

2025 HMS PERFORMANCE INDEX SCORECARD CHEAT SHEET

MEASURE 4. INCREASE USE OF 5 DAYS OF ANTIBIOTIC TREATMENT IN UNCOMPLICATED CAP (COMMUNITY ACQUIRED PNEUMONIA) CASES (I.E., REDUCE EXCESS DURATIONS)

$$\text{Measure 5} = \frac{\text{Pneumonia cases classified as uncomplicated CAP that received 5 days (+ or- 1 day) of antibiotics}}{\text{Pneumonia cases classified as uncomplicated CAP}}$$

- Higher is better.
 - A measure of x/y means that x uncomplicated CAP cases had an appropriate duration of antibiotics (5 days +/- 1 days) out of the y uncomplicated CAP cases included in the measure.
 - Example: 2/3 means that 2 uncomplicated CAP cases received appropriate antibiotic treatment out of the 3 cases that were assessed in this measure. There will be 1 fall out case for this measure.
 - NOTES:
 - 5 days of treatment is assessed starting with the first day of effective antibiotic treatment during the hospital encounter.
 - For the HMS definitions of uncomplicated CAP, please see your Site's ABX Use Report.
 - There are two ways to receive either full or partial points for this measure:
 - Achieving a certain percentage of uncomplicated CAP cases receiving 5 days (+/- 1 day) of antibiotic treatment as specified on the Performance Index.
 - Achieving a certain percentage of relative increase during the current performance year. Rate of change will be based on the adjusted method and may not reflect raw rates from quarter to quarter.
- $$\text{Relative Change} = \frac{\text{Change in performance via the adjusted model}}{\text{Beginning performance via the adjusted model}}$$
- **Full points:* ≥ 75% uncomplicated CAP cases receive 5 days (+/- 1 day) of antibiotics OR ≥ 75% relative increase in the number of uncomplicated CAP cases that receive 5 days of antibiotics during the current performance year.
 - **Partial points:* 54-74% uncomplicated CAP cases receive 5 days (+/- 1 day) of antibiotics OR 55-74% relative increase in the number of uncomplicated CAP cases that receive 5 days of antibiotics during the current performance year.
 - **No points:* ≤ 53% uncomplicated CAP cases receive 5 days (+/- 1 day) of antibiotics AND ≤ 54% relative increase during the current performance year

MEASURE 5: INCREASE ANTIBIOTICS DELIVERED WITHIN 3 HOURS OF ARRIVAL FOR SEPSIS CASES WITH HYPOTENSION

$$\text{Measure 5} = \frac{\text{Sepsis cases with hypotension that receive antibiotics within 3 hours of hospital arrival}}{\text{All non-viral sepsis cases with hypotension}}$$

- Higher is better.
- A measure of x/y means that x sepsis cases received antibiotics within 3 hours of hospital arrival out of the y non-viral sepsis cases with hypotension assessed in this measure.
 - Example: 2/10 means that 2 sepsis cases received antibiotics within 3 hours of hospital arrival out of the 10 non-viral sepsis cases with hypotension assessed in this measure. There will be 8 fallout cases for this measure.
- NOTES:
 - Non-viral sepsis is defined as those with a primary discharge diagnosis of:
 - Sepsis
 - Pneumonia
 - Respiratory Failure
 - Cases with hypotension are defined as those with:
 - Intravenous vasopressors initiated within 2 hours of arrival OR
 - Systolic blood pressure < 90 mmHg within 2 hours of arrival OR
 - Calculated MAP < 65mmHg within 2 hours of arrival
 - Cases excluded from this measure include:
 - 0-1 SIRS criteria in the first 2 hours of arrival
 - No elevated White Blood Cell (WBC)
 - No elevated lactate
 - No provider documentation symptoms of infection
 - Positive COVID or Influenza testing within the 3 days prior or on day 1 or 2 of the hospital encounter
- **Full points:* ≥ 68% sepsis cases with hypotension receive antibiotics within 3 hours of arrival
- **Partial points:* 64 - 67% sepsis cases with hypotension receive antibiotics within 3 hours of arrival
- **No points:* ≤ 63% sepsis cases with hypotension receive antibiotics within 3 hours of arrival

Measure 6: Increase Discharge/Post-Discharge Care Coordination for Sepsis Patients Discharged to Home-like Setting

$$\text{Measure 6} = \frac{\text{Sepsis cases receiving at least 1 of 3 discharge or post-discharge coordination of care measures}}{\text{All sepsis cases discharged to home-like setting}}$$

- Higher is better.
- A measure of x/y means that x sepsis cases receive at least 1 of 3 discharge/post-discharge coordination of care measures out of the y sepsis cases discharged to a home-like setting assessed in this measure.
 - Example: 4/10 means that 4 sepsis cases receive at least 1 of 3 discharge/post-discharge coordination of care measures out of the 10 sepsis cases discharged to a home-like setting assessed in this measure. There will be 6 fallout cases for this measure.
- NOTES:

- Home-like setting = home (with or without home health services), assisted living, custodial nursing, temporary shelter
- Discharge/post-discharge coordination of care measures:
 - Hospital contact for issues post-discharge (i.e. name and phone number of hospital contact for issues post-discharge is provided in discharge paperwork)
 - Scheduled visit for outpatient follow-up within 2 weeks (i.e. appointment with a PCP specialist is scheduled at the time of discharge and date of appointment is within 14 days of discharge)
 - Post-discharge telephone call or patient was seen by a PCP or specialist within 3 calendar days of discharge or patient is discharged with home health services
- **Full points:* ≥ 84% sepsis cases discharged to home-like setting received at least 1 of 3 discharge/post-discharge coordination of care measures
- *Partial points:* 69 - 83% sepsis cases discharged to home-like setting received at least 1 of 3 discharge/post-discharge coordination of care measures
- *No points:* ≤ 68% sepsis cases discharged to home-like setting received at least 1 of 3 discharge/post-discharge coordination of care measures

MEASURE 7. INCREASE USE OF BALANCED SOLUTIONS OVER NORMAL SALINE IN PATIENTS WITH SEPSIS

$$\text{Measure 7} = \frac{\text{Sepsis Cases Receiving } \geq 75\% \text{ of their Bolus } \frac{\text{and}}{\text{or}} \text{ Maintenance Fluid was balanced in the First 48 Hours of Hospital Arrival}}{\text{Sepsis Cases Receiving } \geq 1\text{L Bolus } \frac{\text{and}}{\text{or}} \text{ Maintenance Fluid within the First 48 Hours of Hospital Arrival}}$$

- Higher is better.
- A measure of x/y means that x sepsis cases received ≥75% of their bolus and/or maintenance fluid as balanced in the first 48 hours of hospital arrival out of the y sepsis cases who received ≥1 Liter bolus and/or maintenance fluid within the first 48 hours of arrival.
- Example: 4/10 means that 4 sepsis cases received ≥75% of their bolus and/or maintenance fluid as balanced in the first 48 hours of hospital arrival out of the 10 who received ≥1 Liter bolus and/or maintenance fluid within the first 48 hours of arrival. There will be 6 fallout cases for this measure.
- NOTES:
 - Balanced fluids include Lactated Ringer's, Plasma-Lyte, Dextrose in Lactated Ringer's, Dextrose in Plasma-Lyte, and Normosol.
 - Percent of fluids as balanced solutions calculated as follows: Balanced Solutions / All other maintenance and bolus fluids, excluding Bicarbonate solutions.
- **Full points:* ≥ 17% of sepsis cases who have ≥ 75% of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival
- *Partial points:* 9 - 16% of sepsis cases who have ≥ 75% of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival
- *No points:* ≤ 8% of sepsis cases who have ≥ 75% of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival

Measure C (Collaborative Wide Measure): Reduce Use of Antibiotics in Patients with ASB (Asymptomatic Bacteriuria)

$$\text{Measure C} = \frac{\text{Number of positive urine culture cases that are treated with an antibiotic on day 2 or later of the hospital encounter that are ASB cases}}{\text{Number of positive urine culture cases}}$$

- Lower is better
- A measure of x/y means that x positive urine culture cases treated with antibiotics on day 2 or later of the hospital encounter were classified as ASB cases out of the y positive urine culture cases included in the measure
 - Example: 4/6 means 4 positive urine culture cases were classified as ASB cases AND were inappropriately treated on day 2 or later of the encounter out of the 6 positive urine culture cases included in the measure. There will be 4 fallout cases for this measure.
- NOTES:
 - ASB Treatment is assessed based on antibiotic treatment given Day 2 or later during the hospital encounter.
 - For the HMS definition of ASB, please see your Site's ABX Use Report.
 - Cases meeting criteria for severe sepsis with organ dysfunction on the day before, day of, or day after positive urine culture collection are **not** classified as ASB:
 - Organ dysfunction is defined as 2 or more SIRS criteria occurring on the same day PLUS one of the below organ dysfunctions on the day before, day of, or day after 2+ SIRS criteria.
 - SIRS Criteria:
 - Temperature
 - Adults aged 18 to <65 = ≤ 35.9 C **OR** ≥ 38.1 C
 - Adults aged 65 or greater = ≤ 35.9 C **OR** ≥ 37.9 C
 - Heart Rate = ≥ 91
 - Respiratory Rate = ≥ 21
 - WBC = > 12 **OR** < 4
 - Organ Dysfunction Criteria:
 - Renal Dysfunction:
 - ICD10 Code of N18.6 (End Stage Renal Disease) is **NOT** documented as a billed discharge ICD10 code
 - **AND** patient has **NOT** received hemodialysis in the 30 days prior to the hospital encounter
 - **AND** Moderate or Severe Chronic Kidney Disease is **NOT** reported as a comorbid condition
 - **AND** Creatinine > 1.2 mg/dL
 - Platelet count $< 100,000$ μL^{-1}
 - Moderate or Severe Liver Disease is **NOT** reported as a comorbid condition **AND** Bilirubin ≥ 2 mg/dL
 - Lactate > 2 mmol/L
 - Blood Pressure (Systolic Lowest) = < 90 mmHg
 - Documentation of altered mental status, confusion, delirium, mental status change or obtunded
 - Cases where patients with baseline dementia (captured in the co-morbid section) and have functional decline or falls noted in the UTI Window AND have fever, hypotension, leukocytosis,

and/or ≥ 2 SIRS criteria the day before, day of, or day after positive urine culture collection are not included in the ASB performance measure. Clinical judgement is advised for these patients.

- Cases where increased seizure activity is documented are not included in the ASB performance measure. Clinical judgement is advised for these patients.
 - Cases where antibiotics were given only on day 1 with a duration of “Q48”, or where antibiotics are given only outside of the UTI Window are not included in the ASB performance measure.
 - The document “Guidelines for Treatment of Urinary Tract Infections” available on Zendesk and on the HMS website contains information regarding ASB and signs/symptoms of UTI for which a urine culture is appropriate.
- For 2025, this measure is based on a **collaborative-wide average** for the final quarter of data entered in the data registry during the 2025 performance year. This is different than the other performance measures in the index, which are based on the rates at each individual hospital.
 - **Full points:* $\leq 10\%$ **collaborative-wide average** of positive urine culture cases treated with an antibiotic are ASB cases.
 - **No points:* $> 10\%$ **collaborative-wide average** of positive urine culture cases treated with an antibiotic are ASB cases.

BONUS POINTS. INCREASE SUCCESS OF PATIENT REPORTED OUTCOMES (PROS) COLLECTION

$$\text{PROS (Antimicrobial)} = \frac{\text{Number of cases with a successful phone call OR an electronic PRO response was received}}{\text{Number of cases eligible for PROS data collection}}$$

$$\text{PROS (Sepsis)} = \frac{\text{Number of cases with a successful phone call OR an electronic PRO response was received}}{\text{Number of cases eligible for PROS data collection}}$$

- Higher is better.
- A measure of x/y means that x cases had a successful phone call, or an electronic PRO response was received of the y cases eligible for PROs data collection.
 - Example: 2/10 means that 2 cases had a successful phone call, or an electronic PRO response was received out of the 10 cases eligible for PROs data collection. There will be 8 fallout cases for this measure.
- NOTES:
 - Cases ineligible for PROS data collection include:
 - Transferred to the intensive care unit (antimicrobial only)
 - Transferred to another hospital (antimicrobial only)
 - Inpatient or home hospice
 - Deceased
 - Prison
 - Extended Care Facility
 - In the hospital at time of patient contact
 - No contact information available
 - Patient or caregiver refuses to answer questions
 - Successful phone call = “Yes” to “Were you able obtain information about the patient?”
 - Successful electronic PROs = email or text response received

Antimicrobial

- *2.5 points: $\geq 85\%$ of antimicrobial cases
- *2 points: 80 - 84% of antimicrobial cases
- *1.5 points: 75-79% of antimicrobial cases

Sepsis

- *2.5 points: $\geq 70\%$ of sepsis cases
- *2 points: 65 - 69% of sepsis cases
- *1.5 points: 60 - 64% off sepsis cases

*Cut-off values for full, partial, and no points are included as reference only in this document. The 2025 Performance Index should be consulted and used as the source of truth for determining cut-off values for each measure.