

2027 Michigan Hospital Medicine Safety Consortium Collaborative Quality Initiative Performance Index Scorecard

Measurement Period: Sepsis & Antimicrobial Discharges: 05/06/2027 – 07/28/2027 (Unless Otherwise Noted)

Measure	Weight	Measure Description	Points
1	10	Timeliness¹, Completeness¹, and Accuracy² of HMS Data (5 metrics)	
		1. $\geq 95\%$ of registry data on time and complete ¹ at Mid-Year (Measurement Period: Discharge Dates – 07/30/26 – 01/27/27)	
		2. $\geq 95\%$ of registry data on time and complete ¹ at End-of-Year (Measurement Period: Discharge Dates – 07/30/26 – 07/28/27)	
		3. $\geq 95\%$ of registry data accurate ²	
		4. Audit case corrections completed by due date ²	
		5. Two semi-annual QI activity surveys completed ³	
		5 of 5 metrics met	10
		4 of 5 metrics met	8
2	10	Collaborative Wide Meeting Participation⁴ – Physician Champion or Delegate⁵	
		3 meetings	10
		2 meetings	5
		1 meeting	3
		0 meetings	0
3	10	Collaborative Wide Meeting Participation⁴ – Clinical Data Abstractor or Other QI Staff⁶	
		3 meetings	10
		2 meetings	5
		1 meeting	3
		0 meetings	0
4	15	Increase Appropriate Treatment of Urine Cultures^{7,8,9,10}	
		$\leq 10\%$ of positive urine culture cases treated with an antibiotic are ASB cases ⁷ OR $\geq 58\%$ of uncomplicated UTI cases receive appropriate antibiotic treatment ¹⁰	15
		$> 10\%$ of positive urine culture cases treated with an antibiotic are ASB cases ⁷ AND $< 58\%$ of uncomplicated UTI cases receive appropriate antibiotic treatment ¹⁰	0
5	15	Increase Antibiotics Delivered within 3 hours of Hospital Arrival for Sepsis Cases with Hypotension^{8,9,11}	
		$\geq 75\%$ of sepsis cases with hypotension ¹¹ receive antibiotics within 3 hours of hospital arrival	15
		71 – 74% of sepsis cases with hypotension ¹¹ receive antibiotics within 3 hours of hospital arrival	8
		$\leq 70\%$ of sepsis cases with hypotension ¹¹ receive antibiotics within 3 hours of hospital arrival	0
6	15	Increase Discharge/Post-Discharge Care Coordination for Sepsis Cases Discharged to Home-like Setting^{8,9,12,13,14}	
		$\geq 90\%$ of ALL sepsis cases discharged to home-like setting ¹² received at least 1 of 4 discharge/post-discharge coordination of care measures ¹³ AND $\geq 74\%$ sepsis cases at high risk ¹⁴ of readmission received at least 2 of 4 discharge/post-discharge coordination of care measures ¹³	15
		$\geq 80\%$ of ALL sepsis cases discharged to home-like setting ¹² received at least 1 of 4 discharge/post-discharge coordination of care measures ¹³ AND $\geq 40\%$ sepsis cases at high risk ¹⁴ of readmission received at least 2 of 4 discharge/post-discharge coordination of care measures ¹³	8
		$< 80\%$ of ALL sepsis cases discharged to home-like setting ¹² received at least 1 of 4 discharge/post-discharge coordination of care measures ¹³ OR $< 40\%$ sepsis cases at high risk ¹⁴ of readmission received at least 2 of 4 discharge/post-discharge coordination of care measures ¹³	0
7	10	Increase Use of Balanced Solutions in Patients with Sepsis^{8,9,15}	
		$\geq 60\%$ of sepsis cases who have $\geq 75\%$ of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival ¹⁵	10
		40 – 59% of sepsis cases who have $\geq 75\%$ of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival ¹⁵	5
		$\leq 39\%$ of sepsis cases who have $\geq 75\%$ of their bolus and/or maintenance fluid as balanced solutions in the first 48 hours of hospital arrival ¹⁵	0

8	10	Increase Use of IV Fluids at ≥ 30 ml/kg within 6 Hours in Patients with Sepsis ^{8,9,16}	
		$\geq 65\%$ of sepsis cases receive ≥ 30 ml/kg intravenous fluid within 6 hours of hospital arrival ¹⁶	10
		60 – 64% of sepsis cases receive ≥ 30 ml/kg intravenous fluid within 6 hours of hospital arrival ¹⁶	5
		$\leq 59\%$ of sepsis cases receive ≥ 30 ml/kg intravenous fluid within 6 hours of hospital arrival ¹⁶	0
9	5	Increase Use of Appropriate Antibiotic Treatment Duration ¹⁷ (3 – 5 days) in Uncomplicated CAP (Community Acquired Pneumonia) Cases (i.e., reduce excess durations) ¹⁸	
		$\geq 75\%$ collaborative-wide average ¹⁸ of uncomplicated CAP cases receive appropriate duration ¹⁷ of antibiotics	5
		$< 75\%$ collaborative-wide average ¹⁸ of uncomplicated CAP cases receive appropriate duration ¹⁷ of antibiotics	0
		Total (Max points = 100)	
Optional Bonus Points*			
Optional	5	Participation Bonus Points ²³ : Each site has the option of earning up to 5 bonus points toward their participation metrics (1-3) during the performance year. Each opportunity for bonus points is highlighted below with their point allowance: - Emergency Medicine Physician¹⁹ attendance at the 2 in-person Collaborative Wide Meetings convened during the performance year (July & November) – 5 points - Present HMS data or about HMS at a national meeting (with approval)²⁰ – 3 points - Emergency Medicine Physician¹⁹ attendance at 1 in-person Collaborative Wide Meeting convened during the performance year (July OR November) – 2 points - Present at an HMS meeting, event, or webinar during the performance year²¹ – 2 points	5
Optional	2.5	Performance Bonus ²³ : Increase success of Patient Reported Outcomes (PROs – phone, email, or text) collection in patients eligible for PROs completion in Antimicrobial Use Cases ^{8,22}	
		$\geq 85\%$ success of Patient Reported Outcomes (PROs) collection in Antimicrobial Use cases ²²	2.5
		80-84% success of Patient Reported Outcomes (PROs) collection in Antimicrobial Use cases ²²	2
		75-79% success of Patient Reported Outcomes (PROs) collection in Antimicrobial Use cases ²²	1.5
Optional	2.5	Performance Bonus ²³ : Increase success of Patient Reported Outcomes (PROs – phone, email, or text) collection in patients eligible for PROs completion in Sepsis Cases ^{8,22}	
		$\geq 85\%$ success of Patient Reported Outcomes (PROs) collection in Sepsis cases ²²	2.5
		80-84% success of Patient Reported Outcomes (PROs) collection in Sepsis cases ²²	2
		67-79% success of Patient Reported Outcomes (PROs) collection in Sepsis cases ²²	1.5
Optional	5	Performance Bonus ²³ : Increase Appropriate Treatment of Urine Cultures ^{7,8,9,10}	
		$\leq 10\%$ of positive urine culture cases treated with an antibiotic are ASB cases ⁷ AND $\geq 58\%$ of uncomplicated UTI cases receive appropriate antibiotic treatment ¹⁰	5
*Earned bonus points will be added to the scorecard total, with the final score not to exceed 100 points overall. Participation bonus points may only apply to participation-based measures (1-3) and performance bonus points may only apply to performance-based measures (4-9).			



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- ¹ Timeliness & Completeness of registry data for the Antimicrobial, Sepsis and Critical Care initiatives is assessed based upon the number of fully completed cases (with ALL required forms completed, including Patient Reported Outcomes attempts in eligible cases) submitted out of the total number of cases required/expected for that site at the timepoint of assessment. This assessment will occur twice in a performance year – once at mid-year and once at year end.
- ² Accuracy of registry data is based on score(s) received for site audits conducted during the performance year. Scores are averaged if multiple audits take place during the year. For audits conducted during the performance year, audit case corrections must be completed or discrepancies addressed within 3 months of audit summary receipt (due date for case corrections provided in audit summary) or end of performance year deadline – whichever comes first.
- ³ Semi-annual Quality Improvement (QI) Activity surveys are sent twice per year – in Spring and Fall. Each survey has two sections: one for Antimicrobial Use and one for Sepsis. All surveys must be completed by due dates announced by Coordinating Center to receive full points for this year.
- ⁴ HMS hosts three Collaborative Wide Meetings per year, scheduled in March (virtual), July (in-person), and November (in-person). Participation is defined as virtual or in-person attendance at each meeting for the required attendees.
- ⁵ A Physician Champion or delegate must be a physician as outlined in the HMS Hospital Eligibility and Expectations Document. A delegate for the Physician Champion cannot be a Resident, Fellow, Intern, or Advanced Practice Professional. Physician Champions or delegate may only represent one (1) site per meeting.
- ⁶ Each site must send one (1) Clinical Data Abstractor or other Quality Improvement Staff member to each Collaborative Wide Meeting. CDAs or other Quality Improvement Staff members can only represent one (1) site per meeting.
- ⁷ Antibiotic treatment for ASB is assessed based on treatment on day 2 or later of the entire hospital encounter. This portion of the measure is assessed out of all positive urine culture cases abstracted during the performance year.
- ⁸ This measure is assessed utilizing an adjusted statistical model in the final quarter (Q4) of the Performance Year. The method for obtaining each hospital's adjusted performance measurement utilizes all available data from the most recent 4 quarters. The collaborative wide average and collaborative wide improvement or decline, as well as the average rate change over time of each individual hospital are incorporated into the final adjusted rate. Each hospital's adjusted rate reflects both change in performance over time and overall performance relative to the collaborative average. The adjusted performance is a more stable and reliable estimate of each hospital's current performance, their performance relative to collaborative, and reflects the improvement work each hospital is doing over a given performance year.
- ⁹ If there are no eligible cases for a site to be assessed in this measure from Q4 2026 through Q3 2027, both the numerator and denominator of points for this measure will be removed from the site's final score.
- ¹⁰ This measure assesses antibiotic duration and ineffective treatment out of all uncomplicated UTI (uUTI) cases. Antibiotic duration is generally considered appropriate* if 3–5 days of total **effective** therapy (inpatient and outpatient) is administered. Antibiotic days are counted as calendar days rather than 24-hour periods, allowing a one-day grace period for total duration. Ineffective treatment, defined as 0 days of effective therapy but ≥3 days of total antibiotic duration, is

assessed in this metric and such cases are classified as fallouts. Duration is calculated using effective duration which considers the presence of pathogen susceptibility and resistance.

**Appropriate duration exceptions:*

- Fosfomycin or IV aminoglycosides: 1–5 days
- Oral beta-lactam only therapy: 3–7 days

Measure exclusions:

- Cases with 0-2 days of antibiotic therapy in the absence of fosfomycin, gentamicin, or tobramycin
- Patients who died, transferred to ICU or another hospital, or are missing critical data needed to calculate inpatient duration

¹¹ Hypotension is defined as: an intravenous vasopressor initiated OR systolic blood pressure < 90 mmHg OR calculated MAP < 65 within two hours of arrival to the hospital encounter. Patients excluded from review in this measure include those with viral sepsis (COVID and Influenza), < 2 SIRS, normal white blood cell count, no elevated lactate, and no symptoms of infection.

¹² A home-like setting includes any of the following locations, with or without home health care services: home, assisted living, custodial nursing, or temporary shelter.

¹³ Discharge/post-discharge coordination of care measures:

- Hospital contact information provided at discharge (in discharge paperwork)
- Scheduled for outpatient follow-up within 2 weeks (at time of discharge)
- Post-discharge telephone call attempted within 3 calendar days of hospital discharge **OR** visit with Primary Care Provider or specialist within 3 calendar days of hospital discharge
- Patient is discharged to a home-like setting with home health services

¹⁴ High risk patients are those who are deemed by a site-specific readmission risk score to be high risk. If a site does not have a readmission risk score in place or it is not used/reported for an individual patient, the patient will be scored using the HMS Readmission Score (see components below). A score of 4 or higher using the HMS Readmission Score is considered high risk. The HMS Sepsis Readmission Score is based upon elements from published literature (i.e., LACE score, Sepsis Transition and Recovery (STAR) program high risk readmission definition, etc.). The scoring methodology is as follows:

Element	Score
Length of Stay	1 – 6 Days – 0 Points 7 – 10 Days – 1 Point 11 – 14 Days – 2 Points 15+ Days – 3 Points
Admitted from SNF/SAR/LTAC	1 Point
Admitted to the ICU during hospital encounter	1 Point
Hospitalization in the 90 days prior to hospital encounter	1 Point
Baseline functional limitation (ADL – any limitation - partially/fully dependent)	1 Point
Mild, moderate or severe liver disease	1 Point
Baseline cognitive impairment	1 Point
Hematologic malignancy (Leukemia/Lymphoma)	1 Point
Congestive heart failure	1 Point
Cardiovascular disease	1 Point
Peripheral vascular disease	1 Point
Moderate or severe kidney disease	1 Point

¹⁵ Balanced Solutions are defined as Lactated Ringers or Plasma-Lyte (alone or in dextrose). Bicarbonate infusions are excluded from the numerator and denominator of this measure. Sepsis cases eligible for this measure include all patients who received ≥ 1 liter of bolus and/or maintenance fluid within the first 48 hours of hospital arrival.

¹⁶ Includes cases presenting with hypoperfusion, defined as SBP<90, MAP<65, Lactate ≥ 4 , or IV Vasopressors initiated within the first 3 hours of encounter. Excludes patients with specific comorbidities including ESRD/Stage 5 CKD, Ejection Fraction $\leq 39\%$, Severe-Critical Aortic Stenosis.

¹⁷ Antibiotic duration for Uncomplicated CAP is considered appropriate if 3 to 5 days of total antibiotic treatment (inpatient and outpatient) is administered. Antibiotic days of treatment are counted as calendar days rather than 24-hour periods; therefore, six (6) days of total antibiotic duration is also considered appropriate for the allowance of a one-day grace period. Cases with total antibiotic durations of 1 or 2 days are excluded from the denominator of this measure. Duration is calculated using effective duration which considers the presence of pathogen susceptibility and resistance. Cases missing critical data to calculate duration are excluded from the measure.

¹⁸ The Collaborative Wide measure is assessed at year end based on the collaborative-wide average for the final quarter of data entered (Q4) in the performance year.

¹⁹ The Emergency Medicine Physician in attendance at the in-person Collaborative Wide Meeting cannot be a resident, fellow, intern or Advanced Practice Professional. Emergency Medicine Physicians may only represent one (1) site per meeting. The Emergency Medicine Physician may not also be the Physician representing the site for Measure 2 of the Performance Index.

²⁰ Presenters who are interested in sharing HMS data at a national or international meeting must submit intent to present data to the HMS Coordinating Center and receive approval from our Data, Design, and Publications Committee. Guidelines in the most recent [HMS Publication Policy](#) must be followed.

²¹ Bonus points will be awarded to sites who present at an HMS Collaborative Wide Meeting, HMS-sponsored event, HMS Abstractor Conference Call, or HMS webinar during the 2027 Performance Year when requested by the HMS Coordinating Center. Sites may only receive bonus points for 1 presentation per year.

²² This section will be calculated by assessing the number of cases with successful Patient Reported Outcomes (PROs) out of those eligible for PROs. A successful PROs attempt means that the patient was contacted and information was obtained.

²³ Hospitals can only earn a total of 10 bonus points (combined total of participation and performance).