|  |  |  |  |
| --- | --- | --- | --- |
| **eCQM Title** | **Equity of Emergency Care Capacity and Quality HOQR** | | |
| **eCQM Identifier (Measure Authoring Tool)** | 1244 | **eCQM Version Number** | 0.4.000 |
| **CBE Number** | Not Applicable | **GUID** | 30fef876-91cd-4d92-8948-0cb5c3f7ee7c |
| **Measurement Period** | January 1, 20XX through December 31, 20XX | | |
| **Measure Steward** | Centers for Medicare & Medicaid Services (CMS) | | |
| **Measure Developer** | Yale New Haven Health Service Corporation/ Center for Outcomes Research and Evaluation | | |
| **Endorsed By** | None | | |
| **Description** | This measure's main objectives are to capture variation in equity of emergency care and measure capacity and quality of emergency care to support hospital quality improvement. The measure aims to reduce patient harm and improve outcomes for patients requiring emergency care in an emergency department (ED). Emergency care capacity is inclusive of several concepts pertaining to boarding and crowding in an ED. This measure will be designed to align with incentives to promote improved care both in EDs and the broader health system to help identify where patients do not receive equitable access to emergency care.  The measure intends to capture established outcome metrics that quantify capacity and access of care in an ED, including for patients with mental health disorders. Additional disparities in ED care are well documented for patients of older age, by race and ethnicity, primary language, and insurance status; such documented disparities include significantly longer ED wait times, higher left without being seen rates, longer boarding times, and longer total length of stay in the ED. | | |
| **Copyright** | Limited proprietary coding is contained in these specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets.  This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2023 International Health Terminology Standards Development Organisation. All rights reserved.  LOINC(R) copyright 2004-2023 Regenstrief Institute, Inc.  ICD-10 copyright 2024 World Health Organization. All Rights Reserved.  CPT(R) contained in the Measure specifications is copyright 2004-2024 American Medical Association. | | |
| **Disclaimer** | These performance specifications are not clinical guidelines and do not establish a standard of medical care and have not been tested for all potential applications.  THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.  Due to technical limitations, registered trademarks are indicated by (R) or [R] and unregistered trademarks are indicated by (TM) or [TM]. | | |
| **Measure Scoring** | Proportion | | |
| **Measure Type** | Intermediate Clinical Outcome | | |
| **Stratification** | Four cohorts of the measure will be calculated, stratified by age and mental health visits. The measure's outcome will be stratified by race and ethnicity, primary language, and insurance status to best address equity of emergency care.  A history of mental health disorders will not automatically exclude or include patients in the strata; the principal diagnosis defines inclusion in the appropriate strata. For the purposes of this measure, mental health disorders do not include substance use disorders. Stratification by age will be reported for patients less than 18 years of age and patients 18 years of age and older, for both mental health and non-mental health cohorts.  Total score and score for the following strata will be reported:  Non-Mental Health Visits  Stratification 1: all patients aged less than 18 years seen in the ED who do not have an ED encounter principal diagnosis consistent with mental health disorders. Patients who have an ED encounter principal diagnosis consistent with substance use disorders will be included in this stratification.  Stratification 2: all patients aged 18 years and older seen in the ED who do not have an ED encounter principal diagnosis consistent with mental health disorders. Patients who have an ED encounter principal diagnosis consistent with substance use disorders will be included in this stratification.  Mental Health Visits  Stratification 3: all patients aged less than 18 years seen in the ED who have an ED encounter principal diagnosis consistent with mental health disorders.  Stratification 4: all patients aged 18 years and older seen in the ED who have an ED encounter principal diagnosis consistent with mental health disorders. | | |
| **Risk Adjustment** | The measure will utilize volume standardization to address differences in patient population between hospitals. Volume-standardization is harmonized with other existing measures and accommodates a “like to like” comparison among hospitals. Large volume EDs will always be compared to large volume EDs, while smaller volume EDs will always be compared to EDs of similar size. We will collect other demographic data to explore score variation by various social and demographic risk factors. | | |
| **Rate Aggregation** | NA | | |
| **Rationale** | This measure aims to reduce patient harm and improve outcomes for patients requiring emergency care in an ED by addressing the variation in equity of emergency care and measuring the capacity and quality of emergency care. There are long-standing concerns about parameters that impact the quality and timeliness of care in the ED. Currently, there are no national metrics to assess the proportion of patients impacted by the quality of timely ED care. | | |
| **Clinical Recommendation Statement** | The goal of this Emergency Care Capacity and Quality (ECCQ) measure is to assess and improve the safety and equity of care for the 140 million ED visits that patients experience each year. Limitations in capacity and quality of emergency care have been shown to be associated with harm, such as increases in mortality, delays in care, preventable errors, poor patient experience and staff burnout. These capacity and quality limitations are also associated with increased costs of care. This proposed ECCQ measure, still in development, is intended for use in CMS’s HOQR program. The numerator is comprised of all ED visits that meet the criteria, defined in the numerator, of a quality gap in access. Challenges related to emergency care access and capacity have been increasing and have prompted public calls for action. Prior efforts to measure components of this proposed measure (for example, ED boarding, through use of the ED-2 measure) were unsuccessful, likely in part due to the construction of the measure score, which was based on median performance that obscured poor performance. Implementation of this proposed measure, which captures multiple components of quality and capacity, will minimize gaming, and help identify facilities where patients do not receive equitable access to emergency care. This measure, therefore, could positively impact millions of patients who seek treatment in the ED and help address long-standing disparities in emergency care, including for patients with mental health disorders. | | |
| **Improvement Notation** | Improvement noted as a decrease in measure score (decrease in proportion of eligible visits that meet the numerator criteria). | | |
| **Reference** | Reference Type: CITATION    Reference Text: 'American College of Emergency Physicians. 2018. Definition of Boarded Patient. Policy Statements. https://www.acep.org/patient-care/policy-statements/definition-of-boarded-patient' | | |
| **Reference** | Reference Type: CITATION    Reference Text: 'American Medical Association. 2022. What is Behavioral Health. https://www.ama-assn.org/delivering-care/public-health/what-behavioral-health' | | |
| **Reference** | Reference Type: CITATION    Reference Text: 'Centers for Disease Control and Prevention. Emergency Department Visits. https://www.cdc.gov/nchs/fastats/emergency-department.htm (2021)' | | |
| **Reference** | Reference Type: CITATION    Reference Text: 'ECQI Resource Center. Median Admit Decision Time to ED Departure Time for Admitted Patients.' | | |
| **Definition** | Mental Health:  Behavioral health generally refers to mental health disorders, life stressors and crises, and stress-related physical symptoms. Behavioral health care refers to the prevention, diagnosis, and treatment of those conditions. For this measure, mental health cohorts will be defined separately from substance use disorders.  Boarding:  The practice of holding patients in the emergency department after they have been admitted to the hospital because no inpatient beds are available.  ED Observation:  ED observation stays, defined as an observation encounter where the patient remains physically in an area under control of the emergency department and under the care of an emergency clinician inclusive of observation in a hospital bed. ED observation involves placing patients in observation status after their initial evaluation, allowing for continued assessment, treatment, and the determination of a safe disposition. ED observation stays are generally longer than routine ED visits and may allow time to evaluate a patient’s response to treatment. | | |
| **Guidance** | Measure Score Calculation  The measure score is first calculated at the individual ED level as the proportion of ED visits where any one of the four outcomes occurred. Scores will be standardized z-scores by ED case volume strata (defined in ED visit volume bands of 20,000 visits). For CCN’s with more than one ED, volume-adjusted z-scores are then combined as a weighted average for that CCN. A z-score of greater than zero means worse performance and less than zero means better performance, compared to like EDs.  For the purposes of this measure, a decision to admit can be captured using any of the following:  - a decision to admit order to admit the patient inpatient  - an evaluation that results in a decision to admit  - an order to admit to inpatient  - an order for a bed assignment  - start of inpatient admission | | |
| **Transmission Format** | TBD | | |
| **Initial Population** | Target population includes all ED visits associated with patients of all ages, for all payers, during the measurement period. Patients can have multiple visits during a measurement period; each visit is eligible to contribute to the outcome. | | |
| **Denominator** | Equals Initial Population | | |
| **Denominator Exclusions** | None | | |
| **Numerator** | The numerator is comprised of any ED visit in the denominator with any quality gap in access; if the patient experiences any of the following during a visit, the visit is included in the numerator:  1. The patient waited longer than 60 minutes (1 hour) to be placed in a treatment room or dedicated treatment area that allows for audiovisual privacy during history-taking and physical examination, or  2. The patient left the ED without being evaluated by a physician/advanced practice nurse/physician’s assistant, or  3. The patient boarded (time from Decision to Admit (order) to ED departure for admitted patients) in the ED for longer than 240 minutes (4 hours), or  4. The patient had an ED length of stay (LOS) (time from ED arrival to ED physical departure as defined by the ED depart timestamp) of longer than 480 minutes (8 hours). | | |
| **Numerator Exclusions** | ED encounters with ED observation stays will be excluded from criteria #3 (boarding), and #4 (ED LOS). To clarify, patients who have a ‘decision to admit’ after an ED observation stay remain excluded from criteria #3 (boarding) calculations.  Transfers out to a facility will be excluded from criteria #4 (ED LOS). | | |
| **Denominator Exceptions** | None | | |
| **Supplemental Data Elements** | For every patient in the Initial Population, also identify county, ethnicity, payer, primary language, race, sex, state and zip code. | | |

**Table of Contents**

* [Population Criteria](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e405)
* [Definitions](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e649)
* [Functions](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e650)
* [Terminology](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e555)
* [Data Criteria (QDM Data Elements)](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e647)
* [Supplemental Data Elements](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e767)
* [Risk Adjustment Variables](file:///C:\Users\angela.flanagan\AppData\Local\Temp\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\CMS1244-v0-4-000-QDM-5-6\CMS1244-v0-4-000-QDM-5-6.html#d1e879)

**[Population Criteria](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* + **Initial Population**
    - * "ED Encounter"
      * union "ED Triage"

* + **Denominator**
    - * "Initial Population"

* + **Denominator Exclusions**
    - * None

* + **Numerator**
    - * "Time to Treatment Room Greater Than 60 Minutes"
      * union "ED Arrival Left Without Being Seen" "Decision to Admit Encounter Order"
      * union "Boarded Time Greater Than 240 Minutes"
      * union "ED Length of Stay Greater Than 480 Minutes"

* + **Numerator Exclusions**
    - * "ED Observation during ED Encounter"
      * union "Discharged to Another Facility"

* + **Denominator Exceptions**
    - * None

* + **Stratification 1**
    - * ( "ED Encounter or Triage of Patients Less Than 18 Years" EDEncounter
      * where not exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratification 2**
    - * ( "ED Encounter or Triage of Patients 18 Years and Older" EDEncounter
      * where not exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratification 3**
    - * ( "ED Encounter or Triage of Patients Less Than 18 Years" EDEncounter
      * where exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratification 4**
    - * ( "ED Encounter or Triage of Patients 18 Years and Older" EDEncounter
      * where exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

**[Definitions](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* + **Admitted to Inpatient 241 Minutes Before Departure**
    - * "Denominator" EDEncounter
      * with Global."Inpatient Encounter" Inpatient
      * such that "HoldingInEDAfterAdmission"(Inpatient) 241 minutes or more before "EDDepartureTime"(EDEncounter)

* + **Boarded Time Greater Than 240 Minutes**
    - * "Decision to Admit Encounter Order"
      * union "Decision to Admit Using Assessment"
      * union "Time of Admit Order Or Bed Assignment to Departure Greater Than 241 Minutes"
      * union "Admitted to Inpatient 241 Minutes Before Departure"

* + **Decision to Admit Encounter Order**
    - * "Denominator" EDEncounter
      * with Global."Inpatient Encounter" EncounterInpatient
      * such that "AdmitDecisionUsingEncounterOrder"(EncounterInpatient) 241 minutes or more before "EDDepartureTime"(EDEncounter)

* + **Decision to Admit Using Assessment**
    - * "Denominator" EDEncounter
      * with Global."Inpatient Encounter" EncounterInpatient
      * such that "AdmitDecisionUsingAssessment"(EncounterInpatient) 241 minutes or more before "EDDepartureTime"(EDEncounter)

* + **Denominator**
    - * "Initial Population"

* + **Discharged to Another Facility**
    - * "ED Length of Stay Greater Than 480 Minutes" EDEncounter
      * where EDEncounter.dischargeDisposition in "Discharge To Acute Care Facility"

* + **ED Arrival Left Without Being Seen**
    - * "ED Triage" EDTriage
      * where EDTriage.dischargeDisposition ~ "Patient left without being seen (finding)"

* + **ED Encounter**
    - * ["Encounter, Performed": "Emergency Department Evaluation and Management Visit"] EDEncounter
      * where EDEncounter.relevantPeriod ends during day of "Measurement Period"

* + **ED Encounter or Triage of Patients 18 Years and Older**
    - * ( "ED Encounter"
      * union "ED Triage" ) EDEncounter
      * where AgeInYearsAt(date from start of EDEncounter.relevantPeriod) >= 18

* + **ED Encounter or Triage of Patients Less Than 18 Years**
    - * ( "ED Encounter"
      * union "ED Triage" ) EDEncounter
      * where AgeInYearsAt(date from start of EDEncounter.relevantPeriod) < 18

* + **ED Length of Stay Greater Than 480 Minutes**
    - * "Denominator" EDEncounter
      * where "EDArrivalTime"(EDEncounter) 481 minutes or more before "EDDepartureTime"(EDEncounter)

* + **ED Observation during ED Encounter**
    - * ( ( "Boarded Time Greater Than 240 Minutes"
      * union "ED Length of Stay Greater Than 480 Minutes" ) EDStay
      * with "ED Observation Status" EDO
      * such that ( EDO.relevantPeriod during EDStay.relevantPeriod
      * or EDO.authorDatetime during EDStay.relevantPeriod
      * )
      * )

* + **ED Observation Status**
    - * ( ["Encounter, Performed": "Emergency Department Observation"]
      * union ["Encounter, Order": "Emergency Department Observation"] ) EDObs
      * with "Denominator" EDEncounter
      * such that ( EDObs.relevantPeriod during EDEncounter.relevantPeriod
      * or EDObs.authorDatetime during EDEncounter.relevantPeriod
      * )

* + **ED Triage**
    - * ["Encounter, Performed": "Triage"] EDTriage
      * where EDTriage.relevantPeriod during day of "Measurement Period"

* + **Initial Population**
    - * "ED Encounter"
      * union "ED Triage"

* + **Global.Inpatient Encounter**
    - * ["Encounter, Performed": "Encounter Inpatient"] EncounterInpatient
      * where EncounterInpatient.relevantPeriod ends during day of "Measurement Period"

* + **Numerator**
    - * "Time to Treatment Room Greater Than 60 Minutes"
      * union "ED Arrival Left Without Being Seen" "Decision to Admit Encounter Order"
      * union "Boarded Time Greater Than 240 Minutes"
      * union "ED Length of Stay Greater Than 480 Minutes"

* + **Numerator Exclusions**
    - * "ED Observation during ED Encounter"
      * union "Discharged to Another Facility"

* + **SDE Ethnicity**
    - * ["Patient Characteristic Ethnicity": "Ethnicity"]

* + **SDE Payer**
    - * ["Patient Characteristic Payer": "Payer Type"]

* + **SDE Race**
    - * ["Patient Characteristic Race": "Race"]

* + **SDE Sex**
    - * ["Patient Characteristic Sex": "ONC Administrative Sex"]

* + **Stratum 1**
    - * ( "ED Encounter or Triage of Patients Less Than 18 Years" EDEncounter
      * where not exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratum 2**
    - * ( "ED Encounter or Triage of Patients 18 Years and Older" EDEncounter
      * where not exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratum 3**
    - * ( "ED Encounter or Triage of Patients Less Than 18 Years" EDEncounter
      * where exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Stratum 4**
    - * ( "ED Encounter or Triage of Patients 18 Years and Older" EDEncounter
      * where exists ( EDEncounter.diagnoses Diagnosis
      * where Diagnosis.code in "Mental Health Diagnosis without Substance Use Disorders"
      * and Diagnosis.rank = 1
      * )
      * )

* + **Time of Admit Order Or Bed Assignment to Departure Greater Than 241 Minutes**
    - * "Denominator" EDEncounter
      * with Global."Inpatient Encounter" Inpatient
      * such that "EDDepartureTime"(EDEncounter) 241 minutes or more after "AdmitInpatientOrBedAssignmentEncounterOrder"(Inpatient)

* + **Time to Treatment Room Greater Than 60 Minutes**
    - * "Denominator" EDEncounter
      * where "EDArrivalTime"(EDEncounter) 61 minutes or more before "EDTreatmentRoomTimeArrivalTime"(EDEncounter)

**[Functions](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* + **AdmitDecisionUsingAssessment(EncounterInpatient "Encounter, Performed")**
    - * Last((["Assessment, Performed": "Emergency Department Evaluation"]) EDEvaluation
      * let LastEDVisit: "LastEDEncounter"(EncounterInpatient)
      * where Global."NormalizeInterval"(EDEvaluation.relevantDatetime, EDEvaluation.relevantPeriod) starts during LastEDVisit.relevantPeriod
      * and EDEvaluation.result in "Admit Inpatient"
      * return start of Global."NormalizeInterval"(EDEvaluation.relevantDatetime, EDEvaluation.relevantPeriod)
      * sort ascending
      * )

* + **AdmitDecisionUsingEncounterOrder(EncounterInpatient "Encounter, Performed")**
    - * Last((["Encounter, Order": "Decision to Admit to Hospital Inpatient"]) AdmitOrder
      * let LastEDVisit: "LastEDEncounter"(EncounterInpatient)
      * where AdmitOrder.authorDatetime during LastEDVisit.relevantPeriod
      * return AdmitOrder.authorDatetime
      * sort ascending
      * )

* + **AdmitInpatientOrBedAssignmentEncounterOrder(Encounter "Encounter, Performed")**
    - * Last((["Encounter, Order": "Encounter Inpatient"]
      * union ["Encounter, Order": "Patient bed assigned (finding)"]) AdmitInpatientOrder
      * let LastEDVisit: "LastEDEncounter"(Encounter)
      * where AdmitInpatientOrder.authorDatetime during LastEDVisit.relevantPeriod
      * return AdmitInpatientOrder.authorDatetime
      * sort ascending
      * )

* + **EDArrivalTime(EDEncounter "Encounter, Performed")**
    - * Last(EDEncounter.facilityLocations Location
      * where Location.code in "Emergency Department Location"
      * and Global."HasStart"(Location.locationPeriod)
      * return start of Location.locationPeriod
      * sort ascending
      * )

* + **EDDepartureTime(Encounter "Encounter, Performed")**
    - * Last(Encounter.facilityLocations Location
      * where Location.code in "Emergency Department Location"
      * and Global."HasEnd"(Location.locationPeriod)
      * return
      * end of Location.locationPeriod
      * sort ascending
      * )

* + **EDTreatmentRoomTimeArrivalTime(EDEncounter "Encounter, Performed")**
    - * Last(EDEncounter.facilityLocations Location
      * where Location.code in "Emergency Department Treatment Location"
      * and Global."HasStart"(Location.locationPeriod)
      * return start of Location.locationPeriod
      * sort ascending
      * )

* + **HoldingInEDAfterAdmission(Encounter "Encounter, Performed")**
    - * Last((["Encounter, Performed": "Encounter Inpatient"]) AdmittedInpatient
      * let LastEDVisit: LastEDEncounter(Encounter)
      * where start of AdmittedInpatient.relevantPeriod during LastEDVisit.relevantPeriod
      * return start of AdmittedInpatient.relevantPeriod
      * sort ascending
      * )

* + **LastEDEncounter(EncounterInpatient "Encounter, Performed")**
    - * Last("ED Encounter" EDVisit
      * where EDVisit.relevantPeriod ends same day as start of EncounterInpatient.relevantPeriod
      * and EDVisit.relevantPeriod starts before start of EncounterInpatient.relevantPeriod
      * sort by
      * end of relevantPeriod ascending
      * )

* + **Global.HasEnd(period Interval<DateTime>)**
    - * not (
      * end of period is null
      * or
      * end of period = maximum DateTime
      * )

* + **Global.HasStart(period Interval<DateTime>)**
    - * not ( start of period is null
      * or start of period = minimum DateTime
      * )

* + **Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)**
    - * if pointInTime is not null then Interval[pointInTime, pointInTime]
      * else if period is not null then period
      * else null as Interval<DateTime>

**[Terminology](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* code "Patient bed assigned (finding)" ("SNOMEDCT Code (5751000175101)")
* code "Patient left without being seen (finding)" ("SNOMEDCT Code (21541000119102)")
* valueset "Admit Inpatient" (2.16.840.1.113762.1.4.1111.164)
* valueset "Decision to Admit to Hospital Inpatient" (2.16.840.1.113883.3.117.1.7.1.294)
* valueset "Discharge To Acute Care Facility" (2.16.840.1.113883.3.117.1.7.1.87)
* valueset "Emergency Department Evaluation" (2.16.840.1.113762.1.4.1111.163)
* valueset "Emergency Department Evaluation and Management Visit" (2.16.840.1.113883.3.464.1003.101.12.1010)
* valueset "Emergency Department Location" (2.16.840.1.113762.1.4.1046.284)
* valueset "Emergency Department Observation" (2.16.840.1.113762.1.4.1170.22)
* valueset "Emergency Department Treatment Location" (2.16.840.1.113762.1.4.1046.278)
* valueset "Encounter Inpatient" (2.16.840.1.113883.3.666.5.307)
* valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
* valueset "Mental Health Diagnosis without Substance Use Disorders" (2.16.840.1.113762.1.4.1046.285)
* valueset "ONC Administrative Sex" (2.16.840.1.113762.1.4.1)
* valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
* valueset "Race" (2.16.840.1.114222.4.11.836)
* valueset "Triage" (2.16.840.1.113762.1.4.1046.279)

**[Data Criteria (QDM Data Elements)](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* "Assessment, Performed: Emergency Department Evaluation" using "Emergency Department Evaluation (2.16.840.1.113762.1.4.1111.163)"
* "Encounter, Order: Decision to Admit to Hospital Inpatient" using "Decision to Admit to Hospital Inpatient (2.16.840.1.113883.3.117.1.7.1.294)"
* "Encounter, Order: Emergency Department Observation" using "Emergency Department Observation (2.16.840.1.113762.1.4.1170.22)"
* "Encounter, Order: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
* "Encounter, Order: Patient bed assigned (finding)" using "Patient bed assigned (finding) (SNOMEDCT Code 5751000175101)"
* "Encounter, Performed: Emergency Department Evaluation and Management Visit" using "Emergency Department Evaluation and Management Visit (2.16.840.1.113883.3.464.1003.101.12.1010)"
* "Encounter, Performed: Emergency Department Observation" using "Emergency Department Observation (2.16.840.1.113762.1.4.1170.22)"
* "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient (2.16.840.1.113883.3.666.5.307)"
* "Encounter, Performed: Triage" using "Triage (2.16.840.1.113762.1.4.1046.279)"
* "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
* "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
* "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
* "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex (2.16.840.1.113762.1.4.1)"

**[Supplemental Data Elements](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* **SDE Ethnicity**
  + - ["Patient Characteristic Ethnicity": "Ethnicity"]

* **SDE Payer**
  + - ["Patient Characteristic Payer": "Payer Type"]

* **SDE Race**
  + - ["Patient Characteristic Race": "Race"]

* **SDE Sex**
  + - ["Patient Characteristic Sex": "ONC Administrative Sex"]

**[Risk Adjustment Variables](file:///C:\\Users\\angela.flanagan\\AppData\\Local\\Temp\\2cf2c1d0-b080-4422-bad3-46f0d9ad1389_CMS1244-v0-4-000-QDM-5-6.zip.389\\CMS1244-v0-4-000-QDM-5-6\\CMS1244-v0-4-000-QDM-5-6.html" \l "toc)**

* None

|  |  |
| --- | --- |
| **Measure Set** |  |