POINNEERS IN QUALITY: EXPERT TO EXPERT:

Median Time from Emergency Department (ED) Arrival to ED Departure for Admitted ED Patients
ED-1 (CMS55v4)

Median Admit Decision Time to ED Departure Time for Admitted Patients
ED-2 (CMS111v4)

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The Objectives of this Webinar

Learning Objectives:

• Explain logic specifications for ED-1 & ED-2
• Address Important notes regarding 2016 Data
• Identify differences between the chart abstracted and eCQM versions of these measures
• Discuss frequently asked questions about ED-1 & ED-2
• Describe changes to measure specifications applicable for 2017 reporting
Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment.

**ED-1** - The measure is assessing the median time from emergency department admission to time of discharge from the emergency room for patients admitted to the facility from the emergency department.

**ED-2** - The measure is assessing the median time (in minutes) from admit decision time to time of discharge from the emergency department for emergency department patients admitted to inpatient status.
1. Episodes of care are classified using the IP criteria, and those satisfying the criteria are included in the IP.
2. The members of the IP are classified using the Measure Population criteria, and those satisfying the criteria are included in the Measure Population.
3. Each member of the Measure Population is evaluated according to the criteria defined in the Measure Observations criteria, and all of these results are aggregated using the specified operator.
Calculate the ED encounter duration in minutes for each ED encounter in the measure population; report the median time for all calculations performed.

Also stated as:
Datetime difference between the Emergency Department discharge time and the Emergency Department admission time. The calculation requires the median across all ED encounter durations.

**IP:** Inpatient Encounters  
**MSRP:** Admitted to hospital from ED  
**MSRPEX:** None  
**MSRP Observation:** # minutes in ED  
**Aggregate MSRP:** Median minutes in ED
Describes the strata for which the measure is to be evaluated.

Evaluate the eCQM based on a specific condition:
- those with primary mental health diagnosis
- those without primary mental health diagnosis
Logic statements that are reused throughout a measure
- Denoted with "$"
- Defined in the Data Criteria (QDM Variables) section

Data Criteria (QDM Variables)

$EncounterInpatient =

"Encounter, Performed: Encounter Inpatient" satisfies all
  • (length of stay <= 120 day(s))
  • ends during "Measurement Period"
Median Time from ED Arrival to ED Departure for Admitted ED Patients (CMS55v4)
ED – 1 Initial Population

Initial Population =
Inpatient Encounters ending during the measurement period with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days.

AND: Occurrence A of $EncounterInpatient
Inpatient Encounters preceded by an emergency department visit.

**AND:** Initial Population  
**AND:** "Occurrence A of Encounter, Performed: Emergency Department Visit" \( \leq 1 \) hour(s) ends before or concurrent with start of Occurrence A of $EncounterInpatient
None
ED-1 Measure Observation

Time (in minutes) from ED admission to ED discharge for patients admitted to the facility from the emergency department.

Median of:
• Datetime difference of:
  o "Occurrence A of Encounter, Performed: Emergency Department Visit (discharge datetime)"
  o "Occurrence A of Encounter, Performed: Emergency Department Visit (admission datetime)"

Median – the middle of a value in a set

52, 75, **102**, 132, 155
Report total score and the following strata:

**Stratum 1 =**

- AND NOT: "Diagnosis, Active: Psychiatric/Mental Health Patient (ordinality: Principal)" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"

**Stratum 2 =**

- AND: "Diagnosis, Active: Psychiatric/Mental Health Patient (ordinality: Principal)" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
<table>
<thead>
<tr>
<th>Value Set Name</th>
<th>Object Identifier (OID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Psychiatric/Mental Health Patient Value Set&quot;</td>
<td>(2.16.840.1.113883.3.117.1.7.1.299)</td>
</tr>
<tr>
<td>&quot;Emergency Department Visit Value Set&quot;</td>
<td>(2.16.840.1.113883.3.117.1.7.1.292)</td>
</tr>
<tr>
<td>&quot;Encounter Inpatient Value Set&quot;</td>
<td>(2.16.840.1.113883.3.666.5.307)</td>
</tr>
<tr>
<td>Attribute: Principal Value Set</td>
<td>(2.16.840.1.113883.3.117.1.7.1.14)</td>
</tr>
</tbody>
</table>
Median Admit Decision Time to ED Departure Time for Admitted Patients (CMS111v4)
ED-2 Initial Population

Inpatient Encounters ending during the measurement period with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days.

AND: Occurrence A of $EncounterInpatient
Inpatient Encounters where the decision to admit was made during the preceding emergency department visit.

**AND:** Initial Population

**AND:** "Occurrence A of Encounter, Performed: Emergency Department Visit" $\leq 1$ hour(s) ends before or concurrent with start of Occurrence A of $\text{EncounterInpatient}$

**AND:** "Occurrence A of Encounter, Order: Decision to Admit to Hospital Inpatient" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
ED-2 Measure Observation

Time (in minutes) from Decision to Admit to ED discharge for patients admitted to the facility from the emergency department.

Median of:

• Datetime difference of:
  o "Occurrence A of Encounter, Performed: Emergency Department Visit (discharge datetime)"
  o "Occurrence A of Encounter, Order: Decision to Admit to Hospital Inpatient (start datetime)"
**Stratum 1 =**

- AND NOT: "Diagnosis, Active: Psychiatric/Mental Health Patient (ordinality: Principal)" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"

**Stratum 2 =**

- AND: "Diagnosis, Active: Psychiatric/Mental Health Patient (ordinality: Principal)" starts during "Occurrence A of Encounter, Performed: Emergency Department Visit"
"Psychiatric/Mental Health Patient Value Set (2.16.840.1.113883.3.117.1.7.1.299)"
"Emergency Department Visit Value Set (2.16.840.1.113883.3.117.1.7.1.292)"
"Encounter Inpatient Value Set (2.16.840.1.113883.3.666.5.307)"
"Decision to Admit to Hospital Inpatient Value Set (2.16.840.1.113883.3.117.1.7.1.295)"
Attribute: Principal Value Set (2.16.840.1.113883.3.117.1.7.1.14)"
ED measures in eCQM 2016 Observation values are incorrect

- Impacting 2016 discharge data
- Affects the ED measure values (not comparable to prior years)
- There is no proper way to address the ED eCQM 2016 issue without affecting other measures using ED visit
- The Joint Commission and CMS acknowledge the issue and expect the ED Observation values to be skewed
ED Measures: inconsistencies between Measure Population logic and Observation value calculation:

- The Joint Commission and CMS will not calculate observation value when case is not in Measure Population.

- If a case satisfies the Measure Population logic but the observation value is not able to be calculated due to missing data, The Joint Commission and CMS will take the case out of the ED Measure Population.
What are the differences between the chart-abstracted measure and the eCQM?

- **Transfers**
  - Chart abstracted
  - Version 4
  - Version 5

- **Observations**
  - As it applies to Admission Date, Decision to Admit and ED Departure
  - Chart abstracted capturing
  - eCQM challenges in capturing
Common Questions or Issues
If a negative value is received for the measure observation, will that be the median time calculation?
If the value is <0 minutes (which would be a negative value) the case is rejected.
In order to stratify the ED measures by active diagnosis (mental health or non-mental health), according to the logic, the active diagnosis must be "during" the ED encounter. For an admitted patient, the ED diagnosis is the admission diagnosis which is active "during" the inpatient encounter, and not the ED encounter. Will there be further clarification on how this can be accomplished?
For the 2016 reporting period, the logic in version 4 is required for ED 1 and ED 2.
Should we capture records with final coding applied?
Yes, it would be ideal to capture the final codes.
For IQR/MU eCQM reporting in Q3 or Q4, if we choose to electronically report on ED-1 and/or ED-2 – do we report only ED-1a and/or ED-2a (the overall or unstratified rate) or do we report ED-1a, 1b, 1c, 1d and/or ED-2a, 2b, 2c?
For inquiries regarding reporting requirements, please contact the help desk:
EHR Information Center Help Desk: (888) 734-6433/TTY: (888) 734-6563.
Hours of operation: Monday-Friday 8:30am-4:30pm in all time zones (except Federal holidays).
Why does the decision to admit value set include Hospital admission, for observation (procedure) 764640?04
Because the measure is looking for the time between when a decision is made to admit (essentially move the patient out the ED) to when they actually leave the ED, any status that would result in moving the patient out of the ED to a hospital bed is acceptable.
The technical release notes say to report the Median Time for the Initial Patient Population alone and then for the Stratifications. Then to report the Measure Population alone (an overall) and then again with the stratifications applied. But, the Initial population for CMS ID 55 and 111 have an Inpatient Encounter as the Initial Patient Population. At that point there is no assurance that there even is an Emergency Department Encounter so how can a median time for the Initial Patient Population be reported. Also, if the case only qualifies for the Initial Patient Population and not for the Measure Population, then all the Strata would also have to be a 0 value. Cases that are in the Initial Patient Population with ED visit, are equal to the Measure Population with an ED visit encounter. So what is the reporting on the Initial Patient Population trying to achieve?
The point made is an accurate one. The definition of the IP should be modified to include the logic currently specified for the Measure Population and then the Measure Population definition would equal the IP definitions. This change was made in version 5.
What is a good resource when learning about eCQMs?
The eCQI Resource Center
The one-stop shop for the most current resources to support Electronic Clinical Quality Improvement

https://ecqi.healthit.gov
• Reverted the ED visit attribute from admission/discharge datetime back to facility location.
• Moved Measure Population definition to the IP definition
• Added an exclusion to account for transfers.
  • Value set Hospital Settings (2.16.840.1.113762.1.4.1111.126)
• Revised strata includes principal diagnosis with Inpatient Encounter rather than the ED Visit.
• Changed Psychiatric/Mental Health Patient value set (2.16.840.1.113883.3.117.1.7.1.299)
Resources

**eCQI Resource Center – EH Measures:**
https://ecqi.healthit.gov/eh

**Joint Commission Reporting Requirements:**
https://www.jointcommission.org/performance_measurement.aspx

**Measure Specifications (eCQM Library):**

**ONC Issue Tracking System**
https://oncprojecttracking.healthit.gov/

**Blueprint for the CMS Measures Management Systems version 12.0**
References


