

2025 Measure Set Review (MSR): 00427-01-C-HOQR Preliminary Assessment

I. Measure Overview¹

CMIT ID	Title
Link to CMIT measure record: 00427-01-C-HOQR	Median Time from ED Arrival to ED Departure for Discharged ED Patients
Measure Steward	CMS Program
Centers for Medicare & Medicaid Services (CMS)	Hospital Outpatient Quality Reporting Program Link: Hospital Outpatient Quality Reporting Program CMS

CBE Endorsement Status	CBE Endorsement History
Endorsement Removed	<ul style="list-style-type: none"> Endorsement Removed, Cost and Efficiency, Fall Cycle 2020 Initial Endorsement, 2008 <p>Link to endorsement measure record: Median Time from ED Arrival to ED Departure for Discharged ED Patients</p>

Measure Overview
<p>Rationale for Use: Empirical evidence demonstrates that emergency department (ED) throughput is an indicator of hospital quality of care and shows that shorter lengths of stay in the ED lead to improved clinical outcomes. Significant ED overcrowding has numerous downstream effects, including prolonged patient waiting times, increased suffering for those who wait, rushed and unpleasant treatment environments, and potentially poor patient outcomes. Quality improvement efforts aimed at reducing ED overcrowding and length of stay have been associated with an increase in ED patient volume, decrease in number of patients who leave without being seen, reduction in costs, and increase in patient satisfaction. Recent peer-reviewed studies also demonstrate the need for dedicated emergency mental health services, supplying evidence that the clinical needs for these patients substantively differ from the non-psychiatric population.</p>
<p>CMS-Provided Rationale for Use in Program: We are proposing to remove this measure and the Left Without Being Seen (LWBS) measure beginning with the CY 2028 reporting period/2030 payment determination, contingent upon finalization of adoption of the Emergency Care Access and Timeliness (ECAT) Electronic Clinical Quality Measure (eCQM).</p> <p>We are proposing these changes because of growing concerns about the quality and timeliness of care in the ED as well as the burden associated with two chart-abstracted ED measures.</p>
<p>Description: Median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department.</p>

¹ The information in this PA is sourced from the [CMS Measures Inventory Tool \(CMIT\)](#) and the [PQM Submission Tool and Repository \(STAR\) Measure Database](#). This document reflects the content available as of September 2025. Version 1.0 | September 2025 | *The analyses upon which this publication (or document) is based were performed under Contract Number 75FCMC23C0010, entitled, "National Consensus Development and Strategic Planning for Health Care Quality Measurement," sponsored by the Department of Health and Human Services, Centers for Medicare & Medicaid Services. Restricted: Use, duplication, or disclosure is subject to the restrictions as stated in Contract Number 75FCMC23C0010 between the Government and Battelle.*

Measure Overview	
Numerator: Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department. Exclusions: None	
Denominator: This measure does not have a traditional numerator and denominator. This measure is reported as a continuous variable statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department. Exclusions: Patients who expired in the emergency department.	
CMS Program History: <ul style="list-style-type: none"> In Hospital Outpatient Quality Reporting Program since 2013. In the Rural Emergency Hospital Quality Reporting Program since 2024. The measure was in the Medicare and Medicaid Electronic Health Record Incentive Program for Hospital and Critical Access Hospitals, but the program ended in 2018. The measure was in the Medicare Promoting Interoperability Program until 2020. 	Cascade of Meaningful Measures Priority: Person-Centered Care
Measure Type: Process	Is the Measure Digital or an Electronic Clinical Quality Measure (eCQM)? No
Level(s) of Analysis/Measured Entity: Facility, Hospital, or Agency Level	Care Setting(s): Emergency Department, Emergency Medical Services/Ambulance, Inpatient Acute Care Facility
Does the Measure Fill a Statutorily Required Category for the Program? No	Is the Measure Included in Upcoming Rulemaking? Yes, this measure is proposed for removal beginning with the CY 2028 reporting period/CY 2030 payment determination. The measure plans to be replaced by the Emergency Care Access & Timeliness electronic clinical quality measure (eCQM).

II. Measure Performance in Program

For this measure, the MSR evaluation and analysis team reviewed the publicly available datasets:

- [hospitals_04_2025.zip](#) (which contains data from July 2023-June 2024 and is referred to as PY2023 in this assessment)
- [hospitals_1_2024.zip](#) (which contains data from April 2022-March 2023 and is referred to as PY2022 in this assessment)

- [hospitals_1_2023.zip](#) (which contains data from April 2021-March 2022 and is referred to as PY2021 in this assessment)

About Figure 1: Figure 1 is a boxplot that shows how scores have changed over the past 3 years of publicly available data. For each year, the boxplot displays a box with lines and dots to help visualize the range and distribution of scores. The dots represent the points where the lowest 5% and highest 5% of scores fall, and the line connecting them shows where 90% of the scores are located. The box itself covers the middle half of the scores, from the 25th to the 75th percentile. Inside the box, a horizontal line marks the median score, which is the middle value, while a “+” sign shows the average score. This type of graph makes overall trends in scores over time as well as the consistency and spread of the results easier to understand.

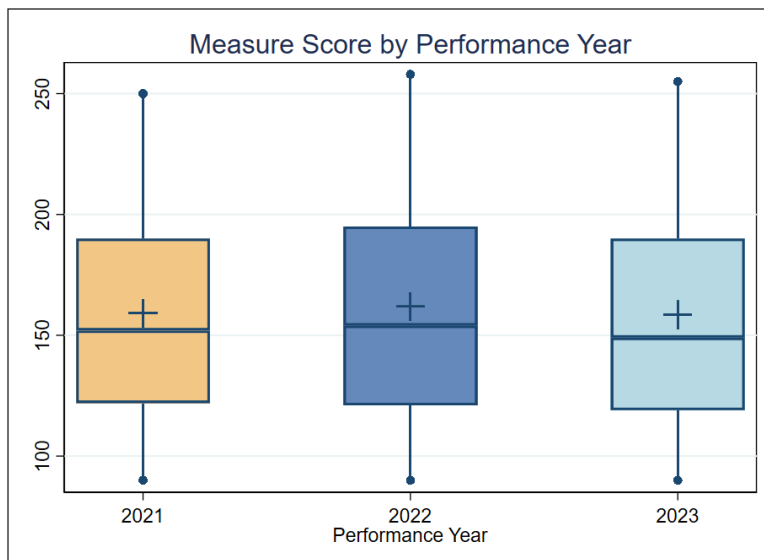


Figure 1. Boxplot of Measure Score by Year

Figure 1 Interpretation: For this measure, a lower score indicates better quality of care. In the boxplot above, the median score increased slightly from 152 in PY2021 to 154 in PY2022. The median score for PY2023 is slightly lower at 149 minutes. Performance over the 3-year period indicates a relatively consistent median time from arrival to discharge among the measured entities.

About Table 1: Table 1 illustrates the distribution of scores and the number of patients represented within each group. It is important to note that the groups with the lowest or highest scores (referred to as deciles, each comprising 10% of the entities) may contain more or fewer patients than other groups. For example, if the lowest-scoring decile includes only 5% of the total patient population, this smaller group size may be associated with lower performance scores.

For this measure, Decile 10 represents a grouping of organizations who have the lowest measure scores and Decile 1 shows those with the highest measure scores. The arrow denotes improving performance on the measure.

Table 1. Importance (Decile by Measure Score, PY2023)

		Highest Performers ←————→ Lowest Performers									
	Overall	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10
Average Score (Standard Deviation)	158.5 (52.893)	87	107	119	131	143	157	173	190	212	267
Entities	4,035	404	403	404	403	404	403	404	403	404	403
Patients	2,432,627	161,122	217,959	178,658	206,733	210,846	264,697	213,557	196,599	437,083	345,373

Table 1 Interpretation: Assuming it would be plausible for entities in deciles 4-10 to improve and reach the average score of the 3rd decile (which more than 20% of the entities have already achieved), we can use that score to estimate possible improvement in outcomes. If the average performance of Decile 3 (119 minutes) is considered a plausible, achievable score, and Deciles 4-10 improved to reach that score, then the total patient population would experience an average of at least 54 minutes less wait. The patients in the worst-performing groups (Deciles 9 and 10), which make up about one-third of the total, would wait at least 93 minutes less if they reached a level of performance similar to those in Decile 3. Improving performance could shorten wait times for hundreds of thousands of patients and lead to better health outcomes.

About Figure 2: Figure 2 is a bar graph displaying average change in performance by performance decile on this measure. Battelle developed this graph by first assigning each entity's year 1 performance score to a decile (1-10). For each entity, the change in performance score from year 1 was then calculated for both year 2 and year 3. The resulting changes in performance for year 2 and year 3 were plotted against the year 1 decile assignments, allowing for visualization of performance trends over time by initial performance level.

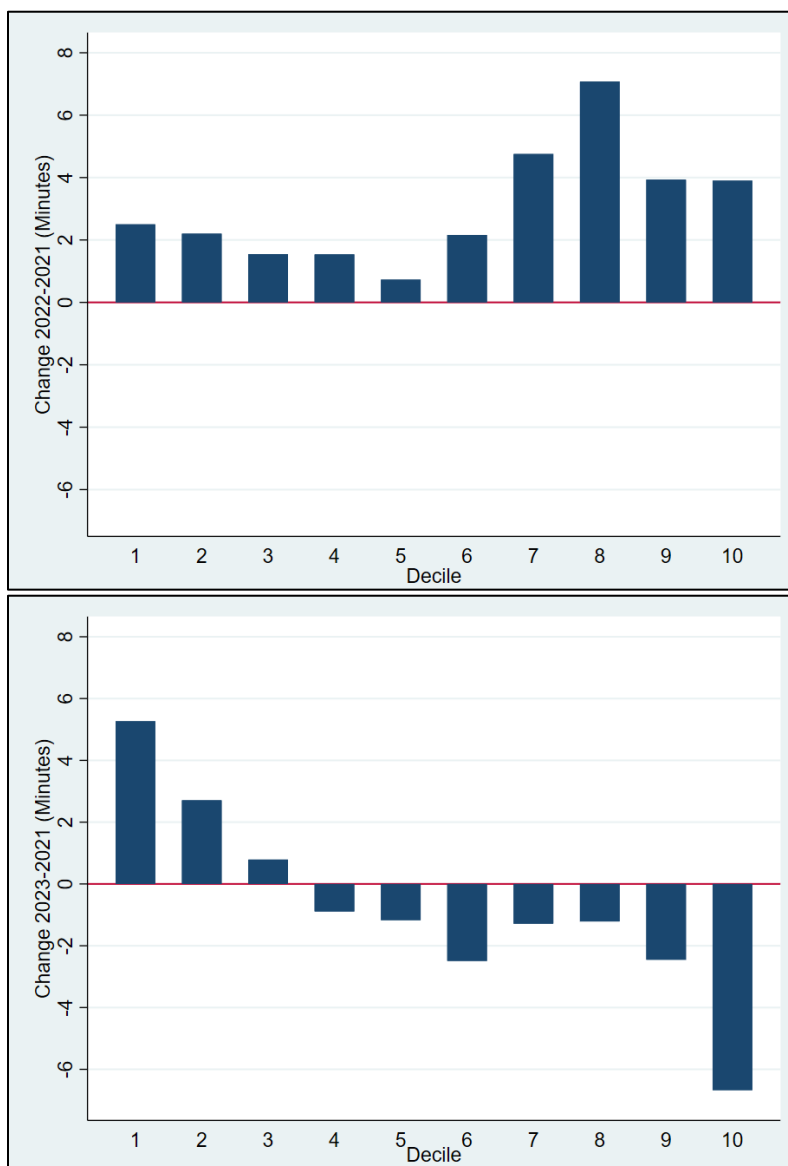


Figure 2. Mean Change in Performance by Decile

Figure 2 Interpretation: The upper graph shows that all deciles showed some increase in average performance score (poorer performance) from PY2021 to PY2022, particularly the lower-performing deciles (Deciles 7-10). The lower graph suggests that between PY2021 and PY2023, with the highest-performing 10% of the entities in PY2021 (Decile 1) showing poorer performance in PY2023 and the lowest performing 10% of the entities in PY2021 (Decile 10) showing improved performance in PY2023.

III. Evaluation Criteria

Meaningfulness

Importance
<p>Guiding Questions: Does the evidence show that the focus of the measure is linked to meaningful outcomes for patients and health care organizations? Does the data demonstrate that using this measure within the quality program results in benefits that outweigh any associated burdens or costs?</p>
<p>As noted in the CMIT rationale, prolonged emergency department (ED) wait times are associated with numerous negative downstream effects.² Thus, improving ED wait time has the potential to improve patient experience and care.³ Figure 1 shows entities still have room to improve on the measure, as the best 5% of scores fall under 100 minutes and the median score is around 150 minutes. Table 1 and Figure 2 outline the impacts on the patient population that improvement on this performance score could have over time. Table 1 indicates that if entities in Deciles 4 through 10 improved to reach the benchmark of 119 minutes, then about 50% of the total patient population would experience, on average, nearly an hour reduction in wait time. Current performance on this measure and potential improvements by measured entities demonstrate benefit to the program population.</p> <p>Committee Member Considerations: Based on reviewing measure performance and professional and personal experiences, consider the balance of implementation costs or burdens with the benefit of measure use within the program. Committee members will have a chance to share these thoughts with the broader committee via Pre-Meeting Initial Evaluation (PIE) Forms and group discussion.</p>
<p>Staff Rating: Met</p>

Conformance
<p>Guiding Question: Do measure components and specifications align with the measure intent and target population?</p>
<p>The intent of this measure is to reduce the median time from emergency department (ED) arrival to departure for patients discharged from the ED in outpatient settings. The measure is reported as a continuous variable, with the numerator defined as the time (in minutes) from ED arrival to ED departure for each patient discharged from the ED. While the measure does not use a traditional numerator/denominator structure, the denominator effectively includes all patients discharged from the ED, excluding only those who expired in the ED. The measure specifications are well-defined and directly support its intent and the target population of hospital outpatient settings. Additionally, the measure aligns with the Hospital Outpatient Quality Reporting Program's objectives to improve care quality and provide transparent, objective data on hospital performance.</p> <p>Committee Member Considerations: Committee members should review the list of active measures within this CMS program in the appendix and consider this measure's alignment with the group. The appendix lists all active measures reported in this program.</p>
<p>Staff Rating: Met</p>

² Nyce, A., Gandhi, S., Freeze, B., Bosire, J., Ricca, T., Kupersmith, E., Mazzarelli, A., & Rachoin, J. S. (2021). Association of Emergency Department Waiting Times With Patient Experience in Admitted and Discharged Patients. *Journal of patient experience*, 8, 23743735211011404. <https://doi.org/10.1177/23743735211011404>.

³ Bernstein SL, Aronsky D, Duseja R, et al. The effect of emergency department crowding on clinically oriented outcomes. *Acad Emerg Med* 2009; 16:1–10.

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Feasibility
<p>Guiding Question: Are the tools, processes, and people necessary to implement and report on the measure reasonably available for measured entities in the CMS program?</p>
<p>The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publicly reported in aggregate for one calendar year. Data are collected using either paper patient medical records or electronic health records. Some measured entities lack the necessary health IT infrastructure to collect, or report required data elements electronically. Additional investment in technology or alternative reporting methods would be helpful to reduce burden.</p>
<p>Committee Member Considerations: Committee members with experience implementing this or similar measures in emergency department settings should reflect on potential challenges to feasibility of data collection and reporting.</p>
<p>Staff Rating: Met</p>

Validity
<p>Guiding Question: Do the data and/or logic support the idea that the measured entity can improve their performance on the measure?</p>
<p>Measure performance from 2021-2023 demonstrates that there is room for improvement among reporting entities. Figure 2 shows that the worst-performing 10% of the entities in 2021 (Decile 10) showed improved performance in 2023. Process and efficiency improvements in the ED and implementing triage processes can improve entity-level performance on the measure.⁴</p>
<p>Committee Member Considerations: Committee members with experience implementing this or similar measures in emergency departments, emergency medical services/ambulances, or inpatient acute care facility settings should reflect on potential methods to improve wait times in the ED.</p>
<p>Staff Rating: Met</p>

Reliability

This measure is not a proportion but a continuous value expressed in minutes. Calculating reliability for a continuous measure requires patient-level data, which are not available in the publicly available files for this measure.

Reliability
<p>Guiding Question: Does the evidence show that changes in measure performance are due to improvements in quality of care? In other words, do the data demonstrate that variation in measure performance is linked to changes made to processes or behaviors to improve care?</p>
<p>Currently, data are insufficient to estimate the reliability of this measure. Additional patient-level data collection and analysis are needed before drawing conclusions about its suitability for comparing quality of care.</p>
<p>Staff Rating: Insufficient Information Available</p>

⁴ Health Catalyst. *Emergency Department Triage Redesign Dramatically Reduces Wait Times, LOS, and Left Without Being Seen Rates*. Clinical Quality, Health Catalyst, 2017.

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Usability
<p>Guiding Questions: Are there any known barriers or facilitators that determine whether the person or entity could improve on the measure focus? Are these barriers addressable?</p>
<p>Variation in resource availability and staffing across entities may limit some entities' ability to improve on the measure. However, due to limited data, the extent and significance of these barriers are unclear. CMS has not received any feedback from the reporting community about the provider burden or barriers for this measure.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should consider any barriers to using this measure for certain measured entities as well as any potential facilitators that might promote usability within the program.</p>
<p>Staff Rating: Insufficient Information Available</p>

Data Stream Parsimony

Data Stream Parsimony
<p>Guiding Question: Does the data flow required for the measure promote non-burdensome data collection and reporting?</p>
<p>The measure uses both paper patient medical records and electronic health records and is manually entered into the CMS web-based tool. This increases staff workload and may introduce inefficiencies in the reporting process. There is minimal reporting overlap with other active measures in the Hospital OQR Program and the measure is aligned with other variations currently active in other CMS programs.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should reflect on any additional barriers to the clinical data flow that collection may add as well as potential mitigation strategies.</p>

Patient Journey

Patient Health Journey
<p>Guiding Question: Does the measure address the appropriate aspects of care to align with the patient health care journey?</p>
<p>The measure addresses the appropriate timepoint during the patient health care journey as it relates to ED visits when timeliness of care may be most critical. The measure promotes improving ED efficiency, which is important for ensuring patients receive the appropriate care in a timely manner.</p> <p>Committee Member Considerations: Based on professional/personal experiences, committee members should consider if the measure identifies an appropriate and critical time to assess continued median wait times in the ED. Reflect on if this timepoint is meaningful to patients and any potential barriers or burdens associated with this timepoint in the care journey.</p>

Appendix: Active Measures in the Hospital Outpatient Quality Reporting Program

Measures Included in the Hospital Outpatient Quality Reporting Program	
CMIT ID	Measure Title
00005-01-C-HOQR	Abdomen Computed Tomography (CT) - Use of Contrast Material
00021-02-C-HOQR	Admissions and Emergency Department (ED) Visits for Patients Receiving Outpatient Chemotherapy
00071-02-C-HOQR	Appropriate Follow-Up Interval for Normal Colonoscopy in Average Risk Patients
01648-01-C-HOQR	Breast Cancer Screening Recall Rates
00116-01-C-HOQR	Cataracts - Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery
00180-02-C-HOQR	COVID-19 Vaccination Coverage Among Health Care Personnel (HCP COVID-19 Vaccination)
00253-01-C-HOQR	Facility 7-Day Risk-Standardized Hospital Visit Rate After Outpatient Colonoscopy
00299-01-C-HOQR	Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation Within 45 Minutes of ED Arrival
01660-02-C-HOQR	Hospital Commitment to Health Equity (HCHE)
00344-01-C-HOQR	Hospital Visits After Hospital Outpatient Surgery
00410-01-C-HOQR	Left Without Being Seen
00427-01-C-HOQR	<i>Median Time from ED Arrival to ED Departure for Discharged ED Patients</i>
00162-01-C-HOQR	Outpatient and Ambulatory Surgery Consumer Assessment (OAS CAHPS)
01625-01-E-HOQR	ST-Segment Elevation Myocardial Infarction (STEMI) Electronic Clinical Quality Measure (eCQM)