Cost and Efficiency, Spring 2018: CDP Report

DRAFT REPORT FOR CSAC REVIEW

October 23, 2018

Contents

Cost and Efficiency, Spring 2018: CDP Report

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Executive Summary

In 2016, healthcare spending in the United States reached $3.3 trillion or approximately $10,348 per person.[1] This represented a 4.3 percent increase over 2015 spending levels.[2] Despite this high level of spending, the U.S. continues to rank below other developed countries for health outcomes including lower life expectancy and greater prevalence of chronic diseases.[3]

The Cost and Efficiency Standing Committee (see Appendix C) oversees NQF's portfolio of nine cost and resource use measures. During NQF's 2017 redesign of the consensus development process (CDP) the charge of the Cost and Resource Use Standing Committee was broadened to include other measures assessing the efficiency of healthcare delivery, such as emergency department throughput. For this project, the Standing Committee evaluated one measure undergoing maintenance review against NQF's standard evaluation criteria, NQF #0496: *Median Time from ED Arrival to ED Departure for Discharged ED Patients*.

A brief summary of the measure under review is included in the body of the report; a detailed ~~summaries~~ summary of the Committee's discussion and ratings of the criteria for the measure are included in Appendix A.

Introduction

In 2016, healthcare spending in the United States reached $3.3 trillion or approximately $10,348 per person.[4] This represented a 4.3 percent increase over 2015 spending levels.[5] Despite this high level of spending, the U.S. continues to rank below other developed countries for health outcomes including lower life expectancy and greater prevalence of chronic diseases.[6] Recent research suggests that U.S. healthcare spending is roughly twice that of other high-income countries, accounting for almost 18 percent of GDP.[7] These concerning trends have been attributed to a wide variety of causes, including high costs for drugs, procedures, and administrative services, as well as poor coordination and overutilization of health services.

Improving efficiency has the potential to simultaneously reduce the rate of cost growth and improve the quality of care provided. As part of NQF's redesign of the Consensus Development Process in 2017, the Cost and Resource Use Standing Committee expanded its charge to assess efficiency more broadly, including measures assessing the efficiency of healthcare delivery. The Committee was renamed the Cost and Efficiency Committee. The new scope allows the Committee to take a more holistic view of drivers of healthcare spending and identify sources of inefficiency and waste across the system. In this project, the Cost and Efficiency Committee reviewed one measure of emergency department throughput. As emergency department use continues to grow, reducing ED crowding is an important goal of delivery system improvement.

Value-based purchasing and alternative payment models are seen as potential solutions to high healthcare spending. By tying reimbursement to performance on cost and quality measures, public- and private-sector payers and purchasers hope to incentivize higher quality care at lower costs, increasing the efficiency of the healthcare system. However, as the use of measures continues to increase, it is also important to ensure that measurement is efficient and driving necessary improvements without placing an undue burden on clinicians and providers. Measurement can be a costly activity. Casalino et al. estimated that U.S. physicians spend over 15 billion dollars annually to report quality measures.[8] Schuster et al. note that measurement also requires an investment in interpreting and analyzing results.[9] The investment required by performance measurement demands that the measures in use provide valuable and actionable results that drive meaningful gains for patients.

NQF Portfolio of Performance Measures for Cost and Efficiency

The Cost and Efficiency Portfolio Standing Committee (see Appendix C) oversees NQF's portfolio of cost and efficiency measures (see Appendix B). This portfolio contains nine measures: six outcome and resource use measures and three ~~efficiency~~process measures (see table below).

Table 1. NQF Cost and Resource Use Portfolio of Measures

NQF #	Title	Category
0495	Median Time from ED Arrival to ED Departure for Admitted ED Patients	~~Efficiency, tThroughput~~Process
0496	Median Time from ED Arrival to ED Departure for Discharged ED Patients	~~Efficiency, tThroughput~~Process
0497	Admit Decision Time to ED Departure Time for Admitted Patients	~~Efficiency, tThroughput~~Process
1598	Total Resource Use Population-Based PMPM Index	Noncondition-specific per capita resource use measure
1604	Total Cost of Care Population-Based PMPM Index	Noncondition-specific per capita resource use measure
2431	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Acute Myocardial Infarction (AMI)	Condition-specific, episode-based resource use measure
2436	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Heart Failure	Condition-specific, episode-based resource use measure
2579	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Pneumonia	Condition-specific, episode-based resource use measure
2158	Medicare Spending Per Beneficiary	Noncondition-specific, episode-based resource use measure

Cost and Efficiency Measure Evaluation

On June 29, 2018 the Cost and Efficiency Standing Committee evaluated one measure undergoing maintenance review against NQF's standard evaluation criteria.

Table 2. Cost and Efficiency Measure Evaluation Summary

	Maintenance
Measures under consideration	1
Measures recommended for endorsement	0
Reasons for not recommending	Importance – 1 Scientific Acceptability – 0 Overall – 0 Competing Measure – 0

Comments Received Prior to Committee Evaluation

NQF solicits comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on May 8, 2018 and ~~will close~~closed on September 5, 2018. As of June 19,

2018, no comments were submitted and shared with the Committee prior to the measure evaluation meeting.

Summary of Measure Evaluation

The following brief ~~summaries~~ summary of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for the ~~each~~ measure under review are included in Appendix A.

When reviewing this measure, the Committee emphasized the need to ensure that performance measures are producing meaningful results and driving necessary improvements. The Committee recognized the potential burden of measurement and the need to ensure that NQF-endorsed measures are providing valuable information. The Committee noted this measure has been in the Outpatient Quality Reporting Program, but measure performance is largely unchanged from its last maintenance review. The Committee debated how to interpret this lack of change and questioned what the expectations for improvement should be for measures that are in widespread use.

The Committee raised questions about the ideal time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The Committee also noted that this measure does not include any risk adjustment for factors that address clinical complexity. This omission does not enable the measure to account for triage decision making or a patient's~~'~~ clinical conditions when they present in the ED. For example, it may be clinically appropriate for patients with less severe or nonemergent conditions (e.g., sore throat) to wait longer than patients with critical injuries or conditions (e.g., chest pain) who require timely emergency care. The Committee noted the relationship between performance gap and validity of the measure and questioned the ability of this measure to identify unwarranted variation in performance.

Transitions or Hand-Offs

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients (Centers for Medicare and Medicaid Services/The Lewin Group): Not Recommended

Description: NQF #0496 calculates the median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported in aggregate for one calendar year. The measure has been publically reported since 2013 as part of the ED Throughput measure set of the CMS' Hospital Outpatient Quality Reporting (HOQR) Program. **Measure Type**: Process; **Level of Analysis**: Facility; **Setting of Care**: Emergency Department and Services; **Data Source**: Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records

Measure #0496 has been endorsed since 2008. There were limited changes in the measure specifications since the measure's last endorsement by the NQF Care Coordination Project 2013-2014. The Committee raised concerns with the evidence supporting the measure, noting a lack of evidence that a change in wait times influences mortality or other outcomes other than patient satisfaction. Additionally, the Committee questioned the underlying assumption of the measure as specified—that decreased wait times indicate ED performance and quality of care. The Committee noted that knowing

the median time would not be useful or meaningful to evaluating performance without knowing the distribution of the case mix and accounting for the acuity/complexity of cases treated by a given ED. The Committee did not reach consensus 's vote on Evidence did not reach consensus.

The Committee noted that the measure is in widespread use as part of CMS's Outpatient Quality Reporting Program; however, performance has remained nearly the same since the measure's last review. Committee members noted disparities in age and race and wide variability across institutions and disparities; however, they noted that differences in performance have also been found to vary based on location, facility size and type (i.e., teaching versus nonteaching facilities). Committee members noted that variation in performance clearly existed, but they were not convinced that the gap represented meaningful differences in quality. The Standing Committee did not vote on the recommendation for endorsement because tThe measure did not pass the Performance Gap criterion—a must-pass criterion.

References

[1] Centers for Medicare & Medicaid Services. National Health Expenditure Data Fact Sheet. https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html.

[2] Centers for Medicare & Medicaid Services. National Health Expenditure Data Fact Sheet. https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html.

[3] Squires D, Anderson C. *U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries. Issues in International Health Policy.* New York: The Commonwealth Fund; 2015. http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2015/oct/1819_squires_us_hlt_care_global_perspective_oecd_intl_brief_v3.pdf. Last accessed March 2017.

[4] Centers for Medicare & Medicaid Services. National Health Expenditure Data Fact Sheet. https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html

[5] Centers for Medicare & Medicaid Services. National Health Expenditure Data Fact Sheet. https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html

[6] Squires D, Anderson C. *U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries. Issues in International Health Policy*. New York: The Commonwealth Fund; 2015. http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2015/oct/1819_squires_us_hlt_care_global_perspective_oecd_intl_brief_v3.pdf. Last accessed March 2017.

[7] Davis K, Stremikis K, Squires D, et al. *Mirror, Mirror on the Wall, How the Performance of the U.S. Health Care System Compares Internationally.* New York: The Commonwealth Fund; 2014. Available at http://www.commonwealthfund.org/~/media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf. Last accessed March 2017.

[8] Casalino LP, Gans D, Weber R, et al. US physician practices spend more than $15.4 billion annually to report quality measures. *Health Aff (Millwood).* 2016;35(3):401-406.

[9] Schuster MA, Onorato SE, & Meltzer DO (2017). Measuring the cost of quality measurement: a missing link in quality strategy. *JAMA*. 2017;318(13)1219-1220.

Appendix A: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable

Measure Not Recommended

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

Submission **|** Specifications

Description: NQF #0496 calculates the median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported in aggregate for one calendar year. The measure has been publically reported since 2013 as part of the ED Throughput measure set of the CMS' Hospital Outpatient Quality Reporting (HOQR) Program.

Numerator Statement: Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department.

Denominator Statement: 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, left against medical advice (AMA), or whose discharge was not documented or unable to be determined (UTD) are excluded from the target population.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Facility

Setting of Care: Emergency Department and Services

Type of Measure: Process

Data Source: Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records

Measure Steward: Centers for Medicare and Medicaid Services

STANDING COMMITTEE MEETING 6/29/2018

1. Importance to Measure and Report: This measure did not meet the Importance criteria
(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-0; M-8; L-3; I-5;** 1b**.** Performance Gap: **H-1; M-2; L-0; I-13;**

Rationale:

- Committee members were concerned ~~by~~ about the lack of evidence that a change in wait times influences mortality or other patient outcomes. The Committee members acknowledged that a recent literature review that noted the importance of this measure is primarily in the realm of patient satisfaction. There is a relationship between EDs with shorter wait times and higher ED volume, as well as a decrease in the number of patients who left without being seen.

- Committee members expressed concern with the lack of risk adjustment or stratification, noting that EDs may serve different populations (some EDs provide more ambulatory care services, as compared to EDs that handle high levels of trauma or complex care). The evidence presented

that did show a relationship to outcomes also found an association between longer throughput times and higher complexity cases, a factor that is not addressed in the measure as currrently specified.

- Committee members noted that the measure reports disparities in age and race, but Committee members remained concerned that there was no risk adjustment for the size of the facility or complexity of disease of presenting patients. The Committee noted that certain population types that should be separated, including those seeking mental health services, ~~who~~ should be separated from the nonpsychiatric population. The developer clarified that psychiatric patients are addressed in a separate rate, and the data regarding this population is not publicly reported.

- Committee members noted that the overall change from 2014-2016, was approximately four minutes, and ~~noted concerns about~~contemplated whether this change was significant enough to be meaningful. Committee members noted that a performance gap existed but members were not convinced that this gap represented variation in quality. They noted that differences in performance have also been found to vary based on location, facility size, and type (i.e., teaching versus non-teaching facilities).

- A Committee member asked if there were more data on the differences between 2014-2016 performance by facility type. The developer noted that this analysis was not conducted. The developer argued that high-quality care equates to a short wait time for all patients and all facilities should be held to the same standard. However, the Committee ~~maintained~~ reiterated ~~concerns~~ that throughput time could not be interpreted without an understanding of the mix of acuity at a given ED.

- Committee members ~~noted~~ acknowledged that the measure has been endorsed for 10 years, but noted that there has been limited improvement in throughput time. Committee members questioned if the measure has been appropriately capturing quality performance, as there has been limited change in throughput time during this period.

- The Committee members ~~expressed~~ noted that this measure might be strengthened by segmenting the time categories of the measure (e.g., time from presentation to triage, time from triage to treatment, time from treatment to discharge).

- Committee members had concerns regarding the validity of the measure particularly related to the need for risk adjustment. The Committee noted the relationship between the validity of the measure and performance gap, as users do not know how meaningful the measure results are without information on the case mix or diagnostic information. Without this information, users cannot determine what the variation in median time means.

- Ultimately the Committee did not reach consensus on the evidence criterion, and measure did not pass performance gap, both of which are must pass criterion.

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2. Scientific Acceptability of Measure Properties: The committee did not discuss or vote on Scientific Acceptability.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

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3. Feasibility: The committee did not discuss or vote on Feasibility

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

4. Use and Usability: The committee did not discuss or vote on Use and Usability.

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

5. Related and Competing Measures: The committee did not discuss Related and Competing Measures.

6. Standing Committee Recommendation for Endorsement: The committee did not vote on an overall Recommendation for Endorsement

7. Public and Member Comment

- NQF received one comment. The commenter was in support of the Committee's recommendation to not endorse the measure.

8. Consensus Standards Approval Committee (CSAC) Vote

9. Appeals

Appendix B: Cost and Efficiency Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Finalized or Implemented as of December 30, 2017
0495	Median Time from ED Arrival to ED Departure for Admitted ED Patients	• Hospital Inpatient Quality Reporting (Implemented) • Medicare and Medicaid Electronic Health Record Incentive Program for Hospitals and Critical Access Hospitals (Implemented)
0496	Median Time from ED Arrival to ED Departure for Discharged ED Patients	• Hospital Inpatient Quality Reporting (Implemented) • Medicare and Medicaid Electronic Health Record Incentive Program for Hospitals and Critical Access Hospitals (Implemented)
0497	Admit Decision Time to ED Departure Time for Admitted Patients	• Hospital Inpatient Quality Reporting (Implemented) • Medicare and Medicaid Electronic Health Record Incentive Program for Hospitals and Critical Access Hospitals (Implemented)
2431	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Acute Myocardial Infarction (AMI)	• Hospital Inpatient Quality Reporting (Implemented) • Hospital Value-Based Purchasing (Finalized)
2436	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Heart Failure	• Hospital Compare (Implemented) • Hospital Inpatient Quality Reporting (Implemented) • Hospital Value-Based Purchasing (Finalized)
2579	Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode of Care for Pneumonia	• Hospital Compare (Implemented) • Hospital Inpatient Quality Reporting (Implemented) • Hospital Value-Based Purchasing (Finalized)
2158	Medicare Spending Per Beneficiary	• Hospital Compare (Implemented) • Hospital Inpatient Quality Reporting (Implemented) • Hospital Value-Based Purchasing (Implemented)

Appendix C: Cost and Efficiency Standing Committee and NQF Staff

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Appendix D: Measure Specifications

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

STEWARD

Centers for Medicare and Medicaid Services

DESCRIPTION

NQF #0496 calculates the median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported in aggregate for one calendar year. The measure has been publically reported since 2013 as part of the ED Throughput measure set of the CMS' Hospital Outpatient Quality Reporting (HOQR) Program.

TYPE

Process

DATA SOURCE

Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records An electronic data collection tool, CMS Abstraction & Reporting Tool (CART), is available for third-party vendors or facilities to download for free. Paper tools for manual abstraction, which are posted on www.qualitynet.org, are also available for the CART tool.

LEVEL

Facility

SETTING

Emergency Department and Services

NUMERATOR STATEMENT

Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department.

NUMERATOR DETAILS

The measure population is identified using six evaluation and management (E/M) codes for ED encounters. ICD-10-CM diagnosis codes and discharge codes are used to identify cases for the Psychiatric/Mental Health Rate and Transfer Rate strata. These detailed lists can be found in the Excel workbook provided for Section S.2b.

DENOMINATOR STATEMENT

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.

DENOMINATOR DETAILS

NQF #0496 is a continuous measure; therefore, the numerator and denominator details contained in Section S.6 and Section S.9 are the same.

EXCLUSIONS

Patients who expired in the emergency department, left against medical advice (AMA), or whose discharge was not documented or unable to be determined (UTD) are excluded from the target population.

EXCLUSION DETAILS

The Discharge Code data element is used to identify measure exclusions [Discharge Code equals: 6—Expired, 7—Left Against Medical Advice/AMA, or 8—Not Documented or Unable to Determine (UTD)].

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

NQF #0496 is specified using an overall rate, with three sub-populations (or strata), described in detail in Section 1.2 of the Measure Testing Form, and summarized below.

• Overall rate: The overall rate includes all eligible patients.

• Reporting rate: The reporting rate includes cases from the overall rate that are not included in the psychiatric/mental health rate or transfer patient rate.

• Psychiatric/mental health rate: The psychiatric/mental health rate includes cases from the overall rate for which the principal diagnosis is captured in the psychiatric/mental health code set, provided in Attachment: NQF_0496_Measure Code Set.xlsx.

• Transfer patient rate: The transfer patient rate includes cases from the overall rate for which the discharge code indicates that the patient was transferred to a facility that is an acute care facility for inpatient care of the general population or a facility operated by the Department of Defense or the Department of Veteran's Affairs.

This measure is a process measure for which we provide no risk adjustment or risk stratification. We determined risk adjustment and risk stratification were not appropriate based on the measure evidence base and the measure construct. As a process-of-care measure, timely discharge from the ED should not be influenced by sociodemographic factors; doing so would potentially mask important inequities in care delivery. Variation across patient populations is reflective of differences in the quality of care provided to the disparate patient population included in the effective sample.

TYPE SCORE

Continuous variable better quality = lower score

ALGORITHM

This measure calculates the time (in minutes) from ED arrival to ED departure for discharged ED patients. The patient population is determined from two algorithms: the Hospital Outpatient ED Throughput Population algorithm as well as the NQF #0496 measure-specific algorithm:

1. Start processing. Run all cases that are included in the ED Throughput Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to ICD-10-CM Principal Diagnosis Code.

2. Check Discharge Code.

a. If Discharge Code is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Discharge Code equals 6, 7, or 8 the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If Discharge Code equals 1, 2, 3, 4a, 4b, 4c, 4d, or 5, the case will proceed to Arrival Time.

3. Check Arrival Time.

a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Arrival Time equals non-UTD value, the case will proceed to ED Departure Date.

4. Check ED Departure Date.

a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If ED Departure Date equals non-UTD, the case will proceed to ED Departure Time.

5. Check ED Departure Time.

a. If ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If ED Departure Time equals non-UTD, the case will proceed to Measurement Value.

6. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes).

7. Check Measurement Value.

a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to a Measure Category Assignment of D1.

8. Initialize the Measure Category Assignment for all cases in D1.

9. Proceed to ICD-10-CM Principal Diagnosis Code.

10. Check ICD-10-CM Principal Diagnosis Code.

a.   If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01 of the HOQR Specifications Manual (refer to Attachment: NQF_0496_Measure Code Set.xlsx for corresponding ICD-10 codes), the case will proceed to a Measure Category Assignment of D2. Proceed to Discharge Code.

b.   If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code.

11.   Check Discharge Code.

a.   If Discharge Code equals 4a or 4d, the case will proceed to a Measure Category Assignment of D3. Proceed to ICD-10-CM Principal Diagnosis Code.

b.   If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to ICD-10-CM Principal Diagnosis Code.

12.   Check ICD-10-CM Principal Diagnosis Code.

a.   If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b.   If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code.

13.   Check Discharge Code.

a.   If Discharge Code equals 4a or 4d the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to a Measure Category Assignment of D. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section. 138817| 138553| 141592| 146188| 113612| 141015

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Appendix E1: Related and Competing Measures (tabular format)

Comparison of NQF #0495, NQF #0496, and NQF #0497

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
Steward	Centers for Medicare and Medicaid Services	Centers for Medicare and Medicaid Services	Centers for Medicare and Medicaid Services
Description	Median time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.	NQF #0496 calculates the median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported in aggregate for one calendar year. The measure has been publically reported since 2013 as part of the ED Throughput measure set of the CMS' Hospital Outpatient Quality Reporting (HOQR) Program.	Median time from admit decision time to time of departure from the emergency department for emergency department patients admitted to inpatient status.
Type	Process	Process	Process
Data Source	Electronic Health Records, Other, Paper Medical Records Data collection occurs through vendors or via the CART tool which can be found at http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1205442057026 Available at measure-specific web page URL identified in S.1 Attachment NQF_0495_-ED-1-_Codes-636153999021285277-636371811885712491-636426334978020942.xlsx	Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records An electronic data collection tool, CMS Abstraction & Reporting Tool (CART), is available for third-party vendors or facilities to download for free. Paper tools for manual abstraction, which are posted on www.qualitynet.org, are also available for the CART tool.	Electronic Health Records, Other, Paper Medical Records Data collection occurs through vendors or via the CART tool which can be downloaded free of charge at http://qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1205442057026 Available at measure-specific web page URL identified in S.1 Attachment NQF_0497_-ED-2-_Codes-636154003065246887-636371812344152925-636426334995364692.xlsx

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
Level	Facility	Facility	Facility
Setting	Emergency Department and Services, Inpatient/Hospital	Emergency Department and Services	Emergency Department and Services, Inpatient/Hospital
Numerator Statement	Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department.	Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department.	Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients.
Numerator Details	Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department. Data Elements: • Arrival Date • Arrival Time • ED Departure Date • ED Departure Time • ED Patient • ICD-10-CM Principal Diagnosis Code	The measure population is identified using six evaluation and management (E/M) codes for ED encounters. ICD-10-CM diagnosis codes and discharge codes are used to identify cases for the Psychiatric/Mental Health Rate and Transfer Rate strata. These detailed lists can be found in the Excel workbook provided for Section S.2b.	Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients. Data Elements: • Decision to Admit Date • Decision to Admit Time • ED Departure Date • ED Departure Time • ED Patient • ICD-10-CM Principal Diagnosis Code
Denominator Statement	Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department.	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.	Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients.
Denominator Details	Any ED Patient from the facility's emergency department. Data Element Name: ED Patient Definition: Patient received care in a dedicated emergency department of the facility. Suggested Data Collection Question: Was the patient an ED patient at the facility? Allowable Values:	NQF #0496 is a continuous measure; therefore, the numerator and denominator details contained in Section S.6 and Section S.9 are the same.	Any ED Patient from the facility's emergency department. Data Element Name: ED Patient Definition: Patient received care in a dedicated emergency department of the facility. Suggested Data Collection Question: Was the patient an ED patient at the facility? Allowable Values:

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	Y (Yes) There is documentation the patient was an ED patient. N (No) There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation. Notes for Abstraction: • For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department. • Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient). • Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor). • Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes". ED: • If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency		Y (Yes) There is documentation the patient was an ED patient. N (No) There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation. Notes for Abstraction: • For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department. • Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient). • Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor). • Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes". ED: • If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the

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	department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED. • If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED. Suggested Data Sources: • Emergency department record • Face sheet • Registration form Inclusion Guidelines for Abstraction: None Exclusion Guidelines for Abstraction: • Urgent Care • Fast Track ED • Terms synonymous with Urgent Care		emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED. • If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED. Suggested Data Sources: • Emergency department record • Face sheet • Registration form Inclusion Guidelines for Abstraction: None Exclusion Guidelines for Abstraction: • Urgent Care • Fast Track ED • Terms synonymous with Urgent Care
Exclusions	Patients who are not an ED Patient	Patients who expired in the emergency department, left against medical advice (AMA), or whose discharge was not documented or unable to be determined	Patients who are not an ED Patient

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		(UTD) are excluded from the target population.	
Exclusion Details	All non-ED patients are excluded from this measure. Data Element Name: ED Patient Definition: Patient received care in a dedicated emergency department of the facility. Suggested Data Collection Question: Was the patient an ED patient at the facility? Allowable Values: Y (Yes) There is documentation the patient was an ED patient. N (No) There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation. Notes for Abstraction: • For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department. • Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient). • Patients presenting to the ED who do not receive care or services in the ED abstract as	The Discharge Code data element is used to identify measure exclusions [Discharge Code equals: 6—Expired, 7—Left Against Medical Advice/AMA, or 8—Not Documented or Unable to Determine (UTD)].	All non-ED patients are excluded from this measure. Data Element Name: ED Patient Collected For: ED-1, ED-2 Definition: Patient received care in a dedicated emergency department of the facility. Suggested Data Collection Question: Was the patient an ED patient at the facility? Allowable Values: Y (Yes) There is documentation the patient was an ED patient. N (No) There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation. Notes for Abstraction: • For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department. • Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).

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	a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor). • Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes". ED: • If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED. • If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED. Suggested Data Sources: • Emergency department record • Face sheet • Registration form Inclusion Guidelines for Abstraction: None		• Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor). • Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes". ED: • If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED. • If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED. Suggested Data Sources: • Emergency department record • Face sheet

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
	Exclusion Guidelines for Abstraction: • Urgent Care • Fast Track ED • Terms synonymous with Urgent Care		• Registration form Inclusion Guidelines for Abstraction: None Exclusion Guidelines for Abstraction: • Urgent Care • Fast Track ED • Terms synonymous with Urgent Care
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification.	No risk adjustment or risk stratification.
Stratification	ED-1a Median Time from ED Arrival to ED Departure for Admitted ED Patients – Overall Rate (All reported cases) ED-1b Median Time from ED Arrival to ED Departure for Admitted ED Patients – Reporting Measure (Cases without an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQF 0495 (ED-1) Codes.) ED-1c Median Time from ED Arrival to ED Departure for Admitted ED Patients – Psychiatric/Mental Health Patients (Cases with an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQF 0495 (ED-1) Codes.)	NQF #0496 is specified using an overall rate, with three sub-populations (or strata), described in detail in Section 1.2 of the Measure Testing Form, and summarized below. • Overall rate: The overall rate includes all eligible patients. • Reporting rate: The reporting rate includes cases from the overall rate that are not included in the psychiatric/mental health rate or transfer patient rate. • Psychiatric/mental health rate: The psychiatric/mental health rate includes cases from the overall rate for which the principal diagnosis is captured in the psychiatric/mental health code set, provided in Attachment: NQF_0496_Measure Code Set.xlsx. • Transfer patient rate: The transfer patient rate includes cases from the overall rate for which the discharge code indicates that the patient was	ED-2a Admit Decision Time to ED Departure Time for Admitted Patients – Overall Rate (All cases) ED-2b Admit Decision Time to ED Departure Time for Admitted Patients – Reporting Measure (Cases without an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQR 0497 (ED-2) Codes.) ED-2c Admit Decision Time to ED Departure Time for Admitted Patients – Psychiatric/Mental Health Patients (Cases with an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQR 0497 (ED-2) Codes)

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		transferred to a facility that is an acute care facility for inpatient care of the general population or a facility operated by the Department of Defense or the Department of Veteran's Affairs. This measure is a process measure for which we provide no risk adjustment or risk stratification. We determined risk adjustment and risk stratification were not appropriate based on the measure evidence base and the measure construct. As a process-of-care measure, timely discharge from the ED should not be influenced by sociodemographic factors; doing so would potentially mask important inequities in care delivery. Variation across patient populations is reflective of differences in the quality of care provided to the disparate patient population included in the effective sample.	
Type Score	Continuous variable better quality = lower score	Continuous variable better quality = lower score	Continuous variable better quality = lower score
Algorithm	Emergency Department (ED)-1: Median Time from Emergency Department Arrival to ED Departure for Admitted ED Patients Continuous Variable Statement: Time, in minutes, from ED arrival to ED departure for patients admitted to the facility from the emergency department. 1.　　Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure. 2.　　Check ED Patient	This measure calculates the time (in minutes) from ED arrival to ED departure for discharged ED patients. The patient population is determined from two algorithms: the Hospital Outpatient ED Throughput Population algorithm as well as the NQF #0496 measure-specific algorithm: 1.　　Start processing. Run all cases that are included in the ED Throughput Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to ICD-10-CM Principal Diagnosis Code. 2.　　Check Discharge Code.	Emergency Department (ED)-2: Admit Decision Time to Emergency Department Departure Time for Admitted Patients Continuous Variable Statement: Time, in minutes, from admit decision time to time of departure from the emergency department for admitted patients. 1.　　Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure. 2.　　Check ED Patient

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
	a. If ED Patient is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.	a. If Discharge Code is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	a. If ED Patient is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.
	b. If ED Patient equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Assign the Measure Category to B for ED-1a, proceed to step 9.	b. If Discharge Code equals 6, 7, or 8 the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	b. b. If ED Patient equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Assign the Measure Category to B for ED-2a, proceed to step 9.
	c. If ED Patient equals Yes, continue processing and proceed to check Arrival Date.	c. If Discharge Code equals 1, 2, 3, 4a, 4b, 4c, 4d, or 5, the case will proceed to Arrival Time.	c. c. If ED Patient equals Yes, continue processing and proceed to check Decision to Admit Date.
	3. Check Arrival Date	3. Check Arrival Time.	3. Check Decision to Admit Date
	a. If the Arrival Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.	a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	a. If the Decision to Admit Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.
	b. If the Arrival Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9.	b. If Arrival Time equals non-UTD value, the case will proceed to ED Departure Date.	b. b. If the Decision to Admit Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9.
	c. If Arrival Date equals a Non Unable To Determine Value, continue processing and proceed to check Arrival Time.	4. Check ED Departure Date.	c. c. If Decision to Admit Date equals a Non Unable To Determine Value, continue processing and proceed to check Decision to Admit Time.
	4. Check Arrival Time	a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	4. Check Decision to Admit Time
	a. If the Arrival Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint	b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	

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	Commission, assign the Measure Category to X for ED-1a, proceed to step 9. b. If the Arrival Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9. c. If Arrival Time equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Date. 5. Check ED Departure Date a. If the ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9. b. If the ED Departure Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9. c. If ED Departure Date equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Time. 6. Check ED Departure Time a. If the ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.	c. If ED Departure Date equals non-UTD, the case will proceed to ED Departure Time. 5. Check ED Departure Time. a. If ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section. b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section. c. If ED Departure Time equals non-UTD, the case will proceed to Measurement Value. 6. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes). 7. Check Measurement Value. a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section. b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to a Measure Category Assignment of D1.	a. If the Decision to Admit Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9. b. If the Decision to Admit Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9. c. If Decision to Admit Time equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Date. 5. Check ED Departure Date a. If the ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9. b. If the ED Departure Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9. c. If ED Departure Date equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Time.

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	b. If the ED Departure Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9. c. If ED Departure Time equals a Non Unable To Determine Value, continue processing and proceed to Calculate Measurement Value. 7. Calculate Measurement Value. Measurement Value, in minutes, is equal to the ED Departure Date and ED Departure Time minus the Arrival Date and Arrival Time. Continue processing and proceed to check Measurement Value. 8. Check Measurement Value a. If the Measurement Value is greater than or equal to zero minutes, the case will proceed to a Measurement Category Assignment of D and will be in the Measure Population. Assign the Measure Category to D for ED-1a. Proceed to step 9. b. If the Measurement Value is less than zero minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a. Proceed to step 9. 9. Initialize the Measure Category Assignment for measures (ED-1b, 1c) to equal 'B'. Continue processing and proceed to check Overall Rate Category Assignment.	8. Initialize the Measure Category Assignment for all cases in D1. 9. Proceed to ICD-10-CM Principal Diagnosis Code. 10. Check ICD-10-CM Principal Diagnosis Code. a. If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01 of the HOQR Specifications Manual (refer to Attachment: NQF_0496_Measure Code Set.xlsx for corresponding ICD-10 codes), the case will proceed to a Measure Category Assignment of D2. Proceed to Discharge Code. b. If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code. 11. Check Discharge Code. a. If Discharge Code equals 4a or 4d, the case will proceed to a Measure Category Assignment of D3. Proceed to ICD-10-CM Principal Diagnosis Code. b. If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to ICD-10-CM Principal Diagnosis Code. 12. Check ICD-10-CM Principal Diagnosis Code. a. If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	6. Check ED Departure Time a. If the ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9. b. If the ED Departure Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9. c. If ED Departure Time equals a Non Unable To Determine Value, continue processing and proceed to Calculate Measurement Value. 7. Calculate Measurement Value. Measurement Value, in minutes, is equal to the ED Departure Date and ED Departure Time minus the Decision to Admit Date and Decision to Admit Time. Continue processing and proceed to check Measurement Value. 8. Check Measurement Value a. If the Measurement Value is greater than or equal to zero minutes, the case will proceed to a Measurement Category Assignment of D and will be in the Measure Population. Assign the Measure Category to D for ED-2a. Proceed to step 9. b. If the Measurement Value is less than zero minutes, the case will proceed

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	10. Check Overall Rate Category Assignment a. If the Overall Rate is "D or Y or X" continue processing and proceed to check ICD-10-CM Principal Diagnosis Code. NOTE: X is for The Joint Commission Only. b. If the Overall Rate is equal to B stop processing. 11. Check ICD-10-CM Principal Diagnosis Code a. If the ICD-10-CM Principal Diagnosis Code is on Table 7.01, set the Measure Category Assignment for measure ED-1c equal to ED-1a. Stop processing. Note: Copy Measurement value from ED-1a to ED-1c if ED-1c equals D. b. If the ICD-10-CM Principal Diagnosis Code is not on Table 7.01, set the Measure Category Assignment for measure ED-1b equal to ED-1a. Stop processing. Note: Copy Measurement value from ED-1a to ED-1b if ED-1b equals D.	b. If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code. 13. Check Discharge Code. a. If Discharge Code equals 4a or 4d the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section. If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to a Measure Category Assignment of D. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.	to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a. Proceed to step 9. 9. Initialize the Measure Category Assignment for measures (ED-2b, 2c) to equal 'B'. Continue processing and proceed to check Overall Rate Category Assignment. 10. Check Overall Rate Category Assignment a. If the Overall Rate is "D or Y or X" continue processing and proceed to check ICD-10-CM Principal Diagnosis Code. NOTE: X is for The Joint Commission Only. b. If the Overall Rate is equal to B stop processing. 11. Check ICD-10-CM Principal Diagnosis Code a. If the ICD-10-CM Principal Diagnosis Code is on Table 7.01, set the Measure Category Assignment for measure ED-2c equal to ED-2a. Stop processing. Note: Copy measurement value from ED-2a to ED-2c if ED-2c equals D. b. If the ICD-10-CM Principal Diagnosis Code is not on Table 7.01, set the Measure Category Assignment for measure ED-2b equal to ED-2a. Stop processing. Note: Copy measurement value from ED-2a to ED-2b if ED-2b equals D.

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
Submission items	5.1 Identified measures: 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: 0495 is the total time in the ED, 0497 is time in ED AFTER decision to admit. The same population is targeted, but the measure focus is different. Both may be equally important to represent. 5b.1 If competing, why superior or rationale for additive value: Based on a search of the NQF QPS system and NQMC, there are no competing or similar measures in the United States. Australia has several measures that look at ED patients and timing.	5.1 Identified measures: 0495 : Median Time from ED Arrival to ED Departure for Admitted ED Patients 0497 : Admit Decision Time to ED Departure Time for Admitted Patients 5a.1 Are specs completely harmonized? Yes 5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized to the extent possible; however, the differences are justified. NQF #0496 is reported through the HOQR Program as a chart-abstracted measure, while NQF #0495 (Median Tine from ED Arrival to ED Departure for Admitted Patients) is reported through the Hospital Inpatient Quality Reporting (HIQR) Program as an electronically specified clinical quality measure (eCQM). Although the initial patient populations are identified using different codes, the difference is a function of data availability rather than clinical or methodologic differences in the populations measured by NQF #0496 and NQF #0495. NQF #0497 (Median Admit Decision Time to ED Departure Time for Admitted Patients) is also an eCQM, reported through the HIQR Program. Its measure focus is the duration between the decision to admit a patient and the time the patient is discharged from the ED, which is a subset of a patient's total ED length of stay, as measured by NQF #0496. While the target populations for NQF #0496 and Left Without Being Seen are the same, the focus of the measures is different. NQF #0496 focuses on the median time from ED	5.1 Identified measures: 5a.1 Are specs completely harmonized? No 5a.2 If not completely harmonized, identify difference, rationale, impact: 0495 is the total time in the ED, 0497 is time in ED AFTER decision to admit. The same population is targeted, but the measure focus is different. Both may be equally important to represent. 5b.1 If competing, why superior or rationale for additive value: Based on a search of the NQF QPS system and NQMC, there are no competing measures in the United States. Australia has several measures that look at ED patients and timing.

	0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients	0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients	0497 Admit Decision Time to ED Departure Time for Admitted Patients
		arrival to ED departure for discharged patients, while Left Without Being Seen focuses on the percentage of patients that leave the ED without being seen by a physician/advanced practice nurse/physician's assistant (physician/ APN/ PA). 5b.1 If competing, why superior or rationale for additive value: No competing measure that address both the same measure focus and target population as NQF #0496 was identified.	

Appendix E2: Related and Competing Measures (narrative format)

Comparison of NQF #0495, NQF #0496, and NQF #0497

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
0497 Admit Decision Time to ED Departure Time for Admitted Patients

Steward

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
Centers for Medicare and Medicaid Services

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
Centers for Medicare and Medicaid Services

0497 Admit Decision Time to ED Departure Time for Admitted Patients
Centers for Medicare and Medicaid Services

Description

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
Median time from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
NQF #0496 calculates the median time from emergency department arrival to time of departure from the emergency room for patients discharged from the emergency department (ED). The measure is calculated using chart-abstracted data, on a rolling quarterly basis, and is publically reported in aggregate for one calendar year. The measure has been publically reported since 2013 as part of the ED Throughput measure set of the CMS' Hospital Outpatient Quality Reporting (HOQR) Program.

0497 Admit Decision Time to ED Departure Time for Admitted Patients
Median time from admit decision time to time of departure from the emergency department for emergency department patients admitted to inpatient status.

Type

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
Process

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
Process

0497 Admit Decision Time to ED Departure Time for Admitted Patients
Process

Data Source

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Electronic Health Records, Other, Paper Medical Records Data collection occurs through vendors or via the CART tool which can be found at http://qualitynet.org/dcs/ContentServer?c=

Page&pagename=QnetPublic%2FPage%

2FQnetTier2&cid=1205442057026

Available at measure-specific web page URL identified in S.1 Attachment NQF_0495_-ED-1-_Codes-636153999021285277-636371811885712491-636426334978020942.xlsx

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records An electronic data collection tool, CMS Abstraction & Reporting Tool (CART), is available for third-party vendors or facilities to download for free. Paper tools for manual abstraction, which are posted on www.qualitynet.org, are also available for the CART tool.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Electronic Health Records, Other, Paper Medical Records Data collection occurs through vendors or via the CART tool which can be downloaded free of charge at http://qualitynet.org/dcs/ContentServer?c

=Page&pagename=QnetPublic%2FPage%

2FQnetTier2&cid=1205442057026

Available at measure-specific web page URL identified in S.1 Attachment NQF_0497_-ED-2-_Codes-636154003065246887-636371812344152925-636426334995364692.xlsx

Level

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
Facility

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
Facility

0497 Admit Decision Time to ED Departure Time for Admitted Patients
Facility

Setting

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients
Emergency Department and Services, Inpatient/Hospital

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients
Emergency Department and Services

0497 Admit Decision Time to ED Departure Time for Admitted Patients
Emergency Department and Services, Inpatient/Hospital

Numerator Statement

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department.

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients discharged from the emergency department.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients.

Numerator Details

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department.

Data Elements:

- Arrival Date
- Arrival Time
- ED Departure Date
- ED Departure Time
- ED Patient
- ICD-10-CM Principal Diagnosis Code

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

The measure population is identified using six evaluation and management (E/M) codes for ED encounters. ICD-10-CM diagnosis codes and discharge codes are used to identify cases for the Psychiatric/Mental Health Rate and Transfer Rate strata. These detailed lists can be found in the Excel workbook provided for Section S.2b.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients.

Data Elements:

- Decision to Admit Date
- Decision to Admit Time
- ED Departure Date
- ED Departure Time
- ED Patient
- ICD-10-CM Principal Diagnosis Code

Denominator Statement

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Continuous Variable Statement: Time (in minutes) from ED arrival to ED departure for patients admitted to the facility from the emergency department.

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

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.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Continuous Variable Statement: Time (in minutes) from admit decision time to time of departure from the emergency department for admitted patients.

Denominator Details

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Any ED Patient from the facility's emergency department.

Data Element Name: ED Patient

Definition: Patient received care in a dedicated emergency department of the facility.

Suggested Data Collection Question: Was the patient an ED patient at the facility?

Allowable Values:

Y (Yes) There is documentation the patient was an ED patient.

N (No)   There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation.

Notes for Abstraction:

• For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department.

• Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).

• Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor).

• Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes".

ED:

• If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED.

• If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in

proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED.

Suggested Data Sources:

• Emergency department record

• Face sheet

• Registration form

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

• Urgent Care

• Fast Track ED

• Terms synonymous with Urgent Care

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

NQF #0496 is a continuous measure; therefore, the numerator and denominator details contained in Section S.6 and Section S.9 are the same.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Any ED Patient from the facility's emergency department.

Data Element Name: ED Patient

Definition: Patient received care in a dedicated emergency department of the facility.

Suggested Data Collection Question: Was the patient an ED patient at the facility?

Allowable Values:

Y (Yes) There is documentation the patient was an ED patient.

N (No)   There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation.

Notes for Abstraction:

• For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department.

• Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).

• Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor).

• Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes".

ED:

• If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or

observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED.

• If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED.

Suggested Data Sources:

• Emergency department record

• Face sheet

• Registration form

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

• Urgent Care

• Fast Track ED

• Terms synonymous with Urgent Care

Exclusions

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Patients who are not an ED Patient

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

Patients who expired in the emergency department, left against medical advice (AMA), or whose discharge was not documented or unable to be determined (UTD) are excluded from the target population.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Patients who are not an ED Patient

Exclusion Details

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

All non-ED patients are excluded from this measure.

Data Element Name: ED Patient

Definition: Patient received care in a dedicated emergency department of the facility.

Suggested Data Collection Question: Was the patient an ED patient at the facility?

Allowable Values:

Y (Yes) There is documentation the patient was an ED patient.

N (No)   There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation.

Notes for Abstraction:

• For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department.

- Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).

- Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor).

- Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes".

ED:

- If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED.

- If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED.

Suggested Data Sources:

- Emergency department record
- Face sheet
- Registration form

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

- Urgent Care
- Fast Track ED
- Terms synonymous with Urgent Care

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

The Discharge Code data element is used to identify measure exclusions [Discharge Code equals: 6—Expired, 7—Left Against Medical Advice/AMA, or 8—Not Documented or Unable to Determine (UTD)].

0497 Admit Decision Time to ED Departure Time for Admitted Patients

All non-ED patients are excluded from this measure.

Data Element Name: ED Patient

Collected For: ED-1, ED-2

Definition: Patient received care in a dedicated emergency department of the facility.

Suggested Data Collection Question: Was the patient an ED patient at the facility?

Allowable Values:

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Y (Yes) There is documentation the patient was an ED patient.

N (No)   There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation.

Notes for Abstraction:

• For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department.

• Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).

• Patients presenting to the ED who do not receive care or services in the ED abstract as a "No" (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor).

• Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a "Yes".

ED:

• If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select "No". This applies even if the emergency department or observation unit is part of your hospital's system (e.g., your hospital's free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select "No", even if the transferred patient is seen in this facility's ED.

• If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select "No". This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one medical record. Select "No", even if the transferred patient is seen in this facility's ED.

Suggested Data Sources:

• Emergency department record

• Face sheet

• Registration form

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

• Urgent Care

• Fast Track ED

• Terms synonymous with Urgent Care

Risk Adjustment

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

No risk adjustment or risk stratification

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

No risk adjustment or risk stratification.

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0497 Admit Decision Time to ED Departure Time for Admitted Patients

No risk adjustment or risk stratification.

Stratification

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

ED-1a   Median Time from ED Arrival to ED Departure for Admitted ED Patients – Overall Rate (All reported cases)

ED-1b   Median Time from ED Arrival to ED Departure for Admitted ED Patients – Reporting Measure (Cases without an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQF 0495 (ED-1) Codes.)

ED-1c   Median Time from ED Arrival to ED Departure for Admitted ED Patients – Psychiatric/Mental Health Patients (Cases with an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQF 0495 (ED-1) Codes.)

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

NQF #0496 is specified using an overall rate, with three sub-populations (or strata), described in detail in Section 1.2 of the Measure Testing Form, and summarized below.

- Overall rate: The overall rate includes all eligible patients.
- Reporting rate: The reporting rate includes cases from the overall rate that are not included in the psychiatric/mental health rate or transfer patient rate.
- Psychiatric/mental health rate: The psychiatric/mental health rate includes cases from the overall rate for which the principal diagnosis is captured in the psychiatric/mental health code set, provided in Attachment: NQF_0496_Measure Code Set.xlsx.
- Transfer patient rate: The transfer patient rate includes cases from the overall rate for which the discharge code indicates that the patient was transferred to a facility that is an acute care facility for inpatient care of the general population or a facility operated by the Department of Defense or the Department of Veteran's Affairs.

This measure is a process measure for which we provide no risk adjustment or risk stratification. We determined risk adjustment and risk stratification were not appropriate based on the measure evidence base and the measure construct. As a process-of-care measure, timely discharge from the ED should not be influenced by sociodemographic factors; doing so would potentially mask important inequities in care delivery. Variation across patient populations is reflective of differences in the quality of care provided to the disparate patient population included in the effective sample.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

ED-2a   Admit Decision Time to ED Departure Time for Admitted Patients – Overall Rate (All cases)

ED-2b   Admit Decision Time to ED Departure Time for Admitted Patients – Reporting Measure (Cases without an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQR 0497 (ED-2) Codes.)

ED-2c   Admit Decision Time to ED Departure Time for Admitted Patients – Psychiatric/Mental Health Patients (Cases with an ICD-10-CM Principal Diagnosis of a Psychiatric or Mental Health Disorder. Refer to attached NQR 0497 (ED-2) Codes)

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Type Score

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

Continuous variable better quality = lower score

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

Continuous variable better quality = lower score

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Continuous variable better quality = lower score

Algorithm

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

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

Continuous Variable Statement: Time, in minutes, from ED arrival to ED departure for patients admitted to the facility from the emergency department.

1. Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Check ED Patient

a. If ED Patient is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.

b. If ED Patient equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Assign the Measure Category to B for ED-1a, proceed to step 9.

c. If ED Patient equals Yes, continue processing and proceed to check Arrival Date.

3. Check Arrival Date

a. If the Arrival Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.

b. If the Arrival Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9.

c. If Arrival Date equals a Non Unable To Determine Value, continue processing and proceed to check Arrival Time.

4. Check Arrival Time

a. If the Arrival Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.

b. If the Arrival Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9.

c. If Arrival Time equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Date.

5. Check ED Departure Date

a. If the ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.

b. If the ED Departure Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9.

c. If ED Departure Date equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Time.

6. Check ED Departure Time

a. If the ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a, proceed to step 9.

b. If the ED Departure Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-1a, proceed to step 9.

c. If ED Departure Time equals a Non Unable To Determine Value, continue processing and proceed to Calculate Measurement Value.

7. Calculate Measurement Value. Measurement Value, in minutes, is equal to the ED Departure Date and ED Departure Time minus the Arrival Date and Arrival Time. Continue processing and proceed to check Measurement Value.

8. Check Measurement Value

a. If the Measurement Value is greater than or equal to zero minutes, the case will proceed to a Measurement Category Assignment of D and will be in the Measure Population. Assign the Measure Category to D for ED-1a. Proceed to step 9.

b. If the Measurement Value is less than zero minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-1a. Proceed to step 9.

9. Initialize the Measure Category Assignment for measures (ED-1b, 1c) to equal 'B'. Continue processing and proceed to check Overall Rate Category Assignment.

10.   Check Overall Rate Category Assignment

a. If the Overall Rate is "D or Y or X" continue processing and proceed to check ICD-10-CM Principal Diagnosis Code. NOTE: X is for The Joint Commission Only.

b. If the Overall Rate is equal to B stop processing.

11.   Check ICD-10-CM Principal Diagnosis Code

a. If the ICD-10-CM Principal Diagnosis Code is on Table 7.01, set the Measure Category Assignment for measure ED-1c equal to ED-1a. Stop processing. Note: Copy Measurement value from ED-1a to ED-1c if ED-1c equals D.

b. If the ICD-10-CM Principal Diagnosis Code is not on Table 7.01, set the Measure Category Assignment for measure ED-1b equal to ED-1a. Stop processing. Note: Copy Measurement value from ED-1a to ED-1b if ED-1b equals D.

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0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

This measure calculates the time (in minutes) from ED arrival to ED departure for discharged ED patients. The patient population is determined from two algorithms: the Hospital Outpatient ED Throughput Population algorithm as well as the NQF #0496 measure-specific algorithm:

1. Start processing. Run all cases that are included in the ED Throughput Hospital Outpatient Population Algorithm and pass the edits defined in the Data Processing Flow through this measure. Proceed to ICD-10-CM Principal Diagnosis Code.

2. Check Discharge Code.

a. If Discharge Code is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Discharge Code equals 6, 7, or 8 the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If Discharge Code equals 1, 2, 3, 4a, 4b, 4c, 4d, or 5, the case will proceed to Arrival Time.

3. Check Arrival Time.

a. If Arrival Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If Arrival Time equals non-UTD value, the case will proceed to ED Departure Date.

4. Check ED Departure Date.

a. If ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If ED Departure Date equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If ED Departure Date equals non-UTD, the case will proceed to ED Departure Time.

5. Check ED Departure Time.

a. If ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If ED Departure Time equals UTD, the case will proceed to a Measure Category Assignment of Y. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

c. If ED Departure Time equals non-UTD, the case will proceed to Measurement Value.

6. Calculate the Measurement Value. Time in minutes is equal to the ED Departure Date and ED Departure Time (in minutes) minus the Outpatient Encounter Date and Arrival Time (in minutes).

7. Check Measurement Value.

a. If Measurement Value is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

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b. If Measurement Value is greater than or equal to 0 minutes, the case will proceed to a Measure Category Assignment of D1.

8. Initialize the Measure Category Assignment for all cases in D1.

9. Proceed to ICD-10-CM Principal Diagnosis Code.

10.   Check ICD-10-CM Principal Diagnosis Code.

a. If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01 of the HOQR Specifications Manual (refer to Attachment: NQF_0496_Measure Code Set.xlsx for corresponding ICD-10 codes), the case will proceed to a Measure Category Assignment of D2. Proceed to Discharge Code.

b. If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code.

11.   Check Discharge Code.

a. If Discharge Code equals 4a or 4d, the case will proceed to a Measure Category Assignment of D3. Proceed to ICD-10-CM Principal Diagnosis Code.

b. If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to ICD-10-CM Principal Diagnosis Code.

12.   Check ICD-10-CM Principal Diagnosis Code.

a. If ICD-10-CM Principal Diagnosis Code is in Appendix A, OP Table 7.01, the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

b. If ICD-10-CM Principal Diagnosis Code is not in Appendix A, OP Table 7.01, the case will proceed to Discharge Code.

13.   Check Discharge Code.

a. If Discharge Code equals 4a or 4d the case will proceed to a Measure Category Assignment of B. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

If Discharge Code equals 1, 2, 3, 4b, 4c, or 5, the case will proceed to a Measure Category Assignment of D. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

Emergency Department (ED)-2: Admit Decision Time to Emergency Department Departure Time for Admitted Patients

Continuous Variable Statement: Time, in minutes, from admit decision time to time of departure from the emergency department for admitted patients.

1. Start processing. Run cases that are included in the Global Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Check ED Patient

a. If ED Patient is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.

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b. b. If ED Patient equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Assign the Measure Category to B for ED-2a, proceed to step 9.

c. c. If ED Patient equals Yes, continue processing and proceed to check Decision to Admit Date.

3. Check Decision to Admit Date

a. If the Decision to Admit Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.

b. b. If the Decision to Admit Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9.

c. c. If Decision to Admit Date equals a Non Unable To Determine Value, continue processing and proceed to check Decision to Admit Time.

4. Check Decision to Admit Time

a. If the Decision to Admit Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.

b. If the Decision to Admit Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9.

c. If Decision to Admit Time equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Date.

5. Check ED Departure Date

a. If the ED Departure Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.

b. If the ED Departure Date equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9.

c. If ED Departure Date equals a Non Unable To Determine Value, continue processing and proceed to check ED Departure Time.

6. Check ED Departure Time

a. If the ED Departure Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a, proceed to step 9.

b. If the ED Departure Time equals Unable To Determine, the case will proceed to a Measure Category Assignment of Y and will be in the Measure Population. Assign the Measure Category to Y for ED-2a, proceed to step 9.

c. If ED Departure Time equals a Non Unable To Determine Value, continue processing and proceed to Calculate Measurement Value.

7. Calculate Measurement Value. Measurement Value, in minutes, is equal to the ED Departure Date and ED Departure Time minus the Decision to Admit Date and Decision to Admit Time. Continue processing and proceed to check Measurement Value.

8. Check Measurement Value

a. If the Measurement Value is greater than or equal to zero minutes, the case will proceed to a Measurement Category Assignment of D and will be in the Measure Population. Assign the Measure Category to D for ED-2a. Proceed to step 9.

b. If the Measurement Value is less than zero minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. For CMS, stop processing. For The Joint Commission, assign the Measure Category to X for ED-2a. Proceed to step 9.

9. Initialize the Measure Category Assignment for measures (ED-2b, 2c) to equal 'B'. Continue processing and proceed to check Overall Rate Category Assignment.

10. Check Overall Rate Category Assignment

a. If the Overall Rate is "D or Y or X" continue processing and proceed to check ICD-10-CM Principal Diagnosis Code. NOTE: X is for The Joint Commission Only.

b. If the Overall Rate is equal to B stop processing.

11. Check ICD-10-CM Principal Diagnosis Code

a. If the ICD-10-CM Principal Diagnosis Code is on Table 7.01, set the Measure Category Assignment for measure ED-2c equal to ED-2a. Stop processing. Note: Copy measurement value from ED-2a to ED-2c if ED-2c equals D.

b. If the ICD-10-CM Principal Diagnosis Code is not on Table 7.01, set the Measure Category Assignment for measure ED-2b equal to ED-2a. Stop processing. Note: Copy measurement value from ED-2a to ED-2b if ED-2b equals D.

Submission items

0495 Median Time from ED Arrival to ED Departure for Admitted ED Patients

5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: 0495 is the total time in the ED, 0497 is time in ED AFTER decision to admit. The same population is targeted, but the measure focus is different. Both may be equally important to represent.

5b.1 If competing, why superior or rationale for additive value: Based on a search of the NQF QPS system and NQMC, there are no competing or similar measures in the United States. Australia has several measures that look at ED patients and timing.

0496 Median Time from ED Arrival to ED Departure for Discharged ED Patients

5.1 Identified measures: 0495 : Median Time from ED Arrival to ED Departure for Admitted ED Patients

0497 : Admit Decision Time to ED Departure Time for Admitted Patients

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized to the extent possible; however, the differences are justified. NQF #0496 is reported through the HOQR Program as a chart-abstracted measure, while NQF #0495 (Median Tine from ED Arrival to ED Departure for Admitted Patients) is reported through the Hospital Inpatient Quality Reporting (HIQR) Program as an electronically specified clinical quality measure (eCQM). Although the initial patient populations are identified using different codes, the difference is a function of data

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availability rather than clinical or methodologic differences in the populations measured by NQF #0496 and NQF #0495. NQF #0497 (Median Admit Decision Time to ED Departure Time for Admitted Patients) is also an eCQM, reported through the HIQR Program. Its measure focus is the duration between the decision to admit a patient and the time the patient is discharged from the ED, which is a subset of a patient's total ED length of stay, as measured by NQF #0496. While the target populations for NQF #0496 and Left Without Being Seen are the same, the focus of the measures is different. NQF #0496 focuses on the median time from ED arrival to ED departure for discharged patients, while Left Without Being Seen focuses on the percentage of patients that leave the ED without being seen by a physician/advanced practice nurse/physician's assistant (physician/ APN/ PA).

5b.1 If competing, why superior or rationale for additive value: No competing measure that address both the same measure focus and target population as NQF #0496 was identified.

0497 Admit Decision Time to ED Departure Time for Admitted Patients

5.1 Identified measures:

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: 0495 is the total time in the ED, 0497 is time in ED AFTER decision to admit. The same population is targeted, but the measure focus is different. Both may be equally important to represent.

5b.1 If competing, why superior or rationale for additive value: Based on a search of the NQF QPS system and NQMC, there are no competing measures in the United States. Australia has several measures that look at ED patients and timing.

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Appendix F: Pre-Evaluation Comments

No pre-evaluation comments were received as of June 19, 2018.