check Antibiotic Days I**
   a. If the Antibiotic Days I is greater than 1 for at least one antibiotic dose, continue processing and recheck the ICD-9-CM Principal Procedure Code. Do not recheck **step 25** Antibiotic Days I, **step 26** Surgical Incision Time, **step 27** Antibiotic Administration Time, or **step 29** Antibiotic Timing I.
   b. If the Antibiotic Days I is less than or equal to 1 for all antibiotic doses, continue processing. Proceed to **step 25** and recheck Antibiotics Days I. Do not recheck ICD-9-CM Principal Procedure Code or Oral Antibiotics.

23. **Recheck ICD-9-CM Principal Procedure Code only if the Antibiotics Days was greater than 1 for at least one antibiotic dose**
   a. If the ICD-9-CM Principal Procedure Code is not on Table 5.03, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03, continue processing and check Oral Antibiotics.

24. **Check Oral Antibiotics**
   a. If Oral Antibiotics is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Oral Antibiotics equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to **step 57** and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

25. Recheck Antibiotic Days I only if Antibiotic Days I is less than or equal to 1 for all antibiotic doses
   a. If the Antibiotic Days I is less than or equal to zero for all antibiotic doses, continue processing. Proceed to step 33 and check Anesthesia End Date. Do not check step 26 Surgical Incision Time, step 27 Antibiotic Administration Time, or step 29 Antibiotic Timing I.
   b. If the Antibiotic Days I is equal to 1 for ANY antibiotic dose, continue processing and proceed to Surgical Incision Time.

26. Check Surgical Incision Time
   a. If the Surgical Incision Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Surgical Incision Time is equal to Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If the Surgical Incision Time is equal to a Non Unable to Determine Value, continue processing and check Antibiotic Administration Time.

27. Check Antibiotic Administration Time
   a. If the Antibiotic Administration Time equals Unable to Determine for all antibiotic doses, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Administration Time equals a Non Unable to Determine time for at least one antibiotic dose, continue processing and recheck Antibiotic Administration Time.

28. Recheck Antibiotic Administration Time
   a. If the Antibiotic Administration Time equals Unable to Determine for ANY antibiotic dose with Antibiotic Days equal to 1, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
b. If the Antibiotic Administration Time equals a Non Unable to Determine time for all antibiotic doses with Antibiotic Days equal to 1, continue processing and proceed to the Antibiotic Timing I calculation.

29. Calculate Antibiotic Timing I. Antibiotic Timing I, in minutes, is equal to the \textbf{Surgical Incision Date} and Surgical Incision Time minus the Antibiotic Administration Date and Antibiotic Administration Time. Calculate Antibiotic Timing I for all antibiotic doses with Non Unable to Determine date and time. Proceed with antibiotic doses that have Antibiotic Timing I calculated, or Antibiotic Days I less than or equal to zero.

30. Check Antibiotic Timing I
   a. If the Antibiotic Timing I is greater than 1440 minutes for any antibiotic dose, continue processing and recheck the ICD-9-CM Principal Procedure Code. Proceed with antibiotic doses that have Antibiotic Timing I calculated, or Antibiotic Days I less than or equal to zero.
   b. If the Antibiotic Timing I is less than or equal to 1440 minutes for all antibiotic doses with non Unable to Determine date and time, continue processing and proceed to \textbf{step 33} and check Anesthesia End Date. Proceed with antibiotic doses that have Antibiotic Timing I calculated, or Antibiotic Days I less than or equal to zero. Do not recheck ICD-9-CM Principal Procedure Code or Oral Antibiotics.

31. Recheck ICD-9-CM Principal Procedure Code only if Antibiotic Timing I is greater than 1440 for any antibiotic dose
   a. If the ICD-9-CM Principal Procedure Code is not on Table 5.03, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to \textbf{step 57} and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03, continue processing and check Oral Antibiotics.

32. Check Oral Antibiotics
   a. If Oral Antibiotics is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to \textbf{step 57} and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Oral Antibiotics equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing for CMS. Proceed to \textbf{step 57} and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
c. If Oral Antibiotics equals Yes, continue processing and proceed to Anesthesia End Date.

33. Check Anesthesia End Date
   a. If the Anesthesia End Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Anesthesia End Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If the Anesthesia End Date equals a Non Unable to Determine Value, continue processing and proceed to the Antibiotic Days II calculation.

34. Calculate Antibiotic Days II. Antibiotic Days II, in days, is equal to the Antibiotic Administration Date minus the Anesthesia End Date.

35. Check Antibiotic Days II
   a. If the Antibiotic Days II is less than or equal to zero for all doses of all antibiotics, continue processing. Proceed to step 41 and recheck Antibiotic Administration Route. Do not check step 37 Anesthesia End Time, step 38 Antibiotic Administration Time, or step 39 Antibiotic Timing II.
   b. If the Antibiotic Days II is greater than zero for at least one dose of any antibiotic, continue processing and proceed to Initialize the Abxday flag.

36. Initialize Abxday flag. Initialize Abxday flag to equal 'No' for each antibiotic dose. Set Abxday flag to equal 'Yes' for each antibiotic dose where Antibiotic Days II is less than or equal to zero.

37. Check Anesthesia End Time
   a. If the Anesthesia End Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Anesthesia End Time is equal to Unable to Determine, continue processing and proceed to check the Abxday flag.
      1. If the Abxday flag equals No for All doses, the case will proceed to a Measure Category Assignment of D of will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
2. If the Abxday flag equals Yes for ANY dose, continue processing and proceed to step 41. Proceed only with doses where the Abxflag is equal to Yes.

c. If the Anesthesia End Time is equal to a Non Unable to Determine Value, continue processing and recheck Antibiotic Administration Time.

38. Recheck Antibiotic Administration Time

a. If the Antibiotic Administration Time equals Unable to Determine for all antibiotic doses, continue processing and proceed to check the Abxday flag.

1. If the Abxday flag equals No for All doses, the case will proceed to a Measure Category Assignment of D of will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and recheck the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

2. If the Abxday flag equals Yes for ANY dose, continue processing and proceed to step 41 and recheck the Antibiotic Administration Route. Proceed only with doses where the Abxflag is equal to Yes. Do not check Antibiotic Timing II.

b. If the Antibiotic Administration Time equals a Non Unable to Determine time for at least one antibiotic dose, continue processing and proceed to the Antibiotic Timing II calculation. Proceed with both UTD and Non-UTD time.

39. Calculate Antibiotic Timing II. Antibiotic Timing II, in minutes, is equal to the Antibiotic Administration Date and Antibiotic Administration Time minus Anesthesia End Date and Anesthesia End Time. Calculate Antibiotic Timing II for all antibiotic doses with Non Unable to Determine date and time. Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag equal to Yes.

40. Check Antibiotic Timing II

a. If the Antibiotic Timing II is greater than 1440 minutes for all doses of all Antibiotics with a Non Unable to Determine date and time, continue processing and proceed to check the Abxday Flag. Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag equal to Yes.

1. If the Abxday flag equals No for All doses, the case will proceed to a Measure Category Assignment of B of will not be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
2. If the Abxday flag equals Yes for ANY dose, continue processing and recheck the Antibiotic Administration Route. Proceed only with doses where the Abxflag is equal to Yes.
   b. If the Antibiotic Timing II is less than or equal to 1440 minutes for at least one dose of ANY antibiotic, continue processing and proceed to Antibiotic Administration Route. Proceed with antibiotic doses that have Antibiotic Timing II calculated, or Abxday flag equal to Yes.

41. Recheck Antibiotic Administration Route. For each case, proceed ONLY with those antibiotic doses that satisfy at least one of the following conditions: Antibiotic Timing II is less than or equal to 1440 or Abxday flag is equal to Yes.
   a. If the Antibiotic Administration Route equals 1 for all doses of all Antibiotics, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Administration Route equals 2 for any dose of any antibiotic, continue processing and proceed to recheck the ICD-9-CM Principal Procedure Code. Note: For each case include only those antibiotics with route IV for further processing.

42. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.03, continue processing and proceed to step 46 and recheck Antibiotic Name. Do not recheck to determine if ICD-9-CM Principal Procedure Code is on Tables 5.01, 5.02, 5.04, 5.05, 5.06, 5.07, or 5.08 or if Antibiotic Name is on Table 3.2.
   b. If the ICD-9-CM Principal Procedure Code is on Tables 5.01, 5.02, 5.04, 5.05, 5.06, 5.07, or 5.08, continue processing and proceed to recheck ICD-9-CM Principal Procedure Code.

43. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.06 or 5.07, continue processing and proceed to recheck Antibiotic Name.
      1. If the Antibiotic Name is on Table 3.7, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
      2. If the Antibiotic Name is not on Table 3.7, continue processing and proceed to step 46 and recheck Antibiotic Name. Do not recheck to determine if ICD-9-CM Principal Procedure Code is on Tables 5.01, 5.02, 5.04, 5.05, or 5.08 or if Antibiotic Name is on Table 3.2.
b. If the ICD-9-CM Principal Procedure Code is on Tables 5.01, 5.02, 5.04, 5.05, or 5.08, continue processing and proceed to recheck ICD-9-CM Principal Procedure Code.

44. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.01, 5.02, or 5.08, continue processing and proceed to recheck Antibiotic Name.
      1. If the Antibiotic Name is on Table 3.1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
      2. If the Antibiotic Name is not on Table 3.1, continue processing and proceed to step 46 and recheck Antibiotic Name. Do not recheck to determine if ICD-9-CM Principal Procedure Code is on Tables 5.04 or 5.05 or if Antibiotic Name is on Table 3.2.
   b. If the ICD-9-CM Principal Procedure Code is on Tables 5.04 or 5.05, continue processing and proceed to recheck Antibiotic Name.

45. Recheck Antibiotic Name
   a. If the Antibiotic Name is on Table 3.2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Name is not on Table 3.2, continue processing and proceed to recheck Antibiotic Name.

46. Recheck Antibiotic Name
   a. If the Antibiotic Name is on Table 3.6b, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Name is not on Table 3.6b, continue processing and proceed to recheck Antibiotic Name.

47. Recheck Antibiotic Name
   a. If the Antibiotic Name is on Table 3.5, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If the Antibiotic Name is not on Table 3.5, continue processing and proceed to recheck Antibiotic Name.
48. Recheck Antibiotic Name
   a. If the Antibiotic Name is on Table 3.2, continue processing and recheck Antibiotic Name.
      1. If the Antibiotic Name is on Table 3.6a, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
      2. If the Antibiotic name is not on Table 3.6a, continue processing and proceed to recheck ICD-9-CM Principal Procedure Code.
   b. If the Antibiotic Name is not on Table 3.2, continue processing and proceed to recheck ICD-9-CM Principal Procedure Code.

49. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.01, 5.02, 5.04, 5.05, or 5.08, continue processing and proceed to recheck Antibiotic Name.
   b. If the ICD-9-CM Principal Procedure Code is on Tables 5.03, 5.06 or 5.07, continue processing and proceed to step 54 and check Antibiotic Allergy. Do not check step 50 and 52 to see if Antibiotic Name is on Tables 3.8 or 3.9, step 51 Antibiotic Allergy or step 53 Vancomycin.

50. Recheck Antibiotic Name only if the ICD-9-CM Principal Procedure Code is on Table 5.01, 5.02, 5.04, 5.05, or 5.08
   a. If none of the Antibiotic Names are on Table 3.8 and 3.9, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If at least one of the Antibiotic Names are on Table 3.8 or 3.9, continue processing and proceed to Antibiotic Allergy.

51. Check Antibiotic Allergy only if at least one of the Antibiotic Names are on Table 3.8 or 3.9
   a. If Antibiotic Allergy is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Antibiotic Allergy equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If Antibiotic Allergy equals No, continue processing and proceed to recheck Antibiotic Name.
52. Recheck Antibiotic Name
   a. If none of the Antibiotic Names are on Table 3.8, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If at least one of the Antibiotic Names are on Table 3.8, continue processing and proceed to check Vancomycin.

53. Check Vancomycin
   a. If Vancomycin is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If any Vancomycin value equals 9 and none of the values equal 1, 2, 3, 4, 5, 6, 7, 8, 10, or 11, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If any Vancomycin value equals 1, 2, 3, 4, 5, 6, 7, 8, 10, or 11 and none of the values equals 9, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

54. Check Antibiotic Allergy only if the ICD-9-CM Principal Procedure Code is on Table 5.03, 5.06, or 5.07
   a. If Antibiotic Allergy is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   b. If Antibiotic Allergy equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
   c. If Antibiotic Allergy equals Yes, continue processing and proceed to recheck Antibiotic Name.

55. Recheck Antibiotic Name
   a. If at least one of the Antibiotic Names is on Table 3.9, continue processing and recheck Antibiotic Name.
1. If at least one of the Antibiotic Names is on Tables 2.11 or 3.12 or 2.7, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to step 57 and check the Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

2. If none of the Antibiotic Names are on Tables 2.11 or 3.12 or 2.7, continue processing and recheck Antibiotic Name.
   
   b. If none of the Antibiotic Names are on Table 3.9, continue processing and recheck Antibiotic Name.

56. Recheck Antibiotic Name
   
   a. If at least one of the Antibiotic Names is on Table 3.6a, continue processing and recheck Antibiotic Name.
      
      1. If at least one of the Antibiotic Names is on Tables 2.11 or 3.12, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing for CMS. Proceed to Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
      
      2. If none of the Antibiotic Names are on Tables 2.11 or 3.12, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing for CMS. Proceed to Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.
      
   b. If none of the Antibiotic Names are on Table 3.6a, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing for CMS. Proceed to Stratified Measures for Overall Rate (SCIP-Inf-2a) for The Joint Commission.

57. For The Joint Commission Only, continue processing for the Stratified Measures.

   Note: Initialize the Measure Category Assignment for each strata measure (b-g) to equal B, not in the Measure Population. Do not change the Measure Category Assignment that was already calculated for the overall rate (SCIP-Inf-2a). The rest of the algorithm will reset the appropriate Measure Category Assignment to be equal to the overall rate's (SCIP-Inf-2a) Measure Category Assignment.

58. Check Overall Rate Category Assignment
   
   a. If the Overall Rate Category Assignment is equal to B or X, set the Measure Category Assignment for the strata measures (SCIP-Inf-2b through SCIP-Inf-2h) to equal B, not in the Measure Population. Stop processing.
   
   b. If the Overall Rate Category Assignment is equal to D or E, continue processing and check the ICD-9-CM Principal Procedure Code.
59. Check ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.01, for Stratified Measure SCIP-Inf-2b, set the Measure Category Assignment for measure SCIP-Inf-2b to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.02 or 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08, continue processing and recheck the If the ICD-9-CM Principal Procedure Code.

60. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.02, for Stratified Measure SCIP-Inf-2c, set the Measure Category Assignment for measure SCIP-Inf-2c to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03 or 5.04 or 5.05 or 5.06 or 5.07 or 5.08, continue processing and recheck the If the ICD-9-CM Principal Procedure Code.

61. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.04, for Stratified Measure SCIP-Inf-2d, set the Measure Category Assignment for measure SCIP-Inf-2d to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03 or 5.05 or 5.06 or 5.07 or 5.08, continue processing and recheck the If the ICD-9-CM Principal Procedure Code.

   a. If the ICD-9-CM Principal Procedure Code is on Table 5.05, for Stratified Measure SCIP-Inf-2e, set the Measure Category Assignment for measure SCIP-Inf-2e to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.03 or 5.06 or 5.07 or 5.08, continue processing and recheck the If the ICD-9-CM Principal Procedure Code.

63. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.03, for Stratified Measure SCIP-Inf-2f, set the Measure Category Assignment for measure SCIP-Inf-2f to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
b. If the ICD-9-CM Principal Procedure Code is on Table 5.06 or 5.07 or 5.08, continue processing and recheck the ICD-9-CM Principal Procedure Code.

64. Recheck ICD-9-CM Principal Procedure Code
   a. If the ICD-9-CM Principal Procedure Code is on Table 5.06 or 5.07, for Stratified Measure SCIP-Inf-2g, set the Measure Category Assignment for measure SCIP-Inf-2g to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.
   b. If the ICD-9-CM Principal Procedure Code is on Table 5.08, for Stratified Measure SCIP-Inf-2h, set the Measure Category Assignment for measure SCIP-Inf-2h to equal the Measure Category Assignment for measure SCIP-Inf-2a. Stop processing.