

Specifications Manual for National Hospital Inpatient Quality Measures

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Version 5.6

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The *Specifications Manual for National Hospital Inpatient Quality Measures (Specifications Manual)* is the result of the collaborative efforts of the Centers for Medicare & Medicaid Services (CMS) and The Joint Commission to publish a uniform set of national hospital quality measures. A primary objective of this collaborative effort is to promote and enhance the utility of these measures for all hospitals.

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Example Acknowledgement: The *Specifications Manual for National Hospital Inpatient Quality Measures* [Version xx, Month, Year] is the collaborative work of the Centers for Medicare & Medicaid Services and The Joint Commission. The *Specifications Manual* is periodically updated by the Centers for Medicare & Medicaid Services and The Joint Commission. Users of the *Specifications Manual for National Hospital Inpatient Quality Measures* must update their software and associated documentation based on the published manual production timelines.

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Introduction

Centers for Medicare & Medicaid Services (CMS)/The Joint Commission

Measure Alignment

Since November of 2003, CMS and The Joint Commission have worked to align common measures. This resulted in the creation of one common set of measure specifications documentation known as the *Specifications Manual for National Hospital Inpatient Quality Measures* to be used by both CMS and The Joint Commission with a common (i.e., identical) data dictionary, measure information forms, algorithms, etc. The goal is to improve quality, minimize data collection efforts for these common measures and focus efforts on the use of data to improve the healthcare delivery process.

CMS Hospital Inpatient Quality Reporting Program

The Hospital Inpatient Quality Reporting Program was originally mandated by Section 501(b) of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003. This section of the MMA authorized CMS to pay hospitals that successfully report designated quality measures a higher annual update to their payment rates. Initially, the MMA provided for a 0.4 percentage point reduction in the annual market basket (the measure of inflation in costs of goods and services used by hospitals in treating Medicare patients) update for hospitals that did not successfully report. The Deficit Reduction Act of 2005 increased that reduction to 2.0 percentage points. This was modified by the American Recovery and Reinvestment Act of 2009 and the Affordable Care Act of 2010, which provided that beginning in fiscal year (FY) 2015, the reduction would be by one-quarter of such applicable annual payment rate update if all Hospital Inpatient Quality Reporting Program requirements are not met.

Under the Hospital Inpatient Quality Reporting Program, CMS collects quality data from hospitals paid under the Inpatient Prospective Payment System, with the goal of driving quality improvement through measurement and transparency by publicly displaying data to help consumers make more informed decisions about their health care. It is also intended to encourage hospitals and clinicians to improve the quality and cost of inpatient care provided to all patients. The data collected through the program are available to consumers and providers on the Hospital Compare website at: <https://www.medicare.gov/hospitalcompare/search.html>. Data for selected measures are also used for paying a portion of hospitals based on the quality and efficiency of care, including the Hospital Value-Based Purchasing Program, Hospital-Acquired Condition Reduction Program, and Hospital Readmissions Reduction Program.

The Joint Commission Quality Initiative

In 1987, The Joint Commission announced its *Agenda for Change*, which outlined a series of major steps designed to modernize the accreditation process. A key component of the *Agenda for Change* was the eventual introduction of standardized performance measures into the accreditation process. As the vision to integrate performance measurement into accreditation became more focused, the name ORYX® was chosen for the entire initiative. ORYX® is The Joint Commission's performance measurement and improvement initiative, which integrates outcomes and other performance measure data into the accreditation process.

The ORYX® initiative became operational in March of 1999, when performance measurement systems began transmitting data to The Joint Commission on behalf of accredited hospitals. ORYX® measurement requirements are intended to support Joint Commission accredited organizations in their quality improvement efforts.

The initial phase of the ORYX® initiative provided healthcare organizations a great degree of flexibility in terms of the measures that could be reported. Over time, the ORYX® measures have evolved into standardized valid, reliable, and evidence-based quality measures.

The initial CMS/Joint Commission alignment efforts addressed chart-abstracted measures and subsequently both organizations have worked on aligning as closely as possible the electronic clinical quality measures (eCQMs).

Related Joint Commission Activities

Accreditation Process

In January 2000, Joint Commission surveyors began using organization-specific ORYX® *Pre-Survey Reports*, effectively commencing the use of performance measure data in the survey process.

In 2004, the survey process was substantially modified to be more data-driven and patient-centered thus enhancing its value, relevance, and credibility. Many of the key components of the survey process utilize data derived from the national hospital inpatient quality measures. The survey process now has a greater focus on evaluating actual care processes because patients are traced through the care, treatment and/or services they receive. In addition, surveyors conduct "systems tracers" to analyze key operational systems that directly impact the quality and safety of patient care.

In June 2010, The Joint Commission categorized its process performance measures into accountability and non-accountability measures. This approach placed more emphasis on an organization's performance on accountability measures – quality measures that meet four criteria designed to identify measures that produce the greatest positive impact on patient outcomes when hospitals demonstrate improvement:

Research: Strong scientific evidence demonstrates that performing the evidence-based care process improves health outcomes (either directly or by reducing risk of adverse outcomes).

Proximity: Performing the care process is closely connected to the patient outcome; there are relatively few clinical processes that occur after the one that is measured and before the improved outcome occurs.

Accuracy: The measure accurately assesses whether or not the care process has actually been provided. That is, the measure should be capable of indicating whether the process has been delivered with sufficient effectiveness to make improved outcomes likely.

Adverse Effects: Implementing the measure has little or no chance of inducing unintended adverse consequences.

Data Analysis by The Joint Commission

The Joint Commission has developed a target measure range approach (target analysis) as a basis to evaluate Joint Commission accredited organizations' rating for the performance measures.

The use of target analysis in addition to a control chart is a key feature of the Joint Commission's analytic methods in the ORYX® initiative. The two analyses are alike in that an organization's actual (or observed) performance level is evaluated against a comparative norm but are fundamentally different as to how such a norm is established. In control chart analysis, the norm is determined from an organization's own historic data so that one may assess the organization's internal process stability. In target analysis, the norm is obtained based on multiple organizations' performance data to evaluate an organization's relative performance level. Therefore, the two analyses evaluate an organization's performance in two distinct perspectives and, as a result, can provide a more comprehensive framework to assess an organization's overall performance level.

ORYX® Performance Measure Report

The ORYX® Performance Measure Report, available quarterly, is designed to support and help guide Joint Commission-accredited hospitals in their performance assessment and improvement activities through the use of summary dashboards and comprehensive measure details depicting the organization's performance on each measure for which The Joint Commission receives data from the organization. Joint Commission surveyors receive an identical copy of the report prior to an onsite survey. Surveyors use the report as a guide to understand how the organization uses and responds to performance measure data.

Quality Check®

Quality Check is a directory of the more than 20,000 Joint Commission–accredited and certified health care organizations and programs throughout the United States. The Joint Commission Quality Report differentiates health care organizations based on accreditation decision categories and other related information. While the accreditation decision reflects the process for assessing an organization's commitment to achieving continuous improvement in key areas of safety and quality, the Quality Report also reflects information about a hospital's performance on National Patient Safety Goals, National Quality Improvement Goals for those hospitals reporting ORYX® chart

abstracted performance measure data through a vendor, as well as certain special recognitions and achievements.

Quality Check displays hospital performance on the National Quality Improvement Goal using individual measures which are updated quarterly, for the most recent rolling four quarters (12 months) of chart-abstracted data. Hospital performance at the individual measure level is displayed. The display includes that hospital's observed rate of performance on each reported chart-abstracted measure through the use of various comparative symbols (plus, minus, check, or star), a display of the hospital's performance against a target range of performance established using data received from all hospitals reporting on each measure, and a comparison of the hospital's performance on each measure both on a nationwide and statewide level.

Quality Check® can be accessed at <http://www.qualitycheck.org> to search for healthcare organizations by name, type, and/or location. Interactive links to information are designed to help individuals better understand how to use and interpret the information presented.

Annual Report

Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety has been released annually since 2008. This comprehensive report summarizes the performance of all Joint Commission-accredited hospitals on ORYX® accountability measures.

Pioneers in Quality

Pioneers in Quality™ is a Joint Commission program started in 2016 to assist hospitals on their journey toward electronic clinical quality measure (eCQM) adoption and reporting. Hospitals collect eCQM information through electronic health records (EHRs) and transmit the data to The Joint Commission (as part of its ORYX® performance measurement requirements) and to the Centers for Medicare & Medicaid Services (CMS).

The Pioneers in Quality™ program provides resources to aid hospitals in the transition from chart-abstracted measures to eCQMs. Key components of the Pioneers in Quality™ program include regular educational webinars focused on eCQM adoption, Expert-to-Expert series webinars, a comprehensive eCQM resource portal and recognition for eCQM pioneers in *America's Hospitals: Improving Quality and Safety – The Joint Commission's Annual Report*.

Direct Data Submission Platform

The Joint Commission began accepting direct data submission of electronic clinical quality measure (eCQM) data from hospitals with the submission of calendar year (CY) 2017 eCQM data. The Direct Data Submission Platform enables an ORYX eCQM process that simplifies operations and reduces the burden for our accredited hospitals while ensuring regulatory compliance and security.

Related National Activities

National Quality Forum

The NQF has approved a set of national voluntary consensus standards for measuring the quality of hospital care. These measures will permit consumers, providers, purchasers, and quality improvement professionals to evaluate and compare the quality of care in general acute care hospitals across the nation using a standard set of measures.

National Quality Measures Clearinghouse

The National Quality Measures Clearinghouse (NQMC™), sponsored by AHRQ, U.S. Department of HHS, has included both CMS and Joint Commission measures in its public database for evidence-based quality measures and measure sets. NQMC is sponsored by AHRQ to promote widespread access to quality measures by the healthcare community and other interested individuals.

Measures Management System

The Measures Management System (MMS) is a set of processes and decision criteria used by CMS to oversee the development, implementation, and maintenance of healthcare quality measures. CMS recognizes the need for quality measures of the highest caliber, maintained throughout their life cycle to ensure they retain the highest level of scientific soundness, importance, feasibility, and usability. Through the use of a standardized process with broadly recognized criteria, the Measures Management System ensures that CMS will have a coherent, transparent system for measuring quality of care delivered to its beneficiaries.

Hospital Value-Based Purchasing Program

Congress authorized the Inpatient Hospital VBP in Section 3001(a) of the Affordable Care Act. The program uses the hospital quality data reporting infrastructure that was developed for the Hospital Inpatient Quality Reporting (IQR) Program.

The Hospital Value-Based Purchasing (VBP) program is part of CMS's ongoing effort to structure Medicare's payment system to reward providers for the quality of care they provide. This program adjusts payments to hospitals under the Inpatient Prospective Payment System (IPPS), based on the quality of care they deliver not just the quantity of services they provide. How hospitals perform on quality and resource use measures is linked to the IPPS. The IPPS makes up the largest share of Medicare spending, affecting payment for inpatient stays in approximately 3,000 hospitals across the country.

The Hospital VBP Program is funded by reducing participating hospitals' base operating Medicare severity diagnosis-related group (MS-DRG) payments by 2%. Any leftover funds are redistributed to hospitals based on their Total Performance Scores (TPS). What hospitals earn depends on the range and distribution of all eligible/participating hospitals' TPS scores for a FY. It's possible for a hospital to earn back a value-based incentive payment percentage that is less than, equal to, or more than the applicable reduction for that FY.

The Hospital VBP Program is designed to promote better clinical outcomes for hospital patients, as well as improve their experience of care during hospital stays. Specifically, Hospital VBP seeks to encourage hospitals to improve the quality and safety of care that Medicare beneficiaries and all patients receive during acute-care inpatient stays by:

- Eliminating or reducing the occurrence of adverse events (healthcare errors resulting in patient harm).
- Adopting evidence-based care standards and protocols that result in the best outcomes for the most patients.
- Re-engineering hospital processes that improve patients' experience of care.
- Increasing the transparency of care for consumers.
- Recognizing hospitals that are involved in the provision of high-quality care at a lower cost to Medicare.

Electronic Clinical Quality Measures (eCQMs) Overview

Effective CY 2016, hospitals are required to electronically report clinical quality measures as a portion of the Hospital Inpatient Quality Reporting (IQR) and the Medicare EHR Incentive Programs. These quality measures were developed specifically to allow an electronic health record (EHR) system certified to the Office of the National Coordinator (ONC) standards to capture, export, calculate, and report the measure data. The CQMs required for reporting are electronically specified, using industry standards for the measure logic (Health Quality Measures Format [HQMF]) and the data transmission (Quality Reporting Document Architecture [QRDA]: Category I – patient-level data). As the industry updates these standards, CMS and ONC expect to reflect those updates in their respective requirements.

Hospitals that successfully submit eCQM data to meet Hospital IQR Program requirements will also fulfill the Medicare EHR Incentive Program requirement for electronic reporting of CQMs with one submission. Eligible hospitals (EHs) are required to report eCQMs to the Hospital IQR Program. EHs and Critical Access Hospitals (CAHs) are required to electronically report to the Medicare EHR Incentive Program.

HACRP

Section 3008 of the Affordable Care Act established the Hospital-Acquired Condition (HAC) Reduction Program to encourage hospitals to reduce HACs. Beginning with Federal Fiscal Year (FY) 2015 discharges (i.e., beginning on October 1, 2014), the HAC Reduction Program requires the Secretary of Health and Human Services (HHS) to adjust payments to hospitals that rank in the worst-performing 25 percent of all subsection (d) hospitals with respect to HAC quality measures. As set forth in the Affordable Care Act, the Centers for Medicare & Medicaid Services (CMS) may reduce these hospitals' payments by one percent. CMS will publicly report hospitals' measure scores, domain scores, and HAC Reduction Program data.

CMS identifies the worst-performing quartile of hospitals by calculating a Total HAC Score. CMS derives the Total HAC Score from measures in two domains:

Domain 1 – Recalibrated PSI 90 Composite: Patient Safety and Adverse Events Composite (modified PSI 90 Composite):

- Patient Safety and Adverse Events Composite

Domain 2 - Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) Healthcare-Associated Infection (HAI) measures:

- Central Line-Associated Bloodstream Infection (CLABSI)
- Catheter-Associated Urinary Tract Infection (CAUTI)
- Surgical Site Infection (SSI) – colon and hysterectomy
- Methicillin-resistant Staphylococcus aureus (MRSA) bacteremia
- Clostridium difficile Infection (CDI)

HRRP

Section 3025 of the 2010 Affordable Care Act (Public Law 111-148) requires the Secretary of the Department of Health and Human Services (HHS) to establish the Hospital Readmissions Reduction Program (HRRP). Beginning with Fiscal Year (FY) 2013, the legislation mandates the Secretary reduce Inpatient Prospective Payment System (IPPS) payments to hospitals for excess readmissions on or after October 1, 2012.

HRRP provides a strong financial incentive for hospitals that improve communication and care coordination efforts, and better engage patients and caregivers in post-discharge planning. As of FY 2018, the Hospital Readmissions Reduction Program calculates Excess Readmission Ratios (ERR) for six measures (i.e., AMI, HF, Pneumonia, COPD, CABG, and THA/TKA) to determine the payment adjustment factors for eligible hospitals. CMS calculates an ERR for each of the measures and uses the ERRs to determine payment adjustment. CMS calculates the payment adjustment factor from historical data for Medicare fee-for-service (FFS) patients discharged with one or more conditions specified under the program. CMS will report the ERRs for the risk-standardized readmission measures for HRRP on Hospital Compare.

Using the Specifications Manual for National Hospital Inpatient Quality Measures

The *Specifications Manual for National Hospital Inpatient Quality Measures* is periodically updated for a specific data collection time period (i.e., based on hospital discharge dates) with a Version number and Effective Discharges date (e.g., Version 2.3, Effective 10/01/2007 Discharges) associated with each applicable manual. Over time, it may be necessary to present more than one version of a specific data collection time period due to corrections or clarifications based on ongoing alignment discussion between the Centers for Medicare & Medicaid Services and the Joint Commission. When more than one version of the manual is posted for a specific discharge period, an alpha character is added following the version number to identify there were corrections or clarifications made to the previous release and this would identify the most up-to-date information.

This portion of *The Specifications Manual* provides a brief overview of the information contained within each section of the manual. It is intended for use as a quick reference to assist in the implementation of the hospital national quality measures. The sections of this manual are interrelated and are most useful when considered together.

For each version of the manual and any addenda, it is necessary to review the Release Notes document for a detailed description of the changes that were made to *The Specifications Manual*. Information that is removed from documents is only contained in the Release Notes. Strikethroughs are difficult to read and are not allowed because of the requirements for accommodation for people with disabilities. Information that is added or revised within documents is contained within the Release Notes.

The initial selection of medical records, intended for data abstraction of the National Hospital Quality Inpatient Measures, must meet the following criteria:

- All units/areas of the hospital licensed under the hospitals acute CMS Certification Number (CCN). The acute CCN is identified by a 3rd digit of “0” for IPPS hospitals and a 3rd & 4th digit of “13” for Critical Access Hospitals.
- All inpatient episodes of care billed under the hospitals acute CCN
- All payor sources

For measure set specific Initial Patient Populations, refer to Section 2 (“Measurement Information”) and Section 4 (“Population and Sampling Specifications”) of this manual.

Section 1 - Data Dictionary

The Data Dictionary describes the patient-level data elements required to capture and calculate individual measurements. It specifies those data elements that must be collected for each patient that falls into any of the selected Initial Patient Populations and those data elements needed for a specific measure set.

Section 2 - Measurement Information

The measure information section is divided by measure sets. At the beginning of each set is a listing of the measures comprising the set, including the set measure identification number (alphanumeric number to identify a measure within a set) and the measure short name. This is followed by a data element list for the measure set, including the general data elements, algorithm output data elements, and the specific measure set data elements. Next is a document that describes the Initial Patient Population and the sample size requirements for each measure set. Also included are subsections for each specific measure. These contain a Measure Information Form (MIF) and the Performance Measure Algorithm.

The algorithms and data elements needed to calculate each of the national quality inpatient measures are identified in the MIF. Each algorithm provides the logical steps, data element evaluation, arithmetic calculations, and data manipulation steps that are required to calculate a given measure. In addition, a narrative of the algorithm is included for accommodation for people with disabilities.

Measures listed in this section are known as Chart-Abstracted Measures. Chart abstraction is the review of medical record documentation from the current episode of care for the purposes of data collection and submission.

Section 3 - Missing and Invalid Data

This section addresses CMS's and the Joint Commission's approach to missing and invalid data. Missing data refers to data elements that have no values present for one or more episodes of care and invalid data refers to data element values that fall outside the range of the allowable values. Information and examples are provided on how the "Unable to Determine" (UTD) value is utilized within the measure algorithm and on submission into the CMS Clinical Warehouse and the Joint Commission's Data Warehouse. This section also describes the general and measure specific data elements that are required for submission and how missing and/or invalid data will be handled.

Section 4 - Population and Sampling Specifications

Sampling is an available option for all national hospital quality inpatient measures if certain requirements are met. This section provides general guidance on defining the hospital's Initial Patient Population and information and examples on the order of data flow, sample size requirements, sampling approaches and the transmission of Initial Patient Population and sample data elements to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse. Specific measure set sample size requirements tables are located in the Measure Information section.

Section 5 – Reserved for Future Use

Section 6 – Reserved for Future Use

Section 7 – Reserved for Future Use

Section 8 – Reserved for Future Use

Section 9 – Data Transmission

This section of the manual is provided to highlight the unique data transmission specifications for national hospital quality inpatient measure data for The Joint Commission compared to CMS and the CMS Clinical Warehouse. This section is divided into five parts: Joint Commission Data Transmission, CMS Data Transmission, Guidelines for Submission of Data, Transmission Alphabetical Data Dictionary, and Transmission Data Processing Flows.

The Joint Commission section provides information related to the transmission of national hospital quality inpatient measure data to The Joint Commission. The CMS Transmission section provides the data standards required for submission to the CMS Clinical Warehouse. The Guidelines for Submission of Data include an overview of the data required to be submitted to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse, as well as the Hospital Clinical Data XML file layout and the Hospital Initial Patient Population Data XML file layout.

The Transmission Alphabetical Data Dictionary describes the data elements that are either used to identify the hospital and measure set associated to the transmitted data or are calculated by the vendor using the hospital's patient-level data and measure results. These data elements are not used in the Initial Patient Population Algorithms or Measure Algorithms.

The Transmission Data Processing Flows contain information regarding the order in which both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse evaluate the national hospital quality inpatient measures and the population and sampling data. In addition, it highlights the processing differences between the two warehouses.

Section 10 – CMS Outcome Measures (Claims Based)

This section of the manual provides an overview of the claims-based, Healthcare-Associated Infections (HAI), and web-based measures collected for the Hospital Inpatient Quality Reporting (IQR) Program. In addition, this section provides links to where resources for these measures can be found and where questions should be directed.

Appendix A – ICD-10 Code Tables

For many of the measures, eligibility for inclusion or exclusion in the Initial Patient Population of interest is defined by the presence of certain ICD-10-CM diagnosis and ICD-10-PCS procedure codes within the patient-level record. Appendix A contains the ICD-10 code tables that define these indicator populations for all measures within each measure set. This includes a description of the code as defined in a coding manual and a shortened description that may be used in a data abstraction tool.

The Measure Information Section also refers to the codes or tables provided in this section. ICD-10 codes are modified by the National Center for Health Statistics (NCHS) and the Centers for Medicare & Medicaid Services (CMS). The code tables in this Appendix are evaluated semiannually and modified based on these changes. Potential changes become effective beginning with either April 1st or October 1st discharges. Updates will be provided as indicated.

Appendix B – Reserved for Future Use

Appendix C – Medication Tables

Several of the national quality inpatient measures address the use and timing of certain medications. This Appendix contains tables with the specific names that may be associated with medication categories (e.g., trade names). These tables are provided to facilitate appropriate data collection of applicable medications. These tables are not meant to be an inclusive list of all available therapeutic agents; rather they represent current information available at the time of publication. Discrepancies must be reported. See the Resource Section of this manual for contact information.

Appendix D – Glossary of Terms

Appendix E – Overview of Measure Information Form and Flowchart Formats

Each measure has an associated Measure Information Form and Flowchart (calculation algorithm). This Appendix explains each of the terms used on the Measure Information Form and provides a brief introduction to flowcharting, including an explanation of flowchart symbols.

Appendix F – Measure Name Crosswalk

This appendix identifies where there are differences between the measure names as published within *The Specifications Manual* as compared with measure names contained within the published Federal Register Inpatient Prospective Payment System (IPPS) and Outpatient Prospective Payment System (OPPS) proposed and final rules.

Appendix G – Resources

This appendix contains available resources to those using this manual.

Appendix H – Miscellaneous Tables

The tables in this Appendix contain clinical information to supplement the data element dictionary and provide additional details for data abstraction. They are referenced under the data dictionary under the Notes for Abstraction or the Guidelines for Abstraction. For example, the VTE Prophylaxis Inclusion Table is used to supplement abstraction guidelines for the data element *VTE Prophylaxis Status*.

Appendix P – Preview Section

The preview section is intended to provide an overview of future updates. The information provided in this section **is not** to be programmed or submitted. Placement in this appendix does not assume that the information listed will be implemented in a future manual.

Introduction to the Data Dictionary

Introduction

This section of the manual describes the data elements required to calculate category assignments and measurements for the national quality inpatient measures. It includes information necessary for defining and formatting the data elements, as well as the allowable values for each data element. This information is intended to assist in processing patient level data elements for national quality inpatient measures.

It is of primary importance that all hospitals using national quality inpatient measures gather and utilize the data elements as defined in this section. This will ensure that the data are standardized and comparable across hospitals.

Regardless of which measure sets are selected by a hospital, certain general data elements must be collected by the hospital and submitted for **every** patient that falls into **any** of the selected Initial Patient Populations. These data elements are considered “general” to each patient’s episode of care.

These data elements include:

- *Admission Date*
- *Birthdate*
- *CMS Certification Number*
- *Discharge Date*
- *Health Care Organization Identifier*
- *Hispanic Ethnicity*
- *ICD-10-CM Other Diagnosis Codes*
- *ICD-10-PCS Other Procedure Codes*
- *ICD-10-PCS Other Procedure Dates*
- *ICD-10-CM Principal Diagnosis Code*
- *ICD-10-PCS Principal Procedure Code*
- *ICD-10-PCS Principal Procedure Date*
- *Measure Set*
- *National Provider Identifier*
- *Patient Identifier*
- *Payment Source*
- *Performance Measure Identifier*
- *Postal Code*
- *Race*
- *Sample*
- *Sex*
- *Vendor Tracking Identifier*

Episode of Care

An Episode of Care (EOC) is defined as the health care services given during a certain period of time, usually during a hospital stay (e.g., from the day of arrival or admission to the day of discharge). The medical record should be abstracted as it was billed. In the event that there are multiple ED visits within the inpatient medical record, for the same episode of care, it is recommended that the ED visit resulting in the admission to observation or inpatient status be utilized for the purposes of abstraction.

If a patient is transferred from an acute care hospital to another acute care hospital, which is within the same healthcare system and share the same CMS Certification Number (CCN), this should be abstracted as one episode of care.

Data Integrity

Editing Zero Values

Verification mechanisms are necessary to assure that zero is the intended data value rather than an initialization value for those data elements which have an allowable value of zero (i.e., 0.0, 0000, 0).

Missing and Invalid Data

Each data element that is applicable per the algorithm for each of the measures within a measure set must be “touched” by the abstractor. While this is the expectation, it is recognized that in certain situations information may not be available (e.g., dates, times, codes, etc.). After due diligence in reviewing all allowable data sources within the medical record, if the abstractor determines that a value is not documented, i.e. “missing,” or is unable to determine if a value is documented, the abstractor should select the “UTD - Unable to Determine,” value. The data elements *Admission Date*, *Discharge Date*, and *Birthdate* require an actual date for submission into the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse, and “UTD” cannot be selected as an allowable value. For Yes/No values the allowable value “No” incorporates the “UTD” into the definition. For data elements containing more than two categorical values and for numerical data elements (i.e., dates, times, laboratory values, etc.), a “UTD” option is included as an allowable value and is classified in the same category as not documented. Files that contain any invalid and/or missing data will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. For additional details on the proper handling of missing and/or invalid data, please refer to the Missing and Invalid Data section of this manual.

Interpretation of Data Dictionary Terms

Data elements fall into four broad categories in order to support a specific measure set. They include:

- *General Data Elements* – data elements that must be collected by hospitals for each patient record
 - data elements required for each episode of care (EOC) record submitted
 - data elements used to identify the hospital on each patient record required for each patient-level record submitted
 - patient demographic data required for each episode of care record submitted and used for risk adjustment analysis (where applicable)
- *Measure Data Elements* – data elements used by one specific measure or several measures in two or more measure sets, such as *Discharge Disposition*

- *Measure Set-Specific Data Elements* – data elements used by one specific measure or several measures in one specific measure set, such as *Alcohol Use Status* in the SUB measures
- *Algorithm Output Data Elements* (The Joint Commission only)– Refer to ORYX® Technical guide

Data Element Dictionary Terms

| | |
|-------------------------------------|--|
| Data Element Name: | A short phrase identifying the data element. For ease of identification the data element name is <i>italicized</i> . |
| Collected For: | Identifies the measure(s) and whether CMS or The Joint Commission utilize this data element or specifies that the data element is used for data transmission or verification. |
| Definition: | A detailed explanation of the data element. A measurement system may include this information in data collection software. |
| Suggested Data Collection Question: | A suggested wording for a data element question in a data abstraction tool. |
| Format: | <p>Length = number of characters or digits allowed for the data element</p> <p>Type = type of information the data element contains (e.g., numeric, alphanumeric, date, character, or time)</p> <p>Occurs = the number of times the data element occurs in a single episode of care record</p> |
| Allowable Values: | A list of acceptable responses for this data element. |
| Notes for Abstraction: | Provided to assist abstractor in the selection of appropriate value for a data element. |
| Suggested Data Sources: | Source document from which data may be identified such as administrative or medical record. |
| Guidelines for Abstraction: | <p>Designed to assist abstractors in determining how a data element should be answered.</p> <p>Note: Element specific notes and guidelines should take precedence over the General Abstraction Guidelines.</p> |

General Abstraction Guidelines

The General Abstraction Guidelines are a resource designed to assist abstractors in determining how a question should be answered. The abstractor should first refer to the specific notes and guidelines under each data element. These instructions should take precedence over the following General Abstraction Guidelines. All of the allowable values for a given data element are outlined, and notes and guidelines are often included which provide the necessary direction for abstracting a data element. It is important to utilize the information found in the notes and guidelines when entering or selecting the most appropriate answer.

Medical Record Documentation

The intent of abstraction is to use only documentation that was part of the medical record during the hospitalization (is present upon discharge) and that is present at the time of abstraction. There are instances where an addendum or late entry is added after discharge. This late entry or addendum can be used, for abstraction purposes, as long as it has been added within 30 days of discharge, [Refer to the Medicare Conditions of Participation for Medical Records, 42CFR482.24(b)/42CFR482.24(c)(4)(viii)], unless otherwise specified in the data element. Documents containing amendments, corrections, or delayed entries must employ the following widely accepted recordkeeping principles (CMS “Medicare Program Integrity Manual” Chapter 3, Section 3.3.2.4):

- Clearly and permanently identify any amendments, corrections or addenda;
- Clearly indicate the date and author of any amendments, corrections, or addenda; and
- Clearly identify all original content.

It is not the intent to have documentation added at the time of abstraction to ensure the passing of a measure.

Important Note: There are several data elements where abstraction of data from documentation dated/timed after discharge is restricted, and these exceptions are published on the respective data element pages of the data dictionary. Data element specific notes and guidelines always take precedence over the General Abstraction Guidelines.

Per the Medicare Conditions of Participation, all documentation in the medical record must be legible and must be timed, dated and authenticated [42CFR482.24(c)(1)]. However, documentation that is not timed, dated, or authenticated may still be used for abstraction if not required by the specific data element. When abstracting a medical record, if a handwritten document is determined to be not legible, other documentation should be reviewed in an attempt to obtain the answer. If no other source document is able to verify the handwritten documentation, only then is the abstractor to answer unable to determine from the medical record documentation, unless otherwise specified in the data element. Authentication may include written signatures, initials, computer key, or other codes.

Data element information should be retrieved from the current medical record, covering the admission and discharge date being abstracted. Information ascertainable from previous testing (e.g., left ventricular ejection fraction) or previous history (e.g., reason for not administering a medication) AND determined to be part of the current medical

record may be used in abstraction. As electronic data are available at all times during the hospitalization, it is acceptable to use this data for abstraction purposes. For example, if the patient had a previous left ventricular function assessment and this information is available in the current chart being abstracted (e.g., a note made in the progress notes, a previous echo report, or an electronic document), this information should be used.

The medical record must be abstracted as documented (taken at “face value”). When the value documented is obviously in error (not a valid format/range or outside of the parameters for the data element) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *ED Departure Time* was 3300. No other documentation in the medical record provides a valid time. Since the *ED Departure Time* is outside of the range listed in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD.”
- Patient expires on 02-12-20XX and documentation indicates the *Septic Shock Presentation Date* was 03-12-20XX. Other documentation in the medical record supports the date of death as being accurate. Since the *Septic Shock Presentation Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select “UTD.”

Please note that hospitals that are selected for validation will need to provide a paper or electronic (i.e. CD, DVD, or thumb drive) copy of the current medical record in its entirety, including all previous testing or history documents used in abstraction. If a hospital uses electronic data for abstraction and is unable to provide a paper or electronic copy of these data, and the record is chosen for validation, there is the potential for a mismatch to occur.

Note: Hospitals should use abbreviations according to their policy. Frequently flow sheets or other documentation contain a ‘key or legend’ that explains what the abbreviation or symbol stands for, especially if unique to that facility. If the record is selected for validation, it is not necessary to send your policy.

Suggested Data Sources

- Unless otherwise specified in the data element, the Suggested Data Sources are listed in alphabetical order, NOT priority order.
- Suggested Data Sources are designed to provide guidance to the abstractor as to the locations/sources where the information needed to abstract a data element will likely be found. However, the abstractor is not limited to these sources for abstracting the information and must review the entire medical record unless otherwise specified in the data element.
- In some instances, a data element may restrict the sources that may be used to gain the information, list a priority in which the sources should be used or may restrict documentation by only physician/advanced practice nurse/physician assistant. If so, these sources will be identified and labeled as “Excluded Data Sources,” “ONLY ACCEPTABLE SOURCES,” “Priority Source,” or “PHYSICIAN/APN/PA DOCUMENTATION ONLY.”

- If, after due diligence, the abstractor determines that a value is not documented or is not able to determine the answer value, the abstractor must select “Unable to Determine (UTD)” as the answer.
- Hospitals often label forms and reports with unique names or titles. Suggested Data Sources are listed by commonly used titles; however, information may be abstracted from any source that is equivalent to those listed.
Example: If the “nursing admission assessment” is listed as a suggested source, an acceptable alternative might be titled “nurses initial assessment” or “nursing data base.”

Note:

Element specific notes and guidelines should take precedence over the General Abstraction Guidelines.

Inclusions/Exclusions

- Inclusions are “acceptable terms” that should be abstracted as ***positive findings*** (e.g., “Yes”).
- Inclusion lists are limited to those terms that are believed to be most commonly used in medical record documentation. **The list of inclusions should not be considered all-inclusive, unless otherwise specified in the data element.**
- Exclusions are “unacceptable terms” that should be abstracted as ***negative findings*** (e.g., “No”).
- Exclusion lists are limited to those terms an abstractor may most frequently question whether or not to abstract as a positive finding for a particular element (e.g., “cardiomyopathy” is an unacceptable term for heart failure and should be abstracted as “No”). **The list of exclusions should not be considered all-inclusive, unless otherwise specified in the data element.**
- When both an inclusion and exclusion are documented in a medical record, the inclusion takes precedence over the exclusion and would be abstracted as a positive finding (e.g., answer “Yes”), unless otherwise specified in the data element.

Physician/Advanced Practice Nurse/ Physician Assistant Documentation

- Advanced Practice Nurse (APN, APRN) titles may vary between state and clinical specialties. Some common titles that represent the advanced practice nurse role are:
 - Nurse Practitioner (NP)
 - Certified Registered Nurse Anesthetist (CRNA)
 - Clinical Nurse Specialist (CNS)
 - Certified Nurse Midwife (CNM)
- When a physician/advanced practice nurse/physician assistant (physician/APN/PA) signs a form or report (e.g., ED sheet with triage and nursing information and a physician/APN/PA has signed somewhere on the form), information on that form/report should be considered physician/APN/PA documentation.
- “Rubber” stamped physician/advanced practice nurse/physician assistant (physician/APN/PA) signatures are not acceptable on any document within the medical record. Handwritten, electronic signatures or facsimiles of original written or electronic signatures are acceptable.

- Resident and intern notes should be considered physician documentation. Medical student notes must be co-signed by a physician.
- For purposes of abstraction, telephone or verbal physician/APN/PA orders (TO/VO) in the medical record are considered physician/APN/PA documentation at the time they were written regardless of whether or not they were authenticated by the physician/APN/PA at the time of abstraction.

Pharmacist Documentation

Pharmacist titles may vary. Some common titles that represent the pharmacist role are:

- Doctor of Pharmacy (Pharm.D. or D.Ph.)
- Registered Pharmacist (R.Ph.)

Medications

- The approved medication tables contained in the dictionaries may not be inclusive lists of all available therapeutic agents acceptable for a particular data element. Discrepancies must be reported. See Appendix G (resource section) of this manual for contact information.
- Whether or not a medication has been administered to a patient is often clear when using medical record sources such as medication administration records, but documentation can be more ambiguous in other sources, namely, physician orders, ED records, and ambulance records. To make a determination using these sources, use the following criteria:
 - For EHRs, only accept documentation that reflects the actual administration of the medication in the context of the chart.
 - If a medication in the physician orders has been initialed and signed off with a time, do NOT presume that the medication was administered. The documentation MUST indicate that the medication was actually given.
 - For an ED or ambulance record, there is no need for documentation indicating that the medication was actually given.
Example:
If the ED or ambulance record reflects “ASA 325mg po 13:00” and no other documentation exists indicating that the medication was actually given (e.g., “given” or “administered”), this is acceptable documentation to abstract.
- When determining whether or not a patient was discharged on a specific medication (e.g., a beta-blocker):
 - If discharge medications are noted using **only** references such as “continue home meds,” “continue previous medications,” “resume other meds,” “same medications,” or “continue meds,” rather than lists of the names of the discharge medications, the abstractor should select “Yes” if the patient was on the medication in question prior to arrival (or in the case of transfers from acute care hospitals, if the patient was on the medication in question prior to arrival at the first acute care hospital), unless documentation suggests otherwise.

- If discharge medications are noted using only references such as “continue current medications” or “continue present meds” rather than lists of the names of the discharge medications, the abstractor should select “Yes” if the medication in question was listed as a medication on the day of discharge, unless documentation indicates it was to be discontinued at discharge or suggests otherwise.
- If discharge medications are noted using general references such as “continue home meds,” “continue previous medications,” “continue current meds,” “continue present meds,” “resume other meds,” or “continue meds,” but a list of the names of the discharge medications also in the record gives conflicting information about what medications the patient was actually discharged on, the abstractor should consider the list most accurate and use only the list in determining whether or not a patient was discharged on a specific medication.
- Hospitals may allow a patient (or his or her caregiver/support person where appropriate) to self-administer both hospital-issued medications and the patient’s own medications brought into the hospital. Hospitals must document the administration of each medication, as reported by the patient (or the patient’s caregiver/support person where appropriate), in the patient’s medical record [42CFR482.23(c)(6)].

Nursing Care Plans, Standing Orders and Protocols

- Per Medicare Conditions of Participation [42CFR482.23(b)(4)] hospitals have the option of having a stand-alone nursing care plan or a single interdisciplinary care plan that addresses nursing and other disciplines.
- Hospitals may use pre-printed and electronic standing orders, order sets, and protocols for patient orders if such orders and protocols are dated, timed, and authenticated promptly in the patient’s medical record by the ordering practitioner responsible for the care of the patient [42CFR482.24(c)(3)].

Diagnostic/Laboratory Tests

Whether or not a diagnostic or laboratory test has been done is usually clear when using medical record sources such as diagnostic test reports, laboratory reports, or progress notes (where a physician might note test findings), but documentation can be more ambiguous in other sources, namely, physician orders and ED records. To make a determination using these sources, use the following criteria:

- If a test in the physician orders has been initialed and signed off with a time, do NOT presume that the test was done. The documentation MUST indicate that the test was actually done (e.g., accompanied by a word such as “done”).
- For an ED record, there is no need for explicit documentation indicating that the test was actually done. For example, if an ED record notes “Lactate Level,” and this is followed by a signature and/or a time, the abstractor should presume the test was performed.

Grids

Instructions for reading values recorded on grids: Measure from the midpoint of the symbol, number and letter. If the value falls between two lines on the grid, abstract the earliest value.

Alphabetical Data Dictionary

The General Abstraction Guidelines explain the different sections of the data element definitions and provide direction for common questions and issues that arise in medical record abstraction. Instructions in the specific data elements in this Data Dictionary should **ALWAYS** supersede those found in the General Abstraction Guidelines.

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Data Element Name: *Administrative Contraindication to Care, Septic Shock*

Collected For CMS: SEP-1

Definition: Documentation of refusal of blood draw, IV fluid administration, or vasopressor administration prior to or within 6 hours following presentation of septic shock.

Suggested Data Collection Question: Is there documentation that the patient or authorized patient advocate refused either a blood draw, IV fluid administration, or vasopressor administration prior to or within 6 hours following the *Septic Shock Presentation Time*?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) There is documentation by a physician/APN/PA or nurse that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or vasopressor administration prior to or within 6 hours following presentation of septic shock.
- 2 (No) There is no physician/APN/PA or nurse documentation that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or vasopressor administration prior to or within 6 hours following presentation of septic shock.

Notes for Abstraction:

- Only acceptable sources are physician/APN/PA or nursing documentation.
- Specific documentation indicating patient or authorized patient advocate has refused the following can be used to select Value “1.”
 - Blood draws
 - IV or IO fluid administration
 - Vasopressors
- A more general documentation of refusal of care (e.g. central line, PICC, IO access) or documentation of patient non-compliance with care (e.g., pulling out IV) that would result in the following not being administered within the specified time frame is acceptable.
 - Blood Draws
 - IV or IO fluid administration
 - Vasopressors
- For refusal of blood draws:
 - Documented refusal of blood draws is acceptable.
 - Refusal of specific blood draws or blood tests that do not impact the ability to meet the requirements of the SEP-1 measure data elements should not be used.

Examples:

Patient refused HIV blood test.

Patient refused arterial blood gas (ABG).

- An authorized patient advocate is someone (defined by facility policy) who is authorized to make decisions on behalf of the patient when the patient is not able to.
- If there is a signed AMA form or documentation by a physician/APN/PA or nurse indicating the patient left AMA prior to or within 6 hours following presentation of septic shock, select Value "1."
 - Explicit "left against medical advice" documentation is not required.

Example:

"Patient is refusing to stay for continued care" select Value "1."

- Documentation suggesting that the patient left before discharge instructions could be given does not count as leaving against medical advice.
- An AMA form signed by the patient is not required, for the purposes of this data element.
- Do not consider AMA documentation and other disposition documentation as "contradictory." If any source states the patient left against medical advice, select Value "1," regardless of whether the AMA documentation was written last.

Example:

AMA form signed and discharge instruction sheet states "Discharged home with belongings" select Value "1."

Suggested Data Sources:

- Consultation reports
- History and physical
- Nursing Notes
- Physician/APN/PA notes

Inclusion Guidelines for Abstraction:

- Declined
- Does not want
- Refused
- Requests not to be given

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Administrative Contraindication to Care, Severe Sepsis*

Collected For CMS: SEP-1

Definition: Documentation of refusal of blood draw, IV fluid administration, or IV antibiotic administration prior to or within 6 hours following presentation of severe sepsis.

Suggested Data Collection Question: Is there documentation that the patient or authorized patient advocate refused either a blood draw, IV fluid administration, or IV antibiotic administration prior to or within 6 hours following the *Severe Sepsis Presentation Time*?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) There is documentation by a physician/APN/PA or nurse that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or IV antibiotic administration prior to or within 6 hours following presentation of severe sepsis.
- 2 (No) There is no physician/APN/PA or nurse documentation that the patient or authorized patient advocate has refused either blood draw, IV fluid administration, or IV antibiotic administration prior to or within 6 hours following presentation of severe sepsis.

Notes for Abstraction:

- Only acceptable sources are physician/APN/PA or nursing documentation.
- Specific documentation indicating patient or authorized patient advocate has refused the following can be used to select Value “1.”
 - Blood draws
 - IV or IO fluid administration
 - IV or IO antibiotic
- A more general documentation of refusal of care **or documentation of patient non-compliance with care (e.g., pulling out IV)** that would result in the following not being administered **within the specified time frame** is acceptable.
 - Blood draws
 - IV or IO fluid administration
 - IV or IO antibiotic
- For refusal of blood draws:
 - Documented refusal of blood draws is acceptable.
 - Refusal of specific blood draws or blood tests that do not impact the ability to meet the requirements of the SEP-1 measure data elements should not be used.

Examples:

Patient refused HIV blood test.

Patient refused arterial blood gas (ABG).

- An authorized patient advocate is someone (defined by facility policy) who is authorized to make decisions on behalf of the patient when the patient is not able to.
- If there is a signed AMA form or documentation by a physician/APN/PA or nurse indicating the patient left AMA prior to or within 6 hours following presentation of severe sepsis, select Value "1."
 - Explicit "left against medical advice" documentation is not required.
 - Example:**
"Patient is refusing to stay for continued care" select Value "1."
 - Documentation suggesting that the patient left before discharge instructions could be given does not count as leaving against medical advice.
 - An AMA form signed by the patient is not required, for the purposes of this data element.
 - Do not consider AMA documentation and other disposition documentation as "contradictory." If any source states the patient left against medical advice, select Value "1," regardless of whether the AMA documentation was written last.
 - Example:**
AMA form signed and discharge instruction sheet states "Discharged home with belongings" select Value "1."

Suggested Data Sources:

- Consultation reports
- History and physical
- Nursing Notes
- Physician/APN/PA notes

Inclusion Guidelines for Abstraction:

- Declined
- Does not want
- Refused
- Requests not to be given

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Admission Date*

Collected For CMS/The Joint Commission: All Records

Definition: The month, day, and year of admission to acute inpatient care.

Suggested Data Collection Question: What is the date the patient was admitted to acute inpatient care?

Format:

Length: 10 – MM-DD-YYYY (includes dashes)

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

Note: For CMS, only dates that are equal to or less than 120 days from the *Discharge Date* will be accepted into the CMS Clinical Warehouse.

Refer to the Data Transmission section of this manual for further guidance related to data transmission.

Notes for Abstraction:

- The intent of this data element is to determine the date that the patient was actually admitted to acute inpatient care. Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the admission date is correct. If the abstractor determines through chart review that the date from billing is incorrect, for purposes of abstraction, she/he should correct and override the downloaded value.
- If using claim information, the ‘Statement Covers Period’ is not synonymous with the ‘Admission Date’ and should not be used to abstract this data element. These are two distinctly different identifiers:
 - The Admission Date is purely the date the patient was admitted as an inpatient to the facility.
 - The Statement Covers Period (“From” and “Through” dates) identifies the span of service dates included in a particular claim. The “From” Date is the earliest date of service on the claim.
- For patients who are admitted to Observation status and subsequently admitted to acute inpatient care, abstract the date that the determination was made to admit to acute inpatient care and the order was written. Do not abstract the date that the patient was admitted to Observation.

Example:

Medical record documentation reflects that the patient was admitted to observation on 04-05-20xx. On 04-06-20xx the physician writes an order to admit to acute inpatient effective 04-05-20xx. The *Admission Date* would be abstracted as 04-06-20xx; the date the determination was made to admit to acute inpatient care and the order was written.

- The admission date should not be abstracted from the earliest admission order without regards to substantiating documentation. If documentation suggests that the earliest admission order does not reflect the date the patient was admitted to inpatient care, this date should not be used.

Example:

Preoperative Orders are dated as 04-06-20xx with an order to admit to Inpatient. Postoperative Orders dated 05-01-20xx, state to admit to acute inpatient. All other documentation supports that the patient presented to the hospital for surgery on 05-01-20xx. The *Admission Date* would be abstracted as 05-01-20xx.

- If there are multiple inpatient orders, use the order that most accurately reflects the date that the patient was admitted.
- For newborns that are born within this hospital, the *Admission Date* would be the date the baby was born.

Suggested Data Sources:

Note: The physician order is the priority data source for this data element. If there is not a physician order in the medical record, use the other only allowable sources to determine the *Admission Date*.

ONLY ALLOWABLE SOURCES:

1. Physician orders
2. Face Sheet
3. UB-04

Excluded Data Sources:

UB-04 “From” and “Through” dates

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

- Admit to observation
- Arrival date

Data Element Name: *Alcohol Use Status*

Collected For The Joint Commission Only: All SUB Measures

Definition: Documentation of the adult patient's alcohol use status using a validated screening questionnaire for **unhealthy** alcohol use within the first day of admission (by end of Day 1). A validated screening questionnaire is an instrument that has been psychometrically tested for reliability (the ability of the instrument to produce consistent results), validity (the ability of the instrument to produce true results), and sensitivity (the probability of correctly identifying a patient with the condition). Validated screening questionnaires can be administered by pencil and paper, by computer or verbally. The screening questionnaire should be at a comprehension level or reading level appropriate for the patient population and in the appropriate language for non-English speaking patients.

An example of a validated questionnaire for alcohol screening is the 10 item Alcohol Use Disorder Identification Tests (AUDIT). The first three questions of the AUDIT, the AUDIT-C, ask about alcohol consumption, and can be used reliably and validly to identify unhealthy alcohol use. The four-item CAGE questionnaire is generally inappropriate for screening general populations, as it aims to identify only severely alcohol dependent patients.

Suggested Data Collection Question: What is the patient's alcohol use status?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The patient is screened with a validated tool within the first day of admission (by end of Day 1) and the score on the alcohol screen indicates no or low risk of alcohol related problems.
- 2 The patient was screened with a validated tool within the first day of admission (by end of Day 1) and the score on the alcohol screen indicates unhealthy alcohol use (moderate or high risk) benefiting from brief intervention.
- 3 The patient was screened with a non-validated tool within the first day of admission (by end of Day 1) and the score on the alcohol screen indicates no or low risk of alcohol related problems.
- 4 The patient was screened with a non-validated tool within the first day of admission (by end of Day 1) and the score on the alcohol screen indicates unhealthy alcohol use (moderate or high risk) benefiting from brief intervention.
- 5 The patient refused the screen for alcohol use within the first day of admission (by end of Day 1).

- 6 The patient was not screened for alcohol use within the first day of admission (by end of Day 1) or unable to determine from medical record documentation.
- 7 The patient was not screened for alcohol use within the first day of admission (by end of Day 1) because of cognitive impairment.

Notes for Abstraction:

- The alcohol use status screening must have occurred within the first day of admission (by end of Day 1). This includes the day of admission which is defined as Day 0 and the day after admission which is defined as Day 1.

EXCEPTION:
If the screening was performed within 3 days prior to admission, i.e., at the transferring facility, in another inpatient hospital unit, emergency department or observation unit, the screening documentation must be present in the current medical record.
- If patient has a blood alcohol test with a result of .08 g/dL or greater or the clinician documents the patient was acutely intoxicated per blood alcohol test results, select Value “2.”
 - The 0.08 limit is a blood alcohol concentration (BAC) reported in g/dL. If results are given in mg/dL, convert to g/dL by moving the decimal point 3 places to the left.

Examples:

 - A 100 mg/dL serum ethanol level is equivalent to a 0.10 g/dL BAC.
 - An 80 mg/dL serum ethanol level is equivalent to a 0.08 g/dL BAC.
- Screening may be done with a “validated” Single Alcohol Screening Question (SASQ) in order to identify those patients with no risk or low risk or who do not drink. Further screening should be done with a validated tool for those patients with a positive result to determine if there is need for a brief intervention.

Examples of SASQs include:

 - “On any single occasion during the past 3 months, have you had more than 5 drinks containing alcohol?” (“Yes” response is considered positive.)
 - “When was the last time you had more than X drinks in 1 day?” (X = 4 for women and 5 for men) (Within the last 3 months is considered positive.)
 - “How many times in the past year have you had X or more drinks in a day?” (X = 5 men and 4 women) (Response of >1 is considered positive.)
 - How often have you had 6 or more drinks on one occasion in the past year? (Ever in the past year considered positive.)
 - How often do you have X or more drinks on one occasion? (X = 4 for women and 5 for men) (Ever in the past year considered positive.)
- Refer to the Inclusion Guidelines for examples of commonly used validated screening tools; note that the CAGE, although a validated tool, is not recommended for this measure set.

- If there is documentation in the medical record indicating the patient drinks alcohol and conflicting documentation indicating the patient does not drink alcohol, select Value “6” since alcohol use status is unable to be determined.

EXCEPTION:

If there is documentation of a validated questionnaire for alcohol screening completed within the first day of admission, select the appropriate Value 1 or 2 regardless of conflicting documentation.

- When there is conflicting information in the record with regard to risk, for instance, the results from a validated screening tool are documented as both low AND moderate/high risk, select Value “2” indicating the highest risk.
- Cognition refers to mental activities associated with thinking, learning, and memory. Cognitive impairment for the purposes of this measure set is related to documentation that the patient cannot be screened for alcohol use due to the impairment (e.g., comatose, obtunded, confused, memory loss) within the first day of admission (by end of Day 1).
- If there is documentation within the first day of admission (by end of Day 1) that the patient was psychotic, symptoms of psychosis, e.g., hallucinating, non-communicative, catatonic, etc., must also be documented for the patient to be considered cognitively impaired.
- If there is documentation to “rule out” a condition/diagnosis related to cognitive impairment, Value “7” cannot be selected unless there is documentation of symptoms.

Examples:

- Patient actively hallucinating, rule out psychosis. (Select Value “7”).
- Rule out psychosis. (Cannot select Value “7”).
- If there is documentation within the first day of admission (by end of Day 1) of any of the examples below, select Value “7” regardless of conflicting documentation.

Examples of cognitive impairment include:

- Altered Level of Consciousness (LOC)
- Altered Mental Status
- Cognitive impairment
- Cognitively impaired
- Cognitive impairment due to acute substance use, overdose, acute intoxication
- Confused
- Dementia
- Intubation
- Memory loss
- Mentally handicapped
- Obtunded
- Psychotic/psychosis with documented symptoms
- Sedation
- Documentation of cognitive impairment overrides documentation of an alcohol use screen and therefore would not be considered "conflicting documentation." Even if the family or others tell staff the patient uses alcohol, the patient could not be appropriately screened and subsequently counseled due to cognitive impairment. Select Value “7.”

Suggested Data Sources:

- Consultation notes
- Emergency Department record
- History and physical
- Nursing admission assessment
- Nursing admission notes
- Physician progress notes

Inclusion Guidelines for Abstraction:

Validated Screening Tools for Unhealthy Alcohol Use:

This list is not ALL Inclusive

- AUDIT
- AUDIT-C
- ASSIST
- CRAFFT
- G-MAST
- MAST
- TWEAK

Exclusion Guidelines for Abstraction:

Any tool which specifically screens for alcohol use disorder, alcohol dependency or alcohol abuse. Examples include, but are not limited to:

- CAGE
- SASSI
- S2BI

Data Element Name: *Arrival Date*

Collected For The Joint Commission Only: ED-1

Definition: The earliest documented month, day, and year the patient arrived at the hospital.

Suggested Data Collection Question: What was the **earliest** documented date the patient arrived at the hospital?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values: Enter the earliest documented date

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- If the date of arrival is unable to be determined from medical record documentation, select “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after the *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *Arrival Date* was 03-**42**-20xx. No other documentation in the list of Only Acceptable Sources provides a valid date. Since the *Arrival Date* is outside of the range listed in the Allowable Values for “Day,” it is not a valid date and the abstractor should select “UTD.”
- Patient expires on 02-12-20xx and all documentation within the Only Acceptable Sources indicates the *Arrival Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *Arrival Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *Arrival Date* allows the case to be accepted into the warehouse.

- Review the Only Acceptable Sources to determine the earliest date the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. The intent is to utilize any documentation which reflects processes that occurred after arrival at the ED or after arrival to the nursing floor/observation/cath lab for a direct admit.
- Documentation outside of the Only Acceptable Sources list should NOT be referenced (e.g., ambulance record, physician office record, H&P).

Examples:

- ED Triage Date/Time 03-22-20xx 2355. ED rhythm strip dated/timed 03-23-20xx 0030. EMS report indicates patient was receiving EMS care from 0005 through 0025 on 03-23-20xx. The EMS report is disregarded. Enter 03-22-20xx for *Arrival Date*.
 - ED noted arrival time of 0100 on 04-14-20xx. Lab report shows blood culture collected at 2345 on 04-13-20xx. It is not clear that the blood culture was collected in the ED because the lab report does not specify it was collected in the ED (unable to confirm lab report as an Only Acceptable Source). Enter 04-14-20xx for *Arrival Date*.
 - ED Triage Date/Time 06-18-20xx 0025. EMS report indicates patient arrived by ambulance on 06-17-20xx 2355. Patient routed directly to CT. The EMS report is disregarded. Enter 06-18-20xx for *Arrival Date*.
- Arrival date should NOT be abstracted simply as the earliest date in one of the Only Acceptable Sources, without regard to other substantiating documentation. When looking at the Only Acceptable Sources, if the earliest date documented appears to be an obvious error, this date should not be abstracted.

Examples:

- ED arrival time noted as 0030 on 10-29-20xx. ED MAR shows an antibiotic administration time of 0100 on 10-28-20xx. Surrounding documentation on the ED MAR makes clear that the 10-28-20xx date is an obvious error - Date was not changed to 10-29-20xx. The antibiotic administration date/time would be converted to 0100 on 10-29-20xx. Enter 10-29-20xx for *Arrival Date*.
- ED MAR shows an antibiotic administration time of 1430 on 11-03-20xx. All other dates in the ED record note 12-03-20xx. The antibiotic administration date of 11-03-20xx would not be used for *Arrival Date* because it is an obvious error.
- ED ECG dated/timed as 05-07-20xx 2142. ED Greet Date/Time 05-08-20xx 0125. ED Triage Date/Time 05-08-20xx 0130. There is no documentation in the Only Acceptable Sources which suggests the 05-07-20xx is an obvious error. Enter 05-07-20xx for *Arrival Date*.
- ED RN documents on a nursing triage note dated 04-24-20xx, "Blood culture collected at 2230." ED arrival time is documented as 0130 on 04-25-20xx. There is no documentation in the Only Acceptable Sources which suggests the 04-24-20xx is an obvious error. Enter 04-24-20xx for *Arrival Date*.

- The source “Emergency Department record” includes any documentation from the time period that the patient was an ED patient (e.g., ED face sheet, ED consent/Authorization for treatment forms, ED/Outpatient Registration/sign-in forms, ED vital sign record, ED triage record, ED physician orders, ED ECG reports, ED telemetry/rhythm strips, ED laboratory reports, ED x-ray reports, ED head CT scan, CTA, MRI, MRA reports).
- The source “Procedure notes” refers to procedures such as cardiac cath, endoscopies, and surgical procedures. Procedure notes do not include ECG and x-ray reports.
- The arrival date may differ from the admission date.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the date the patient arrived at the ED or on the floor for acute inpatient care as the arrival date.
- Observation status:
 - If the patient was admitted to observation from an outpatient setting of the hospital, use the date the patient arrived at the ED or on the floor for observation care as the arrival date.
 - If the patient was admitted to observation from the ED of the hospital, use the date the patient arrived at the ED as the arrival date.
- Direct Admits:
 - If the patient is a “Direct Admit” to the cath lab, use the earliest date the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date.
 - For “Direct Admits” to acute inpatient or observation, use the earliest date the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival date.
- If the patient was transferred from your hospital’s satellite/free-standing ED or from another hospital within your hospital’s system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival date at the first facility.

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

- Emergency Department record
- Nursing admission assessment/admitting note
- Observation record
- Procedure notes
- Vital signs graphic record

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

Addressographs/Stamps

Data Element Name: *Arrival Time*

Collected For The Joint Commission Only: ED-1

Definition: The earliest documented time (military time) the patient arrived at the hospital.

Suggested Data Collection Question: What was the earliest documented time the patient arrived at the hospital?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values: Enter the earliest documented time of arrival

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight - 00:00 | Noon - 12:00 |
| 5:31 am - 05:31 | 5:31 pm - 17:31 |
| 11:59 am - 11:59 | 11:59 pm - 23:59 |

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the *Arrival Date* should remain 11-24-20xx or if it should be converted to 11-25-20xx.

When converting Midnight or 24:00 to 00:00 do not forget to change the *Arrival Date*.

Example:

Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- For times that include “seconds,” remove the seconds and record the time as is.

Example:

15:00:35 would be recorded as 15:00.

- If the time of arrival is unable to be determined from medical record documentation, select “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the time documented is obviously in error (not a valid format/range) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Example:

Documentation indicates the *Arrival Time* was 3300. No other documentation in the list of Only Acceptable Sources provides a valid time. Since the *Arrival Time* is outside of the range in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid time as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *Arrival Time* allows the case to be accepted into the warehouse.

- Review the Only Acceptable Sources to determine the earliest time the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. The intent is to utilize any documentation which reflects processes that occurred after arrival at the ED or after arrival to the nursing floor/observation/cath lab for a direct admit.
- Documentation outside of the Only Acceptable Sources list should NOT be referenced (e.g., ambulance record, physician office record, H&P).

Examples:

- ED Triage Time 0800. ED rhythm strip 0830. EMS report indicates patient was receiving EMS care from 0805 through 0825. The EMS report is disregarded. Enter 0800 for *Arrival Time*.
- ED noted arrival time of 0945. Lab report shows blood culture collected at 0830. It is not clear that the blood culture was collected in the ED because the lab report does not specify it was collected in the ED (unable to confirm lab report as an Only Acceptable Source). Enter 0945 for *Arrival Time*.
- ED Triage Time 1525. EMS report indicates patient was receiving care 1435 through 1455. ED report documents time of head CT 1505. The EMS report is disregarded. Enter 1505 for *Arrival Time*.
- Arrival time should NOT be abstracted simply as the earliest time in one of the Only Acceptable Sources, without regard to other substantiating documentation. When looking at the Only Acceptable Sources, if the earliest time documented appears to be an obvious error, this time should not be abstracted.

Examples:

- ED arrival time noted as 2300 on 10-28-20xx. ED MAR shows an antibiotic administration time of 0100 on 10-28-20xx. Surrounding documentation on the ED MAR makes clear that the 10-28-20xx date is an obvious error - Date was not changed to 10-29-20xx. The antibiotic administration date/time would be converted to 0100 on 10-29-20xx. Enter 2300 for *Arrival Time*.
- ED face sheet lists arrival time of 13:20. ED Registration Time 13:25. ED Triage Time 13:30. ED consent to treat form has 1:17 time but “AM” is circled. ED record documentation suggests the 1:17 AM is an obvious error. Enter 13:20 for *Arrival Time*.
- ED ECG timed as 1742. ED Greet Time 2125. ED Triage Time 2130. There is no documentation in the Only Acceptable Sources which suggests the 1742 is an obvious error. Enter 1742 for *Arrival Time*.

- ED RN documents on the nursing triage note, “Blood culture collected at 0730.” ED arrival time is documented as 1030. There is no documentation in the Only Acceptable Sources which suggests the 0730 is an obvious error. Enter 0730 for *Arrival Time*.
- The source “Emergency Department record” includes any documentation from the time period that the patient was an ED patient (e.g., ED face sheet, ED consent/Authorization for treatment forms, ED/Outpatient Registration/sign-in forms, ED vital sign record, ED triage record, ED physician orders, ED ECG reports, ED telemetry/rhythm strips, ED laboratory reports, ED x-ray reports, ED head CT scan, CTA, MRI, MRA reports).
- The source “Procedure notes” refers to procedures such as cardiac cath, endoscopies, and surgical procedures. Procedure notes do not include ECG and x-ray reports.
- The arrival time may differ from the admission time.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the time the patient arrived at the ED or on the floor for acute inpatient care as the arrival time.
- Observation status:
 - If the patient was admitted to observation from an outpatient setting of the hospital, use the time the patient arrived at the ED or on the floor for observation care as the arrival time.
 - If the patient was admitted to observation from the ED of the hospital, use the time the patient arrived at the ED as the arrival time.
- Direct Admits:
 - If the patient is a “Direct Admit” to the cath lab, use the earliest time the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival time.
 - For “Direct Admits” to acute inpatient or observation, use the earliest time the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival time.
- If the patient was transferred from your hospital’s satellite/free-standing ED or from another hospital within your hospital’s system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival time at the first facility.

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

- Emergency Department record
- Nursing admission assessment/admitting note
- Observation record
- Procedure notes
- Vital signs graphic record

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

Addressographs/stamps

Data Element Name: *Birthdate*

Collected For CMS/The Joint Commission: All Records

Definition: The month, day, and year the patient was born.

Note: Patient's age (in years) is calculated by *Admission Date* minus *Birthdate*. The algorithm to calculate age must use the month and day portion of admission date and birthdate to yield the most accurate age.

Suggested Data Collection Question: What is the patient's date of birth?

Format:

Length: 10 – MM-DD-YYYY (includes dashes)

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (1880-Current Year)

Notes for Abstraction:

Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the birthdate is correct. If the abstractor determines through chart review that the date is incorrect, she/he should correct and override the downloaded value. If the abstractor is unable to determine the correct birthdate through chart review, she/he should default to the date of birth on the claim information.

Suggested Data Sources:

- Emergency Department record
- Face sheet
- Registration form
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Blood Culture Collection*

Collected For CMS: SEP-1

Definition: Documentation of the collection of a blood culture.

Suggested Data Collection Question: Was a blood culture collected in the appropriate time window?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

1 (Yes) A blood culture was collected in the appropriate time window.

2 (No) A blood culture was not collected in the appropriate time window or unable to determine.

Notes for Abstraction:

- If a patient **does not** receive an IV or IO antibiotic within the 24 hours before the presentation of severe sepsis, the appropriate time window is:
 - 24 hours prior to Severe Sepsis Presentation Date and Time through 3 hours following Severe Sepsis Presentation Date and Time.
- If a patient **does** receive an IV or IO antibiotic within the 24 hours before the presentation of severe sepsis, the appropriate time window is:
 - 24 hours prior to the administration of the antibiotic through 3 hours following *Severe Sepsis Presentation Date and Time*.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use “Labs Drawn” or similar documentation, as it is not specific to blood culture.
- If a blood culture is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, select Value “1.”
- If there is supportive documentation that a blood culture was collected in the appropriate time window and it is the earliest mention of a blood culture, this date and time can be used, e.g., “BC sent to lab,” “blood culture received time.” Select Value “1.”
- Do not use physician orders to determine a blood culture was collected, as they do not demonstrate collection of the blood culture.

Suggested Data Sources:

- Emergency Department record
- History and physical
- Laboratory report
- Microbiology report
- Nursing notes
- Physician/APN/PA Progress notes

Inclusion Guidelines for Abstraction:

- BC
- Blood cultures
- Blood cultures collected

Exclusion Guidelines for Abstraction:

- Blood sent to lab
- Lab here
- Labs drawn

Data Element Name: *Blood Culture Collection Acceptable Delay*

Collected For CMS: SEP-1

Definition: Documentation supporting there was an acceptable delay in the collection of a blood culture.

Suggested Data Collection Question: Is there documentation supporting an acceptable delay in collecting a blood culture?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

1 (Yes) There is documentation supporting an acceptable delay in the collection of a blood culture.

2 (No) There is no documentation supporting an acceptable delay in the collection of a blood culture.

Notes for Abstraction:

- **Only** the following situations demonstrate an acceptable delay where the blood culture was drawn after the *Broad Spectrum or Other Antibiotic Administration Date and Time*. If there is an acceptable delay, choose Value “1.”
 - Surgical patients who receive a pre-op or post-op prophylactic antibiotic within 24 hours before severe sepsis was identified and had a blood culture drawn after the prophylactic antibiotic was started.
 - Antibiotics were started in the hospital for an infection within 24 hours before severe sepsis was identified, and a blood culture was drawn sometime after the antibiotic dose was started.
 - Antibiotics were started prior to hospital arrival within 24 hours before severe sepsis was identified, and a blood culture was drawn after the pre-hospital antibiotics were started.
 - A physician/APN/PA documented reason for the delay, which makes it clear that waiting to start the antibiotic would be detrimental to the patient.
- Examples:**
- ED Physician Note: Patient condition worsening, IV Vanco ordered stat, blood and urine cultures ordered, awaiting CXR.
 - Hospitalist Progress Note: Patient’s deteriorating condition concern for rapidly advancing infection, starting IV antibiotics now, lab on way to collect blood cultures.
- Obstetric patients given prophylactic antibiotics for ruptured membranes, group B strep, or prior to a caesarean section.
- If there is no documentation supporting an acceptable delay in the collection of a blood culture, choose Value “2.”

Suggested Data Sources:

- Emergency Department record
- History and physical
- Laboratory report
- Medication Administration Records
- Microbiology report
- Nursing notes
- Progress notes

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

Oral (PO) Antibiotics

Data Element Name: *Blood Culture Collection Date*

Collected For CMS: SEP-1

Definition: The date on which a blood culture was collected within the appropriate time window.

Suggested Data Collection Question: What date was the blood culture collected on?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Refer to the *Blood Culture Collection* data element for the appropriate time window to abstract this data element.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use “Labs Drawn” or similar documentation, as it is not specific to the blood culture.
- If there is supportive documentation that a blood culture was collected in the appropriate time window and it is the earliest mention of a blood culture, this date can be used, e.g., “BC sent to lab,” “blood culture received time.”
- Do not use physician orders to determine that a blood culture was collected, as they do not demonstrate collection of the blood culture.
- In the event there is a failure to collect the blood culture specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, abstract the date at which the unsuccessful attempt was carried out.
- Stop abstracting 3 hours after the presentation of severe sepsis.
- If multiple blood cultures were drawn or attempted, abstract the earliest blood culture drawn or attempted in the appropriate time window.

Suggested Data Sources:

- Laboratory documentation
- Nursing notes
- Physician/APN/PA Progress Notes

Inclusion Guidelines for Abstraction:

- Blood culture drawn
- Blood culture to lab
- Blood culture received

Exclusion Guidelines for Abstraction:

- Blood sent to lab
- Lab here
- Labs drawn

Data Element Name: *Blood Culture Collection Time*

Collected For CMS: SEP-1

Definition: The time at which a blood culture was collected within the appropriate time window.

Suggested Data Collection Question: What time was the blood culture collected?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Please refer to the *Blood Culture Collection* data element for the appropriate time window to abstract this data element.
- Use documentation specifying a blood culture was actually drawn or collected. Do not use “Labs Drawn” or similar documentation, as it is not specific to the blood culture.
- If there is supportive documentation that a blood culture was collected in the appropriate time window and it is the earliest mention of a blood culture, this time can be used, e.g., “BC sent to lab,” “blood culture received time.”
- Do not use physician orders to determine that a blood culture was collected, as they do not demonstrate collection of the blood culture.
- In the event there is a failure to collect the blood culture specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, please abstract the time at which the unsuccessful attempt was carried out.
- Stop abstracting 3 hours after the presentation of severe sepsis.
- If multiple blood cultures were drawn or attempted, abstract the earliest blood culture drawn or attempted in the appropriate time window.

Suggested Data Sources:

- Laboratory documentation
- Nursing notes
- Physician/APN/PA Progress Notes

Inclusion Guidelines for Abstraction:

- Blood culture drawn
- Blood culture received
- Blood culture to lab

Exclusion Guidelines for Abstraction:

- Blood sent to lab
- Lab here
- Labs drawn

Data Element Name: *Brief Intervention***Collected For The Joint Commission Only:** SUB-2

Definition: A brief intervention is a single session or multiple sessions conducted by a qualified healthcare professional or trained peer support person, following a positive screen for unhealthy alcohol use. The intervention includes motivational discussion focused on increasing insight and awareness regarding alcohol use and motivation toward behavioral change. Brief interventions can be tailored for variance in population or setting and can be used as a stand-alone treatment for those at risk as well as a vehicle for engaging those in need of more extensive levels of care.

A brief intervention focuses on increasing the patient's understanding of the impact of substance use on his or her health and motivating the patient to change risky behaviors. The components of the intervention include feedback concerning the quantity and frequency of alcohol consumed by the patient in comparison with national norms; a discussion of negative physical, emotional, and occupational consequences; and a discussion of the overall severity of the problem. The qualified health care professional engages the patient in a joint decision-making process regarding alcohol use and plans for follow-up are discussed and agreed to.

Suggested Data Collection Question: Did patients with a positive screening result for unhealthy alcohol use or alcohol use disorder (abuse or dependence) receive a brief intervention prior to discharge?

Format:**Length:** 1**Type:** Alphanumeric**Occurs:** 1**Allowable Values:**

- 1 The patient received the components of a brief intervention.
- 2 The patient refused/declined the brief intervention.
- 3 Brief counseling was not offered to the patient during the hospital stay or unable to determine if a brief intervention was provided from medical record documentation.

Notes for Abstraction:

- A qualified healthcare professional may be defined as a physician, nurse, certified addictions counselor, psychologist, social worker, or health educator with training in brief intervention.
- A peer support person who has received specialized training in brief intervention may perform the brief intervention in lieu of a qualified healthcare professional.
- If there is no documentation that a brief intervention was given to the patient, select Value "3."

- Select Value “3” if the documentation provided is not explicit enough to determine if the intervention provided contained the specific components or if it is determined that the intervention does not meet the intent of the measure.
- A brief intervention includes, at a minimum, the following three components:
 - a. Concern that the patient is drinking at unhealthy levels known to increase his/her risk of alcohol-related health problems
 - b. Feedback linking alcohol use and health, including:
 - Personalized feedback (i.e., explaining how alcohol use can interact with patient’s medical concerns [hypertension, depression/anxiety, insomnia, injury, congestive heart failure (CHF), diabetes mellitus (DM), breast cancer risk, interactions with medications])
OR
 - General feedback on health risks associated with drinking.
 - c. Advice:
 - To abstain (if there are contraindications to drinking)
OR
 - To drink below recommended limits (specified for patient).

Suggested Data Sources:

- Consultation notes
- Nursing notes
- Physical progress notes
- Progress notes

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Broad Spectrum or Other Antibiotic Administration*

Collected For CMS: SEP-1

Definition: Documentation of administration of a broad spectrum or other antibiotic in the time window 24 hours prior to or 3 hours after *Severe Sepsis Presentation Date and Time*.

Suggested Data Collection Question: Was a broad spectrum or other antibiotic administered in the time window 24 hours prior to or 3 hours after *Severe Sepsis Presentation Date and Time*?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) A broad spectrum or other antibiotic was administered in the time window 24 hours prior to or 3 hours following the presentation of severe sepsis.
- 2 (No) No antibiotic was administered in the time window 24 hours prior to or 3 hours following the presentation of severe sepsis, or unable to determine.

Notes for Abstraction:

- Only IV antibiotic administered in the 24 hours prior to or 3 hours after severe sepsis presentation is acceptable.
EXCEPTION:
If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started in the 24 hours prior to or 3 hours after the severe sepsis presentation is acceptable to select Value "1."
- If the patient started on an antibiotic within the 24 hours preceding or 3 hours following the *Severe Sepsis Presentation Date and Time*, choose Value "1."
- If no antibiotic was started within the 24 hours preceding or 3 hours following the *Severe Sepsis Presentation Date and Time*, choose Value "2."
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration of the antibiotic (i.e., antibiotic name, route, date and time).
- A physician/APN/PA order for antibiotics is not sufficient unless the antibiotic ordered was marked as "started" with date/time noted.
- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route indicated. The route on the MAR for an antibiotic cannot be used as the route for a dose of that same antibiotic on another form.

- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Do not abstract test doses of antibiotics.
- Do not abstract antibiotics from sources that do not represent actual administration.
 - **Examples** that **do not** represent actual administration:
 - Pre-Op Checklist states:
 - IV Started at 1730
 - Preop Antibiotic Given at 1800
 - Operative report states:
 - IV antibiotics were given prior to procedure.
 - IV antibiotics given at 0900 prior to incision.
- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was given during the specified time frame.
- If the antibiotic name, route, date or time is missing, disregard that dose.
- Pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record should be used for abstracting antibiotics.

Suggested Data Sources:

- Anesthesia record
- Entire Emergency Department record
- ICU flow sheet
- IV flow sheet
- Medication administration record
- Nurses notes
- Operating room record
- PACU/recovery room record
- Perfusion record
- Physician/APN/PA notes
- Pre-arrival documentation that is part of the medical record

Inclusion Guidelines for Abstraction:

- Antibiotic administered via intravenous route
- Intramuscular or IM
- Intraosseous or IO
- Intravenous
- IV Bolus
- IV infusion

Exclusion Guidelines for Abstraction:

- Give antibiotic stat
- Hang antibiotic
- Order for xx antibiotic

Data Element Name: *Broad Spectrum or Other Antibiotic Administration Date*

Collected For CMS: SEP-1

Definition: The earliest date on which an antibiotic was started in the time window of 24 hours preceding or 3 hours after *Severe Sepsis Presentation Date and Time*.

Suggested Data Collection Question: What was the earliest date on which an antibiotic was started in the time window of 24 hours preceding or 3 hours after *Severe Sepsis Presentation Date and Time*?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date, Numeric

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Only IV antibiotic administered in the 24 hours prior to or 3 hours after severe sepsis presentation is acceptable.
EXCEPTION:
If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started in the 24 hours prior to or 3 hours after the severe sepsis presentation is acceptable.
- If one or more antibiotic was started within the 24 hours prior to presentation of severe sepsis, and none of those same antibiotics were started more than 24 hours prior to presentation, abstract the earliest dose started in the 24 hours prior to presentation of severe sepsis.
- If one or more antibiotics were administered within 24 hours prior to severe sepsis presentation, abstract the earliest date and time that antibiotic was started. This may be the same date as the date of presentation or may be a date any time before presentation. Do not review for antibiotic doses started more than 72 hours prior to severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs.) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| | <u>A</u> A A | | | First dose of A |
| | <u>B</u> C C | | | Antibiotic B |
| G | <u>A</u> A A | | | First dose of A |
| <u>B</u> | B B | | | First dose of B |
| <u>C</u> | D C C | | | First dose of C |

- If one or more antibiotic was started within the 3 hours after presentation of severe sepsis, and the patient did not receive an antibiotic in the 24 hours before severe sepsis presentation, abstract the dose started closest to severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| E | | | <u>L</u> | Antibiotic L |
| K | | | <u>K</u> A | Dose of K in 3 hr. period |

- If antibiotics were administered both 24 hours prior to and within 3 hours after the time of presentation of severe sepsis, abstract the earliest date and time that an antibiotic in the 24 hours prior was started. This may be the same date as the date of presentation or may be a date any time before presentation. Do not review for antibiotic doses started more than 72 hours prior to severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| | <u>D</u> D | | D | First dose of D |
| | <u>E</u> | | F | Antibiotic E |
| <u>E</u> | E E | | L | First dose of E |
| M | <u>A</u> B A | | M | First dose of A |
| <u>M</u> | A B M A | | M | First dose of M |

- Stop abstracting 3 hours after the presentation of severe sepsis.
- If no antibiotic was started in the 24 hours before or 3 hours after the severe sepsis presentation, enter "UTD."

- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route indicated. The route on the MAR for an antibiotic cannot be used as the route for a dose of the same antibiotic on another form.
- If the antibiotic name, route, date or time is missing, disregard that dose.
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration of the specific antibiotic within the time window of 24 hours prior to or 3 hours following the presentation of severe sepsis.

Examples:

- A physician order for IV antibiotics is not sufficient unless the antibiotic ordered was marked as “started” with date/time noted.
 - Do not collect antibiotics documented on an operative report unless the surgeon states that the surgeon actually administered the dose.
 - Specific documentation by one person that another person administered the antibiotic is acceptable for determining the date and time of administration.
- Example:**
OR nurse, S. Smith RN, documents, “Cefazolin 1 gm IV given on 1/7/20xx at 0500 per J Doe RN.” This dose can be abstracted as given if not documented by the person that gave the dose.
- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
 - Do not abstract test doses of antibiotics.
 - Do not abstract antibiotics from sources that do not represent actual administration.

Examples that *do not* represent actual administration:

Pre-Op Checklist states:

- IV Started at 1730
- Preop Antibiotic Given at 1800
- Lab on Chart

Operative report states: IV antibiotics were given prior to procedure.

- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was started during the specified time frame.
- Example:**
Narrative states: “Ancef 1 gram given IV prior to incision.” No other doses of Ancef are documented. The dose in the narrative should be abstracted using UTD for missing data (no date and time).
- Pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record should be used for abstracting antibiotics.

Suggested Data Sources:

- Anesthesia record
- Entire Emergency Department record
- ICU flow sheet
- IV flow sheet
- Medication administration record

- Nurses notes
- Operating room record
- PACU/recovery room record
- Perfusion record
- Physician/APN/PA notes
- Pre-arrival documentation that is part of the medical record

Inclusion Guidelines for Abstraction:

- Antibiotic administered via intravenous route
- Intramuscular or IM
- Intraosseous or IO
- Intravenous
- IV Bolus
- IV infusion

Exclusion Guidelines for Abstraction:

- Give antibiotic stat
- Hang antibiotic
- Order for xx antibiotic

Data Element Name: *Broad Spectrum or Other Antibiotic Administration Selection*

Collected For CMS: SEP-1

Definition: The selection of the antibiotic administered within 3 hours following *Severe Sepsis Presentation Date and Time*.

Suggested Data Collection Question: Was the antibiotic administered within 3 hours after the *Severe Sepsis Presentation Date and Time* consistent with antibiotic selection guidelines detailed in the Notes for Abstraction?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|---------|--|
| 1 (Yes) | The antibiotic that was given within 3 hours following the presentation of severe sepsis is consistent with antibiotic selection guidelines. |
| 2 (No) | The antibiotic that was given within 3 hours following the presentation of severe sepsis is not consistent with antibiotic selection guidelines. |

Notes for Abstraction:

- Only IV antibiotic(s) administered within 3 hours after the *Severe Sepsis Presentation Time* are acceptable.
 - EXCEPTION:**
If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started within 3 hours after the *Severe Sepsis Presentation Time* are acceptable to select Value “1.”
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration within the appropriate time frame.
- If there is one antibiotic started within 3 hours after presentation of severe sepsis that is on the monotherapy table in Appendix C, Table 5.0, choose Value “1.”
- If the administered antibiotics were NOT on Table 5.0, determine if the antibiotics are on Table 5.1 in Appendix C.
 - Determine the class the administered antibiotics belong to, based on the class name in the shaded row above the antibiotic names.
 - Next, refer to the following Combination Antibiotic Therapy Table to determine if an antibiotic from a class in both Column A and Column B were given.
 - There must be at least one from a class in column A and at least one from a class in column B administered to select Value “1.”
 - Review the chart to see that both drugs were started within 3 hours of severe sepsis presentation and if so, choose Value “1.”
 - If both drugs were not started within 3 hours, choose Value “2.”

Example:

Severe Sepsis Presentation Time 1200

Ciprofloxacin initiated at 1230

Vancomycin initiated at 1330

Combination Antibiotic Therapy Table:

Ciprofloxacin is in column A

Vancomycin is in column B

Both antibiotics were initiated within 3 hours of the Severe Sepsis

Presentation Time, therefore value "1" should be selected.

Combination Antibiotic Therapy Table

| Column A | Column B |
|-------------------|---|
| Aminoglycosides + | Cephalosporins (1st and 2nd Generation) |
| OR | OR |
| Aztreonam OR | Clindamycin IV OR |
| Ciprofloxacin | Daptomycin OR |
| | Glycopeptides OR |
| | Linezolid OR |
| | Macrolides OR |
| | Penicillins |

- If IV antibiotic(s) from Table 5.0 or an appropriate combination of IV antibiotics from Table 5.1 are not started within the 3 hours following presentation of severe sepsis, and the following conditions are met, choose value "1."
 - There is Physician/APN/PA documentation referencing the results of a culture from within 5 days prior to the antibiotic start time. The documentation must:
 - Identify the date of the culture results (must be within 5 days prior to the antibiotic start time).
 - Identify the suspected causative organism from the culture result and its antibiotic susceptibility.
 - The IV antibiotic(s) identified as appropriate per the physician/APN/PA documentation is started within 3 hours following the presentation of severe sepsis.

Example:

- Acceptable physician/APN/PA documentation: "Urine culture results from 9/10/17 show enterococcus, sensitive to vancomycin."
The patient has severe sepsis with criteria met on 9/15/17 at 15:00 and the only antibiotic started is IV vancomycin at 15:30.
- If the patient has C. difficile, and IV antibiotic(s) from Table 5.0 or an appropriate combination of IV antibiotics from Table 5.1 are not started within the 3 hours following presentation of severe sepsis, and the following conditions are met, choose value "1."
 - There is physician/APN/PA documentation within 24 hours prior to the antibiotic start time identifying the presence of C. difficile. **Documentation that C. difficile is suspected or likely is acceptable.**
 - Any one of the treatments below is initiated within 3 hours following severe sepsis presentation:
 - Oral vancomycin with or without oral or IV metronidazole (Flagyl)
 - Rectal vancomycin with or without IV metronidazole (Flagyl)

- IV metronidazole (Flagyl) monotherapy

Suggested Data Sources:

- Anesthesia record
- Entire Emergency Department record
- ICU flow sheet
- IV flow sheet
- Medication administration record
- Nurses notes
- Operating room record
- PACU/recovery room record
- Perfusion record
- Physician/APN/PA progress notes

Inclusion Guidelines for Abstraction:

- Intravenous:
- Antibiotic administered via intravenous route
- Intramuscular or IM
- Intraosseous or IO
- Intravenous
- IV bolus
- IV infusion

Exclusion Guidelines for Abstraction:

- Give antibiotic stat
- Hang antibiotic
- Order for xx antibiotic

Data Element Name: *Broad Spectrum or Other Antibiotic Administration Time*

Collected For CMS: SEP-1

Definition: The earliest time at which an antibiotic was started in the time window of 24 hours preceding or 3 hours after *Severe Sepsis Presentation Date and Time*.

Suggested Data Collection Question: What was the earliest time at which an antibiotic was started in the time window of 24 hours preceding or 3 hours after *Severe Sepsis Presentation Date and Time*?

Format:

Length: 5 – HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Only IV antibiotic administered in the 24 hours prior to or 3 hours after severe sepsis presentation is acceptable.

EXCEPTION:

If there is documentation indicating IV access could not be established, antibiotics administered via intramuscular (IM) or intraosseous (IO) started in the 24 hours prior to or 3 hours after the severe sepsis presentation is acceptable.

- If one or more antibiotic was started within the 24 hours prior to presentation of severe sepsis, and none of those same antibiotics were started more than 24 hours prior to presentation, abstract the earliest dose started in the 24 hours prior to presentation of severe sepsis.
- If one or more antibiotics were administered within 24 hours prior to severe sepsis presentation, abstract the earliest date and time that antibiotic was started. This may be the same time as the time of presentation or may be a time before presentation. Do not review for antibiotic doses started more than 72 hours prior to severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs.) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| | <u>A</u> A A | | | First dose of A |
| | <u>B</u> C C | | | Antibiotic B |
| G | <u>A</u> A A | | | First dose of A |
| <u>B</u> | B B | | | First dose of B |
| <u>C</u> | D C C | | | First dose of C |

- If one or more antibiotic was started within the 3 hours after the presentation of severe sepsis, and the patient did not receive an antibiotic in the 24 hours before severe sepsis presentation, abstract the dose started closest to severe sepsis.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| E | | | <u>L</u> | Antibiotic L |
| K | | | <u>K</u> A | Dose of K in 3 hr. period |

- If antibiotics were administered both 24 hours prior to and within 3 hours after the time of presentation of severe sepsis, abstract the earliest date and time that an antibiotic in the 24 hours prior was started. This may be the same time as the time of presentation or may be a time before presentation. Do not review for antibiotic doses started more than 72 hours prior to severe sepsis presentation.

Examples:

| More than 24 hours Before Presentation (Max. lookback 72 hrs. from presentation) | 24 hours Before Presentation | Severe Sepsis | 3 Hours After Presentation | Antibiotic Dose to Abstract |
|--|------------------------------|---------------|----------------------------|-----------------------------|
| | <u>D</u> D | | D | First dose of D |
| | <u>E</u> | | F | Antibiotic E |
| <u>E</u> | E E | | L | First dose of E |
| M | <u>A</u> B A | | M | First dose of A |
| <u>M</u> | A B M A | | M | First dose of M |

- Stop abstracting 3 hours after the presentation of severe sepsis.
- If no antibiotic was started in the 24 hours before or 3 hours after the severe sepsis presentation, enter “UTD.”

- Do not cross reference between different sources to infer that an antibiotic was started if it was documented only with name/date/time given but no route indicated. The route on the MAR for an antibiotic cannot be used as the route for a dose of the same antibiotic on another form.
- If the antibiotic name, route, date or time is missing, disregard that dose.
- Antibiotic administration information should only be abstracted from documentation that demonstrates actual administration of the specific antibiotic within the time window of 24 hours prior to or 3 hours following the presentation of severe sepsis.

Examples:

- A physician order for IV antibiotics is not sufficient unless the antibiotic ordered was marked as “started” with date/time noted.
 - Do not collect antibiotics documented on an operative report unless the surgeon states that the surgeon actually administered the dose.
 - Specific documentation by one person that another person administered the antibiotic is acceptable for determining the date and time of administration.
- Example:**
OR nurse, S. Smith RN, documents, “Cefazolin 1 gm IV given on 1/7/20xx at 0500 per J Doe RN.” This dose can be abstracted as given if not documented by the person that gave the dose.
- The method of designation of administration on hand-written or pre-printed forms such as MARs or eMARs, with pre-printed scheduled times for administration, must be clearly designated as started. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
 - Do not abstract test doses of antibiotics.
 - Do not abstract antibiotics from sources that do not represent actual administration.

Examples that *do not* represent actual administration:

Pre-Op Checklist states:

- IV Started at 1730
- Preop Antibiotic Given at 1800
- Lab on Chart

Operative report states: IV antibiotics were given prior to procedure

- Do not abstract antibiotics from narrative charting unless there is no other documentation that reflects that the same antibiotic was started during the specified time frame.

Example:

Narrative states: “Ancef 1 gram given IV prior to incision.” No other doses of Ancef are documented. The dose in the narrative should be abstracted using “UTD” for missing data (no date and time).

- Pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record should be used for abstracting antibiotics.

Suggested Data Sources:

- Anesthesia record
- Entire Emergency Department record
- ICU flow sheet
- IV flow sheet
- Medication administration record

- Nurses notes
- Operating room record
- PACU/recovery room record
- Perfusion record
- Physician/APN/PA notes
- Pre-arrival documentation that is part of the medical record

Inclusion Guidelines for Abstraction:

- Antibiotic administered via intravenous route
- Intramuscular or IM
- Intraosseous or IO
- Intravenous
- IV Bolus
- IV infusion

Exclusion Guidelines for Abstraction:

- Give antibiotic stat
- Hang antibiotic
- Order for xx antibiotic

Data Element Name: *Clinical Trial*

Collected For The Joint Commission Only: VTE-6; **Collected for CMS Only:** SEP-1

Definition: Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. VTE or SEP-1).

Suggested Data Collection Question: During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. VTE or SEP-1)?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. VTE or SEP-1).

N (No) There is no documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. VTE or SEP-1), or unable to determine from medical record documentation.

Notes for Abstraction:

- To select “Yes” to this data element, BOTH of the following must be true:
 1. **There must be a signed consent form for clinical trial.** For the purposes of abstraction, a clinical trial is defined as an **experimental study** in which research subjects are recruited and assigned a treatment/intervention and their outcomes are measured based on the intervention received. Treatments/interventions most often include use of drugs, surgical procedures, and devices. Often a control group is used to compare with the treatment/intervention. Allocation of different interventions to participants is usually randomized.
 2. **There must be documentation on the signed consent form that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. VTE or SEP-1).** Patients may either be newly enrolled in a clinical trial during the hospital stay or enrolled in a clinical trial prior to arrival and continued active participation in that clinical trial during this hospital stay.
- In the following situations, select “No”:

1. **There is a signed patient consent form for an observational study only.**
Observational studies are non-experimental and involve no intervention (e.g., registries). Individuals are observed (perhaps with lab draws, interviews, etc.), data is collected, and outcomes are tracked by investigators. Although observational studies may include the assessment of the effects of an intervention, the study participants are not allocated into intervention or control groups.
2. **It is not clear whether the study described in the signed patient consent form is experimental or observational.**
3. **It is not clear which study population the clinical trial is enrolling.**
Assumptions should not be made if it is not specified.

VTE:

Only capture patients enrolled in clinical trials studying patients with VTE (prevention or treatment interventions).

SEP-1:

Only capture patients enrolled in clinical trials studying patients with sepsis, severe sepsis or septic shock (treatment and interventions).

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

Signed consent form for clinical trial

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Comfort Measures Only*

Collected For The Joint Commission Only: All SUB Measures, All TOB Measures, VTE-6

Definition: Comfort Measures Only refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. Comfort Measures Only is commonly referred to as “comfort care” by the general public. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Suggested Data Collection Question: When is the earliest physician/APN/PA documentation of comfort measures only?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 **Day 0 or 1:** The earliest day the physician/APN/PA documented comfort measures only was the day of arrival (Day 0) or day after arrival (Day 1).
- 2 **Day 2 or after:** The earliest day the physician/APN/PA documented comfort measures only was two or more days after arrival day (Day 2+).
- 3 **Timing unclear:** There is physician/APN/PA documentation of comfort measures only during this hospital stay, but whether the earliest documentation of comfort measures only was on day 0 or 1 OR after day 1 is unclear.
- 4 **Not Documented/UTD:** There is no physician/APN/PA documentation of comfort measures only, or unable to determine from medical record documentation.

Notes for Abstraction:

- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- Physician/APN/PA documentation of comfort measures only (hospice, comfort care, etc.) mentioned in the following contexts suffices:
 - Comfort measures only recommendation
 - Order for consultation or evaluation by a hospice care service
 - Patient or family request for comfort measures only
 - Plan for comfort measures only
 - Referral to hospice care service
 - Discussion of comfort measures
- Determine the earliest day comfort measures only (CMO) was DOCUMENTED by the physician/APN/PA. If any of the inclusion terms are documented by the physician/APN/PA, select Value “1,” “2,” or “3” accordingly.

Example:

“Discussed comfort care with family on arrival” noted in day 2 progress note
– Select “2.”

- State-authorized portable orders (SAPOs):
 - SAPOs are specialized forms or identifiers authorized by state law that translate a patient’s preferences about specific end-of-life treatment decisions into portable medical orders.

Examples:

 - DNR-Comfort Care form
 - MOLST (Medical Orders for Life-Sustaining Treatment)
 - POLST (Physician Orders for Life-Sustaining Treatment)
 - Out-of-Hospital DNR (OOH DNR)
 - If there is a SAPO in the record that is dated and signed prior to arrival with an option in which an inclusion term is found that is checked, select Value “1.”
 - If a SAPO lists different options for CMO and any CMO option is checked, select Value “1,” “2,” or “3” as applicable.
 - If one or more dated SAPOs are included in the record (and signed by the physician/APN/PA), use only the most recent one. Disregard undated SAPOs.
 - For cases where there is a SAPO in the record with a CMO option selected: If the SAPO is dated prior to arrival and there is documentation on the day of arrival or the day after arrival that the patient does not want CMO, and there is no other documentation regarding CMO found in the record, disregard the SAPO.

Example:

Patient has a POLST dated prior to arrival in his chart and ED physician states in current record “Patient is refusing comfort measures, wants to receive full treatment and be a full code.”

- Documentation of an inclusion term in the following situations should be **disregarded**. Continue to review the remaining physician/APN/PA documentation for acceptable inclusion terms. If the **ONLY** documentation found is an inclusion term in the following situations, select Value “4.”

- Documentation (other than SAPOs) that is dated prior to arrival or documentation which refers to the pre-arrival time period.

Examples:

- Comfort measures only order in previous hospitalization record.
- “Pt. on hospice at home” in MD ED note.

- Inclusion term clearly described as negative or conditional.

Examples:

- “No comfort care”
- “Not appropriate for hospice care”
- “Comfort care would also be reasonable - defer decision for now”
- “DNRCCA” (Do Not Resuscitate – Comfort Care Arrest)
- “Family requests comfort measures only should the patient arrest.”

- Documentation of “CMO” should be disregarded if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., “hx dilated CMO” – Cardiomyopathy context).
- If there is physician/APN/PA documentation of an inclusion term in one source that indicates the patient is Comfort Measures Only, AND there is physician/APN/PA documentation of an inclusion term in another source that indicates the patient is NOT CMO, the source that indicates the patient is CMO would be used to select Value “1,” “2,” or “3” for this data element.

Examples:

- Physician documents in progress note on day 1 “The patient has refused Comfort Measures” AND then on day 2 the physician writes an order for a Hospice referral. Select Value “2.”
- ED physician documents in a note on day of arrival “Patient states they want to be enrolled in Hospice” AND then on day 2 there is a physician progress note with documentation of “Patient is not a Hospice candidate.” Select Value “1.”

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency Department record
- History and physical
- Physician orders
- Progress notes

Excluded Data Sources:

Restraint order sheet

Inclusion Guidelines for Abstraction:

- Brain dead
- Brain death
- Comfort care
- Comfort measures
- Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Terminal care
- Terminal extubation

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Crystalloid Fluid Administration*

Collected For CMS: SEP-1

Definition: Documentation of initiation of crystalloid fluids within the specified time frame AND complete infusion of the target ordered volume.

Suggested Data Collection Question: Were crystalloid fluids initiated within the specified time frame AND completely infused based on the target ordered volume?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) Target volume of crystalloid fluids were ordered AND initiated within the specified time frame. Additionally, the target ordered volume was completely infused.
- 2 (No) Less than the target volume of crystalloid fluids were ordered OR initiated within the specified time frame. The target ordered volume was not completely infused.
- 3 (No) The target volume of crystalloid fluids was NOT initiated within the specified time frame.
- 4 (No) There is documentation the patient has an implanted Ventricular Assist Device (VAD) OR documentation of the patient or authorized patient advocate refusal of IV fluids.

Notes for Abstraction:

- The specified time frame for abstraction of crystalloid fluids is within 6 hours prior through 3 hours after either of the following trigger events. If both are present the specified time frame is determined by the earliest trigger.
 - Initial Hypotension Date and Time
 - Septic Shock Presentation Date and Time
- The target ordered volume must be ordered and initiated within the specified time frame if Initial Hypotension or Septic Shock is present. Additionally, in order to choose Value “1,” the target ordered volume must be documented as completely infused. The target ordered volume is NOT required to be completely infused within the specified time frame. If the target ordered volume is not completely infused, choose Value “2.”
- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg or within 10% less than 30 mL/kg are considered the target ordered volume.

Example:

2000 mL of normal saline was ordered and initiated in the ED. The patient's weight is not available or documented at the time of the order. After admission to critical care a weight is obtained of 74 kg. Based on this weight 30 mL/kg is 2220 mL. The 2000 mL ordered is within 10% lower of 2220 mL ($2220 \text{ mL} - 222 \text{ mL} = 1998 \text{ mL}$) and is an acceptable volume.

- To determine the target ordered volume:
 - Use the patient weight in kilograms (kg) if documented.
 - If not documented, divide the weight in pounds by 2.2; that yields the weight in kg. Round the weight to the nearest whole number.
 - Multiply the weight in kg by 30; the result is the number of mL of IV fluid that should be specified in the physician/APN/PA order(s).
 - Round the volume of IV fluid (mL) to the nearest whole number.

Examples:

- Patient weight is 160 pounds. $160/2.2 = 72.72 \text{ kg}$. Round to 73 kg. $73 \times 30 = 2190 \text{ (mL)}$. Physician order is "Infuse 2400 mL 0.9% Normal Saline over the next two hours." This is acceptable because 2400 mL is greater than 2190.
 - Patient weight is 160 pounds. $160/2.2 = 72.72 \text{ kg}$. Round to 73 kg. $73 \times 30 = 2190 \text{ (mL)}$. Physician order is "Give 1000 mL Lactated Ringers over the next 4 hours." This is not acceptable because 1000 mL is less than 2190.
- To calculate the appropriate target ordered volume use the actual or estimated weight in the following priority order.
 1. Weight documented in the crystalloid fluid order
 2. Weight documented closest and prior to the order for crystalloid fluids
 3. Weight documented closest and after the order for crystalloid fluids
 - Physician/APN/PA can use Ideal Body Weight (IBW) to determine the target ordered volume if all of the following conditions are met:
 - Physician/APN/PA documents the patient is obese (defined BMI >30).
 - Physician/APN/PA documents IBW is used to determine target ordered volume.
 - IBW must be present in the medical record, abstractors should not calculate the IBW.
 - Other acceptable weight terms include predicted weight, dosing weight, and adjusted body weight.
 - If the total volume of crystalloid fluids ordered is less than the target ordered volume, select Value "2."
 - If there is documentation the infusion was stopped prior to reaching the target ordered volume, select Value "2."
 - Documentation of fluid initiation:
 - Medical record documentation must be clear that crystalloid fluids were actually initiated (i.e., date and time of administration is noted).
 - Do not use physician/APN/PA orders as equivalent to actual initiation of fluids as they are not specific to initiation.
 - Crystalloid fluid orders:
 - Physician/APN/PA orders are required for the fluids.

- The order must include the type of fluid, the volume of fluid, and a rate or time over which the fluids are to be given.
- The terms bolus, wide-open, or open are acceptable for a rate or infusion duration.
- If the type of fluid, volume of fluid, rate or infusion duration is missing, do not use the order toward the target ordered volume.
- The target ordered volume may be in a single order or a series of multiple orders.
- If crystalloid fluids are initiated via multiple physician/APN/PA orders, only abstract crystalloid fluids initiated within the specified time frame.
- **Exception for Prior to Arrival:** Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and either a rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.
- **Exception for Operating Room (OR):** Crystalloid fluids administered in the OR by a physician/APN/PA are acceptable without an order if a fluid type, an infusion start time, and an infusion rate or infusion end time is documented.
- To determine if the target ordered volume was completely infused, one of the following must be documented along with the infusion start time. If one of the following is not documented, do not use the fluids toward the target ordered volume:
 - An infusion rate
 - Infusion duration or time over which to infuse
 - Infusion end or completion time

Examples:

 - Order for 1500 mL (30 mL/kg) of normal saline over 1 hour started at 08:00. There is no infusion end time documented, and no documentation indicating the 1500 mL was not infused. The infusion end time can be determined based on the duration in the order. Select Value “1.”
 - Order for 1000 mL (30 mL/kg) normal saline bolus started at 09:30. The nurse documented an infusion rate of 1000 mL/hour. There is no fluid bolus end time documented, and no documentation indicating the 1000 mL was not infused. The infusion end time can be determined based on the rate. Select Value “1.”
 - Order for 2000 mL (30 mL/kg) normal saline bolus started at 08:30. There is no infusion rate documented and no fluid bolus end time documented. An infusion end time cannot be determined. Choose Value “2.”
- If a rate or duration to infuse fluids contained within the order is different from the rate or duration the fluids were actually administered, use the rate or duration the fluids were actually administered over.

Example:

 - Fluid Order: 0.9% NS 1000 mL bolus at 150 mL/hr

- Nurse documents a start time of 1500 and end time of 1800 for the 1000 mL bolus
 - Use the start and stop time documented by nursing that reflects the duration over which the fluids were actually administered.
- Only those crystalloid fluids given at a rate greater than 125 mL/hour should be used towards the target ordered volume. Do not use crystalloid fluids given at 125 mL/hr or less toward the target ordered volume.
- Acceptable fluids are crystalloid or balanced crystalloid solutions.
- Crystalloid fluids or balanced crystalloid fluids that are given to dilute medications are acceptable to count towards the target ordered volume.
- Crystalloid fluid volumes to which the following electrolytes have been added may be counted toward the target ordered volume requirement: potassium, magnesium, calcium, lactate, acetate, or gluconate.
- Only abstract fluids administered through the intravenous or intraosseous route.
- If there is documentation that the patient has an implanted ventricular assist device (VAD) prior to or at the time of identifying need for crystalloid fluids, choose Value “4” regardless of the volume and rate of crystalloid fluids ordered.
- Physician/APN/PA or nursing documentation indicating patient or authorized patient advocate has refused IV fluid administration prior to or within 6 hours following presentation of septic shock can be used to select Value “4.”

Suggested Data Sources:

- Ambulance or transport vehicle records
- Entire ED record
- Input and Output (I&O) flowsheet
- IV therapy record
- Medication Administration Record
- Patient weight record
- Physician/APN/PA orders

Inclusion Guidelines for Abstraction:

- 0.9% saline solution
- 0.9% Sodium Chloride Solution
- Isolyte
- Lactated Ringers Solution
- normal saline
- Normosol
- PlasmaLyte

Exclusion Guidelines for Abstraction:

Crystalloid solutions that are given to flush other medications or IV lines

Data Element Name: *Crystalloid Fluid Administration Date*

Collected For CMS: SEP-1

Definition: The earliest date on which crystalloid fluids were initiated within the specified time frame.

Suggested Data Collection Question: What was the earliest date on which crystalloid fluids were initiated within the specified time frame?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg or within 10% less than 30 mL/kg are considered the target ordered volume.
- The specified time frame for abstraction of crystalloid fluids is within 6 hours prior through 3 hours after either of the following trigger events. If both are present the specified time frame is determined by the earliest trigger.
- Initial Hypotension Date and Time
- Septic Shock Presentation Date and Time
- If a single order is written for the target ordered volume, use the date the crystalloid solution was started as an IV infusion.
- If a single order is written for the target ordered volume and the infusion is given over multiple infusions, use the start date of the first crystalloid fluid infusion.
- If multiple orders are written that total the target ordered volume, use the start date of the crystalloid fluid infusion that completes the target ordered volume.
- If a crystalloid infusion is running at a maintenance rate (125 mL/hour or less) and the rate is increased to administer the target ordered volume, use the date the infusion rate is increased.
- Do not abstract the date that fluids were ordered or the date that IV access was started. Abstract the date that the crystalloid fluid infusion began.
- Do not use physician orders as fluid administration start date and time; use the date and time that the fluid infusion was initiated.
- Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.

Suggested Data Sources:

- Ambulance or transport vehicle records
- Entire ED record
- IV therapy records or flow sheet
- Medication Administration Record

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Crystalloid Fluid Administration Time*

Collected For CMS: SEP-1

Definition: The earliest time at which crystalloid fluids were initiated within the specified time frame.

Suggested Data Collection Question: What was the earliest time at which crystalloid fluids were initiated within the specified time frame?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Crystalloid fluid volumes ordered that are equivalent to 30 mL/kg or within 10% less than 30 mL/kg are considered the target ordered volume.
- The specified time frame for abstraction of crystalloid fluids is within 6 hours prior through 3 hours after either of the following trigger events. If both are present the specified time frame is determined by the earliest trigger.
- Initial Hypotension Date and Time
- Septic Shock Presentation Date and Time
- If a single order is written for the target ordered volume, use the time the crystalloid solution was started as an IV infusion.
- If a single order is written for the target ordered volume and the infusion is given over multiple infusions, use the start time of the first crystalloid fluid infusion.
- If multiple orders are written that total the target ordered volume, use the start time of the crystalloid fluid infusion that completes the target ordered volume.
- If a crystalloid infusion is running at a maintenance rate (125 mL/ hour or less) and the rate is increased to administer the target ordered volume, use the time the infusion rate is increased.

- Do not abstract the time that fluids were ordered or the time that IV access was started. Abstract the time that the crystalloid fluid infusion began.
- Do not use physician orders as fluid administration start date and time; use the date and time that the fluid infusion was initiated.
- Documentation of crystalloid fluids administered prior to arrival to the hospital (e.g., ambulance, nursing home) that are part of the medical record are acceptable if the documentation of fluid administration contains the type, volume, start time, and rate, duration, or end time of the fluid infusion. A physician/APN/PA order for fluids administered prior to arrival is not required.

Suggested Data Sources:

- Ambulance or transport vehicle records
- Entire ED record
- IV therapy records or flow sheet
- Medication Administration Record

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Decision to Admit Date*

Collected For CMS/The Joint Commission: ED-2

Definition: The documented date the decision to admit to observation or inpatient status occurred. Decision to admit to observation or inpatient status date is the date the physician/APN/PA makes the decision to admit the patient from the emergency department to the hospital for continued care in the facility.

Suggested Data Collection Question: What was the earliest documented month, day, and year of the decision to admit?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

Enter the documented date of the decision to admit

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- If the date of the decision to admit to observation or inpatient status is unable to be determined from medical record documentation, select “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after the *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *Decision to Admit Date* was 03-**42**-20xx. No other documentation in the list of ONLY ACCEPTABLE SOURCES provides a valid date. Since the *Decision to Admit Date* is outside of the range listed in the Allowable Values for “Day,” it is not a valid date and the abstractor should select “UTD.”
- Patient expires on 02-12-20xx and all documentation within the ONLY ACCEPTABLE SOURCES indicates the *Decision to Admit Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *Decision to Admit Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission's Data Warehouse. Use of "UTD" for *Decision to Admit Date* allows the case to be accepted into the warehouse.

- When reviewing ED records do NOT include any documentation from external sources (e.g., ambulance records, physician/advanced practice nurse/physician assistant [physician/APN/PA] office record, laboratory reports or ECGs) obtained prior to arrival. The intent is to utilize any documentation that reflects processes that occurred in the ED or hospital.
- For purposes of this data element, the source "Emergency Department record" includes any documentation from the time of ED arrival to the time the patient physically departed from the ED.

Example:

ED departure is at 11:00 on 03-12-20xx. The attending physicians admit orders written in the inpatient record at 10:00 on 03-12-20xx are considered part of the ED record.

- Disregard physician/APN/PA narrative documentation of a consult or orders for consult, transfer to another physician's service, or discussion with another physician since this does not reflect a decision was made.
- If there is more than one date of documentation for the decision to admit, use the following order to determine which date to abstract.
 1. Specified date the decision to admit was documented.
 2. Specified date the decision to admit was documented in a non-narrative location (e.g., flowsheet, checklist, screening).
 3. Note opened date for the decision to admit documented in a non-narrative location without a specified date (e.g., flowsheet, checklist, screening).
 4. Note opened date for narrative documentation identifying the decision to admit was made without a specified date.
- *Decision to Admit Date* includes physician/APN/PA documentation of a decision to send the patient to cath lab or surgery.

Example:

The ED physician documents that he/she is sending the patient to the OR for surgery. The decision to admit to observation or inpatient status date will abstract as the date this was documented.

- Use the date from the earliest documentation of decision to admit for either observation or inpatient.

Example:

The physician ordered "Admit Observation Service." Four hours later the physician wrote an order to admit the patient to inpatient status. These orders were written while the patient was still receiving care in the ED. Use the earlier order for Observation Services to abstract as date and time.

- If it can be determined that the patient arrived on the same date and departed on the same date, the arrival date can be used as the decision to admit to observation or inpatient status date.

- Data fields representing ‘decision to admit’ in electronic documentation for this specific episode of care are acceptable to use as long as they are the earliest physician/APN/PA documentation and clearly defined to capture the date an observation status or inpatient admit decision was documented. Information found in an electronically interfaced event log or Admit/Decision/Transfer (ADT) is acceptable provided this information is part of the submitted medical record covering the arrival to discharge date being abstracted.

Examples:

- Decision to Admit
- Dispo
- Disposition set to admit
- For purposes of this data element *Decision to Admit Date* is the date on which the physician/APN/PA makes the decision to admit the patient from the emergency department to the hospital. This will not necessarily coincide with the date the patient is officially admitted to inpatient status.
- If the decision to admit the patient to observation or inpatient status is made, but the actual request for a bed is delayed until an inpatient bed is available, record the date the physician/APN/PA communicated the decision to admit.
- If the decision to admit to observation or inpatient status date is dated prior to the date of patient arrival or after the date of departure, select “UTD.”
- For documentation of a decision to admit accompanied by an indicator, the table below should be used. Documentation containing a positive indicator should be used for a decision to admit, documentation containing a negative indicator should **not** be used for a decision to admit.

| Positive Indicators | Negative Indicators |
|--------------------------|----------------------------|
| Plan to admit | Request admission |
| Doctor accepts admission | May need admission |
| Plan to hospitalize | Doctor will accept patient |
| Admit to doctor | Recommend admission |
| Need to admit | Would like to admit |

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

Emergency Department record

Inclusion Guidelines for Abstraction:

- Admit Order Date
- Disposition Date

Exclusion Guidelines for Abstraction:

- Bed assignment Date
- Direct admit patients seen in the ED

Data Element Name: *Decision to Admit Time*

Collected For CMS/The Joint Commission: ED-2

Definition: The documented time (military time) the decision to admit to observation or inpatient status occurred. Decision to admit to observation or inpatient status time is the time the physician/APN/PA makes the decision to admit the patient from the emergency department to the hospital for continued care in the facility.

Suggested Data Collection Question: What was the earliest documented time of the decision to admit?

Format:

Length: 5 – HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight - 00:00 | Noon - 12:00 |
| 5:31 am - 05:31 | 5:31 pm - 17:31 |
| 11:59 am - 11:59 | 11:59 pm - 23:59 |

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the *Decision to Admit Date* should remain 11-24-20xx or if it should be converted to 11-25-20xx.

When converting Midnight or 24:00 to 00:00, do not forget to change the *Decision to Admit Date*.

Example:

Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- For times that include “seconds,” remove the seconds and record the military time.

Example:

15:00:35 would be recorded as 15:00.

- If the time of the decision to admit to observation or inpatient status is unable to be determined from medical record documentation, select “UTD.”

- The medical record must be abstracted as documented (taken at “face value”). When the time documented is obviously in error (not a valid format/range) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Example:

Documentation indicates the Decision to Admit Time was 3300. No other documentation in the list of ONLY Acceptable Sources provides a valid time. Since the Decision to Admit Time is outside of the range in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid time as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *Decision to Admit Time* allows the case to be accepted into the warehouse.

- When reviewing ED records do NOT include any documentation from external sources (e.g., ambulance records, physician/advanced practice nurse/physician assistant [physician/APN/PA] office record, laboratory reports, or ECGs) obtained prior to arrival. The intent is to utilize any documentation which reflects processes that occurred in the ED or hospital.
- For purposes of this data element, the source “Emergency Department record” includes any documentation from the time of ED arrival to the time the patient physically departed from the ED.

Example:

ED departure is at 11:00 on 03-12-20XX. The attending physicians admit orders written in the inpatient record at 10:00 on 03-12-20XX are considered part of the ED record.

- Disregard physician/APN/PA narrative documentation of a consult or orders for consult, transfer to another physician’s service, or discussion with another physician since this does not reflect a decision was made.

Examples that reflect a decision to admit was NOT made:

- ED physician note states “Discussed case with hospitalist.” This is only documentation that a discussion occurred, there is no documentation regarding a decision to admit.
- ED physician note states “Discussed patient with Dr. Jones who recommends admission.” This reflects a discussion occurred and a recommendation was made to admit, but does not indicate a decision was made to admit.
- ED physician note states “Contacted Dr. Smith for admission consult.” This reflects a consult has been requested for admission, but does not indicate a decision to admit has been made.
- ED physician note states “Possible admission pending cardiology consult.” This reflects a consult was ordered and admission is possible, but does not indicate a decision to admit has been made.

Examples that reflect a decision to admit was made:

- ED physician note states “Discussed case with hospitalist on call, plan to admit.” The note references a discussion with another physician with “plan to admit” documented, indicating a decision to admit has been made.

- ED physician note states “Discussed case with Dr. Brown who will admit patient to ICU.” The note references a discussion with another physician with “who will admit patient” documented, indicating a decision to admit has been made.
- If there is more than one time of documentation for the decision to admit, use the following order to determine which time to abstract.
 1. Specified time the decision to admit was documented.
 2. Specified time the decision to admit was documented in a non-narrative location (e.g., flowsheet, checklist, screening).
 3. Note opened time for the decision to admit documented in a non-narrative location without a specified time (e.g., flowsheet, checklist, screening).
 4. Note opened time for narrative documentation identifying the decision to admit was made without a specified time.
- *Decision to Admit Time* includes physician/APN/PA documentation of a decision to send the patient to cath lab or surgery.

Example:
The ED physician documents that he/she is sending the patient to the OR for surgery. The decision to admit to observation or inpatient status time will abstract as the time this was documented.
- Use the time from the earliest documentation for either observation or inpatient.

Example:
The physician ordered “Admit Observation Services.” Four hours later the physician wrote an order to admit the patient to inpatient status. These orders were written while the patient was still receiving care in the ED. Use the earlier order for Observation Services to abstract decision to admit time.
- Data fields representing ‘decision to admit’ in electronic documentation for this specific episode of care are acceptable to use as long as they are the earliest physician/APN/PA documentation and clearly defined to capture the time an observation status or inpatient admit decision was documented. Information found in an electronically interfaced event log or Admit/Decision/Transfer (ADT) is acceptable provided this information is part of the submitted medical record covering the arrival to discharge time being abstracted.

Examples:

 - Decision to Admit
 - Dispo
 - Disposition set to admit
- For purposes of this data element “*Decision to Admit Time*” is the time the physician/APN/PA communicates the decision to admit the patient to observation or inpatient status from the emergency department to the hospital. This will not necessarily coincide with the time the patient is officially admitted to inpatient status.
- If the decision to admit the patient to observation or inpatient status is made, but the actual request for a bed is delayed until an inpatient bed is available, record the time the physician/APN/PA communicated the decision to admit.
- If documentation of the decision to admit to observation or inpatient status time is prior to arrival or after departure from the ED, select, “UTD.”

Example:

The APN saw the patient in the clinic and sent him/her to the ED for admission. Select UTD.

- For documentation of a decision to admit accompanied by an indicator, the table below should be used. Documentation containing a positive indicator should be used for a decision to admit, documentation containing a negative indicator should **not** be used for a decision to admit.

| Positive Indicators | Negative Indicators |
|----------------------------|----------------------------|
| Plan to admit | Request admission |
| Doctor accepts admission | May need admission |
| Plan to hospitalize | Doctor will accept patient |
| Admit to doctor | Recommend admission |
| Need to admit | Would like to admit |

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

Emergency Department record

Inclusion Guidelines for Abstraction:

- Admit Order Time
- Disposition Time

Exclusion Guidelines for Abstraction:

- Bed assignment time
- Direct admit patients seen in the ED
- Report Called Time

Data Element Name: *Directive for Comfort Care or Palliative Care, Septic Shock*

Collected For CMS: SEP-1

Definition: Directive for Comfort Care refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Palliative Care is the identification, prevention, and treatment of suffering by means of assessment of the physical, psychosocial, intellectual, and spiritual needs of the patient with a goal of supporting and optimizing the patient's quality of life. Palliative care ensures a partnership between practitioner, patient, and family to provide support in decision making at any stage in the patient's care.

Suggested Data Collection Question: Did physician/APN/PA documentation of comfort measures only or palliative care occur?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|---------|--|
| 1 (Yes) | Physician/APN/PA documentation of comfort measures only or palliative care was prior to or within 6 hours of the presentation of septic shock. |
| 2 (No) | Physician/APN/PA documentation of comfort measures only or palliative care was not prior to or within 6 hours of presentation of septic shock, or not documented or time is unclear. |

Notes for Abstraction:

- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- **Only the earliest physician/APN/PA documentation of an inclusion term documented** in the following contexts suffices:
 - Comfort measures only recommendation
 - Order for consultation or evaluation by a hospice care service
 - Patient or patient representative request for comfort measures only
 - Plan for comfort measures only
 - Referral to hospice care service
- State-authorized portable orders (SAPOs):
 - SAPOs are specialized forms or identifiers authorized by state law that translate a patient's preferences about specific end-of-life treatment decisions into portable medical orders.

Examples:

- DNR-Comfort Care form
- MOLST (Medical Orders for Life-Sustaining Treatment)
- POLST (Physician Orders for Life-Sustaining Treatment)
- Out-of-Hospital DNR (OOH DNR)
- If there is a SAPO in the record that is dated and signed prior to arrival with an option in which an inclusion term is found that is checked, select Value “1.”
- If a SAPO lists different options for CMO and any CMO option is checked, select Value “1.”
- If one or more dated SAPOs are included in the record (and signed by the physician/APN/PA), use only the most recent one. Disregard undated SAPOs.
- For cases where there is a SAPO in the record with a CMO option selected: If the SAPO is dated prior to arrival and there is documentation on the day of arrival up to septic shock presentation that the patient or patient representative does not want CMO, and there is no other documentation regarding CMO found in the record, disregard the SAPO.

Example:

Patient has a POLST dated prior to arrival in his chart and ED physician states in current record “Patient is refusing comfort measures, wants to receive full treatment and be a full code.”

- Documentation of an inclusion term in the following situations should be **disregarded**. Continue to review the remaining physician/APN/PA documentation for acceptable inclusion terms. If the **ONLY** documentation found is an inclusion term in the following situations, select Value “2.”
 - Documentation (other than SAPOs) that is dated prior to arrival or documentation which refers to the pre-arrival time period.
 - Examples:**
 - Comfort measures only or palliative care order in previous hospitalization record.
 - “Pt. on hospice at home” in MD ED note.
 - Inclusion term clearly described as negative or conditional.
 - Examples:**
 - “No comfort care”
 - “Not appropriate for hospice care”
 - “Comfort care would also be reasonable - defer decision for now”
 - “DNRCCA” (Do Not Resuscitate – Comfort Care Arrest)
 - “Family requests comfort measures only should the patient arrest.”
 - Documentation of “CMO” should be disregarded if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., “hx dilated CMO” – Cardiomyopathy context).

- If there is physician/APN/PA documentation of an inclusion term in one source that indicates the patient is Comfort Measures Only or Palliative Care, AND there is physician/APN/PA documentation of an inclusion term in another source that indicates the patient is NOT CMO or Palliative Care, the source that indicates the patient is CMO or Palliative Care would be used to select Value “1.”

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency Department record
- History and physical
- Physician orders
- Progress notes

Excluded Data Sources:

Restraint order sheet

Inclusion Guidelines for Abstraction:

- Brain dead
- Brain death
- Comfort care
- Comfort measures
- Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Palliative Care
- Palliative Consult
- Terminal care
- Terminal extubation
- Withdraw care
- Withhold care

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Directive for Comfort Care or Palliative Care, Severe Sepsis*

Collected For CMS: SEP-1

Definition: Directive for Comfort Care refers to medical treatment of a dying person where the natural dying process is permitted to occur while assuring maximum comfort. It includes attention to the psychological and spiritual needs of the patient and support for both the dying patient and the patient's family. It is not equivalent to a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate (DNR).

Palliative Care is the identification, prevention, and treatment of suffering by means of assessment of the physical, psychosocial, intellectual, and spiritual needs of the patient with a goal of supporting and optimizing the patient's quality of life. Palliative care ensures a partnership between practitioner, patient, and family to provide support in decision making at any stage in the patient's care.

Suggested Data Collection Question: Did physician/APN/PA documentation of comfort measures only or palliative care occur?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|---------|---|
| 1 (Yes) | Physician/APN/PA documentation of comfort measures only or palliative care was prior to or within 6 hours of the presentation of severe sepsis. |
| 2 (No) | Physician/APN/PA documentation of comfort measures only or palliative care was not prior to or within 6 hours of presentation of severe sepsis, or not documented or time is unclear. |

Notes for Abstraction:

- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- Only the earliest physician/APN/PA documentation of an inclusion term **documented** in the following contexts suffices:
 - Comfort measures only recommendation
 - Order for consultation or evaluation by a hospice care service
 - Patient or patient representative request for comfort measures only
 - Plan for comfort measures only
 - Referral to hospice care service
- State-authorized portable orders (SAPOs):
 - SAPOs are specialized forms or identifiers authorized by state law that translate a patient's preferences about specific end-of-life treatment decisions into portable medical orders.

Examples:

- DNR-Comfort Care form
- MOLST (Medical Orders for Life-Sustaining Treatment)
- POLST (Physician Orders for Life-Sustaining Treatment)
- Out-of-Hospital DNR (OOH DNR)
- If there is a SAPO in the record that is dated and signed prior to arrival with an option in which an inclusion term is found that is checked, select Value “1.”
- If a SAPO lists different options for CMO and any CMO option is checked, select Value “1.”
- If one or more dated SAPOs are included in the record (and signed by the physician/APN/PA), use only the most recent one. Disregard undated SAPOs.
- For cases where there is a SAPO in the record with a CMO option selected: If the SAPO is dated prior to arrival and there is documentation on the day of arrival up to severe sepsis presentation that the patient or patient representative does not want CMO, and there is no other documentation regarding CMO found in the record, disregard the SAPO.

Example:

Patient has a POLST dated prior to arrival in his chart and ED physician states in current record “Patient is refusing comfort measures, wants to receive full treatment and be a full code.”

- Documentation of an inclusion term in the following situations should be **disregarded**. Continue to review the remaining physician/APN/PA documentation for acceptable inclusion terms. If the **ONLY** documentation found is an inclusion term in the following situations, select Value “2.”

- Documentation (other than SAPOs) that is dated prior to arrival or documentation which refers to the pre-arrival time period.

Examples:

- Comfort measures only or palliative care order in previous hospitalization record.
- “Pt. on hospice at home” in MD ED note.
- Inclusion term clearly described as negative or conditional.

Examples:

- “No comfort care”
- “Not appropriate for hospice care”
- “Comfort care would also be reasonable - defer decision for now”
- “DNRCCA” (Do Not Resuscitate – Comfort Care Arrest)
- “Family requests comfort measures only should the patient arrest.”
- Documentation of “CMO” should be disregarded if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., “hx dilated CMO” – Cardiomyopathy context).

- If there is physician/APN/PA documentation of an inclusion term in one source that indicates the patient is Comfort Measures Only or Palliative Care, AND there is physician/APN/PA documentation of an inclusion term in another source that indicates the patient is NOT CMO or Palliative Care, the source that indicates the patient is CMO or Palliative Care would be used, select Value “1.”

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency Department record
- History and physical
- Physician orders
- Progress notes

Excluded Data Sources:

Restraint order sheet

Inclusion Guidelines for Abstraction:

- Brain dead
- Brain death
- Comfort care
- Comfort measures
- Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Palliative Care
- Palliative Consult
- Terminal care
- Terminal extubation
- Withdraw care
- Withhold care

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Discharge Date*

Collected For CMS/The Joint Commission: All Records

Definition: The month, day, and year the patient was discharged from acute care, left against medical advice, or expired during this stay.

Suggested Data Collection Question: What is the date the patient was discharged from acute care, left against medical advice (AMA), or expired?

Format:

Length: 10 – MM-DD-YYYY (includes dashes)

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

Note: The CMS Clinical Warehouse only allows data containing dates applicable to a specified quarter of data transmission. Data submitted for discharge quarters outside of the current submission deadline will be rejected.

Refer to the Data Transmission section of this manual for further guidance related to data transmission.

Notes for Abstraction:

Because this data element is critical in determining the population for many measures, the abstractor should NOT assume that the claim information for the discharge date is correct. If the abstractor determines through chart review that the date is incorrect, she/he should correct and override the downloaded value. If the abstractor is unable to determine the correct discharge date through chart review, she/he should default to the discharge date on the claim information.

Suggested Data Sources:

- Discharge summary
- Face sheet
- Nursing discharge notes
- Physician orders
- Progress notes
- Transfer note
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Discharge Disposition*

Collected For The Joint Commission Only: IMM-2, SUB-3, TOB-3; **CMS Only:** SEP-1

Definition: The final place or setting to which the patient was discharged on the day of discharge.

Suggested Data Collection Question: What was the patient's discharge disposition on the day of discharge?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 Home
- 2 Hospice - Home
- 3 Hospice – Health Care Facility
- 4 Acute Care Facility
- 5 Other Health Care Facility
- 6 Expired
- 7 Left Against Medical Advice/AMA
- 8 Not Documented or Unable to Determine (UTD)

Notes for Abstraction:

- Only use documentation written on the day prior to discharge through 30 days after discharge when abstracting this data element.

Example:

Documentation in the Discharge Planning notes on 04-01-20xx state that the patient will be discharged back home. On 04-06-20xx the physician orders and nursing discharge notes on the day of discharge reflect that the patient was being transferred to skilled care. The documentation from 04-06-20xx would be used to select Value "5" (Other Health Care Facility).

- The medical record must be abstracted as documented (taken at "face value"). Inferences should not be made based on internal knowledge.
- If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract. If documentation is contradictory, use the latest documentation.

Examples:

- Discharge summary dictated 2 days after discharge states patient went "home." Physician note on day of discharge further clarifies that the patient will be going "home with hospice." Select Value "2" ("Hospice - Home").
- Discharge planner note from day before discharge states "XYZ Nursing Home." Discharge order from day of discharge states

- “Discharge home.” Contradictory documentation, use latest. Select Value “1” (“Home”).
 - Physician order on discharge states “Discharge to ALF.” Discharge instruction sheet completed after the physician order states patient discharged to “SNF.” Contradictory documentation, use latest. Select Value “5” (“Other Health Care Facility”).
- If documentation is contradictory, and you are unable to determine the latest documentation, select the disposition ranked highest (top to bottom) in the following list. See Inclusion lists for examples.
 - Acute Care Facility
 - Hospice – Health Care Facility
 - Hospice – Home
 - Other Health Care Facility
 - Home
- Hospice (Values “2” and “3”) includes discharges with hospice referrals and evaluations.
- If the medical record states only that the patient is being discharged to another hospital and does not reflect the level of care that the patient will be receiving, select Value “4” (“Acute Care Facility”).
- If the medical record states the patient is being discharged to assisted living care or an assisted living facility (ALF) and the documentation also includes nursing home, intermediate care or skilled nursing facility, select Value “1” (“Home”).
- If the medical record states the patient is being discharged to nursing home, intermediate care or skilled nursing facility without mention of assisted living care or assisted living facility (ALF), select Value “5” (“Other Health Care Facility”).
- If the medical record identifies the facility the patient is being discharged to by name only (e.g., “Park Meadows”), and does not reflect the type of facility or level of care, select Value “5” (“Other Health Care Facility”).
- If the medical record states only that the patient is being “discharged” and does not address the place or setting to which the patient was discharged, select Value “1” (“Home”).
- When determining whether to select Value “7” (“Left Against Medical Advice/AMA”):
 - Explicit “left against medical advice” documentation is not required. E.g., “Patient is refusing to stay for continued care” – Select Value “7.”
 - Documentation suggesting that the patient left before discharge instructions could be given does not count.
 - A signed AMA form is not required, for the purposes of this data element.
 - Do not consider AMA documentation and other disposition documentation as “contradictory.” If any source states the patient left against medical advice, select Value “7,” regardless of whether the AMA documentation was written last. E.g., AMA form signed and discharge instruction sheet states “Discharged home with belongings” – Select “7.”

Suggested Data Sources:

- Discharge instruction sheet
- Discharge planning notes
- Discharge summary

- Nursing discharge notes
- Physician orders
- Progress notes
- Social service notes
- Transfer record

Excluded Data Sources:

- Any documentation prior to the last two days of hospitalization
- Coding documents
- UB-04

Inclusion Guidelines for Abstraction:

Home (Value 1):

- Assisted Living Facilities (ALFs) – Includes ALFs and assisted living care at: nursing home, intermediate care, and skilled nursing facilities
- Court/Law Enforcement – includes detention facilities, jails, and prison
- Home – includes board and care, foster or residential care, group or personal care homes, retirement communities, and homeless shelters
- Home with Home Health Services
- Outpatient Services including outpatient procedures at another hospital, Outpatient Chemical Dependency Programs and Partial Hospitalization

Hospice – Home (Value 2):

Hospice in the home (or other “Home” setting as above in Value 1)

Hospice – Health Care Facility (Value 3):

- Hospice - General Inpatient and Respite
- Hospice - Residential and Skilled Facilities
- Hospice - Other Health Care Facilities

Acute Care Facility (Value 4):

- Acute Short Term General and Critical Access Hospitals
- Cancer and Children’s Hospitals
- Department of Defense and Veteran’s Administration Hospitals

Other Health Care Facility (Value 5):

- Extended or Intermediate Care Facility (ECF/ICF)
- Long Term Acute Care Hospital (LTACH)
- Nursing Home or Facility including Veteran’s Administration Nursing Facility
- Psychiatric Hospital or Psychiatric Unit of a Hospital
- Rehabilitation Facility including, but not limited to: Inpatient Rehabilitation Facility/Hospital, Rehabilitation Unit of a Hospital, Chemical Dependency/Alcohol Rehabilitation Facility
- Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed
- Transitional Care Unit (TCU)
- Veterans Home

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Discharge Time*

Collected For CMS: SEP-1

Definition: The time the patient was discharged from acute care, left against medical advice (AMA), or expired during this stay.

Suggested Data Collection Question: What time was the patient discharged?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Abstract the earliest documented time of the following:
 - Discharge from acute inpatient care
 - Left against medical advice (AMA)
 - Expired
- If the time the patient was discharged from acute inpatient care, left AMA, or expired is unable to be determined from medical record documentation, enter “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the time documented is obviously in error (not a valid time/format) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Example:

Documentation indicates the patient expired at **3300**. No other documentation in the medical record provides a valid time. Since the Time Expired is outside of the range listed in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD.”

- If the patient expired and there are multiple times, such as a time the patient was pronounced in physician notes and an administrative time the patient was discharged, use the time the patient was pronounced.

- If the patient expired and there is not a pronounced time but there is a discharge time, use the discharge time.
- If the patient was discharged from acute inpatient care, left AMA, or transferred out to another facility, use the time the patient actually left, not the time the order was written.
- If there are multiple times documented when the patient was discharged from acute inpatient care or left AMA, use the earliest time.

Suggested Data Sources:

- Death certificate
- Discharge summary
- Nurses Notes
- Progress Notes
- Resuscitation records

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ED Departure Date*

Collected For CMS/The Joint Commission: ED-2; **Collected For The Joint Commission Only:** ED-1

Definition: The month, day, and year at which the patient departed from the emergency department.

Suggested Data Collection Question: What is the date the patient departed from the emergency department?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

Enter the documented date of the ED Departure

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after the *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *ED Departure Date* was 03-~~42~~-20xx. No other documentation in the list of ONLY ACCEPTABLE SOURCES provides a valid date. Since the *ED Departure Date* is outside of the range listed in the Allowable Values for “Day,” it is not a valid date and the abstractor should select “UTD.”
- Patient expires on 02-12-20xx and all documentation within the ONLY ACCEPTABLE SOURCES indicates the *ED Departure Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *ED Departure Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *ED Departure Date* allows the case to be accepted into the warehouse.

- If the date the patient departed is unable to be determined from medical record documentation, select “UTD.”

- If the date of departure is not documented, but the date can be determined from other documentation in the ED record, this is acceptable to use (the patient arrived and was transferred on the same day).
- Data fields representing ED Departure Date in electronic documentation for this specific episode of care are acceptable to use as long as the fields are easily understood to mean departure. Information found in an electronically interfaced event log or Admit/Decision/Transfer (ADT) is acceptable provided this information is part of the submitted medical record covering the arrival to discharge date being abstracted.

Examples:

- Patient departed
- Patient transferred off the floor (OTF)
- Check out time
- Transported to
- For patients who are placed into observation outside the services of the emergency department, abstract the date of departure from the emergency department.
- For patients who are placed into observation under the services of the emergency department, abstract the date of departure from the observation services (e.g., patient is seen in the ED and admitted to an observation unit of the ED on 01-01-20xx then is discharged from the observation unit on 01-03-20xx abstract 01-03-20xx as the departure date).
- If there is a departure date listed within a disposition heading from the ED, this may be used for *ED Departure Date*.
- The inclusion list is not to be considered a comprehensive list of inclusions.

Suggested Data Sources:

ONLY ACCEPTABLE SOURCES

Emergency Department record

Inclusion Guidelines for Abstraction:

- ED Checkout Date
- ED Departure Date
- ED Discharge Date
- ED Leave Date
- ED Transport Date

Exclusion Guidelines for Abstraction:

Patient Admission Date

Data Element Name: *ED Departure Time*

Collected For CMS/The Joint Commission: ED-2; **Collected For The Joint Commission Only:** ED-1

Definition: The time (military time) represented in hours and minutes at which the patient departed from the emergency department.

Suggested Data Collection Question: What is the time the patient departed from the emergency department?

Format:

Length: 5 – HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight - 00:00 | Noon - 12:00 |
| 5:31 am - 05:31 | 5:31 pm - 17:31 |
| 11:59 am - 11:59 | 11:59 pm - 23:59 |

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the *ED Departure Date* should remain 11-24-20xx or if it should be converted to 11-25-20xx.

When converting Midnight or 24:00 to 00:00, do not forget to change the *ED Departure Date*.

Example:

Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- For times that include “seconds,” remove the seconds and record the military time.

Example:

15:00:35 would be recorded as 15:00.

- The intention is to capture the latest time at which the patient was receiving care in the emergency department.
- The medical record must be abstracted as documented (taken at “face value”). When the time documented is obviously in error (not a valid format/range) and no

other documentation is found that provides this information, the abstractor should select “UTD.”

Example:

Documentation indicates the *ED Departure Time* was 3300. No other documentation in the list of ONLY Acceptable Sources provides a valid time. Since the *ED Departure Time* is outside of the range in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid time as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *ED Departure Time* allows the case to be accepted into the warehouse.

- ED Departure Time is the time the patient physically left the emergency department (e.g., nurse’s notes state “18:00 transfer to floor-room 300” and other documentation includes a time that the patient left the ED via stretcher, abstract the later time or nurses notes state “18:00 transport to unit” and other documentation includes a time that the patient actually left the ED to be transferred, abstract the later time).
- If the time the patient departed is unable to be determined from medical record documentation, select, “UTD.”
- When more than one acceptable emergency department departure/discharge time is documented, abstract the latest time.

Example:

Two departure times are found in the nurse’s notes: 12:03 via wheelchair and 12:20 via wheelchair. Select the later time of 12:20.

- Do not use documentation of vital signs or medications if they are later than the ED departure time.
- Do not use the time the discharge order was written because it may not represent the actual time of departure.
- Data fields representing *ED Departure Time* in electronic documentation for this specific episode of care are acceptable to use as long as the fields are easily understood to mean departure. Information found in an electronically interfaced event log or Admit/Decision/Transfer (ADT) is acceptable provided this information is part of the submitted medical record covering the arrival to discharge time being abstracted.

Examples:

- Patient departed
- Patient transferred off the floor (OTF)
- Check out time
- Transported to
- If there is a departure time listed within a disposition heading from the ED, this may be used for *ED Departure Time*.
- For patients who are placed into observation outside the services of the emergency department, abstract the time of departure from the emergency department.

- If the patient is placed into observation services and remains in the ED or in a unit of the ED abstract the time they depart the ED or ED unit for the floor/surgery etc. Do not abstract the time they are placed into observation services.
- For patients who are placed into observation under the services of the emergency department, abstract the time of departure from the observation services.
 - If a patient is seen in the ED and admitted to an observation unit of the ED, then discharged from the observation unit, abstract the time they depart the observation unit.
 - If the patient is placed into observation services and remains in the ED or in a unit of the ED abstract the time they depart the ED or ED unit for the floor/surgery etc. Do not abstract the time they are placed into observation services.
- If the documented *ED Departure Time* is prior to arrival, enter “UTD.”
- If the patient expired in the ED, use the time of death as the departure time.
- The inclusion and exclusion lists are not to be considered comprehensive lists of inclusions and exclusions.

Suggested Data Sources:
ONLY ACCEPTABLE SOURCES

Emergency Department record

Inclusion Guidelines for Abstraction:

- ED Check Out Time
- ED Departure Time
- ED Discharge Time
- ED Leave Time
- ED Transport Time

Exclusion Guidelines for Abstraction:

- Patient Admission Time
- Report Called Time

Data Element Name: *ED Patient*

Collected For CMS/The Joint Commission: ED-2; **Collected For The Joint Commission Only:** ED-1

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?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

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:

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

Data Element Name: *First Name*

Collected For CMS Only: All Records (Optional Element)

Definition: The patient's first name.

Suggested Data Collection Question: What is the patient's first name?

Format:

Length: 30

Type: Character

Occurs: 1

Allowable Values:

Enter the patient's first name. Up to 30 letters, numbers, and/or special characters can be entered.

Note: Only the following special characters will be allowed:

~ ! @ # \$ % ^ * () _ + { } | : ? ` - = [] \ ; ' . , / and space

Notes for Abstraction:

None

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Hispanic Ethnicity*

Collected For CMS/The Joint Commission: All Records

Definition: Documentation that the patient is of Hispanic ethnicity or Latino.

Suggested Data Collection Question: Is the patient of Hispanic ethnicity or Latino?

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

Y (Yes) Patient is of Hispanic ethnicity or Latino.

N (No) Patient is not of Hispanic ethnicity or Latino or unable to determine from medical record documentation.

Notes for Abstraction:

The data element, *Race*, is required in addition to this data element.

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes

Inclusion Guidelines for Abstraction:

A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term “Spanish origin” can be used in addition to “Hispanic or Latino.”

Examples:

- Black-Hispanic
- Chicano
- H
- Hispanic
- Latin American
- Latino/Latina
- Mexican-American
- Spanish
- White-Hispanic

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-CM Other Diagnosis Codes*

Collected For CMS/The Joint Commission: All Records

Definition: The other or secondary ICD-10-CM codes associated with the diagnosis for this hospitalization.

Suggested Data Collection Question: What were the ICD-10-CM other diagnosis codes selected for this medical record?

Format:

Length: 3-7 (without decimal point or dot)

Type: Character (upper or lower case)

Occurs: 24

Allowable Values:

Any valid diagnosis code as per the CMS ICD-10-CM master code table (Code Descriptions in Tabular Order):

<https://www.cms.gov/Medicare/Coding/ICD10/index.html>

Notes for Abstraction:

None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-PCS Other Procedure Codes*

Collected For CMS/The Joint Commission: All Records

Definition: The other or secondary ICD-10-PCS codes identifying all significant procedures other than the principal procedure.

Suggested Data Collection Question: What were the ICD-10-PCS code(s) selected as other procedure(s) for this record?

Format:

Length: 3-7 (without decimal point or dot)

Type: Character (upper or lower case)

Occurs: 24

Allowable Values:

Any valid procedure code as per the CMS ICD-10-PCS master code table (PCS Long and Abbreviated Titles): <https://www.cms.gov/Medicare/Coding/ICD10/index.html>

Notes for Abstraction:

None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-PCS Other Procedure Dates*

Collected For CMS/The Joint Commission: All Records

Definition: The month, day, and year when the associated procedure(s) was (were) performed.

Suggested Data Collection Question: What were the date(s) the other procedure(s) were performed?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 24

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- If the procedure date for the associated procedure is unable to be determined from medical record documentation, select “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *ICD-10-PCS Other Procedure Dates* was 02-**42**-20xx. No other documentation in the medical record provides a valid date. Since the *ICD-10-PCS Other Procedure Dates* is outside of the range listed in the Allowable Values for “Day,” it is not a valid date and the abstractor should select “UTD.”
- Patient expires on 02-12-20xx and documentation indicates the *ICD-10-PCS Other Procedure Dates* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-10-PCS Other Procedure Dates* is after the *Discharge Date* (death), it is outside of the parameters of care and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *ICD-10-PCS Other Procedure Dates* allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Discharge summary
- Face sheet
- Operative notes
- Procedure notes
- Progress notes
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-CM Principal Diagnosis Code*

Collected For CMS/The Joint Commission: All Records

Definition: The ICD-10-CM diagnosis code that is primarily responsible for the admission of the patient to the hospital for care during this hospitalization.

Suggested Data Collection Question: What was the ICD-10-CM code selected as the principal diagnosis for this record?

Format:

Length: 3-7 (without decimal point or dot)

Type: Character (upper or lower case)

Occurs: 1

Allowable Values:

Any valid diagnosis code as per the CMS ICD-10-CM master code table (Code Descriptions in Tabular Order):

<https://www.cms.gov/Medicare/Coding/ICD10/index.html>

Notes for Abstraction:

None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-PCS Principal Procedure Code*

Collected For CMS/The Joint Commission: All Records

Definition: The principal procedure is the procedure performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.

Suggested Data Collection Question: What was the ICD-10-PCS code selected as the **principal** procedure for this record?

Format:

Length: 3-7 (without decimal point or dot)

Type: Character (upper or lower case)

Occurs: 1

Allowable Values:

Any valid procedure code as per the CMS ICD-10-PCS master code table (PCS Long and Abbreviated Titles):

<https://www.cms.gov/Medicare/Coding/ICD10/index.html>

Notes for Abstraction:

None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *ICD-10-PCS Principal Procedure Date*

Collected For CMS/The Joint Commission: All Records

Definition: The month, day, and year when the principal procedure was performed.

Suggested Data Collection Question: What was the date the principal procedure was performed?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- If the principal procedure date is unable to be determined from medical record documentation, select “UTD.”
- The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid date/format or is outside of the parameters of care [after Discharge Date]) and no other documentation is found that provides this information, the abstractor should select “UTD.”

Examples:

- Documentation indicates the *ICD-10-PCS Principal Procedure Date* was 02-~~42~~-20xx. No other documentation in the medical record provides a valid date. Since the *ICD-10-PCS Principal Procedure Date* is outside of the range listed in the Allowable Values for “Day,” it is not a valid date and the abstractor should select “UTD.”
- Patient expires on 02-12-20xx and documentation indicates the *ICD-10-PCS Principal Procedure Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-10-PCS Principal Procedure Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select “UTD.”

Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse. Use of “UTD” for *ICD-10-PCS Principal Procedure Date* allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Discharge summary
- Face sheet
- Operative notes
- Procedure notes
- Progress notes
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Influenza Vaccination Status*

Collected For The Joint Commission Only: IMM-2

Definition: Documentation of the patient's vaccination status during this influenza season. If found to be a candidate for the influenza vaccine, documentation that the influenza vaccine was given during this hospitalization. The main types of influenza vaccine available are: an attenuated (weakened) live vaccine given as a nasal spray and approved for healthy nonpregnant persons 2-49 years of age, a killed (inactivated) influenza vaccine administered via intramuscular (IM) needle injection for persons 6 months and older, an intradermal vaccine administered to persons 18-64 years old, or a recombinant vaccine administered IM to a person 18 years or older.

Suggested Data Collection Question: What is the patient's influenza vaccination status?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 Influenza vaccine was given during this hospitalization.
- 2 Influenza vaccine was received prior to admission during the current flu season, not during this hospitalization.
- 3 Documentation of patient's or caregiver's refusal of influenza vaccine.
- 4 There was documentation of an allergy/sensitivity to influenza vaccine, anaphylactic latex allergy or anaphylactic allergy to eggs OR is not likely to be effective because of bone marrow transplant within the past 6 months OR history of Guillian-Barré syndrome within 6 weeks after a previous influenza vaccination.
- 5 None of the above/Not documented/Unable to determine from medical record documentation.
- 6 Only select this allowable value if there is documentation the vaccine has been ordered but has not yet been received by the hospital due to problems with vaccine production or distribution AND Allowable Values 1-5 are not selected.

Notes for Abstraction:

- Each year, flu vaccines start to become available usually in September and most influenza vaccine is administered in October – December, but the vaccine is recommended to be administered throughout the influenza season which can last until May in some years. For the purposes of this project, the hospitals are only responsible for discharges October through March.

- Only influenza vaccines administered during August through March are acceptable.
- The caregiver is defined as the surrogate decision-maker, or healthcare surrogate and may be a patient's family member or any other person (e.g., home health, VNA provider, prison official or other law enforcement personnel) who is responsible for the healthcare decision-making and care of the minor patient or the adult patient when that patient is unable to make this decision on his/her own.
- In order to select "Influenza vaccine was given during this hospitalization," there must be documentation either on the MAR, nursing notes, standing orders, etc., where the vaccine was dated and signed as administered.
- In situations where there is documentation that would support more than one of the Allowable Values, 1-4, select the smallest number.
 - Example:**
Nurses' notes have documentation the patient refused. Vaccination order sheet has documentation that the patient was vaccinated during this hospitalization. You will select Value "1," as it is the smallest number.
- If there is no documentation to support any of the Allowable Values 1-4, and there is physician/APN/PA documentation that they will administer the vaccine after discharge or physician/APN/PA documentation not to administer the vaccine for a reason other than those noted as acceptable in this data element, select Value "5."
- If there is conflicting documentation regarding influenza vaccine refusal, select Value "5."
 - Example:**
There is documentation of refusal in the influenza immunization screening for the current admission and the patient did not receive the vaccine, but a subsequent narrative note states the patient wants to receive the vaccine, select Value "5."
- If there is conflicting documentation regarding whether the influenza vaccine is current, use documentation reflecting it is current.
 - Examples:**
 - There is documentation in the medical record stating "influenza vaccination status: current," but the physician H&P indicates the patient has not received an influenza vaccine this season, select Value "2."
 - There is documentation in medical record stating "influenza vaccination status: current," but the influenza vaccination date is from the previous season, select Value "2."
- If there is conflicting documentation regarding administration of the vaccine in the hospital, use documentation reflecting the vaccine was given during the admission.
 - Example:**
There is documentation in the medical record indicating the vaccine was given (dated and signed as administered) during the hospital stay, but the discharge summary states order for vaccine was cancelled and patient did not receive vaccine during the hospital stay, select Value "1."
- If there is documentation that the patient received the vaccine and only the current year is documented, i.e., no month or day, select Value "2."

Example:

There is documentation the patient received the vaccine in 2009 and it is October 2009, select Value “2.”

- If there is documentation the patient received the vaccine the year prior to the current year and the discharge is not January, February or March, select Value “5.”

Examples:

- There is documentation the patient received the vaccine in 2008 and it is October 2009, select Value “5.”
- There is documentation the patient received the vaccine in 2008 and it is January 2009, select Value “2.”
- If it is documented in the chart that the patient’s influenza vaccination status is “up to date” or “current,” select Allowable Value “2.” Documentation of “up to date” or “current” in the vaccination record that does not reference the influenza vaccine is not sufficient to select Allowable Value “2.”
- Documentation of the acronym “UTD,” even with specific reference to the influenza vaccine, is not sufficient to select Allowable Value “2.”
- Documentation from a pre-admission screening or previous episode of care indicating that the patient received the influenza vaccine with a date from the current season would be acceptable to choose Value “2.”
- Documentation of influenza vaccine refusal from an admission or encounter that is prior to arrival cannot be used for selecting Value “3.” Information for selecting Value “3” must be assessed and documented within the current admission.
- Documentation of unavailability due to problems with vaccine production or distribution from an admission or encounter that is prior to arrival cannot be used for selecting Value “6.” Information for selecting Value “6” must be assessed and documented within the current admission.

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Emergency Department record
- Immunization assessment forms
- Medication administration record
- Nursing admission assessment
- Nursing notes
- Physician orders
- Physician progress notes
- Social service notes
- Transfer forms
- Vaccine order sheet

Inclusion Guidelines for Abstraction:

All patients discharged during October, November, December, January, February, or March

Acceptable terms for influenza vaccines include those listed below or refer to CDC list of Influenza vaccines at <http://www.cdc.gov/flu/protect/vaccine/vaccines.htm>.

- Afluria
- Flu shot
- Flu vaccine
- FluLaval
- FluMist
- Fluarix
- Fluvirin
- Fluzone
- Fluzone High Dose
- Influenza virus vaccine
- Live attenuated influenza vaccine
- Quadrivalent influenza vaccine
- Trivalent influenza vaccine

Exclusion Guidelines for Abstraction:

- All discharges from April through September
- Pandemic monovalent vaccine, e.g. H1N1
- Patients with an organ transplant during the current hospitalization (Appendix A, Table 12.10)

Data Element Name: *Initial Hypotension*

Collected For CMS: SEP-1

Definition: Documentation of the presence of initial hypotension within the specified time frame and prior to the completion of the target ordered volume (30 mL/kg or up to 10% less than 30 mL/kg) of crystalloid fluids.

Suggested Data Collection Question: Was initial hypotension present within the specified time frame?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

1 (Yes) Initial Hypotension was present within the specified time frame.

2 (No) Initial Hypotension was not present within the specified time frame or unable to determine from medical record documentation.

Notes for Abstraction:

- The specified time frame for assessing Initial Hypotension is 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*.
- The criteria for determining that Initial Hypotension was present are as follows:
 - Two hypotensive blood pressure readings from measurements taken at different times within the specified time frame. The hypotensive blood pressure readings do not need to be consecutive but need to be within 3 hours of each other. Acceptable readings are:
 - systolic blood pressures <90, or
 - mean arterial pressures (MAP) <65 or
 - a decrease in systolic blood pressure by >40 mm/Hg.
 Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection or severe sepsis and not other causes.
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless there is no other documentation that reflects the time that the same hypotensive values were obtained.
- Hypotensive BPs obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used**.
- Hypotensive BPs documented from an orthostatic BP evaluation **should not be used**.
- For the following, physician/APN/PA documentation prior to or within 24 hours after *Severe Sepsis Presentation Time* **is required**.

- If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, it **should not be used**. Inferences should not be made. The abnormal value or reference to the abnormal value must be in the same documentation.
 - Normal for that patient
 - Is due to a chronic condition
 - Is due to a medication

Example:
“Hypotensive after pain meds”
- If a hypotensive value is due to an acute condition that has a non-infectious source/process, it **should not be used** (Refer to *Severe Sepsis Present* criteria “a” to determine if the source of the acute condition is an infection).

Example:
“BP 85/50 r/t blood loss” “2 liters lost via GI bleed” (blood loss is the acute condition and GI bleed is the non-infectious source).
- If a hypotensive value should not be used based on the above guidance, all instances of less severe values **should not be used**.

Example:
“BP 80/50 secondary to Lasix” (systolic blood pressures ≥ 80 would not be used).
- If a hypotensive value is due to the following, the criteria value **should be used**.
 - Acute condition

Example:
Progress Note: “Hypotension r/t dehydration.”
 - Acute on chronic condition

Example:
H&P: “Hypotension due to acute exacerbation of chronic heart failure.”
 - Infection

Example:
Physician Note: “Sepsis, hypotensive.”
- Documentation of a term that represents or is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value **when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process**.

Example:
Hypotension (Systolic blood pressure <90 mmHg).
- If within the same physician/APN/PA documentation, there is conflicting documentation indicating hypotension is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, the criteria value **should be used**.

Example:
“Hypotensive post medications, possibly r/t sepsis.”
- If within 24 hours after *Severe Sepsis Presentation Time* there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis,

or Septic Shock, abstract based on the latest piece of documentation within the 24-hour period.

Example:

- Note 1200: “Antihypertensive discontinued due to hypotension.”
Note 1600: “Sepsis with hypotension and SIRS criteria.”
 - Hypotensive readings should be used.
- Initial hypotension is hypotension that is present prior to the target ordered volume of crystalloid fluids being completely infused.
- If hypotension was present within 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*, select Value “1.”
- If hypotension was not present within 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*, select Value “2.”
- If within 24 hours of the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation indicating a hypotensive reading is invalid, erroneous or questionable, disregard that reading when determining the presence of Initial Hypotension.
- If there is physician/APN/PA documentation indicating the patient does not have hypotension and it is referencing a specific time period in which there was one or more hypotensive values recorded, the hypotensive value(s) should not be used. The documentation must be within 24 hours following the low blood pressure value(s).

Example:

- Progress note: “Not hypotensive in ED.”
 - Hypotensive values in ED should not be used.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining Initial Hypotension.

Suggested Data Sources:

- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Hypotension Date*

Collected For CMS: SEP-1

Definition: The date of the documentation of initial hypotension in the 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time* and prior to the completion of the target ordered volume (30 mL/kg or up to 10% less than 30 mL/kg) of crystalloid fluids.

Suggested Data Collection Question: On which date was initial hypotension present 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Use the earliest date of the second hypotensive blood pressure documented within the time period of 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time* (to determine the second hypotensive blood pressure, see the *Initial Hypotension* data element).
- For patients with more than two hypotensive blood pressures in the time period of 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*, use the date of the second hypotensive blood pressure documented within the time period.
- Use the date documented for when hypotensive blood pressure was taken or obtained. If date taken or obtained is not available, use recorded or documented date.

Suggested Data Sources:

- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Hypotension Time*

Collected For CMS: SEP-1

Definition: The time of the documentation of initial hypotension in the 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time* and prior to the completion of the target ordered volume (30 mL/kg or up to 10% less than 30 mL/kg) of crystalloid fluids.

Suggested Data Collection Question: At which time was initial hypotension present 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Use the earliest time of the second hypotensive blood pressure documented within the time period of 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time* (to determine the second hypotensive blood pressure, see the *Initial Hypotension* data element).
- For patients with more than two hypotensive blood pressures in the time period of 6 hours prior to or within 6 hours following *Severe Sepsis Presentation Date and Time*, use the time of the second hypotensive blood pressure documented within the time period.
- Use the time documented for when hypotensive blood pressure was taken or obtained. If time taken or obtained is not available, use recorded or documented time.

Suggested Data Sources:

- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Lactate Level Collection*

Collected For CMS: SEP-1

Definition: Documentation of collection of an initial lactate level within the specified time frame.

Suggested Data Collection Question: Was an initial lactate level drawn within the specified time frame?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) An initial lactate level was drawn within the specified time frame.
- 2 (No) An initial lactate level was not drawn within the specified time frame, or unable to determine.

Notes for Abstraction:

- The specified time frame within which an initial lactate must be drawn is within 6 hours prior through 3 hours following severe sepsis presentation.
 - If multiple lactate levels are drawn within the specified time frame, use the lactate drawn PRIOR to the *Severe Sepsis Presentation Time* with the HIGHEST level.
 - If multiple lactate levels are drawn ONLY in the 3 hours after the *Severe Sepsis Presentation Time*, use the lactate drawn with the HIGHEST level within this time frame.
- If there is more than one time of documentation for the *Initial Lactate Level Collection*, use the following order to determine which time to abstract.
 1. Laboratory documentation indicating date and time lactate was drawn.
 2. Date and Time the lactate is documented as drawn in a non-narrative location (e.g., sepsis flowsheet, checklist, screening).
 3. Narrative note indicating lactate is drawn with an associated date and time.
- If there is no documentation indicating a lactate was drawn or collected, but there is supportive documentation that a lactate was drawn, use the earliest supportive documentation (e.g., lactate sent to lab, lactate received, lactate result).
- If within 24 hours of the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation that a lactate value is invalid, erroneous or questionable, disregard that value.
- Use documentation specifying a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn; however, you may use a physician order that has a notation “drawn” or “collected” next to it.

- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, select Value “1.”
- If a lactate level is drawn but there are no results in the record, choose Value “1.”

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate drawn
- Lactate level collected
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

Labs drawn

Data Element Name: *Initial Lactate Level Date*

Collected For CMS: SEP-1

Definition: The date on which the initial lactate level was drawn.

Suggested Data Collection Question: What was the date on which the initial lactate level was drawn?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- If there is more than one date of documentation for the *Initial Lactate Level Collection*, use the following order to determine which date to abstract.
 1. Laboratory documentation indicating date lactate was drawn.
 2. Non-narrative location indicating lactate was drawn with an associated date (e.g., sepsis flowsheet, checklist, screening).
 3. Narrative note indicating lactate is drawn with an associated date.
- If there is not a lactate draw or collected date documented, but there is supportive documentation that a lactate was drawn, use the date of the earliest supportive documentation (e.g., lactate sent to lab, lactate received date, lactate result date).
- Use documentation specifying the date a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn or reported, unless there is a notation of “drawn” or “collected” next to the order, including a date.
- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, use the date of attempted lactate level collection.

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

Labs drawn

Data Element Name: *Initial Lactate Level Result*

Collected For CMS: SEP-1

Definition: Documentation of the initial lactate level result.

Suggested Data Collection Question: What was the initial lactate level result?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|-----------------|--|
| 1 (<=2) | The initial lactate level was less than or equal to 2 mmol/L, or there is no result in the chart, or unable to determine the result. |
| 2 (>2 and <4.0) | The initial lactate level was greater than 2 mmol/L and less than 4 mmol/L. |
| 3 (>=4) | The initial lactate level was 4 mmol/L or more. |

Notes for Abstraction:

- Lactate levels may be reported as mmol/L or mg/dL. Use the following to cross reference mmol/L and mg/dL equivalents.
 - 2 mmol/L is equivalent to 18 mg/dL
 - 4 mmol/L is equivalent to 36 mg/dL
- Use the result for the initial lactate level drawn in the data element *Initial Lactate Level Collection*.
- If there was an initial lactate level collected but there is no result, or the result cannot be determined, choose Value “1.”
- If point of care (POC) results and laboratory results are obtained from the same sample, use the results that are recorded first.
- If there is physician/APN/PA documentation prior to or within 24 hours after the initial lactate level result that indicates the initial lactate value is due to a condition that is not an infection, or is due to a medication, select Value “1.”

Suggested Data Sources:

- Laboratory results
- Physician/APN/PA notes

Inclusion Guidelines for Abstraction:

- Lactate results
- Lactic acid results

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Lactate Level Time*

Collected For CMS: SEP-1

Definition: The time at which the initial lactate level was drawn.

Suggested Data Collection Question: What was the time at which the initial lactate level was drawn?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- If there is more than one time of documentation for the *Initial Lactate Level Collection*, use the following order to determine which time to abstract.
 1. Laboratory documentation indicating time lactate was drawn.
 2. Non-narrative location indicating lactate was drawn with an associated time (e.g., sepsis flowsheet, checklist, screening).
 3. Narrative note indicating lactate is drawn with an associated time.
- If there is not a lactate draw or collected time documented, but there is supportive documentation that a lactate was drawn, use the time of the earliest supportive documentation (e.g., lactate sent to lab, lactate received time, lactate result time).
- Use documentation specifying the time a lactate was actually drawn or collected. Do not use documentation such as “Labs Drawn” as it is not specific for lactate level.
- Do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the lactate level order indicating it was drawn or collected, with a time noted.

- If a lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, use the time of attempted lactate level collection.

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

Labs drawn

Data Element Name: *Last Name*

Collected For CMS Only: All Records (Optional Element)

Definition: The patient's last name.

Suggested Data Collection Question: What is the patient's last name?

Format:

Length: 60

Type: Character

Occurs: 1

Allowable Values:

Enter the patient's last name. Up to 60 letters, numbers, and/or special characters can be entered.

Note: Only the following special characters will be allowed:

~ ! @ # \$ % ^ * () _ + { } | : ? ` - = [] \ ; ' . , / and space

Notes for Abstraction:

None

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Measure Category Assignment*

Collected For The Joint Commission Only: Used in calculation of The Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file

Notes:

- Episode of care records that calculate with a *Measure Category Assignment* of "X" (missing data) for one or more measures will be rejected by the CMS Clinical Warehouse and the Joint Commission's Data Warehouse. Refer to the Missing and Invalid data section in this manual for more information.
- All hospital measures use this data element. The ORYX® Vendor's calculated *Measure Category Assignment* will be transmitted to The Joint Commission on a quarterly basis with the associated hospital clinical data. These measure results will be used in The Joint Commission's data quality analysis and continuous measure verification process. ORYX Vendors can refer to The Joint Commission's *ORYX Data Quality Manual* for more information.
- *Measure Category Assignment* must be transmitted to The Joint Commission but cannot be transmitted to CMS. Files transmitted to the CMS Clinical Warehouse that contain *Measure Category Assignment* will be rejected.

Definition: Calculated measures results for each episode of care (EOC) that is processed through a measure algorithm.

Used to summarize the outcome for an EOC that is processed through a specific measure algorithm.

Suggested Data Collection Question: Not Applicable

Format:

Length: 1

Type: Character

Occurs: One *Measure Category Assignment* per EOC is expected for every measure that a hospital is participating in.

Allowable Values:

B Category B - Not in Measure Population

For rate-based and continuous variable measures: EOC record is not a member of a measure's population.

D Category D - In Measure Population

For rate-based measures: EOC record is a member of the measure's population and there has not been an occurrence of the measure.

Note: For measures for which better quality is associated with a lower score or numerator, i.e., VTE-6 and PC-01, a *Measure Category Assignment* of "D" means that the appropriate care was provided and the intent of the

measure was met. For aggregate data, the EOC record will be included in the measure denominator only.

For continuous variable measures: EOC record is a member of the measure's population and has sufficient accurate and valid data to compute the measurement.

Note: For continuous variable measures, EOC records that have a *Measure Category Assignment* of "D" **will** have an associated *Measurement Value*.

E Category E - In Numerator Population

For rate-based measures: EOC record is a member of the measure's population and there has been an occurrence of the measure.

Note: For measures for which better quality is associated with a lower score or numerator, i.e., VTE-6 and PC-01, a *Measure Category Assignment* of "E" means that the appropriate care was not provided and the intent of the measure was not met. For aggregate data, the EOC record will be included in both the measure numerator and denominator.

For continuous variable measures: Does not apply.

X Category X – Data Are Missing

For rate-based and continuous variable measures: Data are missing that is required to calculate the measure. The record will be rejected by the CMS Clinical Warehouse and the Joint Commission's Data Warehouse.

Y Category Y – UTD Allowable Value Does Not Allow Calculation of The Measure

For rate-based measures: Does not apply.

For continuous variable measures: EOC record contains a Date, Time, or Numeric data element with a Value of "UTD."

Note: For continuous variable measures, EOC records that have a *Measure Category Assignment* of "Y" **will not** have an associated *Measurement Value*.

Notes for Abstraction:

None

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Measurement Value*

Collected For The Joint Commission Only: Used in the calculation of Continuous Variable Measures (ED-1, ED-2), and in the transmission of the Hospital Clinical Data file

Note:

- The ORYX® Vendor's calculated *Measurement Value* will be transmitted to The Joint Commission on a quarterly basis with the associated hospital clinical data. These measure results will be used in The Joint Commission's data quality analysis and continuous measure verification process. ORYX Vendors can refer to The Joint Commission's *ORYX Data Quality Manual* for more information.
- *Measurement Value* must be transmitted to The Joint Commission but cannot be transmitted to CMS. Files transmitted to the CMS Clinical Warehouse that contain *Measurement Value* will be rejected.

Definition: This data element is used to store the calculated results of the measurements that are outputs from continuous variable measure algorithms.

Note: Used in conjunction with Measure Category Assignment when its allowable value = "D" (In Measure Population).

Suggested Data Collection Question: Not Applicable

Format:

Length: 6

Type: Numeric

Occurs: One *Measurement Value* is expected per EOC for every continuous variable measure that a hospital is participating in.

Allowable Values:

Any valid number

Note: The allowable value range for each continuous variable measure is documented in that measure's algorithm. Each measure may have a different allowable value range.

Notes for Abstraction:

None

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Patient Identifier*

Collected For CMS Only: All Records

Note: Refer to the Hospital Clinical Data XML File Layout in the Transmission section of this manual.

Definition: The number used by the hospital to identify this patient's stay. The number provided will be used to identify the patient in communications with the hospital, e.g., Medical Record Number, Account Number, Unique Identifiable Number as determined by the facility, etc.

A patient identifier is required for data submitted to the CMS Clinical Data Warehouse.

Suggested Data Collection Question: What was the number used by the hospital to identify this patient's stay?

Format:

Length: 40

Type: Character

Occurs: 1

Allowable Values:

Up to 40 letters, numbers, and/or characters.

Note: The only characters that will be allowed are spaces, hyphens, dashes and under-scores.

Notes for Abstraction:

None

Suggested Data Sources:

None

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Payment Source*

Collected For CMS/The Joint Commission: All Records

Definition: The source of payment for this episode of care.

Suggested Data Collection Question: What is the patient's source of payment for this episode of care?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 Source of payment is Medicare.
- 2 Source of payment is Non-Medicare.

Notes for Abstraction:

- If Medicare is listed as the primary, secondary, tertiary, or even lower down on the list of payers, select "1."
- If the patient has Medicaid only or Medicaid and another insurance type, other than Medicare, select "2." If the patient has Medicaid and Medicare, select "1."
- If the patient is an Undocumented Alien or Illegal immigrant, select "1."
Undocumented Alien: Section 1011 of the Medicare Modernization Act of 2003 allows for reimbursement for services rendered to patients who are:
Undocumented or illegal aliens (immigrants), Aliens who have been paroled into a United States port of entry and Mexican citizens permitted to enter the United States on a laser visa.

Suggested Data Sources:

- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

Medicare includes, but is not limited to:

- Black Lung
- End Stage Renal Disease (ESRD)
- Medicare Fee for Service (includes DRG or PPS)
- Medicare HMO/Medicare Advantage
- Medicare Secondary Payer
- Railroad Retirement Board (RRB)

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Persistent Hypotension*

Collected For CMS: SEP-1

Definition: Documentation of the presence of persistent hypotension or new onset of hypotension following the administration of the target ordered volume (30 mL/kg or up to 10% less than 30 mL/kg) of crystalloid fluids.

Suggested Data Collection Question: Was persistent hypotension or new onset of hypotension present within one hour of the conclusion of crystalloid fluid administration?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|--------------------|--|
| 1 (Yes) | Persistent hypotension or new onset of hypotension was present within one hour of conclusion of crystalloid fluid administration at the target ordered volume. |
| 2 (No) | Persistent hypotension or new onset of hypotension was not present within one hour of the conclusion of crystalloid fluid administration at the target ordered volume. |
| 3 (No) or UTD | The patient was not assessed for persistent hypotension or new onset of hypotension within one hour after the conclusion of crystalloid fluid administration at the target ordered volume, or Unable to Determine. |
| 4 (Not applicable) | Crystalloid fluids were administered but at a volume less than the target ordered volume. |

Notes for Abstraction:

- The criteria for determining that persistent hypotension or new onset of hypotension was present are as follows:
 - In the one hour following conclusion of administration of the target ordered volume of crystalloid fluids, two consecutive documented blood pressure readings of either:
 - systolic blood pressure <90, or
 - mean arterial pressure (MAP) <65 or
 - a decrease in systolic blood pressure by >40 mm/Hg.
 Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection, severe sepsis or septic shock and not other causes.
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless there is no other documentation that reflects the time that the same hypotensive values were obtained.

- Hypotensive BPs obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used.**
- Hypotensive BPs documented from an orthostatic BP evaluation **should not be used.**
- Determining presence of persistent hypotension (low is SBP <90 or MAP <65):
 - If there were no blood pressures or only one blood pressure recorded within the hour:
 - If the only blood pressure within the hour is normal, select Value “2.”
 - If there is no blood pressure or the only blood pressure within the hour is low, select Value “3.”
 - If there are more than two blood pressures documented, refer to the last two consecutive blood pressures within the hour:
 - If there is a normal blood pressure followed by another normal blood pressure, select Value “2.”
 - If there is a normal blood pressure followed by a low blood pressure, select Value “3.”
 - If there is a low blood pressure followed by a normal blood pressure, select Value “2.”
 - If there is a low blood pressure followed by another low blood pressure, select Value “1.”
- If one or more blood pressures were documented within the time frame and persistent hypotension is unable to be determined but a vasopressor was administered, select Value “1.”
- For the following, physician/APN/PA documentation prior to or within 24 hours after *Severe Sepsis Presentation Time* is required.
 - If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, it **should not be used**. Inferences should not be made. The abnormal value or reference to the abnormal value must be in the same documentation.
 - Normal for that patient
 - Is due to a chronic condition
 - Is due to a medication

Example:
“Hypotensive after pain meds.”
 - If a hypotensive value is due to an acute condition that has a non-infectious source/process, it **should not be used** (Refer to *Severe Sepsis Present* criteria “a” to determine if the source of the acute condition is an infection).

Example:
“BP 85/50 r/t blood loss” “2 liters lost via GI bleed” (blood loss is the acute condition and GI bleed is the non-infectious source).
 - If a hypotensive value should not be used based on the above guidance, all instances of less severe values **should not be used**.

Example:
“BP 80/50 secondary to Lasix” (systolic blood pressures ≥ 80 would not be used).
 - If a hypotensive value is due to the following, the criteria value **should be used**.
 - Acute condition

Example:

Progress Note: "Hypotension r/t dehydration."

- Acute on chronic condition

Example:

H&P: "Hypotension due to acute exacerbation of chronic heart failure."

- Infection

Example:

Physician Note: "Sepsis, hypotensive."

- Documentation of a term that represents or is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value **when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.**

Example:

Hypotension (Systolic blood pressure <90 mmHg).

- If within the same physician/APN/PA documentation, there is conflicting documentation indicating hypotension is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, the criteria value **should be used.**

Example:

"Hypotensive post medications, possibly r/t sepsis."

- If within 24 hours after *Severe Sepsis Presentation Time* there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, abstract based on the latest piece of documentation within the 24-hour period.

Example:

- Note 1200: "Antihypertensive discontinued due to hypotension."
Note 1600: "Sepsis with hypotension and SIRS criteria."
 - Hypotensive readings should be used.

- Begin abstracting at the time the target ordered volume concludes; abstract for the time period that follows for the next hour only. Choose Value "1" if persistent hypotension or new onset of hypotension was present, choose Value "2" if persistent hypotension or new onset of hypotension was not present.
- If the completion time of the target ordered volume is documented in the medical record use that time as the start for the one hour within which to determine presence of persistent hypotension or new onset of hypotension.
- If the completion time of the target ordered volume is not documented in the medical record use the following criteria to determine the conclusion time.
 - If the order includes a time frame over which to infuse the crystalloid fluid, identify the time the fluids are started and add to that the duration identified in the order. This will represent the conclusion of crystalloid fluids.

Example:

An order for 1500 mL over 1 hour and the infusion is started at 10:00. Add 1 hour to the start time to determine infusion conclusion time of 11:00.

- If the order includes a rate at which to infuse the crystalloid fluids, the end time can be calculated based on the volume, the rate and the start time.
 - Example:**
An order for 1500 mL at 1000 mL/hour and the infusion is started at 10:00. The time over which 1500 mL is infused is the volume divided by the rate. 1500 mL divided by 1000 mL/hour is 1.5 hours. Add 1.5 hours to the start time to determine infusion conclusion time of 11:30.
- If the order is for more than 30 mL/kg, 30 mL/kg will have been infused before the entire volume ordered is infused.
 - Example:**
An order for 3000 mL over 2 hours, infusion started at 10:00. Patient weighs 80 kg, 30 mL/kg target volume is 2400 mL (as determined for *Crystalloid Fluid Administration*). Divide the total volume ordered by the infusion duration in minutes to determine the infusion rate (3000 mL/120 minutes = 25 mL/minute). Divide the 30 mL/kg target volume by the infusion rate to determine the number of minutes it takes to infuse the target volume (2400 mL/25 mL/min = 96 minutes). Add the number of minutes to infuse the target volume to the infusion start time to determine the time 30 mL/kg was completed (10:00 + 96 minutes = 11:36).
- If the order states “bolus” or “wide open” and does not include an infusion rate or time over which to infuse the fluids, an infusion rate recorded in the medical record by a nurse OR fluid bolus completed time or end time can be used to determine when the target ordered volume was completed.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable for determining the presence of Persistent Hypotension.
- If within 24 hours of the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation indicating a hypotensive reading is erroneous or questioning the validity of a hypotensive reading, disregard that reading for determining the presence of persistent or new onset of hypotension.

Suggested Data Sources:

- Entire ED record
- Nurses notes
- Physician/APN/PA notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Physician 1*

Collected For CMS Only: All Records (Optional Element)

Definition: The first physician identifier

Suggested Data Collection Question: What is the first physician identifier?

Format:

Length: 50

Type: Character

Occurs: 1

Allowable Values:

Enter the first physician identifier, as directed. Up to 50 letters, numbers, and/or special characters can be entered.

Note: Only the following special characters will be allowed:

~ ! @ # \$ % ^ * () _ + { } | : ? ` - = [] \ ; ' . , / and space

Notes for Abstraction:

This data element may be used to capture physician information that might be helpful in internal analysis. This information is for internal analysis only and will not be shared with any external parties in any data output.

Suggested Data Sources:

None

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Physician 2*

Collected For CMS Only: All Records (Optional Element)

Definition: A second physician identifier

Suggested Data Collection Question: What is the second physician identifier?

Format:

Length: 50

Type: Character

Occurs: 1

Allowable Values:

Enter the second physician identifier, as directed. Up to 50 letters, numbers, and/or special characters can be entered.

Note: Only the following special characters will be allowed:

~ ! @ # \$ % ^ * () _ + { } | : ? ` - = [] \ ; ' . , / and space

Notes for Abstraction:

This data element may be used to capture physician information that might be helpful in internal analysis. This information is for internal analysis only and will not be shared with any external parties in any data output.

Suggested Data Sources:

None

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Postal Code*

Collected For CMS Only: All Records

Definition: The postal code of the patient's residence. For the United States zip codes the hyphen is implied. If the patient is determined to not have a permanent residence, then the patient is considered homeless.

Suggested Data Collection Question: What is the postal code of the patient's residence?

Format:

Length: 9

Type: Character

Occurs: 1

Allowable Values:

Any valid five or nine digit postal code or "HOMELESS" if the patient is determined not to have a permanent residence. If the patient is not a resident of the United States, use "NON-US."

Notes for Abstraction:

If the postal code of the patient is unable to be determined from medical record documentation, enter the provider's postal code.

Suggested Data Sources:

- Face sheet
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Prescription for Alcohol or Drug Disorder Medication*

Collected For The Joint Commission Only: SUB-3

Definition: Documentation that an FDA-approved medication for alcohol or drug disorder was prescribed at hospital discharge.

Suggested Data Collection Question: Was one of the FDA-approved medications for alcohol or drug disorder prescribed at discharge?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 A prescription for an FDA-approved medication for alcohol or drug disorder was given to the patient at discharge.
- 2 A prescription for an FDA-approved medication for alcohol or drug disorder was offered at discharge and the patient refused.
- 3 The patient:
 - is being discharged to a residence outside the USA
 - is released to a court hearing and does not return
 - is being discharged to jail/law enforcement
- 4 A prescription for an FDA-approved medication for alcohol or drug disorder was not offered at discharge, or unable to determine from medical record documentation.

Notes for Abstraction

- In determining whether a medication for alcohol or drug disorder was prescribed at discharge, it is not uncommon to see conflicting documentation among different medical record sources. For example, the discharge summary may list Disulfiram, but this is not included in any of the other discharge medications sources, e.g., discharge orders. All discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor.
- In cases where there is a medication for alcohol or drug disorder in one source and it is not mentioned on other sources, it should be interpreted as a discharge medication, select Value “1” unless documentation elsewhere in the medical record suggests that it was not prescribed at discharge.
- If documentation is contradictory (physician noted “d/c Antabuse” or “hold Antabuse” in the discharge orders, but Antabuse is listed in the discharge summary’s discharge medication list), or after careful examination of circumstances, context, timing, etc., documentation raises enough questions, the case should be deemed unable to determine, select Value “4.”
- If the patient does not have a residence in the USA, Value “3” must be selected.

Suggested Data Sources:

- Discharge Instruction Sheet
- Discharge summary
- Medication Reconciliation Form
- Nursing Discharge notes
- Physician Orders Sheet
- Transfer sheet

Inclusion Guidelines for Abstraction:

Refer to Appendix C, Table 9.2 for a comprehensive list of FDA-approved medications for alcohol and drug dependence

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Prescription for Tobacco Cessation Medication*

Collected For The Joint Commission Only: TOB-3

Definition: Documentation that an FDA-approved tobacco cessation medication was prescribed at hospital discharge.

Suggested Data Collection Question: Was an FDA-approved tobacco cessation medication prescribed at discharge?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 A prescription for an FDA-approved tobacco cessation medication was given to the patient at discharge.
- 2 A prescription for an FDA-approved tobacco cessation medication was offered at discharge and the patient refused.
- 3 The patient:
 - is being discharged to a residence outside the USA
 - is released to a court hearing and does not return
 - is being discharged to jail/law enforcement
- 4 A prescription for an FDA-approved tobacco cessation medication was not offered at discharge or unable to determine from medical record documentation.

Notes for Abstraction

- All discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor. In determining whether a tobacco cessation medication was prescribed at discharge, it is not uncommon to see conflicting documentation among different medical record sources. For example, the discharge summary may list Varenicline and this is not included in any of the other discharge medication sources (e.g., discharge orders). Select Value “1” unless documentation elsewhere in the medical record suggests that it (tobacco cessation medication) was not prescribed at discharge.
- If documentation is contradictory (physician noted “d/c Varenicline” or “hold Varenicline” in the discharge orders, but Varenicline is listed in the discharge summary’s discharge medication list) or after careful examination of circumstance, context, timing, etc., the documentation remains unclear, the case should be deemed unable to determine. Select Value “4.”
- If the physician wishes the patient to continue on medication that does not require a prescription (for example, over-the-counter nicotine replacement therapy (NRT) or medication that will be provided by the outpatient counseling or quit line), select Value “1” if the medication is listed on the discharge medication list.

- If NRT or a prescribed FDA-approved tobacco cessation medication is listed as a discharge medication but there is also documentation of refusal by the patient at discharge, select Value “2.”
- If the patient does not have a residence in the USA, Value “3” must be selected.
- If the patient refused tobacco cessation medication during the hospitalization, a prescription must be offered again at the time of discharge. Select Value “4” if documentation reflects that a prescription for cessation medication was not offered at the time of discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Medication reconciliation form
- Nursing discharge notes
- Physician order sheet
- Transfer sheet

Inclusion Guidelines for Abstraction:

Refer to Appendix C, Table 9.1 for a comprehensive list of FDA-approved tobacco cessation medications

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Race*

Collected For CMS/The Joint Commission: All Records

Definition: Documentation of the patient's race.

Suggested Data Collection Question: What is the patient's race?

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

Select one:

- 1 **White:** Patient's race is White, or the patient has origins in Europe, the Middle East, or North Africa.
- 2 **Black or African American:** Patient's race is Black or African American.
- 3 **American Indian or Alaska Native:** Patient's race is American Indian/Alaska Native.
- 4 **Asian:** Patient's race is Asian.
- 5 **Native Hawaiian or Pacific Islander:** Patient's race is Native Hawaiian/Pacific Islander.
- 6 **RETIRED VALUE** (effective 07-01-05 discharges)
- 7 **UTD:** Unable to determine the patient's race or not stated (e.g., not documented, conflicting documentation or patient unwilling to provide).

Notes for Abstraction:

- The data element *Hispanic Ethnicity* is required in addition to this data element.
- If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race.
- Although the terms "Hispanic" and "Latino" are actually descriptions of the patient's ethnicity, it is not uncommon to find them referenced as race. If the patient's race is documented only as Hispanic/Latino, select "White." If the race is documented as mixed Hispanic/Latino with another race, use whatever race is given (e.g., Black-Hispanic – select "Black"). Other terms for Hispanic/Latino include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican-American, Puerto Rican, South or Central American, and Spanish.

Suggested Data Sources:

- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes

Inclusion Guidelines for Abstraction:

Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as “Haitian” or “Negro” can be used in addition to “Black or African.”

American Indian or Alaska Native: A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment (e.g., any recognized tribal entity in North and South America [including Central America], Native American).

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (e.g., Caucasian, Iranian, White).

Native Hawaiian or Pacific Islander: A person having origins in any of the other original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Reason for No Administration of VTE Prophylaxis*

Collected For The Joint Commission Only: VTE-6

Definition: Physician/APN/PA or pharmacist documentation why mechanical AND pharmacological VTE prophylaxis were not administered on the day(s) between arrival and the day before the *VTE Diagnostic Test* order date. Both mechanical and pharmacological prophylaxis must be addressed.

Suggested Data Collection Question: Is there physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered on the day(s) between arrival and the day before the *VTE Diagnostic Test* order date?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is physician/APN/PA or pharmacist documentation why mechanical AND pharmacological VTE prophylaxis were not administered on the day(s) between arrival and the day before the *VTE Diagnostic Test* order date.

N (No) There is no physician/APN/PA or pharmacist documentation why mechanical AND pharmacological VTE prophylaxis were not administered on the day(s) between arrival and the day before the *VTE Diagnostic Test* order date, or unable to determine from medical record documentation.

Notes for Abstraction:

- To select “Yes” for this data element, documentation of a reason for not administering mechanical AND pharmacological VTE prophylaxis must be dated between hospital arrival and the day before the *VTE Diagnostic Test* order date. Refer to the data element *VTE Diagnostic Test* for a list of acceptable tests.
- Reasons for not prescribing VTE prophylaxis must be documented by a physician/APN/PA or pharmacist.

EXCEPTIONS:

- Patient/family refusal may be documented by a nurse, but should be documented within the same time frame as the reason for no VTE prophylaxis. Patient/family refusal of **any form** of prophylaxis is acceptable to select “Yes.” For example, “patient refused heparin,” select “Yes.”
- A validated risk assessment may be documented by a nurse, but should be documented within the same time frame as the reason for no administration of VTE prophylaxis.

- For patients receiving anticoagulant therapy, including continuous IV heparin infusion, **between arrival and** the day before the VTE diagnostic test order date, select “Yes.” **Disregard** IV heparin administered to flush/maintain patency of a line or dialysis equipment and IV heparin administered during an interventional procedure, e.g., cardiac cath.
- If reasons are not mentioned in the context of VTE prophylaxis, do not make inferences (e.g., do not assume that VTE Prophylaxis was not administered because of a bleeding disorder unless documentation explicitly states so).
 - Example:**
Physician/APN/PA documentation of bleeding risk, review the chart for documentation about reasons for no mechanical AND no pharmacological VTE prophylaxis.
- Documentation that a formal risk assessment was administered, AND the results indicated that there was no risk or low risk for VTE is acceptable as a reason for not administering VTE prophylaxis.
 - If a copy of the validated risk assessment is included in the medical record along with the results, select “Yes.”
 - Documentation of a low risk score without a copy of the validated risk assessment is acceptable, if the validated risk assessment tool used is mentioned in the note. See Inclusion Guidelines for Abstraction.
 - Documentation of low risk or no risk without mention of a score and the validated risk assessment tool, select “No.”
- If two physicians/APN/PA or pharmacist document conflicting or questionable needs for prophylaxis, select “No.”

SUGGESTED DATA SOURCES:

ONLY PHYSICIAN/APN/PA OR PHARMACIST DOCUMENTATION OF A REASON FOR NOT ADMINISTERING VTE PROPHYLAXIS

- Anesthesia record
- Consultation notes
- Emergency department record
- History and physical
- Physician orders
- Physician progress notes
- Transfer form

SUGGESTED DATA SOURCES FOR PATIENT REFUSAL (other than physician/APN/PA or pharmacist) documentation of a reason for not administering VTE prophylaxis as above):

- Medication administration record
- Nurses notes

Inclusion Guidelines for Abstraction:

Explicit documentation that the patient does not need VTE prophylaxis

ALL INCLUSIVE VALIDATED RISK ASSESSMENTS:

- Caprini DVT Risk Assessment
- Padua Prediction Score
- International Medical Prevention Registry on Venous Thromboembolism (IMPROVE)

LOW RISK SCORES:

- Caprini score of 0 (zero) – no need for prophylaxis.
- IMPROVE score of 0 (zero) or 1 (one); or a probability of less than 1.5%
- Padua score of less than 4 (0-3)

Refer to Appendix H, Table 2.7 Anticoagulation Therapy

Exclusion Guidelines for Abstraction:

Risk Assessment tools other than Caprini, Padua, and IMPROVE

Data Element Name: *Reason for No Tobacco Cessation Medication at Discharge*

Collected For The Joint Commission Only: TOB-3

Definition: Reasons for not prescribing an FDA-approved tobacco cessation medication at discharge include:

- Allergy to all of the FDA-approved tobacco cessation medications.
- Drug interaction (for all of the FDA-approved medications) with other drugs the patient is currently taking.
- Patient is pregnant.
- Other reasons documented by physician, advanced practice nurse (APN), physician assistant (PA), or pharmacist.

Suggested Data Collection Question: Is there documentation of a reason for not prescribing one of the FDA-approved tobacco cessation medications at discharge?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not prescribing an FDA-approved cessation medication at discharge.

N (No) There is no documentation of a reason for not prescribing an FDA-approved cessation medication at discharge or unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons (other than pregnancy) for not prescribing FDA-approved tobacco cessation medications must be documented by a physician/APN/PA or pharmacist.
- If there is any documentation in the medical record indicating the patient is pregnant, select “Yes.”
- An allergy or adverse reaction to one of the FDA-approved cessation medications would not be a reason for not prescribing another of the cessation medications.
- In determining whether there is a reason documented by physician/APN/PA or pharmacist for not prescribing tobacco cessation medications, the reason must be explicitly documented (e.g., “No tobacco cessation medication as patient is post-operative and nicotine may place them at risk for impaired wound healing”) or clearly implied (e.g., “Patient becomes anxious when they take tobacco cessation medication”). If reasons are not mentioned in the context of cessation medication, do not make inferences (e.g., Do not assume that a tobacco cessation medication is not being prescribed because of the patient's history of recent surgery alone).
- When conflicting information is documented in the medical record, select Value “No.”

- If the reason for not prescribing FDA-approved cessation medication is documented at any time during the hospitalization, additional documentation of the reason at the time of discharge is not required.
- Documentation by the physician, advanced practice nurse (APN), physician assistant (PA), or pharmacist that the patient refused tobacco cessation medication is not considered a valid reason for no tobacco cessation medication at discharge. If refusal is documented as the reason, select Value “No.”

Suggested Data Sources:

- Anesthesia record
- Consultation record
- Discharge summary
- Emergency Department record
- History and physical
- Medication administration record (MAR)
- Physician orders
- Progress notes
- Transfer form

Inclusion Guidelines for Abstraction:

Allergy or sensitivity

Refer to Appendix C, Table 9.1 for a list of FDA-approved tobacco cessation medications

Exclusion Guidelines for Abstraction:

Medication allergy using a negative modifier or qualifier (questionable, risk of, suspect, etc.)

Data Element Name: *Reason for No Tobacco Cessation Medication During the Hospital Stay*

Collected For The Joint Commission Only: TOB-2

Definition: Reasons for not administering an FDA-approved tobacco cessation medication documented during the hospital stay include:

- Allergy to all of the FDA-approved tobacco cessation medications.
- Drug interaction (for all of the FDA-approved medications) with other drugs the patient is currently taking.
- Patient is pregnant.
- Other reasons documented by physician, advanced practice nurse (APN), physician assistant (PA), or pharmacist.

Suggested Data Collection Question: Is there documentation of a reason for not administering one of the FDA-approved tobacco cessation medications during the hospital stay?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not administering an FDA-approved cessation medication during the hospital stay.

N (No) There is no documentation of a reason for not administering an FDA-approved cessation medication during the hospital stay or unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons (other than pregnancy) for not administering FDA-approved tobacco cessation medications must be documented by a physician/APN/PA or pharmacist.
- If there is any documentation in the medical record indicating the patient is pregnant, select “Yes.”
- An allergy or adverse reaction to one of the FDA-approved cessation medications would not be a reason for not administering another of the cessation medications.
- In determining whether there is a reason documented by physician/APN/PA or pharmacist for not administering tobacco cessation medications, the reason must be explicitly documented (e.g., “No tobacco cessation medication as patient is post-operative and nicotine may place them at risk for impaired wound healing”) or clearly implied (e.g., “Patient becomes anxious when they take tobacco cessation medication”). If reasons are not mentioned in the context of cessation medication, do not make inferences (e.g., Do not assume that a tobacco cessation medication is not being prescribed because of the patient's history of recent surgery alone).

- When conflicting information is documented in the medical record, select Value “No” for the indicated reasons present for not administering the tobacco cessation medications.
- Documentation by the physician, advanced practice nurse (APN), physician assistant (PA), or pharmacist that the patient refused tobacco cessation medication is not considered a valid reason for no tobacco cessation medication during the hospitalization. If refusal is documented as the reason, select Value “No.”

Suggested Data Sources:

- Anesthesia record
- Consultation record
- Discharge summary
- Emergency Department record
- History and physical
- Medication administration record (MAR)
- Physician orders
- Progress notes
- Transfer form

Inclusion Guidelines for Abstraction:

Allergy or sensitivity

Refer to Appendix C, Table 9.1 for a list of FDA-approved tobacco cessation medications

Exclusion Guidelines for Abstraction:

Medication allergy using a negative modifier or qualifier (questionable, risk of, suspect, etc.)

Data Element Name: *Referral for Addictions Treatment*

Collected For The Joint Commission Only: SUB-3

Definition: Documentation that a referral was made at discharge for addictions treatment by a physician or non-physician (such as nurse, psychologist, or counselor). A referral is defined as an appointment made by the provider either through telephone contact, fax or e-mail. The referral may be to an addictions treatment program, to a mental health program or mental health specialist for follow-up for substance use or addiction treatment, or to a medical or health professional for follow-up for substance use or addiction.

Suggested Data Collection Question: Was a referral for addictions treatment made for the patient prior to discharge?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The referral to addictions treatment was made by the healthcare provider or health care organization at any time prior to discharge.
- 2 Referral information was given to the patient at discharge, but the appointment was not made by the provider or health care organization prior to discharge.
- 3 The patient refused the referral for addictions treatment and the referral was not made.
- 4 The patient:
 - is being discharged to a residence outside the USA
 - is released to a court hearing and does not return
 - is being discharged to jail/law enforcement
- 5 The referral for addictions treatment was not offered at any time prior to discharge or unable to determine from the medical record documentation.

Notes for Abstraction:

- If a patient is referred to an addictions treatment provider that does not schedule appointments and the patient was given a specific date and time to present for addictions treatment, select Value "1."
- If the patient does not have a residence in the USA, Value "4" must be selected.
- A referral to Alcoholics Anonymous (AA) or similar mutual support groups does not meet the intent of the measure. Select Value "5."
- Select Value "5" if:
 - it cannot be determined that a referral for addictions treatment was made or;
 - it is unclear that the absence of the referral was due to a patient refusal or because the referral was not offered.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Nursing discharge notes
- Physician order sheet
- Transfer sheet

Inclusion Guidelines for Abstraction:

- Group counseling
- Individual counseling
 - Addictions counselor
 - Personal physician
 - Psychiatrist
 - Psychologist

Exclusion Guidelines for Abstraction:

- Self-help interventions in the form of printed/electronic/digital media
- Support groups that are not considered treatment such as Alcoholics Anonymous (AA)

Data Element Name: *Referral for Outpatient Tobacco Cessation Counseling*

Collected For The Joint Commission Only: TOB-3

Definition: Documentation that a referral was made at discharge for ongoing evidence-based counseling with clinicians (physician or non-physician such as nurse, psychologist, counselor). Outpatient counseling may include proactive telephone counseling, group counseling and/or individual counseling. A counseling referral is defined as an appointment made by the healthcare provider or hospital either through telephone contact, fax, the EHR or e-mail. For quitline referrals, the healthcare provider or hospital can either fax or e-mail a quitline referral or assist the patient in directly calling the quitline prior to discharge.

Suggested Data Collection Question: Did the patient receive a referral for Outpatient Tobacco Cessation Counseling?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The referral to outpatient tobacco cessation counseling treatment was made by the healthcare provider or health care organization at any time prior to discharge.
- 2 Referral information was given to the patient at discharge, but the appointment was not made by the provider or health care organization prior to discharge.
- 3 The patient refused the referral for outpatient tobacco cessation counseling treatment and the referral was not made.
- 4 The patient:
 - is being discharged to a residence outside the USA
 - is released to a court hearing and does not return
 - is being discharged to jail/law enforcement
- 5 The referral for outpatient tobacco cessation counseling treatment was not offered at discharge or unable to determine from the medical record documentation.

Notes for Abstraction:

- If a referral is made to a Quitline, defined as a telephone counseling in which at least some of the contact is initiated by the Quitline counselor to deliver tobacco use interventions, select Value "1." If the patient directly calls the Quitline during the hospitalization, documentation must reflect that staff was present during the call to verify that an appointment was set.

- If a patient is referred to an outpatient tobacco cessation counseling provider that does not schedule appointments and the patient was given a specific date and time to present for counseling, select Value “1.”
- If the patient is provided with contact information for e-health or internet smoking cessation programs which tailor program content to the tobacco user’s needs (by collecting information from the tobacco user and using algorithms to tailor feedback or recommendations, permitting the user to select from various features including extensive information on quitting, tobacco dependence, and related topics) select Value “2.” Note that if Value “2” is selected, the case will not pass the measure. Value “2” can be used as part of an internal performance improvement activity in order to determine if any type of referral was made rather than no referral.
- If a referral for outpatient tobacco cessation counseling was offered during the hospitalization and the patient refused, select Value “3.” It does not need to be offered again at discharge.
- If the patient does not have a residence in the USA, Value “4” must be selected.
- If the patient is provided with self-help materials that are not tailored to the patient’s needs and do not provide a structured program, select Value “5.”
- Select Value “5” if:
 - it cannot be determined that a referral for outpatient cessation counseling was made or;
 - it is unclear that the absence of the referral was due to a patient refusal or because the referral was not offered.
- If the patient refused practical counseling (*Tobacco Use Treatment Practical Counseling*) during the hospitalization, a referral for outpatient tobacco cessation counseling must still be offered at the time of discharge. Select Value “5” if a referral for outpatient counseling was not offered at the time of discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Nursing discharge notes
- Physician order sheet
- Transfer sheet

Inclusion Guidelines for Abstraction:

- Group counseling
- Individual counseling
- Quitline

Exclusion Guidelines for Abstraction:

- E-health
- Internet structured programs
- Self-help interventions in the form of printed/electronic/digital media

Data Element Name: *Repeat Lactate Level Collection*

Collected For CMS: SEP-1

Definition: Documentation of obtaining a repeat lactate level in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter. A repeat lactate level is the level drawn following the initial level.

Suggested Data Collection Question: Was a repeat lactate level drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|---------|--|
| 1 (Yes) | A repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter. |
| 2 (No) | A repeat lactate level was not drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter, or unable to determine. |

Notes for Abstraction:

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). This repeat level must be drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter to choose Value “1.”
- If a repeat lactate level was drawn but not in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter, choose Value “2.”
- Do not use documentation such as “Labs Drawn” as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, select Value “1.”

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate drawn
- Lactate level collected
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

Labs drawn

Data Element Name: *Repeat Lactate Level Date*

Collected For CMS: SEP-1

Definition: The date on which the repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter.

Suggested Data Collection Question: What was the earliest date on which the repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). This repeat level must be drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter.
- Do not use documentation such as “Labs Drawn” as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected and there is a date noted.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, enter the date of the attempted lactate collection.

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

- Labs drawn
- Labs reported

Data Element Name: *Repeat Lactate Level Time*

Collected For CMS: SEP-1

Definition: The earliest time at which a repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter.

Suggested Data Collection Question: What was the earliest time at which a repeat lactate level was drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- A repeat lactate level is the next lactate level drawn after the initial lactate level if the initial lactate is elevated (>2.0 mmol/L). This repeat level must be drawn in the time window beginning at severe sepsis presentation date and time and ending 6 hours thereafter.
- Do not use documentation such as “Labs Drawn” as it is not specific for lactate level. Similarly, do not use a physician order for lactate levels as it does not specify that lactate level was drawn, unless there is a notation next to the order that it was drawn or collected and there is a time noted.
- If there is no documentation indicating a repeat lactate was drawn or collected, it is acceptable to use supporting documentation indicating that a repeat lactate was drawn (e.g., lactate sent to lab, lactate received, lactate result). If there are multiple instances of supporting documentation, use the earliest.
- If a repeat lactate level is ordered and there is an attempt to collect it, but the attempt results in failure to collect the specimen (too dehydrated to get a vein) or the specimen was contaminated during or after the draw, enter the time of the attempted lactate collection.

Suggested Data Sources:

- Laboratory Reports
- Nursing Notes
- Physician/APN/PA notes or orders

Inclusion Guidelines for Abstraction:

- Lactate level collected
- Lactate level drawn
- Lactic acid drawn

Exclusion Guidelines for Abstraction:

- Labs drawn
- Labs reported

Data Element Name: *Repeat Volume Status and Tissue Perfusion Assessment Performed*

Collected For CMS: SEP-1

Definition: Documentation indicating that a repeat volume status and tissue perfusion assessment was performed to assess the patient's response to the administration of crystalloid fluids.

Suggested Data Collection Question: Was a repeat volume status and tissue perfusion assessment documented in the appropriate time window?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) Repeat Volume Status and Tissue Perfusion Assessment was documented in the appropriate time window.
- 2 (No) Repeat Volume Status and Tissue Perfusion Assessment was not documented in the appropriate time window, or unable to be determined.

Notes for Abstraction:

- Start abstracting at the crystalloid fluid administration date and time and stop abstracting six hours after the presentation of septic shock date and time. This is the appropriate time window.
- A repeat volume status and tissue perfusion assessment may consist of any one of the following three:
 - Physician/APN/PA documentation indicating or attesting to performing or completing a physical examination, perfusion (re-perfusion) assessment, sepsis (severe sepsis or septic shock) focused exam, or systems review.

Examples of Physician/APN/PA documentation that is acceptable:

 - "I did the Sepsis reassessment"
 - Flowsheet question: "Sepsis focused exam performed?" and selection of "Yes"
 - "Review of systems completed"
 - "I have reassessed tissue perfusion after bolus given."
 - "Sepsis re-evaluation was performed"
 - "I have reassessed the patient's hemodynamic status"
 - Physician/APN/PA documentation indicating or attesting to performing or completing a review of at least five of the following eight parameters. Reference to the parameters must be made in physician/APN/PA documentation. Parameters do not need to all be contained within the same physician/APN/PA documentation.

- Arterial Oxygen Saturation
 - Must be documented as from an arterial source, referenced as arterial oxygen saturation, oxygen saturation, pulse oximetry, POx, or using the abbreviation SaO₂ (arterial oxygen saturation) or SpO₂ (oxygen saturation measured by pulse oximetry).
- Capillary Refill
 - Minimally includes documentation of a capillary refill test. (e.g., capillary refill 3 seconds, cap refill normal).
- Cardiopulmonary Assessment
 - Minimally includes description of heart rate and rhythm, and results of auscultation of lungs. (e.g., heart normal rate & rhythm and lungs clear to auscultation, patient tachycardic and lungs decreased in bases)
- Peripheral Pulses
 - Minimally includes documentation of presence or lack of presence of peripheral pulses (e.g., pulses present bilaterally, peripheral pulses faint, unable to palpate radial pulses).
- Shock Index (SI)
 - A shock index value is documented in the medical record, or there is physician/APN/PA documentation that they have reviewed the shock index.
- Skin Color or Condition
 - Minimally includes either a description of the skin color or condition (e.g., skin cool and clammy, peripheral cyanosis, skin pink and warm, patient appears pale, skin normal, skin normal for ethnicity).
- Urine Output (UO)
 - Physician/APN/PA documentation must reference urine output.
 - Documentation of the urine output volume is not required.
- Vital Signs
 - Minimally includes documentation referencing heart rate (HR) respiratory rate (RR), blood pressure (BP) and temperature (temp or t).
 - Values for these vital signs are not required.
- Documentation demonstrating one of the following was measured or performed. This documentation can be met by physician/APN/PA or non-physician/APN/PA documentation of performance of the test, a result or value. Physician/APN/PA attestation to having reviewed the test is acceptable.
 - Central Venous Pressure (CVP).
 - Central Venous Oxygen Saturation (ScvO₂ or SvO₂).
 - If documentation indicates the oxygen saturation is not from a central line source such as a peripheral venous blood gas do not use it.
 - Echocardiogram (Cardiac echo or cardiac ultrasound).
 - An order for an echocardiogram is not sufficient.

- Fluid Challenge or Passive Leg Raise.
 - Documentation must explicitly indicate a “fluid challenge” or “passive leg raise” or “leg raise” was performed.
- If there are no repeat volume status and tissue perfusion assessment documented within the appropriate time window, choose Value “2.”

Suggested Data Sources:

- Cardiovascular ultrasound or echocardiogram report
- Consultation notes
- Critical Care flow sheet
- Emergency Department record
- History and physical
- Nurses notes
- Physician/APN/PA notes
- Procedure notes
- Respiratory Therapy notes or flow sheet
- Vital signs flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Repeat Volume Status and Tissue Perfusion Assessment Performed Date*

Collected For CMS: SEP-1

Definition: Documentation of the date indicating a repeat volume status and tissue perfusion assessment was performed.

Suggested Data Collection Question: On what date was a repeat volume status and tissue perfusion assessment documented by a physician/APN/PA?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Physician/APN/PA documentation must occur or reflect the assessment was performed between Crystalloid Fluid Administration Date, Crystalloid Fluid Administration Time and six hours after Septic Shock Presentation Date, Septic Shock Presentation Time.
- Documentation of what constitutes or is acceptable for a repeat volume status and tissue perfusion assessment is defined in the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element.
- If there are multiple repeat volume status and tissue perfusion assessments performed, abstract the date of the latest assessment documented within the appropriate time window.
- If the repeat volume status and tissue perfusion assessment is in a physician/APN/PA note without a specific date documented within the note, use the date the note was started or opened.

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Emergency Department record
- History and physical
- Progress notes

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Repeat Volume Status and Tissue Perfusion Assessment Performed Time*

Collected For CMS: SEP-1

Definition: Documentation of the time indicating a repeat volume status and tissue perfusion assessment was performed.

Suggested Data Collection Question: At what time was a repeat volume status and tissue perfusion assessment documented by a physician/APN/PA?

Format:

Length: 5 - HH-MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Physician/APN/PA documentation must occur or reflect the assessment was performed between Crystalloid Fluid Administration Date, Crystalloid Fluid Administration Time and six hours after Septic Shock Presentation Date, Septic Shock Presentation Time.
- Documentation of what constitutes or is acceptable for a repeat volume status and tissue perfusion assessment is defined in the *Repeat Volume Status and Tissue Perfusion Assessment Performed* data element.
- If there are multiple repeat volume status and tissue perfusion assessments performed, abstract the time of the latest assessment documented within the appropriate time window.
- If the repeat volume status and tissue perfusion assessment is in a physician/APN/PA note without a specific date documented within the note, use the time the note was started or opened.

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Emergency Department record
- History and physical
- Progress notes

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Sample*

Collected For CMS/The Joint Commission: All Records (Used in transmission of The Joint Commission's aggregate data file and the Hospital Clinical Data file.)

Notes:

- Required for transmission of individual case data to the CMS Clinical Warehouse. Refer to the Hospital Clinical Data XML File Layout in the Transmission section of this manual.
- Required for transmission of aggregate data to The Joint Commission. Refer to the ORYX Technical Implementation Guide for more information.

Definition: Indicates if the data being transmitted for a hospital has been sampled, or represent an entire population for the specified time period.

Suggested Data Collection Question: Does this case represent part of a sample?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) The data represents part of a sample.

N (No) The data is not part of a sample; this indicates the hospital is performing 100 percent of the discharges eligible for this measure set.

Notes for Abstraction:

When Sampling Frequency equals "3" (No, the hospital is not sampling) or "4" (N/A, submission of patient level data is not required), then abstract Sample as "No."

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Septic Shock Present*

Collected For CMS: SEP-1

Definition: Documentation of the presence of septic shock.

Suggested Data Collection Question: Is there documentation of the presence of septic shock?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

1 (Yes) Septic Shock is present.

2 (No) Septic Shock is not present, or unable to determine.

Notes for Abstraction:

- Presence of Septic Shock may be identified based upon clinical criteria **OR** physician/APN/PA documentation of Septic Shock.
- If clinical criteria for Septic Shock are **NOT** met, but there is physician/APN/PA documentation of Septic Shock, choose Value “1.”
- In order to establish the presence of Septic Shock by clinical criteria, one of following two criteria (a or b) must be met:
 - a. Severe Sepsis Present
AND
Persistent Hypotension evidenced by:
 - In the hour after the conclusion of the target ordered volume of *Crystalloid Fluid Administration*, two consecutive documented **hypotensive blood pressure readings.**
 - b. Severe Sepsis Present
AND
Tissue hypoperfusion evidenced by
 - *Initial Lactate Level Result* is ≥ 4 mmol/L
- For evaluation of blood pressure parameters to establish whether or not hypotension persists after crystalloid fluid administration, begin abstracting at the time that crystalloid fluid administration concludes (refer to the *Persistent Hypotension* data element); abstract for the time period that follows for the next hour only.
- Hypotensive BPs obtained within the operating room (OR), **interventional radiology, during active delivery, or procedural/conscious sedation should not be used.**
- Hypotensive BPs documented from an orthostatic BP evaluation **should not be used.**
- Use the time the hypotensive blood pressures were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract hypotensive values from narrative charting unless there is no other documentation that reflects the time that the same hypotensive values were obtained.

- For the following, physician/APN/PA documentation prior to or within 24 hours after *Severe Sepsis Presentation Time* **is required**.
 - If hypotension (SBP <90 mmHg or MAP <65 mmHg) is due to the following, it **should not be used**. Inferences should not be made. The abnormal value or reference to the abnormal value must be in the same documentation.
 - Normal for that patient
 - Is due to a chronic condition
 - Is due to a medication

Example:
“Hypotensive after pain meds”
 - If a hypotensive value is due to an acute condition that has a non-infectious source/process, it **should not be used** (Refer to *Severe Sepsis Present* criteria “a” to determine if the source of the acute condition is an infection).

Example:
“BP 85/50 r/t blood loss” “2 liters lost via GI bleed” (blood loss is the acute condition and GI bleed is the non-infectious source).
 - If a hypotensive value should not be used based on the above guidance, all instances of less severe values **should not be used**.

Example:
“BP 80/50 secondary to Lasix” (systolic blood pressures ≥ 80 would not be used).
 - If a hypotensive value is due to the following, the criteria value **should be used**.
 - Acute condition

Example:
Progress Note: “Hypotension r/t dehydration.”
 - Acute on chronic condition

Example:
H&P: “Hypotension due to acute exacerbation of chronic heart failure.”
 - Infection

Example:
Physician Note: “Sepsis, hypotensive.”
- Documentation of a term that represents or is defined by a SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value **when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process**.

Example:
Hypotension (Systolic blood pressure <90 mmHg)
- If within the same physician/APN/PA documentation, there is conflicting documentation indicating hypotension is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, the criteria value **should be used**.

Example:
“Hypotensive post medications, possibly r/t sepsis.”
- If within 24 hours after *Severe Sepsis Presentation Time* there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating hypotension is normal for the patient, or due to a chronic

condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, abstract based on the latest piece of documentation within the 24-hour period.

Example:

- Note 1200: “Antihypertensive discontinued due to hypotension.”
Note 1600: “Sepsis with hypotension and SIRS criteria.”
 - Hypotensive readings should be used.
- If within 24 hours after the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation that a hypotensive reading is invalid, erroneous or questionable, disregard that reading when determining the presence of Septic Shock.
- If Septic Shock presentation is more than six hours after *Severe Sepsis Presentation Time*, choose Value “2.”
- Disregard documentation of Septic Shock in a discharge note, discharge summary, or documented after the time of discharge.
- The title or heading of an order set, protocol, checklist, alert, screening tool, etc. reflecting an infection, SIRS, Sepsis, Severe Sepsis, or Septic Shock should not be used to meet criteria.
- Documentation of a criterion or Septic Shock **within an** order set, protocol, checklist, alert, screening tool, etc., may be used if the following is true:
 - The documentation or value and recorded date and time is present and is the earliest date and time recorded for the criteria.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining presence of Septic Shock.
- Choose Value “2” if within 6 hours after documentation meeting clinical criteria or physician/APN/PA documentation of Septic Shock there is additional physician/APN/PA documentation indicating:
 - Patient is not septic
 - Patient does not have Sepsis, Severe Sepsis, Septic Shock
 - Septic Shock is due to a viral, fungal or parasitic infection
- For documentation of Septic Shock accompanied by a qualifier, the table below should be used. Documentation containing a positive qualifier should be used to meet criteria, documentation containing a negative qualifier should not be used to meet criteria. Documentation containing both a positive and negative qualifier should not be used to meet criteria.

| Positive Qualifiers | Negative Qualifiers |
|------------------------|---------------------|
| Possible | Impending |
| Rule out (r/o) | Unlikely |
| Suspected | Doubt |
| Likely | Risk for |
| Probable | Ruled out |
| Differential Diagnosis | Evolving |
| Suspicious for | Questionable |
| Concern for | |

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

- Septic Shock
- Severe Sepsis with Shock

Exclusion Guidelines for Abstraction:

- Bacteremia
- Septicemia
- Shock (not referenced as related to Severe Sepsis or Septic Shock)

Data Element Name: *Septic Shock Presentation Date*

Collected For CMS: SEP-1

Definition: The earliest date on which the final criterion was met to establish the presence of septic shock.

Suggested Data Collection Question: What was the date on which the last criterion was met to establish the presence of septic shock?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Use the earliest date on which the final criterion for septic shock was noted (see *Septic Shock Present* data element for criteria list) or the earliest date the physician/APN/PA documented septic shock.
- Septic Shock identified by severe sepsis present and persistent hypotension (*Septic Shock Present* criteria a):
 - Use the later date of either severe sepsis presentation or persistent hypotension.
 - For persistent hypotension, use the date of the last consecutive blood pressure reading that identifies the presence of persistent hypotension.
- Septic Shock identified by severe sepsis present and initial lactate ≥ 4 (*Septic Shock Present* criteria b):
 - Use the later date of either severe sepsis presentation or the initial lactate level result.
- For patients with multiple septic shock presentation dates, only abstract the earliest presentation date.
- Use the earliest documented arrival date for patients who enter the Emergency Department with the following:
 - Septic shock clinical criteria met in pre-hospital records
 - Physician/APN/PA documentation of septic shock in pre-hospital records
 - Physician/APN/PA documentation that septic shock was present on arrival
- Use the earliest documented date patient arrives to floor or unit for admission for patients who are admitted with the following:
 - Septic shock clinical criteria met in pre-hospital records and patient is a direct admit
 - Physician/APN/PA documentation of septic shock in pre-hospital records and patient is a direct admit

- Physician/APN/PA documentation that septic shock was present on admission
- If septic shock is in a physician/APN/PA note without a specific date documented within the note or documented using the acronym POA, the following apply:
 - If it is the only documentation of Septic Shock in the note, use the date the note was started or opened.
 - If Septic Shock is documented multiple times within the same note, use the earliest specified date.

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Septic Shock Presentation Time*

Collected For CMS: SEP-1

Definition: The earliest time at which the final criterion was met to establish the presence of septic shock.

Suggested Data Collection Question: What was the time at which the last criterion was met to establish the presence of septic shock?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Use the earliest time at which the final criterion for septic shock was noted (see *Septic Shock Present* data element for criteria list) or the earliest time the physician/APN/PA documented septic shock.
- Septic Shock identified by severe sepsis present and persistent hypotension (*Septic Shock Present* criteria a):
 - Use the later time of either severe sepsis presentation or persistent hypotension.
 - For persistent hypotension, use the time of the last consecutive blood pressure reading that identifies the presence of persistent hypotension.
- Septic Shock identified by severe sepsis present and initial lactate ≥ 4 (*Septic Shock Present* criteria b):
 - Use the later time of either severe sepsis presentation or the initial lactate level result.
- For patients with multiple septic shock presentation times, only abstract the earliest presentation time.
- Use the earliest documented arrival time for patients who enter the Emergency Department with the following:

- Septic shock clinical criteria met in pre-hospital records
- Physician/APN/PA documentation of septic shock in pre-hospital records
- Physician/APN/PA documentation that septic shock was present on arrival
- Use the earliest documented time patient arrives to floor or unit for admission for patients who are admitted with the following:
 - Septic shock clinical criteria met in pre-hospital records and patient is a direct admit
 - Physician/APN/PA documentation of septic shock in pre-hospital records and patient is a direct admit
 - Physician/APN/PA documentation that septic shock was present on admission
- If septic shock is in a physician/APN/PA note without a specific time documented within the note or documented using the acronym POA, the following applies:
 - If it is the only documentation of Septic Shock in the note, use the time the note was started or opened.
 - If Septic Shock is documented multiple times within the same note, use the earliest specified time.

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Severe Sepsis Present*

Collected For CMS: SEP-1

Definition: Documentation of the presence of severe sepsis.

Suggested Data Collection Question: Was severe sepsis present?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

1 (Yes) Severe Sepsis was present.

2 (No) Severe Sepsis was not present, or Unable to Determine.

Notes for Abstraction:

- Presence of Severe Sepsis may be identified based upon clinical criteria or physician/APN/PA documentation of Severe Sepsis.
- In order to establish the presence of Severe Sepsis by clinical criteria, all three clinical criteria (a, b, and c)_must **be met within 6 hours of each other**. The three clinical criteria do not need to be documented in any particular order.
 - a. Documentation of an infection.
 - Physician/APN/PA or nursing documentation referencing the presence of an infection is acceptable.
 - Physician/APN/PA, nursing, or pharmacist documentation indicating a patient is being treated with an antibiotic for an infection and that antibiotic is documented as administered within 6 hours of criteria b or c is acceptable (e.g., Levaquin is documented in MAR for pneumonia and nursing documentation within 6 hours of criteria b and c that indicates a dose was given).
 - If documentation of an infection is in a physician/APN/PA, nursing, or pharmacist note without a specific date and time or documented using the acronym POA, use the date and time the note was started or opened.
 - If the note states an infection was present on arrival, use the earliest documented arrival date and time.
 - If the note states an infection was present on admission, use the earliest documented date and time that the patient arrives to the floor or unit for admission.
 - If an infection is documented and within 6 hours following the initial documentation of the infection, there is additional physician/APN/PA documentation indicating the infection is not present, disregard the initial documentation of the infection.

Examples:

- ED physician/APN/PA documents rule out UTI and pneumonia at 05:00. At 10:00 hospitalist documents no infection present. Disregard ED physician/APN/PA documentation of rule out UTI and pneumonia.
- ED physician/APN/PA documents suspected UTI and pneumonia at 09:00. At 12:30 infectious disease APN documents no UTI. Disregard the initial documentation of suspected UTI. Documentation of pneumonia is still valid to use for an infection.
- Documentation of an infection in an active problem list is acceptable if there is information in the medical record supporting the infection is current.
- If a condition documented in the medical record does not include the word “infection,” or is not in the Inclusion Guidelines for Abstraction infection list, consulting other medical resources (such as a medical dictionary) to identify whether or not the condition is an infection or is caused by an infection is acceptable.
 - i. If the other medical resource indicates the condition is an infection or is caused by an infection, it may be used to meet the suspected infection criteria.
 - ii. If the other medical resource indicates the condition is NOT an infection and NOT caused by an infection, it may NOT be used to meet the suspected infection criteria.
 - iii. If the other medical resource indicates the condition may or may not be an infection, or may be caused by an infection or may be caused by something other than an infection, there must be additional documentation in the medical record supporting the condition is an infection (e.g., antibiotic ordered for the condition) to be used to meet the suspected infection criteria.
- If an antibiotic is ordered for a condition that may be inflammation or a sign or symptom of an infection this may be considered documentation of an infection (e.g., ceftriaxone ordered for colitis, Zosyn 3.375 g IV q6hr for cough).
- Exclude documentation of viral, fungal, or parasitic infections.
- b. Two or more manifestations of systemic infection according to the Systemic Inflammatory Response Syndrome (SIRS) criteria, which are:
 - Temperature >38.3 C or <36.0 C (>100.9 F or <96.8 F)
 - Heart rate (pulse) >90
 - Respiration >20 per minute
 - White blood cell count >12,000 or <4,000 or >10% bands
- c. Organ dysfunction, evidenced by any one of the following:
 - Systolic blood pressure (SBP) <90 mmHg or mean arterial pressure <65 mmHg.
 - **Do not use** hypotensive BPs documented from an orthostatic BP evaluation.
 - Systolic blood pressure decrease of more than 40 mmHg.

- Physician/APN/PA documentation must be present in the medical record indicating a >40 mmHg decrease in SBP has occurred and is related to infection, Severe Sepsis or Septic Shock and not other causes.
- Acute respiratory failure as evidenced by a new need for invasive or non-invasive mechanical ventilation.
 - Documentation the patient is on mechanical ventilation.
 - Invasive mechanical ventilation requires an endotracheal or tracheostomy tube. Non-invasive mechanical ventilation may be referred to as BiPAP or CPAP.
 - New need for mechanical ventilation indicates the patient had a new need for mechanical ventilation that was not previously needed or the patient had an increased need from intermittent to continuous mechanical ventilation.
 - Use the time mechanical ventilation was initiated or the time the mechanical ventilation changed from intermittent to continuous.
- Creatinine >2.0
 - If there is physician/APN/PA documentation prior to or within 24 hours following presentation of severe sepsis that the patient has end stage renal disease (ESRD) and is on hemodialysis or peritoneal dialysis all reported creatinine levels should be disregarded as signs of organ dysfunction. ESRD (on hemodialysis or peritoneal dialysis) and creatinine levels or reference to elevated creatinine levels do not need to be included in the same physician/APN/PA documentation.
 - If there is physician/APN/PA documentation prior to or within 24 hours following presentation of severe sepsis of chronic renal disease (e.g., CKD I, II, or III, or “chronic renal insufficiency”) and the baseline creatinine is documented, creatinine values elevated >0.5 above baseline should be used as organ dysfunction (e.g., baseline 2.30, creatinine now 2.81).
- Urine output <0.5 mL/kg/hour for 2 consecutive hours
 - Documentation must clearly indicate that urine output is being monitored hourly to be able to use this as organ dysfunction.
- Total Bilirubin >2 mg/dL (34.2 mmol/L)
- Platelet count <100,000
- INR >1.5 or aPTT >60 sec
 - If the suggested data source shows the patient was given an anticoagulant medication in Appendix C Table 5.3, an elevated INR or aPTT level should not be used as organ dysfunction. Physician/APN/PA documentation is not required. **If only the following is given, the elevated INR or aPTT level should be used:**
 - **Heparin flushes**
- Lactate >2 mmol/L (18.0 mg/dL)

- For the following, physician/APN/PA documentation prior to or within 24 hours after *Severe Sepsis Presentation Time* is **required**.
 - If the SIRS criteria or a sign of organ dysfunction is due to the following, it **should not be used**. Inferences should not be made. The abnormal value or reference to the abnormal value must be in the same documentation.
 - Normal for that patient
 - Is due to a chronic condition
 - Is due to a medication

Examples:

 - Do not use value since the creatinine and the chronic condition are in the same documentation and section of the H&P.
 H&P: Assessment Section
 Renal Assessment
 History of CKD
 Creatinine 3.0
 HD daily
 - Do not use the hypotensive readings since the medication is in the same sentence
 “Hypotensive after pain meds”
 - If SIRS criteria or a sign of organ dysfunction is due to an acute condition that has a non-infectious source/process, it **should not be used** (Refer to *Severe Sepsis Present* criteria “a” to determine if the source of the acute condition is an infection).

Examples:

 - “Lactate 4.3 r/t seizure” “Seizure post brain injury” (seizure is the acute condition and brain injury is the non-infectious source).
 - “AKI, dehydrated due to nephrotoxic medication, creatinine 3.8.” (AKI and dehydration are the acute conditions and medication is the non-infectious source).
 - APN Note: “Elevated Cr secondary to dehydration post DKA.”
 Physician Note: “DKA likely due to patient non-compliance with meds.”
 (dehydration is the acute condition and DKA is the non-infectious source because it is due to medication non-compliance).
 - If SIRS criteria or a sign of organ dysfunction should not be used based on the above guidance, all instances of less severe values **should not be used**.

Examples:

 - “Platelet count 75 r/t chemo” (platelet counts ≥ 75 would not be used).
 - “Cr 2.8, CKD” (creatinine values ≤ 2.8 would not be used).
 - If SIRS criteria or a sign of organ dysfunction is due to the following, the criteria value **should be used**.
 - Acute condition

Examples:

 - Progress Note: “Lactate 4.3 r/t seizure.”

- H&P: “AKI, dehydration, creatinine 3.8.”
 - Acute on chronic condition
 - Examples:**
 - H&P: “Acute on chronic renal failure, creatinine 2.8.”
 - Progress Note: “Hypotension due to acute exacerbation of chronic heart failure.”
 - Infection
 - Example:**
 - Physician Note: “Cholecystitis with Hyperbilirubinemia.”
 - Antibiotic Order Indication: “Cholecystitis” (The antibiotic indication confirms cholecystitis is an infection).
- Documentation of a term that represents or is defined by a SIRS criteria or sign of organ dysfunction is acceptable in place of an abnormal value **when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.**
 - Examples** include but are not limited to:
 - Tachypnea (Respiration >20 per minutes)
 - Tachycardia, RVR (Heart rate >90)
 - Leukopenia (White blood cell count <4,000)
 - Leukocytosis (White blood cell count >12,000)
 - Thrombocytopenia (Platelet count <100,000)
 - Hypotension (Systolic blood pressure <90 mmHg)
 - If within the same physician/APN/PA documentation, there is conflicting documentation indicating SIRS criteria or sign of organ dysfunction is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, the criteria value **should be used.**
 - Examples:**
 - “Creatinine 4.3, CKD, potentially increasing due to worsening UTI,” creatinine value should be used.
 - “Thrombocytopenia possibly due to NSAID use, however complicated by sepsis,” platelet value should be used.
 - If within 24 hours after *Severe Sepsis Presentation Time* there is conflicting information within **two or more separate** pieces of physician/APN/PA documentation indicating SIRS criteria or sign of organ dysfunction is normal for the patient, or due to a chronic condition or medication AND due to or possibly due to an infection, Severe Sepsis, or Septic Shock, abstract based on the latest piece of documentation within the 24-hour period.
 - Examples:**
 - H&P 0900: “Tachypnea, on 2L NC, chronic emphysema.”
Consult 1500: “URI x 2 days with worsening tachypnea.”
 - Elevated respiratory rate should be used.
 - Note 1800: “Patient has been taking Lasix BID for 1 week, presenting with hypotension and dehydration.”
Note 2230: “Dehydration and hypotension currently, Lasix discontinued, starting fluid resuscitation for possible sepsis.”
 - Hypotensive readings should be used.

- SIRS criteria or a sign of organ dysfunction obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation should not be used.
- SIRS criteria or a sign of organ dysfunction due to artificial interventions should not be used.
 - **Example:**
Mechanical ventilator rate set at 24 and respiratory rate is 24, the respiratory rate would not be used for SIRS criteria.
- If an artificial intervention is unable to control a patient's physiological function, the SIRS criteria or a sign of organ dysfunction should be used.
 - **Example:**
Mechanical ventilator rate set at 24 and respiratory rate at 28, the respiratory rate should be used for SIRS criteria.
- The title or heading of an order set, protocol, checklist, alert, screening tool, etc. reflecting an infection, SIRS, Organ Dysfunction, Sepsis, Severe Sepsis, or Septic Shock should not be used to meet criteria.
- Documentation of an infection, SIRS, Organ Dysfunction, Sepsis, Severe Sepsis, or Septic Shock **within an** order set, protocol, checklist, alert, screening tool, etc., may be used if the following is true:
 - The documentation or value and recorded date and time is present and is the earliest date and time recorded for the criteria.
- If within 24 hours after the *Severe Sepsis Presentation Time* there is physician/APN/PA or nursing documentation that SIRS criteria or sign of organ dysfunction is invalid, erroneous or questionable, disregard that value when determining the presence of Severe Sepsis.
- Use the time vital signs were taken or obtained. If time taken or obtained is not available, use recorded or documented time. Do not abstract vital signs from narrative charting unless there is no other documentation that reflects the time that the same vital sign was obtained.
- To determine the laboratory test value time for severe sepsis criteria, use the following sources in priority order.
 - Primary source:
 1. Laboratory test value result time from lab
 - Supporting sources in priority order if primary source not available:
 1. Time within a narrative note that is directly associated with the laboratory test value
 2. Time the laboratory test value is documented in a non-narrative location (e.g., sepsis flowsheet)
 3. Laboratory test sample draw or collected time
 4. Physician/APN/PA or nursing narrative note open time
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that is considered part of the medical record is acceptable for determining presence of Severe Sepsis.
- If there is more than one presentation of Severe Sepsis in the record, abstract only the first presentation.
- If clinical criteria for Severe Sepsis are not met, but there is physician/APN/PA documentation of Severe Sepsis, choose Value "1."

- If Severe Sepsis is met by physician/APN/PA documentation only, and is documented as due to a viral, fungal, or parasitic infection, the documentation of Severe Sepsis should not be used.
- If clinical criteria for Severe Sepsis are not documented and there is not physician/APN/PA documentation of Severe Sepsis, but there is physician/APN/PA documentation of Septic Shock, choose Value “1.”
- Disregard any documentation of SIRS criteria, organ dysfunction, an infection, Severe Sepsis, or Septic Shock in a discharge note, discharge summary, or documented after the time of discharge.
- Choose Value “2” if within 6 hours after documentation meeting clinical criteria or physician/APN/PA documentation of Severe Sepsis there is additional physician/APN/PA documentation indicating:
 - Patient is not septic
 - Patient does not have Sepsis, Severe Sepsis, or Septic Shock
 - Severe Sepsis or Septic Shock is due to a viral, fungal, or parasitic infection.
- For documentation of an infection, Severe Sepsis, or Septic Shock accompanied by a qualifier, the table below should be used. Documentation containing a positive qualifier should be used to meet criteria, documentation containing a negative qualifier should not be used to meet criteria. Documentation containing both a positive and negative qualifier should not be used to meet criteria.

| Positive Qualifiers | Negative Qualifiers |
|------------------------|---------------------|
| Possible | Impending |
| Rule out (r/o) | Unlikely |
| Suspected | Doubt |
| Likely | Risk for |
| Probable | Ruled out |
| Differential Diagnosis | Evolving |
| Suspicious for | Questionable |
| Concern for | |

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Guidelines for Abstraction: Severe Sepsis

Inclusions

- Documentation that is acceptable for Severe Sepsis.
- PHYSICIAN/APN/PA DOCUMENTATION ONLY
- Severe Sepsis

Exclusions

- Documentation that is not acceptable for Severe Sepsis.
- Bacteremia

- Septicemia

Guidelines for Abstraction: Infections

Inclusions

Documentation that is acceptable for an infection.

- The following is a list of conditions commonly associated with Severe Sepsis that are considered infections.
- (This is not an all-inclusive list.)
- Abscess
- Acute abdomen
- Acute abdominal infection
- Blood stream catheter infection
- Bone/joint infection
- C. difficile (C-diff)
- Chronic Obstructive Pulmonary Disease (COPD) acute exacerbation
- Endocarditis
- Gangrene
- Implantable device infection
- Infection
- Infectious
- Meningitis
- Necrosis
- Necrotic/ischemic/infarcted bowel
- Pelvic Inflammatory Disease
- Perforated bowel
- Pneumonia, empyema
- Purulence/pus
- Sepsis
- Septic
- Skin/soft tissue infection
- Suspect infection, source unknown
- Urosepsis, Urinary tract infection
- Wound infection

Exclusions

Documentation that is not acceptable for an infection.

- Colonization, positive screens, or positive cultures (e.g., MRSA, VRE, or for other bacteria) without physician/APN/PA documentation referencing an infection.
- Fungal infections
- History of infection, recent infection, or recurrent infection that is not documented as a current or active infection.
- Orders for tests or screens without documentation of a suspected infection.
- Parasitic infections
- Results of tests without documentation of a suspected infection (e.g., infiltrates on chest x-ray, positive cultures).
- Signs or symptoms of an infection without supportive documentation.
- Viral infections

Data Element Name: *Severe Sepsis Presentation Date*

Collected For CMS: SEP-1

Definition: The earliest date on which the final criterion was met to establish the presence of severe sepsis.

Suggested Data Collection Question: What was the date on which the last criterion was met to establish the presence of severe sepsis?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- Use the earliest date the final clinical criterion for severe sepsis was noted (see *Severe Sepsis Present* data element for clinical criteria list) or the earliest date the physician/APN/PA documented severe sepsis.
- For patients with multiple severe sepsis presentation dates, only abstract the earliest presentation date.
- If severe sepsis or septic shock is documented in a physician/APN/PA note without a specific date or documented using the acronym POA, the following apply:
 - If it is the only documentation of Severe Sepsis or Septic Shock in the note, use the date the note was started or opened.
 - If Severe Sepsis or Septic Shock is documented multiple times within the same note, use the earliest specified date.
- Use the earliest documented arrival date for patients who enter the Emergency Department with the following:
 - Severe sepsis clinical criteria met in pre-hospital records
 - Physician/APN/PA documentation of severe sepsis in pre-hospital records
 - Physician/APN/PA documentation that severe sepsis was present on arrival
- Use the earliest documented date patient arrives to floor or unit for admission for patients who are admitted with the following:
 - Severe sepsis clinical criteria met in pre-hospital records and patient is a direct admit
 - Physician/APN/PA documentation of severe sepsis in pre-hospital records and patient is a direct admit
 - Physician/APN/PA documentation that severe sepsis was present on admission

- If clinical criteria for severe sepsis are met after physician/APN/PA documentation of septic shock, enter the date the physician/APN/PA documented septic shock.
- If clinical criteria for severe sepsis are not documented and there is not physician/APN/PA documentation of severe sepsis, but there is physician/APN/PA documentation of septic shock, enter the earliest date septic shock was documented for this data element.

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Severe Sepsis Presentation Time*

Collected For CMS: SEP-1

Definition: The earliest time at which the final criterion was met to establish the presence of severe sepsis.

Suggested Data Collection Question: What was the time at which the last criterion was met to establish the presence of severe sepsis?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- Use the earliest time the final clinical criterion for severe sepsis was noted (see *Severe Sepsis Present* data element for clinical criteria list) or the earliest time the physician/APN/PA documented severe sepsis.
- For patients with multiple severe sepsis presentation times, only abstract the earliest presentation time.
- If severe sepsis or septic shock is documented in a physician/APN/PA note without a specific time or documented using the acronym POA, the following apply:
 - If it is the only documentation of Severe Sepsis or Septic Shock in the note, use the time the note was started or opened.
 - If Severe Sepsis or Septic Shock is documented multiple times within the same note, use the earliest specified time.
- Use the earliest documented arrival time for patients who enter the Emergency Department with the following:
 - Severe sepsis clinical criteria met in pre-hospital records
 - Physician/APN/PA documentation of severe sepsis in pre-hospital records
 - Physician/APN/PA documentation that severe sepsis was present on arrival
- Use the earliest documented time patient arrives to floor or unit for admission for patients who are admitted with the following:

- Severe sepsis clinical criteria met in pre-hospital records and patient is a direct admit
- Physician/APN/PA documentation of severe sepsis in pre-hospital records and patient is a direct admit
- Physician/APN/PA documentation that severe sepsis was present on admission
- If clinical criteria for severe sepsis are met after physician/APN/PA documentation of septic shock, enter the time the physician/APN/PA documented septic shock.
- If clinical criteria for severe sepsis are not documented and there is not physician/APN/PA documentation of severe sepsis, but there is physician/APN/PA documentation of septic shock, enter the earliest time septic shock was documented.

Suggested Data Sources:

- Any physician/APN/PA documentation
- Entire ED record
- Hourly output record
- Intake/Output record
- Laboratory results
- Nurses notes
- Vital signs record or flow sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: Sex

Collected For CMS/The Joint Commission: All Records

Definition: The patient's documented sex on arrival at the hospital.

Suggested Data Collection Question: What was the patient's sex on arrival?

Format:

Length: 1

Type: Character

Occurs: 1

Allowable Values:

M = Male

F = Female

U = Unknown

Notes for Abstraction:

- Collect the documented patient's sex at admission or the first documentation after arrival.
- Consider the sex to be unable to be determined and select "Unknown" if:
 - The patient refuses to provide their sex.
 - Documentation is contradictory.
 - Documentation indicates the patient is a Transsexual.
 - Documentation indicates the patient is a Hermaphrodite.

Suggested Data Sources:

- Consultation notes
- Emergency Department record
- Face sheet
- History and physical
- Nursing admission notes
- Progress notes
- UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Tobacco Use Status*

Collected For The Joint Commission Only: All TOB Measures

Definition: Documentation within the first day of admission (by the end of Day 1) of the adult patient's tobacco use status within the past 30 days prior to the day of hospital admission. Tobacco use includes all forms of tobacco including cigarettes, smokeless tobacco products, pipe, and cigars. A tobacco use screen should identify the type of tobacco product used, the volume used, and the time frame of use.

Suggested Data Collection Question: What is the patient's tobacco use status?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The patient has during the past 30 days:
 - smoked, on average, 5 or more cigarettes ($\geq \frac{1}{4}$ pack) daily, and/or
 - smoked cigars and/or pipes daily.
- 2 The patient has during the past 30 days:
 - smoked, on average, 4 or less cigarettes ($< \frac{1}{4}$ pack) daily, and/or
 - smoked cigarettes, cigars and/or pipes, but not daily, and/or
 - used smokeless tobacco, regardless of frequency.
- 3 The patient has not used any forms of tobacco in the past 30 days.
- 4 The patient refused the tobacco use screen within the first day of admission (by the end of Day 1).
- 5 The patient was not screened for tobacco use within the first day of admission (by the end of Day 1) or unable to determine the patient's tobacco use status from medical record documentation.
- 6 The patient was not screened for tobacco use within the first day of admission (by end of Day 1) because of cognitive impairment.

Notes for Abstraction:

- The tobacco use status screening must have occurred within the first day of admission (by the end of Day 1). This includes the day of admission which is defined as Day 0, and the day after admission which is defined as Day 1

EXCEPTION:

If the screening was performed within 3 days prior to admission, i.e., at the transferring facility, in another inpatient hospital unit, emergency department or observation unit, the screening documentation must be present in the current medical record.

- If there is **any conflicting** documentation about the patient's tobacco use status, e.g., RN assessment states patient has not used any tobacco products in the past 30 days prior to admission, but there is also physician documentation in the H & P

that the patient is a “smoker,” select Value “5” since tobacco use status is unable to be determined.

- Documentation of "nicotine" use is not acceptable to determine tobacco use status. The documentation of "nicotine" use needs to be supported by language showing it was in the form of cigarettes, cigars, pipes and/or smokeless tobacco.
- If there is documentation that the patient has not used any tobacco products during the past 30 days prior to admission, continued assessment for the type, volume and frequency does not need to be performed.
- If there is documentation that the patient has used smokeless tobacco **AND** has **also** smoked cigarettes daily on average in a volume of five or more cigarettes (=>¼ pack) per day and/or cigars daily and/or pipes daily during the past 30 days, select Value “1.”
- There is no requirement to capture volume and frequency of use for patients using **only** smokeless tobacco.
- For the History and Physical (H&P) source, use only the H&P report for the current admission. The H&P may be a dictated report, a handwritten report on an H&P form, or a separate entry labeled as the H&P in the progress notes.
- Classify a form as a nursing admission assessment if the content is typical of nursing admission assessment (e.g., med/surg/social history, current meds, allergies, physical assessment) AND the form is completed/reviewed by a nurse or labeled as a “nursing form.”
- Disregard documentation of tobacco use history if the current tobacco use status or time frame that patient quit is not defined (e.g., “20 pk/yr smoking history,” “History of tobacco abuse”).
- Do not include documentation of smoking history referenced as a “risk factor” (e.g., “risk factor: tobacco,” “risk factor: smoking,” “risk factor: smoker”), where current tobacco use status is indeterminable.
- When there is conflicting information in the record with regard to volume, for instance, one document indicates patient is a light smoker and another indicates patient is a volume greater than light smoking; select Value “1” indicating the heaviest usage.
- If the medical record indicates the patient smokes cigarettes and the volume is not documented or is unknown, assume smoking at the heaviest level and select Value “1.”
- Cognition refers to mental activities associated with thinking, learning, and memory. Cognitive impairment for the purposes of this measure set is related to documentation that the patient cannot be screened for tobacco use due to the impairment (e.g., comatose, obtunded, confused, memory loss) within the first day of admission (by end of Day 1).
- If there is documentation within the first day of admission (by end of Day 1) that the patient was psychotic, symptoms of psychosis, e.g., hallucinating, non-communicative, catatonic, etc., must also be documented for the patient to be considered cognitively impaired.
- If there is documentation to “rule out” a condition/diagnosis related to cognitive impairment, Value “6” cannot be selected unless there is documentation of symptoms.

Examples:

- Patient actively hallucinating, rule out psychosis. (Select Value “6”).

- Rule out psychosis. (Cannot select Value “6”).
- If there is documentation of any of the examples of cognitive impairment below within the first day of admission (by the end of Day 1), select Value “6” regardless of conflicting documentation.
 - Examples** of cognitive impairment include:
 - Altered Level of Consciousness (LOC)
 - Altered Mental Status
 - Cognitive impairment
 - Cognitively impaired
 - Cognitive impairment due to acute substance use; overdose, acute intoxication
 - Confused
 - Dementia
 - Intubation
 - Memory loss
 - Mentally handicapped
 - Obtunded
 - Psychotic/psychosis with documented symptoms
 - Sedation
- Documentation of cognitive impairment overrides documentation of a tobacco screen and therefore would not be considered "conflicting documentation." Even if the family or others tell staff the patient uses tobacco, the patient could not be appropriately screened and subsequently counseled due to cognitive impairment. Select Value “6.”

Suggested Data Sources:

- Emergency Department record
- History and physical
- Nursing admission assessment
- Nursing admission notes
- Physician progress notes
- Respiratory therapy notes

Inclusion Guidelines for Abstraction:

- Chewing (spit) tobacco
- Dry snuff
- Moist snuff
- Plug tobacco
- Redman
- Smokeless tobacco
- Snus
- Twist

Exclusion Guidelines for Abstraction:

- E-cigarettes
- Hookah pipe
- Marijuana use only
- Nicotine delivery system
- Vaping or nicotine vaporizer use

Data Element Name: *Tobacco Use Treatment FDA – Approved Cessation Medication*

Collected For The Joint Commission Only: TOB-2

Definition: The FDA-approved tobacco cessation medications may be referenced in Appendix C on Table 9.1.

Suggested Data Collection Question: Did the patient receive one of the FDA-approved tobacco cessation medications during the hospital stay?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The patient received one of the FDA-approved tobacco cessation medications during the hospital stay.
- 2 The patient refused the FDA-approved tobacco cessation medications during the hospital stay.
- 3 FDA-approved tobacco cessation medications were not offered to the patient during the hospital stay or unable to determine from medical record documentation.

Notes for Abstraction:

If nicotine replacement therapy (NRT) is ordered PRN and the patient does not receive any doses during the hospital stay, select Value “2” (the patient refused the FDA-approved tobacco cessation medications during the hospital stay).

Suggested Data Sources:

- Medication administration record (MAR)
- Physician orders

Inclusion Guidelines for Abstraction:

Refer to Appendix C, Table 9.1 for the list of FDA-approved tobacco cessation medications

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Tobacco Use Treatment Practical Counseling*

Collected For The Joint Commission Only: TOB-2

Definition: Practical counseling requires a one-on-one interaction with the patient to address at a minimum the following three components: recognizing danger situations, developing coping skills, and providing basic information about quitting.

Suggested Data Collection Question: Did the patient receive all of the components of practical counseling during the hospital stay?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 The patient received all components of practical counseling during the hospital stay.
- 2 The patient refused/declined practical counseling during the hospital stay.
- 3 Practical counseling was not offered to the patient during the hospital stay or unable to determine if tobacco use treatment was provided from medical record documentation.

Notes for Abstraction:

- A referral to the Quitline may be considered a component of practical counseling (providing basic information about quitting), however, handing the patient a phone number to call for the quit line will not meet the intent of practical counseling. There must be interaction between the patient and the caregiver.
- A pamphlet with basic information about quitting, recognizing danger situations and how to develop coping skills may be given to the patient; however, the caregiver must still document what was discussed with the patient from the pamphlet. Giving the patient a pamphlet alone does not constitute practical counseling which requires a one-on-one interaction with the patient.
- Danger situations covered in practical counseling might include alcohol use during the first month after quitting, being around smoke and/or other smokers, or times/situations when the patient routinely smoked (in the car, on break at work, with coffee, after a meal, upon waking up, social events, etc.). Triggers and/or roadblocks are the same as danger situations.
- Coping skills covered in practical counseling might include learning new ways to manage stress, exercising, relaxation breathing, changing routines and distraction techniques to prevent tobacco use.
- Basic information on quitting covered in practical counseling might include the benefits of quitting tobacco, how to quit techniques and available resources to support quitting.

- If there is no documentation that practical counseling was given to the patient, select Value “3.”
- Select Value “3” if the documentation provided is not explicit enough to determine if the counseling provided contained all components or if the counseling meets the intent of the measure.

Suggested Data Sources:

- Medication administration record (MAR)
- Nursing notes
- Physician progress notes
- Respiratory therapy notes

Inclusion Guidelines for Abstraction:

Referral to Quitline

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Transfer From Another Hospital or ASC*

Collected For CMS Only: SEP-1

Definition: Documentation that the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center (ASC).

Suggested Data Collection Question: Was the patient received as a transfer from an inpatient, outpatient or emergency/observation department of an outside hospital or from an ambulatory surgery center?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) Patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center.

N (No) Patient was not received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, or unable to determine from medical record documentation.

Notes for Abstraction:

- If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select “Yes.” 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.
- If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select “Yes.” 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 “Yes” in the following types of transfers:
 - Long term acute care (LTAC): Any LTAC hospital or unit (outside or inside your hospital)
 - Acute rehabilitation: Rehab unit in outside hospital, free-standing rehab hospital/facility/pavilion outside your hospital, OR rehab hospital inside your hospital
 - Psychiatric: Psych unit in outside hospital, free-standing psych hospital/facility/pavilion outside your hospital, OR psych hospital inside your hospital
 - Cath lab, same day surgery, or other outpatient department of an outside hospital

- Disaster Medical Assistance Team (DMAT): Provides emergency medical assistance following catastrophic disaster or other major emergency
- Select **“No”** in the following types of transfers:
 - Urgent care center
 - Psych or rehab unit inside your hospital
 - Dialysis center (unless documented as an outpatient department of an outside hospital)
 - Same Day Surgery or other outpatient department inside your hospital
 - Clinic (outside or inside your hospital)
 - Hospice facility (outside or inside your hospital)
 - Assisted living facilities and nursing homes
 - Skilled nursing facility (SNF) care: Any facility or unit (outside or inside your hospital) providing SNF level of care to patient
- If there is conflicting documentation in the record, and you are unable to determine whether or not the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, select **“No”** UNLESS there is supporting documentation for one setting over the other.
 - **Examples:**
 - One source reports patient was transferred from an outside hospital’s ED, another source reports patient was transferred in from an urgent care center. No additional documentation. Select **“No.”**
 - One source states patient came from physician office, another source reports patient was transferred from an outside hospital’s ED, and transfer records from the outside hospital’s ED are included in the record. Select **“Yes.”**
- If, in cases other than conflicting documentation, you are unable to determine whether or not the patient was received as a transfer from an inpatient, outpatient, or emergency/observation department of an outside hospital or from an ambulatory surgery center, select **“No.”** (e.g., **“Transferred from Park Meadows”** documented – documentation is not clear whether Park Meadows is a hospital or not.)

Suggested Data Sources:

- Ambulance record
- Any DMAT documentation
- Emergency Department record
- Face sheet
- History and physical
- Nursing admission assessment
- Progress notes
- Transfer sheet

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Vasopressor Administration*

Collected For CMS: SEP-1

Definition: Documentation of administration of an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending 6 hours after the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

Suggested Data Collection Question: Was an intravenous or intraosseous vasopressor administered in the time window beginning at septic shock presentation and ending 6 hours after the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- 1 (Yes) The patient was given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending 6 hours after the presentation of septic shock.
- 2 (No) The patient was not given an intravenous or intraosseous vasopressor in the time window beginning at septic shock presentation and ending 6 hours after the time of presentation of septic shock.

Notes for Abstraction:

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
 - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
 - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, choose Value “1.” For example, septic shock patient was triaged in the ED at 08:00. The patient was receiving Levophed via an IV at the time of triage – choose Value “1.”
- If a vasopressor was not started or running within the acceptable time frame, select Value “2.”

- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written or pre-printed forms, such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

Suggested Data Sources:

- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Vasopressor Administration Date*

Collected For CMS: SEP-1

Definition: The date on which an intravenous or intraosseous vasopressor was administered within 6 hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

Suggested Data Collection Question: What was the date on which an intravenous or intraosseous vasopressor was administered within 6 hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

Format:

Length: 10 – MM-DD-YYYY (includes dashes) or UTD

Type: Date

Occurs: 1

Allowable Values:

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (20xx)

UTD = Unable to Determine

Notes for Abstraction:

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
 - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
 - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, or the vasopressor was infusing at the time of septic shock and multiple doses were subsequently given, abstract the date the vasopressor that was infusing at the time of presentation of septic shock was initiated.

Example:

Septic shock patient was triaged in the ED at 08:00. At the time of triage, the patient was receiving Levophed via an IV started prior to arrival, abstract the date the Levophed was started prior to arrival.

- If the patient received multiple doses of a vasopressor and there was no vasopressor infusing at the time of presentation of septic shock, abstract the dose given closest to the time of presentation of septic shock.

- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Only abstract from an undated MAR if it has a patient sticker on it and it is titled first day or initial MAR. If an undated MAR is designated as the initial or first day MAR and it does not have a patient sticker on it, use UTD for the date.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from sources that do not represent actual administration.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

Suggested Data Sources:

- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Vasopressor Administration Time*

Collected For CMS: SEP-1

Definition: The time at which an intravenous or intraosseous vasopressor was administered within 6 hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration.

Suggested Data Collection Question: What was the time at which an intravenous or intraosseous vasopressor was administered within 6 hours following the presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration?

Format:

Length: 5 - HH:MM (with or without colon) or UTD

Type: Time

Occurs: 1

Allowable Values:

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unable to Determine

Time must be recorded in military time format.

With the exception of Midnight and Noon:

- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:

| | |
|------------------|------------------|
| Midnight – 00:00 | Noon – 12:00 |
| 5:31 am – 05:31 | 5:31 pm – 17:31 |
| 11:59 am – 11:59 | 11:59 pm – 23:59 |

Notes for Abstraction:

- The list of acceptable vasopressors is contained in Appendix C, Table 5.2. These are the only medications that can be abstracted.
- Only abstract a vasopressor given via the IV or intraosseous (IO) route.
- Vasopressor administration information should only be abstracted from documentation that demonstrates actual administration of the vasopressor.
 - Do not abstract doses from a physician order unless they are clearly designated as given on the physician order form.
 - Acceptable examples of administration include: “vasopressor running” and “vasopressor given.”
- If a vasopressor was infusing at the time of presentation of septic shock, demonstrated by persistent hypotension after crystalloid fluid administration, or the vasopressor was infusing at the time of septic shock and multiple doses were subsequently given, abstract the time the vasopressor that was infusing at the time of presentation of septic shock was initiated.

Example:

Septic shock patient was triaged in the ED at 08:00. At the time of triage, the patient was receiving Levophed via an IV started prior to arrival at 07:45, abstract the time the Levophed was started prior to arrival, 07:45.

- If the patient received multiple doses of a vasopressor and there was no vasopressor infusing at the time of presentation of septic shock, abstract the dose given closest to the time of presentation of septic shock.
- A dose can be abstracted that is given by one person and documented as being given by another person if that dose is not documented by the person that actually administered it.
- Only abstract from an undated MAR if it has a patient sticker on it and it is titled first day or initial MAR. If an undated MAR is designated as the initial or first day MAR and it does not have a patient sticker on it, use UTD for the time.
- Authentication on one side/page of a multi-side or multi-page form applies to all pages of the form. The sides/pages of the form must be identifiable as being from the same form.
- The method of designation of administration on hand-written such as MARs or eMARs, must be clearly designated as given. The methods may vary. Whatever method is used, it must be clear that the dose was administered.
- Use of documentation in pre-hospital records (e.g., ambulance records, nursing home records) that are considered part of the medical record is acceptable.
- Do not abstract test doses of vasopressors.
- Do not abstract vasopressors from narrative charting unless there is no other documentation that reflects that the same vasopressor was given during the specified time frame.

Suggested Data Sources:

- Entire Emergency Department record
- IV flow sheets
- Medication Administration record (MAR)
- Nursing notes
- Physician/APN/PA notes
- Transport records

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *VTE Confirmed*

Collected For The Joint Commission Only: VTE-6

Definition: Documentation by a physician/APN/PA that a diagnosis of new/acute VTE [deep vein thrombosis (DVT) and/or pulmonary embolism (PE)] was confirmed in a defined location on the day of arrival or anytime during the hospitalization.

Suggested Data Collection Question: Is there physician/APN/PA documentation that a new/acute VTE was confirmed in one of the defined locations on the day of arrival or anytime during the hospitalization?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|---------|--|
| Y (Yes) | There is physician/APN/PA documentation that a new/acute VTE was confirmed in one of the defined locations on the day of arrival or anytime during the hospitalization. |
| N (No) | There is no physician/APN/PA documentation that a new/acute VTE was confirmed in one of the defined locations on the day of arrival or anytime during the hospitalization, or unable to determine from medical record documentation. |

Notes for Abstraction:

- If the patient had a new or acute VTE in one of the defined locations which was confirmed by a physician/APN/PA following an acceptable *VTE Diagnostic Test*, select “Yes.” Refer to the data element *VTE Diagnostic Test* for a list of acceptable tests.

Examples:

- Physician/ APN/PA documentation states that PE was confirmed with a VQ scan on Day 4 of the hospital stay, select “Yes.”
- Physician/APN/PA documentation states that the patient arrived without prior DVT confirmation, but two days after admission, there is documentation based on a venous Doppler that the patient has an acute right popliteal DVT, select “Yes.”
- Physician/APN/PA documentation states that a CT abdomen with IV contrast was done during the hospital stay and noted an extensive IVC thrombus, select “Yes.”
- Physician/APN/PA documentation states that the patient had an MRI of the lower extremity leg veins which confirmed the development of the VTE during the hospital stay without mention of the VTE location, select “No.”
- If the patient was transferred from another acute care hospital with a VTE, and there is no documentation indicating the VTE location, select “No.”
- Physician/APN/PA documentation of VTE described as either occlusive or non-occlusive is acceptable.

- In cases where VTE is documented in a defined location, consider it a new or acute VTE unless described as otherwise, e.g., chronic. The terms “new” or “acute” do not need to be explicitly documented to select “Yes.”
- Recurrent, chronic, sub-acute, indeterminate age, or history of VTE, select “No.”
 - Example:**
Venous Doppler is performed on the day of admission. The results document DVT in the right popliteal vein which appears to be chronic. MD note states “no calf tenderness or swelling.” No other documentation of a new or acute VTE in the medical record, select “No.”
 - EXCEPTION:**
Documentation of an acute or new VTE in a defined location is also present in the medical record.
 - Example:**
If a patient had a history of lower extremity DVT, but vascular ultrasound done after hospital admission found a new DVT in the popliteal vein of the right lower extremity, select “Yes.”
- If more than one acceptable *VTE Diagnostic Test* was performed, review the chart for the earliest acceptable *VTE Diagnostic Test* that confirmed the VTE in one of the defined locations.
 - Example:**
Patient had CT of chest with contrast in the emergency department on 02/01/20xx for shortness of breath, no PE confirmed. The patient was admitted on 02/02/20XX. The patient had venous ultrasound with confirmed proximal left common iliac DVT on 02/04/20XX. Select “Yes.”
- If conflicting documentation between providers is present, select “Yes.”
 - Example:**
PCP documents acute deep femoral DVT but oncologist states that DVT appears to be chronic.
- For patients with radiology reports that state “low probability” or “inconclusive test results” on any of the acceptable *VTE Diagnostic Tests*, select “No.”
- For patients with a nuclear medicine VQ scan to rule-out PE; if the result was documented as “high probability,” select “Yes.” For all other impressions (e.g., “low probability,” “intermediate,” “intermediate to high probability” or “inconclusive test results”), select “No.”
- If there is questionable physician/APN/PA documentation regarding whether the patient had VTE, select “Yes.”
 - Example:**
If the radiologist interpretation of the exam did not confirm DVT, but there is documentation of a DVT in physician’s progress notes, select “Yes.”
- If there is physician/APN/PA documentation that the patient had a VTE, select “Yes.”
- If the record indicates ONLY a radiology report, and that report is questionable regarding whether the patient had a VTE, select “No.”
 - Examples:**
 - If the radiology report of a CTA indicates, “possible” or “suggestive of” common femoral clot, select “No.”
 - If the radiology report of an angiogram indicates, distal vein clot that may extend into the greater saphenous vein, select “No.”

Documentation in sources other than radiology reports:

- The physician/APN/PA documentation must indicate the clinician's confirmation of an acute VTE in a defined location.

Examples:

- Physician Notes: Venous Doppler on day of admission positive for DVT left popliteal vein clot, select "Yes."
 - Emergency Notes: Venogram positive for VTE, select "No."
- The physician/APN/PA documentation must reflect the time frame from arrival to hospital discharge.

Suggested Data Sources:**PHYSICIAN/APN/PA DOCUMENTATION ONLY**

- Admission notes
- Consult notes
- Emergency Department record
- History and physical
- Physician notes
- Radiology report

Inclusion Guidelines for Abstraction:**THIS LIST IS ALL INCLUSIVE****VTE Location**

VTE Confirmed is defined as:

Pulmonary Emboli (PE), pulmonary artery embolism, pulmonary trunk embolism, saddle embolism

Or

DVT Located in:

- Common femoral vein
- Common Iliac
- External Iliac vein
- Femoral/superficial femoral vein
- Inferior vena cava (IVC)
- **Infrarenal IVC**
- Intrahepatic IVC
- Internal iliac
- Popliteal vein
- Profunda / deep femoral vein
- Saphenofemoral junction WITH extension into the common femoral vein
- Tumor thrombus in the IVC or another defined location

Exclusion Guidelines for Abstraction:**Patients with VTE in the following areas:**

- Confirmed sites of venous thrombosis without a proximal leg DVT or PE also involved.
- History of VTE without documentation of a new/acute event
- Not in the defined locations
- **Amniotic fluid embolism / emboli**
- Anterior tibial vein

- **Cement embolism / emboli**
- Cerebral venous thrombosis (CVT)
- Gastrocnemius vein
- Hepatic/portal/splenic/mesenteric thrombosis
- Ovarian vein thrombosis
- Peroneal vein
- Posterior tibial vein
- Renal vein thrombosis
- Saphenofemoral junction
- Saphenofemoral junction WITHOUT extension into the common femoral vein
- Septic emboli
- Soleal vein
- Stroke / ischemic stroke
- Thrombus in the heart
- Upper extremity thrombosis

Data Element Name: *VTE Diagnostic Test*

Collected For The Joint Commission Only: VTE-6

Definition: Documentation that a diagnostic test was performed during the hospitalization.

Suggested Data Collection Question: Is there documentation that a diagnostic test was performed on the day of arrival or anytime during the hospitalization?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation that a diagnostic test was performed on the day of arrival or anytime during the hospitalization.

N (No) There is no documentation that a diagnostic test was performed on the day of arrival or anytime during the hospitalization, or unable to determine from medical record documentation.

Notes for Abstraction:

- The time frame for this data element includes patients who had one of the acceptable diagnostic tests performed on arrival or anytime during hospitalization.

Acceptable Examples:

- Patient arrives on 01/01/20XX and documentation indicates a CT of chest with contrast was performed earlier that same day.
- Patient arrived on 01/01/20XX and documentation indicates that the patient was admitted on 01/02/20XX. A VQ scan was performed on 01/04/20XX.

Unacceptable Example:

- Patient transferred on 01/05/20XX with documentation from a transferring hospital indicating vascular ultrasound was performed on 01/02/20XX."

- If a diagnostic test was performed that is not on the inclusion list, select "No."

Example:

Patient admitted on 01/01/20XX. 2D Echo done on 01/05/20XX. Physician notes indicate that the test confirmed a PE, select "No."

Documentation in sources other than radiology reports:

- Documentation other than radiology reports must confirm one of the acceptable tests was performed.

Examples:

- Physician Notes: Venous Doppler positive for DVT left popliteal, select "Yes."
- Emergency Notes: Patient to CT without contrast, select "No."

- The physician/APN/PA documentation must reflect the time frame from arrival to hospital discharge.

Suggested Data Sources:

- Admission notes
- Consult notes
- Emergency Department record
- History and physical
- Physician notes
- Radiology report

Inclusion Guidelines for Abstraction:

Diagnostic testing includes the following:

THIS LIST IS ALL INCLUSIVE

- Compression Ultrasound of lower extremities
- Venous Ultrasound of lower extremities
- Duplex Ultrasound (DUS) of lower extremities
- Venous Doppler of lower extremities
- Vascular vein mapping of the lower extremities
- Computed tomography angiography (CTA) / Angiogram of Chest
- Computed tomography angiography (CTA) / Pulmonary Angiogram of Chest
- Computed tomography (CT) of thorax (chest) with IV contrast
- Computed tomography angiography (CTA) / Angiogram of the abdomen
- Computed tomography (CT) of the abdomen/abdominal aorta with IV contrast
- Computed tomography (CT) of the pelvis with IV contrast
- Computed tomography angiography (CTA) / Angiogram of the pelvis
- Computed tomography (CT) of the lower extremity leg veins with IV contrast
- CT pulmonary angiogram (CTPA) / CTPA Scan / CT pulmonary embolism (CTPE)
- Magnetic resonance imaging (MRI or MRV) of the thorax (chest, cardiac)
- Magnetic resonance imaging (MRI or MRV) of the abdomen
- Magnetic resonance imaging (MRI or MRV) of the pelvis
- Magnetic resonance imaging (MRI or MRV) of the lower extremity leg veins
- Nuclear Medicine Pulmonary Scan/ventilation/perfusion (V/Q) lung scan
- Pulmonary arteriography/angiography/angiogram
- Cavagram/cavogram
- Inferior venocavagram
- Venography/Venogram of pelvis using IV contrast material
- Venography/Venogram of femoral using IV contrast material
- Venography/Venogram of other lower extremity veins using IV contrast material

Exclusion Guidelines for Abstraction:

- Patients with VTE confirmation by only D-dimer tests
- Patients with VTE diagnosed by tests not listed

Data Element Name: *VTE Present at Admission*

Collected For The Joint Commission Only: VTE-6

Definition: Documentation by a physician/APN/PA that VTE was diagnosed or suspected on arrival to the day after admission.

Suggested Data Collection Question: Was there any documentation by the physician/APN/PA that VTE was diagnosed or suspected on arrival to the day after admission?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation by the physician/APN/PA that VTE was diagnosed or suspected from hospital arrival to the day after admission.

N (No) There is no documentation by the physician/APN/PA that VTE was diagnosed or suspected from hospital arrival to the day after admission or unable to determine from medical record documentation.

Notes for Abstraction:

- The time frame for this data element includes any documentation dated from hospital arrival to the day after admission. **It is not necessary to review documentation outside of this time frame to answer this data element.**
- Documentation of suspicion or a diagnosis of a pulmonary embolism (PE) or venous thromboembolism (VTE) in a confirmed location is acceptable. **Only accept terms identified in the list of inclusions.**

Note: It is not necessary for a *VTE Diagnostic Test* to be linked with the physician/APN/PA documented diagnosis of PE or VTE.

Acceptable Examples:

- A patient arrived on 10/1/20xx with shortness of breath. On 10/2/20XX, there is physician documentation that a PE is suspected, select "Yes."
- Results of a venous Doppler performed the day after admission are positive for VTE in the common femoral vein, select "Yes."
- Results of a Doppler are positive for an acute nonocclusive LLE thrombus on the day after admission, select "Yes."
- Day of admission physician includes PE on the problem list, select "Yes."
- Patient admitted with a diagnosis of left popliteal deep vein thrombus, select "Yes."

- Patient arrived on 01/05/20XX with documentation from an outside transferring hospital indicating vascular ultrasound was performed on 01/02/20XX and positive for VTE, select “Yes.”
- Physician documents in H&P on day of admission, “DVT right lower extremity,” select “Yes.”

Unacceptable Examples:

- H&P on day of admission notes that the patient has an occlusion of the subclavian vein. Subclavian vein is not a defined location, select “No.”
 - A patient arrives to the hospital emergency department with C/O severe headache. Differential diagnosis on the day of arrival includes cerebral venous thrombosis (CVT) versus SAH, select “No.”
 - Physician admitting note documents DVT prophylaxis under the treatment plan, select “No.”
 - Patient admitted with a diagnosis of left upper extremity deep vein thrombus, select “No.”
 - Patient has a CT chest with IV contrast on the day of arrival to R/O PE and test results are negative and received by 2359 the day after admission, select “No.”
- An order for a VTE diagnostic test is acceptable **ONLY** if it is explicitly documented that VTE/PE is the reason for the test. **Only accept terms identified in the list of inclusions.** If an acceptable test is ordered for a PE or VTE indication and results are documented as **negative** by 2359 the day after admission, then suspicion of PE or VTE has been ruled out. Select “No.”

Acceptable Examples:

- A patient presents to the hospital emergency department with a chief complaint of pain and swelling in the right calf. A vascular ultrasound of the lower extremities is ordered to R/O DVT, select “Yes” UNLESS results are negative and received by 2359 the day after admission.
- Bilateral venous Doppler of the lower extremities is ordered on the day after admission for redness and swelling left calf, select “Yes.”
- A patient arrives on 06/01/20XX. Admitting diagnosis is fever. On 06/02/20XX patient admitted and physician documents “if cough continues may require evaluation for PE.” On 06/03/20XX, CTA chest is ordered and **positive for PE**. Select “Yes.”

Unacceptable Examples:

- Physician orders a bilateral lower extremity arterial duplex on the day after admission. Arterial duplex is not an acceptable test. Select “No” for VTE Present on Admission.
- Patient presents to the emergency room with complaints of pain all over after sustaining a fall. ED MD orders multiple tests including a CT of the chest with IV contrast. ED MD documents fall as the reason for the test. No mention of PE/VTE, select “No.”
- A patient is admitted after a motor vehicle accident. On arrival, a CT of the abd/pelvis with IV contrast was done to R/O internal injuries. No mention of PE/VTE, select “No.”
- Bilateral venous Doppler of the lower extremities is ordered on the day of arrival for redness and swelling left calf. Results returned the

same day document no acute VTE in left common femoral vein or popliteal vein, select “No.”

- Patients who are under treatment and receiving anticoagulation therapy for PE/VTE at the time of hospital arrival, select “Yes.”
Examples:
 - Patient admitted 04/30/20XX. Physician documents on 04/30/20XX that Coumadin was started on 04/20/20XX for a recently diagnosed PE, select “Yes.”
 - Patient presents with a documented diagnosis of PE on the day of arrival. Coumadin placed on hold to evaluate for GI bleed, select “Yes.”
- Patients on anticoagulation therapy for another condition (e.g., atrial fibrillation, mitral valve replacement) at the time of hospital arrival, select “Yes.”
Examples:
 - Patient with a history of stroke and taking dabigatran as a home medication prior to arrival, select “YES.”
 - H&P documents chronic VTE. Taking Coumadin, select “Yes.”**EXCEPTION:**

Patient on apixaban prior to arrival for a history of atrial fibrillation. Apixaban discontinued on arrival for surgery the day after admission, select “No.”
- For patients with only a past history of VTE documented, select “No.”
Example:
 - Problem list includes PE 199X, select “No.”
- If the patient was admitted and had surgery on day of or day after hospital admission or ICU admission and there was no documentation of diagnosed/suspected VTE prior to surgery, the VTE is **not** considered present on admission. Select “No.”
- Disregard diagnostic procedures performed, e.g., cardiac catheterization, endoscopy, ERCP.

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Consultation notes
- Emergency Department record
- History and physical
- Radiology report
- Observation notes
- Outpatient surgery notes
- Physician notes

Inclusion Guidelines for Abstraction:

VTE Confirmed is defined as:

Pulmonary Emboli (PE), pulmonary artery embolism, pulmonary trunk embolism, saddle embolism

Or

DVT Located in:

- Common femoral vein
- Common Iliac

- External Iliac vein
- Femoral/superficial femoral vein
- Inferior vena cava (IVC)
- **Infrarenal IVC**
- Intrahepatic IVC
- Internal iliac
- Popliteal vein
- Profunda / deep femoral vein
- Saphenofemoral junction WITH extension into the common femoral vein
- Tumor thrombus in the IVC or another defined location

VTE Diagnostic Test:

THIS LIST IS ALL INCLUSIVE

- Compression Ultrasound of lower extremities
- **Venous** Ultrasound of lower extremities
- Duplex Ultrasound (DUS) of lower extremities
- Venous Doppler of lower extremities
- Vascular vein mapping of the lower extremities
- Computed tomography angiography (CTA) / Angiogram of Chest
- Computed tomography angiography (CTA) / Pulmonary Angiogram of Chest
- Computed tomography (CT) of thorax (chest) with IV contrast
- Computed tomography angiography (CTA) / Angiogram of the abdomen
- Computed tomography (CT) of the abdomen/abdominal aorta with IV contrast
- Computed tomography (CT) of the pelvis with IV contrast
- Computed tomography angiography (CTA) / Angiogram of the pelvis
- Computed tomography (CT) of the lower extremity leg veins with IV contrast
- **CT pulmonary angiogram (CTPA) / CTPA Scan / CT pulmonary embolism (CTPE)**
- Magnetic resonance imaging (MRI or MRV) of the thorax (chest, cardiac)
- Magnetic resonance imaging (MRI or MRV) of the abdomen
- Magnetic resonance imaging (MRI or MRV) of the pelvis
- Magnetic resonance imaging (MRI or MRV) of the lower extremity leg veins
- Nuclear Medicine Pulmonary Scan/ventilation/perfusion (V/Q) lung scan
- Pulmonary arteriography/angiography/angiogram
- Cavagram/cavogram
- Inferior venocavagram
- Venography/Venogram of pelvis using IV contrast material
- Venography/Venogram of femoral using IV contrast material
- Venography/Venogram of other lower extremity veins using IV contrast material

Exclusion Guidelines for Abstraction:

VTE Confirmed:

- History of PE or VTE without documentation of a new/acute event
- VTE not in a defined location

VTE Diagnostic Test:

Patients with PE or VTE diagnosed by tests not listed

Data Element Name: *VTE Prophylaxis Status*

Collected For The Joint Commission Only: VTE-6

Definition: Documentation of VTE prophylaxis (mechanical or pharmacologic) administration between the hospital arrival date and the day before the *VTE Diagnostic Test* order date.

Suggested Data Collection Question: Was VTE prophylaxis administered between the arrival date and the day before the *VTE Diagnostic Test* order date?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

Y (Yes) There is documentation that VTE prophylaxis was administered between the day of arrival and the day before the *VTE Diagnostic Test* order date.

N (No) There is no documentation that VTE prophylaxis was administered between the day of arrival and the day before the *VTE Diagnostic Test* order date or unable to determine from medical record documentation.

Notes for Abstraction:

- If **ANY** VTE prophylaxis was administered within the specified time frame above, select “Yes.”
- If more than one acceptable *VTE Diagnostic Test* was ordered to rule out VTE and both confirmed VTE, select the earliest diagnostic test ordered that confirmed VTE to determine if the patient received VTE prophylaxis.

Example:

Patient arrived on 11/1/20XX. A venous Doppler of lower extremities was ordered 11/4/20xx and confirmed a DVT of the right lower extremity. In addition, a CT scan with contrast was ordered on 11/5/20xx and confirmed a PE. Determine if any prophylaxis was administered any time between the hospital arrival date of 11/1/20XX and 11/3/20xx. If no prophylaxis was given, select “No.”

- If the *VTE Diagnostic Test* was ordered the day of or the day after the arrival date, select “Yes.”
- If the record contains questionable information regarding the administration of VTE prophylaxis the day before the *VTE Diagnostic Test* was ordered, select “No.”
- Application of mechanical prophylaxis may be documented by any personnel.

Example:

Nursing assistant documentation of IPC application during the allowable time frame is acceptable.

- Evaluate prophylaxis with documentation of administration only.
Example:
The only documentation of prophylaxis is in the physician progress notes under assessment/Plan: “DVT prophylaxis – IPC,” select “No” because there is no documentation of administration.
- If one pharmacological medication is ordered and another medication is substituted (such as per pharmacy formulary substitution or protocol), select “Yes” if the substitution medication was administered.
Note: No copy of the formulary or protocol is required in the medical record.
Example:
Lovenox is ordered but not administered, and is substituted with Arixtra, which is administered. Select “Yes.”
- Aspirin is only acceptable as VTE prophylaxis in total hip replacement and total knee replacement surgery.

Suggested Data Sources:

- Circulator notes
- Emergency department record
- Graphic/flow sheets
- Medication administration record
- Nursing notes
- Operative notes
- Physician notes
- Preoperative nursing notes
- Progress notes
- Radiology reports

Inclusion Guidelines for Abstraction:

A list of the ONLY acceptable diagnostic tests is found in the data element *VTE Diagnostic Test*.

Refer to Appendix H, Table 2.1 VTE Prophylaxis Inclusion Table.

Exclusion Guidelines for Abstraction:

None

**SEPSIS BUNDLE PROJECT (SEP)
NATIONAL HOSPITAL INPATIENT QUALITY MEASURES**

SEP Measure Set Table

| Set Measure ID # | Measure Short Name |
|-------------------------|---|
| SEP-1 | Early Management Bundle, Severe Sepsis/Septic Shock |

SEP DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|---|--|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>First Name</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-CM Other Procedure Codes</i> | All Records |
| <i>ICD-10-CM Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-CM Principal Procedure Code</i> | All Records |
| <i>ICD-10-CM Principal Procedure Date</i> | All Records |
| <i>Last Name</i> | All Records |
| <i>Patient Identifier</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Physician 1</i> | Optional for All Records |
| <i>Physician 2</i> | Optional for All Records |
| <i>Postal Code</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Joint Commission's aggregate data file and the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Element Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |

SEP DATA ELEMENT LIST

SEP Data Elements Table

| Name | Collected For: |
|--|----------------|
| <i>Administrative Contraindication to Care, Septic Shock</i> | SEP-1 |
| <i>Administrative Contraindication to Care, Severe Sepsis</i> | SEP-1 |
| <i>Blood Culture Collection</i> | SEP-1 |
| <i>Blood Culture Collection Acceptable Delay</i> | SEP-1 |
| <i>Blood Culture Collection Date</i> | SEP-1 |
| <i>Blood Culture Collection Time</i> | SEP-1 |
| <i>Broad Spectrum or Other Antibiotic Administration</i> | SEP-1 |
| <i>Broad Spectrum or Other Antibiotic Administration Date</i> | SEP-1 |
| <i>Broad Spectrum or Other Antibiotic Administration Selection</i> | SEP-1 |
| <i>Broad Spectrum or Other Antibiotic Administration Time</i> | SEP-1 |
| <i>Clinical Trial</i> | SEP-1 |
| <i>Crystalloid Fluid Administration</i> | SEP-1 |
| <i>Crystalloid Fluid Administration Date</i> | SEP-1 |
| <i>Crystalloid Fluid Administration Time</i> | SEP-1 |
| <i>Directive for Comfort Care or Palliative Care, Septic Shock</i> | SEP-1 |
| <i>Directive for Comfort Care or Palliative Care, Severe Sepsis</i> | SEP-1 |
| <i>Discharge Disposition</i> | SEP-1 |
| <i>Discharge Time</i> | SEP-1 |
| <i>Initial Hypotension</i> | SEP-1 |
| <i>Initial Hypotension Date</i> | SEP-1 |
| <i>Initial Hypotension Time</i> | SEP-1 |
| <i>Initial Lactate Level Collection</i> | SEP-1 |
| <i>Initial Lactate Level Date</i> | SEP-1 |
| <i>Initial Lactate Level Result</i> | SEP-1 |
| <i>Initial Lactate Level Time</i> | SEP-1 |
| <i>Persistent Hypotension</i> | SEP-1 |
| <i>Repeat Lactate Level Collection</i> | SEP-1 |
| <i>Repeat Lactate Level Date</i> | SEP-1 |
| <i>Repeat Lactate Level Time</i> | SEP-1 |
| <i>Repeat Volume Status and Tissue Perfusion Assessment Performed</i> | SEP-1 |
| <i>Repeat Volume Status and Tissue Perfusion Assessment Performed Date</i> | SEP-1 |
| <i>Repeat Volume Status and Tissue Perfusion Assessment Performed Time</i> | SEP-1 |
| <i>Septic Shock Present</i> | SEP-1 |
| <i>Septic Shock Presentation Date</i> | SEP-1 |
| <i>Septic Shock Presentation Time</i> | SEP-1 |
| <i>Severe Sepsis Present</i> | SEP-1 |
| <i>Severe Sepsis Presentation Date</i> | SEP-1 |
| <i>Severe Sepsis Presentation Time</i> | SEP-1 |
| <i>Transfer From Another Hospital or ASC</i> | SEP-1 |
| <i>Vasopressor Administration</i> | SEP-1 |

SEP Data Elements Table

| Name | Collected For: |
|--|----------------|
| <i>Vasopressor Administration Date</i> | SEP-1 |
| <i>Vasopressor Administration Time</i> | SEP-1 |

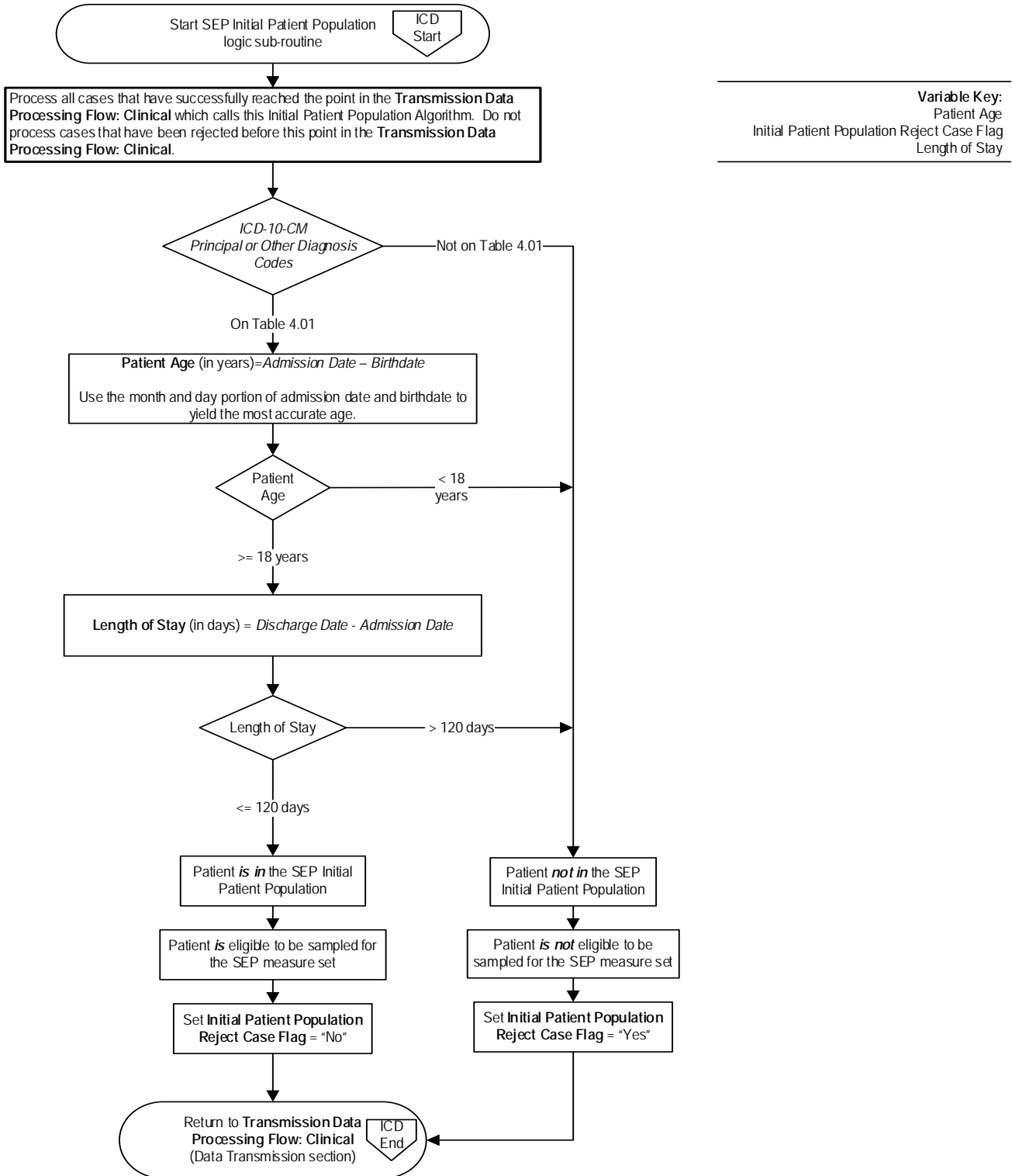
Sepsis (SEP) Initial Patient Population

The population of the SEP measure set is identified using 5 data elements:

- *ICD-10-CM Principal Diagnosis Code*
- *ICD-10-CM Other Diagnosis Codes*
- *Admission Date*
- *Birthdate*
- *Discharge Date*

Patients admitted to the hospital for inpatient acute care with an *ICD-10-CM Principal or Other Diagnosis Code* for SEP as defined in Appendix A, Table 4.01, a Patient Age (*Admission Date* minus *Birthdate*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days are included in the SEP Initial Patient Population and are eligible to be sampled.

Sepsis Initial Patient Population Algorithm



Algorithm Narrative **Sepsis (SEP) Initial Patient Population**

Variable Key: Patient Age, Initial Patient Population Reject Case Flag, and Length of Stay

1. Start SEP Initial Patient Population logic sub-routine. Process all cases that have successfully reached the point in the Transmission Data Processing Flow: Clinical which calls this Initial Patient Population Algorithm. Do not process cases that have been rejected before this point in the Transmission Data Processing Flow: Clinical.
2. Check ICD-10-CM Principal or Other Diagnosis Codes
 - a. If the ICD-10-CM Principal or Other Diagnosis Codes is not on Table 4.01, the patient is not in the SEP Initial Patient Population and is not eligible to be sampled for the SEP measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the ICD-10-CM Principal or Other Diagnosis Codes is on Table 4.01, continue processing and proceed to the patient age calculation.
3. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age.
4. Check Patient Age
 - a. If the Patient Age is less than 18 years, the patient is not in the SEP Initial Patient Population and is not eligible to be sampled for the SEP measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Patient Age is greater than or equal to 18 years, continue processing and proceed to Length of Stay Calculation.
5. Calculate the Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
6. Check Length of Stay
 - a. If the Length of Stay is greater than 120 days, the patient is not in the SEP Initial Patient Population and is not eligible to be sampled for the SEP measure set. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Length of Stay is less than or equal to 120 days, the patient is in the SEP Initial Patient Population and is eligible to be sampled for the SEP measure set. Set Initial Patient Population Reject Case Flag to equal No. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

Sepsis Sample Size Requirements

Hospitals that choose to sample have the option of sampling quarterly or sampling monthly. A hospital may choose to use a larger sample size than is required. Hospitals whose Initial Patient Population size is less than the minimum number of cases per quarter/month cannot sample. Hospitals that have five or fewer sepsis discharges for the entire measure set (both Medicare and non-Medicare combined) in a quarter are not required, but are encouraged to submit sepsis patient level data to the CMS Clinical Warehouse.

Regardless of the option used, hospital samples must be monitored to ensure that sampling procedures consistently produce statistically valid and useful data. Due to exclusions, hospitals selecting sample cases MUST submit AT LEAST the minimum required sample size.

The following sample size tables for each option automatically build in the number of cases needed to obtain the required sample sizes. For information concerning how to perform sampling, refer to the Population and Sampling Specifications section in this manual.

Quarterly Sampling

Hospitals selecting sample cases for the sepsis measure must ensure that the population and quarterly sample size meets the following conditions:

**Quarterly Sample Size
Based on Hospital's Initial Patient Population Size for the Sepsis Measure**

| Average Quarterly Initial Patient Population Size "N" | Minimum Required Sample Size "n" |
|--|---|
| ≥ 301 | 60 |
| 151 - 300 | 20% of Initial Patient Population size |
| 30 - 150 | 30 |
| 6 - 29 | No sampling; 100% Initial Patient Population required |
| 0 - 5 | Submission of patient level data is encouraged but not required. If submission occurs, 1 – 5 cases of the Initial Patient Population may be submitted |

Monthly Sampling

Hospitals selecting sample cases for the sepsis measure must ensure that the population and monthly sample size meets the following conditions:

Monthly Sample Size Based on Hospital's Initial Patient Population Size for the Sepsis Measure

| Average Monthly Initial Patient Population Size "N" | Minimum Required Sample Size "n" |
|---|---|
| ≥ 101 | 20 |
| 51 - 100 | 20% of Initial Patient Population size |
| 10 - 50 | 10 |
| < 10 | No sampling; 100% Initial Patient Population required |

Sample Size Examples

Note:

All of the sepsis measure's specific exclusion criteria are used to filter out cases that do not belong in the measure denominator.

- *Quarterly Sampling:*
When applicable, larger hospitals must also abide by the required quarterly sample sizes with a minimum of 30 required sample cases when the Initial Patient Population size is 30 or greater.
 - The sepsis Initial Patient Population size for a hospital is 405 patients for the quarter. Since the total Initial Patient Population is greater than 5, the hospital must submit patient level data. The required quarterly sample size would be 60 cases.
 - The sepsis Initial Patient Population size for a hospital is 5 patients for the quarter. Since the total Initial Patient Population is 5, the hospital may choose to not submit patient level data. If the hospital chooses to submit patient level data, the quarterly sample size for each would be 1 - 5 cases.
- *Monthly Sampling:*
When applicable, larger hospitals must also abide by the required monthly sample sizes with a minimum of 10 required sample cases when the Initial Patient Population size is 10 or greater.
 - The sepsis Initial Patient Population sizes for a hospital are 6, 49, and 75 patients respectively for July, August, and September. The required monthly sample sizes would be 6, 10, and 15 respectively for July, August, and September.

NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

Measure Information Form Collected For: CMS Only

Measure Set: Sepsis

Set Measure ID #: SEP-1

Performance Measure Name: Early Management Bundle, Severe Sepsis/Septic Shock

Description: This measure focuses on adults 18 years and older with a diagnosis of severe sepsis or septic shock. Consistent with Surviving Sepsis Campaign guidelines, it assesses measurement of lactate, obtaining blood cultures, administering broad spectrum antibiotics, fluid resuscitation, vasopressor administration, reassessment of volume status and tissue perfusion, and repeat lactate measurement. As reflected in the data elements and their definitions, the first three interventions should occur within 3 hours of presentation of severe sepsis, while the remaining interventions are expected to occur within 6 hours of presentation of septic shock.

Rationale: The evidence cited for all components of this measure is directly related to decreases in organ failure, overall reductions in hospital mortality, length of stay, and costs of care.

A principle of sepsis care is that clinicians must rapidly treat patients with an unknown causative organism and unknown antibiotic susceptibility. Since patients with severe sepsis have little margin for error regarding antimicrobial therapy, initial treatment should be broad spectrum to cover all likely pathogens. As soon as the causative organism is identified, based on subsequent culture and susceptibility testing, de-escalation is encouraged by selecting the most appropriate antimicrobial therapy to cover the identified pathogen, safely and cost effectively (Dellinger, 2012).

Multicenter efforts to promote bundles of care for severe sepsis and septic shock were associated with improved guideline compliance and lower hospital mortality (Ferrer, 2008 and Rhodes, 2015). Even with compliance rates of less than 30%, absolute reductions in mortality of 4-6% have been noted (Levy, 2010 and Ferrer, 2008). Absolute reductions in mortality of over 20% have been seen with compliance rates of 52% (Levy, 2010). Coba et al. has shown that when all bundle elements are completed and compared to patients who do not have bundle completion, the mortality difference is 14% (2011). Thus, there is a direct association between bundle compliance and improved mortality. Without a continuous quality initiative (CQI), even these compliance rates will not improve and will decrease over time (Ferrer, 2008). Multiple studies have shown that, for patients with severe sepsis, standardized order sets, enhanced bedside monitor display, telemedicine, and comprehensive CQI feedback is feasible, modifies clinician behavior, and is associated with decreased hospital mortality (Thiel, 2009; Micek, 2006; Winterbottom, 2011; Schramm, 2011; Nguyen, 2007; Loyola, 2011).

Type of Measure: Process

Improvement Noted As: An increase in the rate

Numerator Statement: Patients who received ALL of the following:

Within three hours of presentation of severe sepsis:

- Initial lactate level measurement
- Broad spectrum or other antibiotics administered
- Blood cultures drawn prior to antibiotics

AND received within six hours of presentation of severe sepsis. ONLY if the initial lactate is elevated:

- Repeat lactate level measurement

AND within three hours of initial hypotension:

- Resuscitation with 30 mL/kg crystalloid fluids

OR within three hours of septic shock:

- Resuscitation with 30 mL/kg crystalloid fluids

AND within six hours of septic shock presentation, ONLY if hypotension persists after fluid administration:

- Vasopressors are administered

AND within six hours of septic shock presentation, if hypotension persists after fluid administration or initial lactate ≥ 4 mmol/L:

- Repeat volume status and tissue perfusion assessment is performed

Included Populations: As described above

Excluded Populations: None

Data Elements:

- *Blood Culture Collection*
- *Blood Culture Collection Acceptable Delay*
- *Blood Culture Collection Date*
- *Blood Culture Collection Time*
- *Broad Spectrum or Other Antibiotic Administration*
- *Broad Spectrum or Other Antibiotic Administration Date*
- *Broad Spectrum or Other Antibiotic Administration Selection*
- *Broad Spectrum or Other Antibiotic Administration Time*
- *Crystalloid Fluid Administration*
- *Crystalloid Fluid Administration Date*
- *Crystalloid Fluid Administration Time*
- *Initial Hypotension*
- *Initial Hypotension Date*
- *Initial Hypotension Time*
- *Initial Lactate Level Collection*
- *Initial Lactate Level Date*
- *Initial Lactate Level Result*
- *Initial Lactate Level Time*
- *Persistent Hypotension*

- *Repeat Lactate Level Collection*
- *Repeat Lactate Level Date*
- *Repeat Lactate Level Time*
- *Repeat Volume Status and Tissue Perfusion Assessment Performed*
- *Repeat Volume Status and Tissue Perfusion Assessment Performed Date*
- *Repeat Volume Status and Tissue Perfusion Assessment Performed Time*
- *Septic Shock Present*
- *Septic Shock Presentation Date*
- *Septic Shock Presentation Time*
- *Severe Sepsis Present*
- *Severe Sepsis Presentation Date*
- *Severe Sepsis Presentation Time*
- *Vasopressor Administration*
- *Vasopressor Administration Date*
- *Vasopressor Administration Time*

Denominator Statement: Inpatients age 18 and over with an *ICD-10-CM Principal or Other Diagnosis Code* of Sepsis, Severe Sepsis, or Septic Shock.

Included Populations: Discharges age 18 and over with an *ICD-10-CM Principal or Other Diagnosis Code* of Sepsis, Severe Sepsis, or Septic Shock as defined in Appendix A, Table 4.01.

Excluded Populations:

- Directive for Comfort Care or Palliative Care within 6 hours of presentation of severe sepsis
- Directive for Comfort Care or Palliative Care within 6 hours of presentation of septic shock
- Administrative contraindication to care within 6 hours of presentation of severe sepsis
- Administrative contraindication to care within 6 hours of presentation of septic shock
- Length of Stay >120 days
- Transfer in from another acute care facility
- Patients enrolled in a clinical trial for sepsis, severe sepsis or septic shock treatment or intervention
- Patients with severe sepsis who are discharged within 6 hours of presentation
- Patients with septic shock who are discharged within 6 hours of presentation
- Patients receiving IV antibiotics for more than 24 hours prior to presentation of severe sepsis

Data Elements:

- *Administrative Contraindication to Care, Septic Shock*
- *Administrative Contraindication to Care, Severe Sepsis*
- *Admission Date*
- *Birthdate*
- *Clinical Trial*
- *Directive for Comfort Care or Palliative Care, Septic Shock*
- *Directive for Comfort Care or Palliative Care, Severe Sepsis*
- *Discharge Date*
- *Discharge Disposition*
- *Discharge Time*
- *Transfer From Another Hospital or ASC*

Risk Adjustment: None

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunity for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10-CM diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Variation may exist in the assignment of ICD-10-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to aggregate the reasons for failure to meet this measure so that gaps in care may be identified and educationally addressed.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications.

Data Reported As: Aggregate rate generated from count data reported as a proportion

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SEP-1: Early Management Bundle, Severe Sepsis/Septic Shock

Numerator: Patients who received ALL of the following:

Within three hours of presentation of severe sepsis:

- Initial lactate level measurement
- Broad spectrum or other antibiotics administered
- Blood cultures drawn prior to antibiotics

AND received within six hours of presentation of severe sepsis, ONLY if the initial lactate is elevated:

- Repeat lactate level measurement

AND within three hours of initial hypotension:

- Resuscitation with 30 mL/kg crystalloid fluids

OR within three hours of septic shock:

- Resuscitation with 30 mL/kg crystalloid fluids

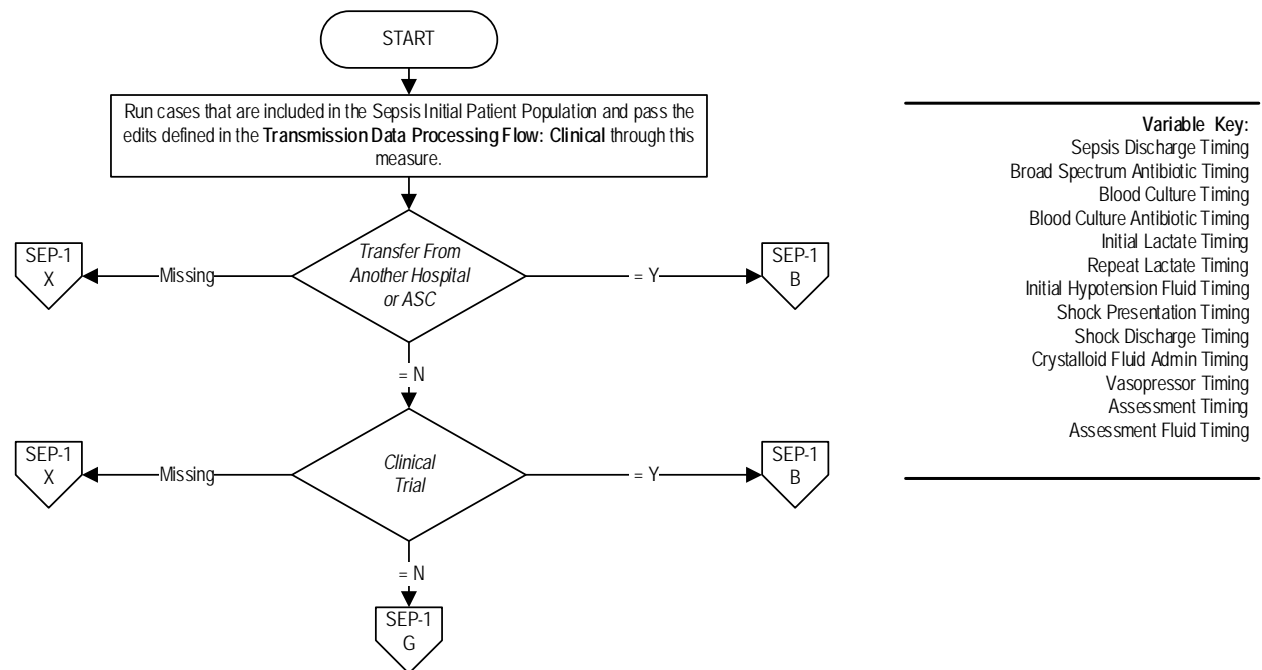
AND within six hours of septic shock presentation, ONLY if hypotension persists after fluid administration:

- Vasopressors are administered

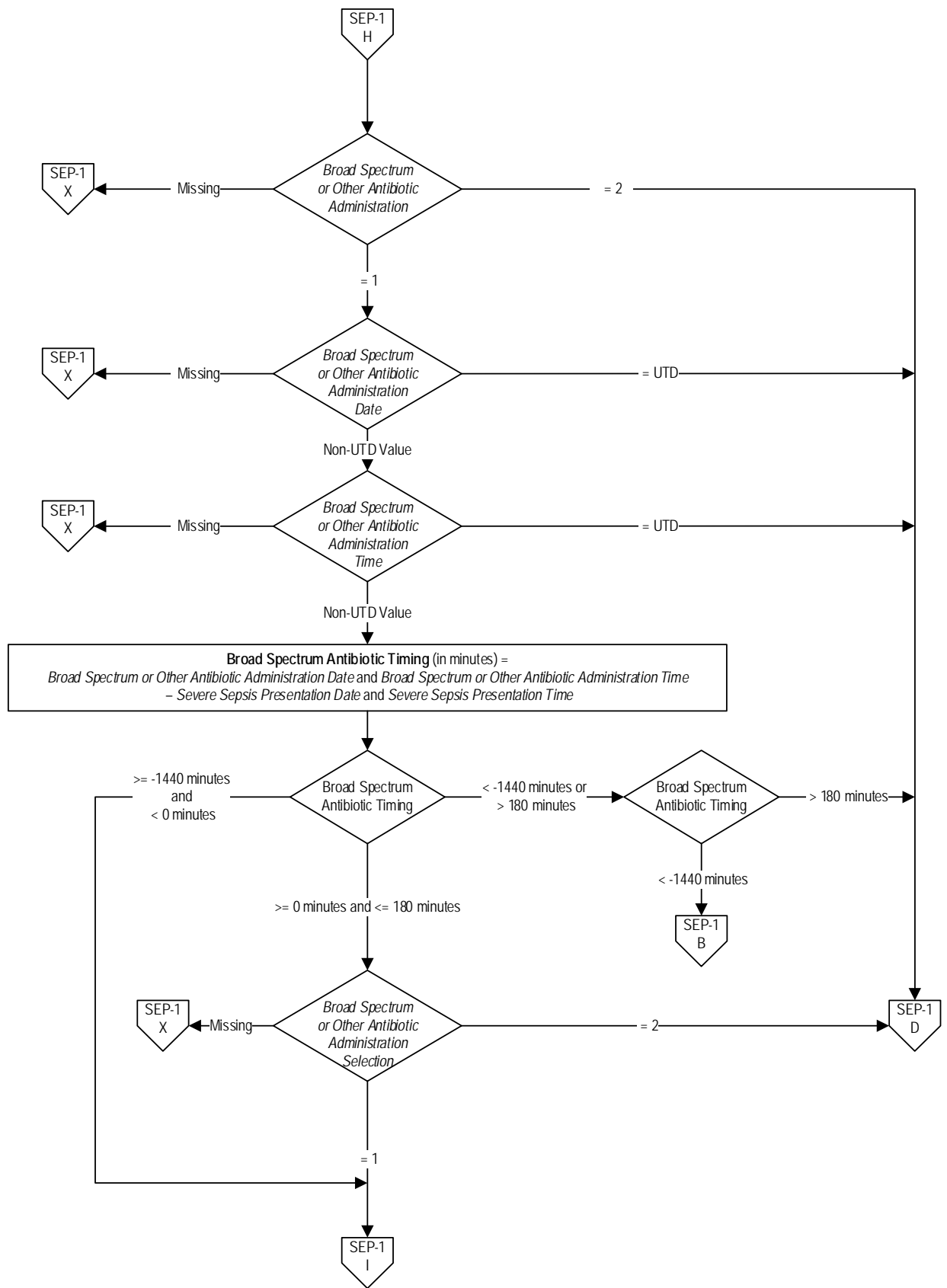
AND within six hours of septic shock presentation, if hypotension persists after fluid administration or initial lactate ≥ 4 mmol/L:

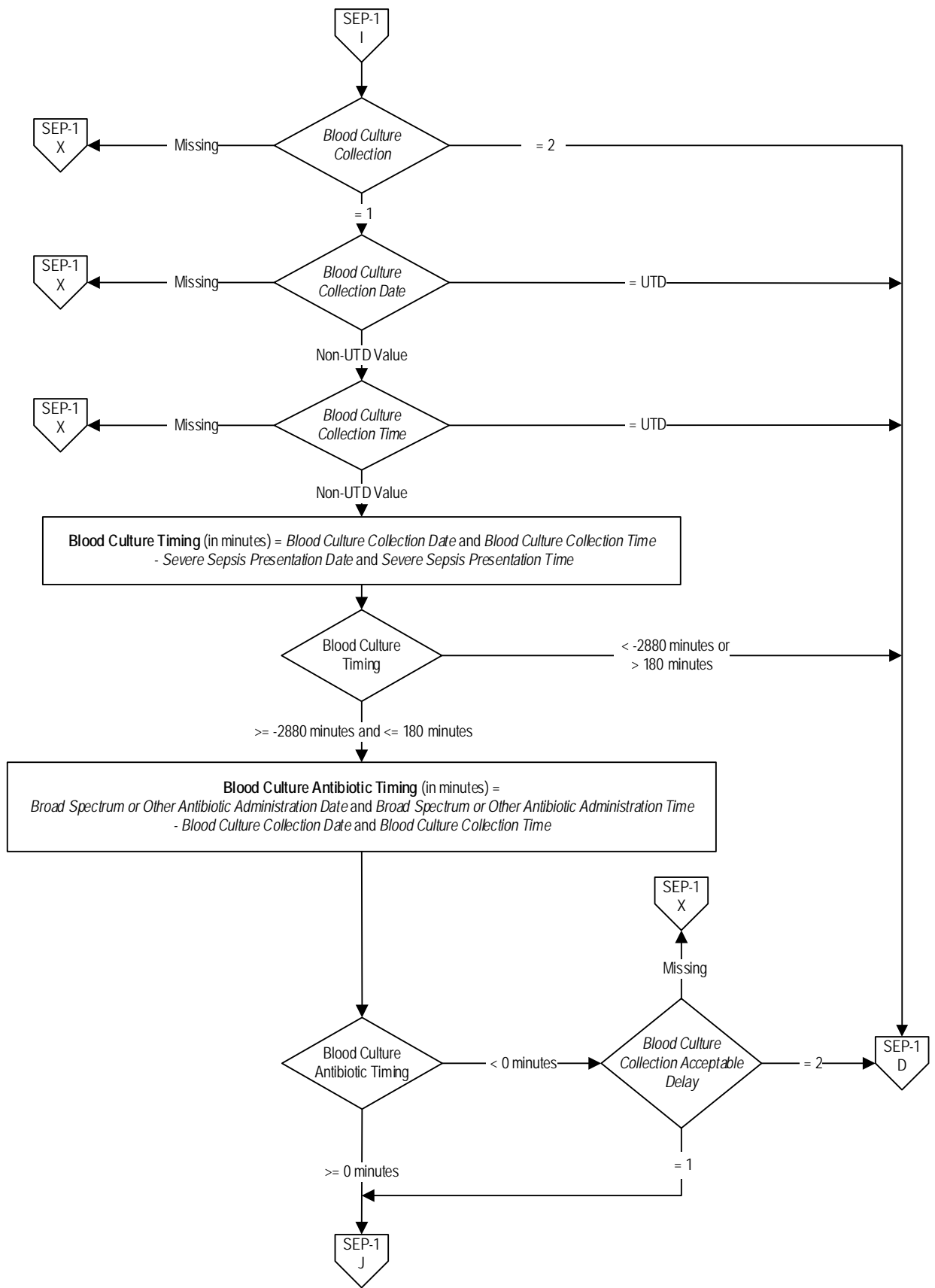
- Repeat volume status and tissue perfusion assessment is performed

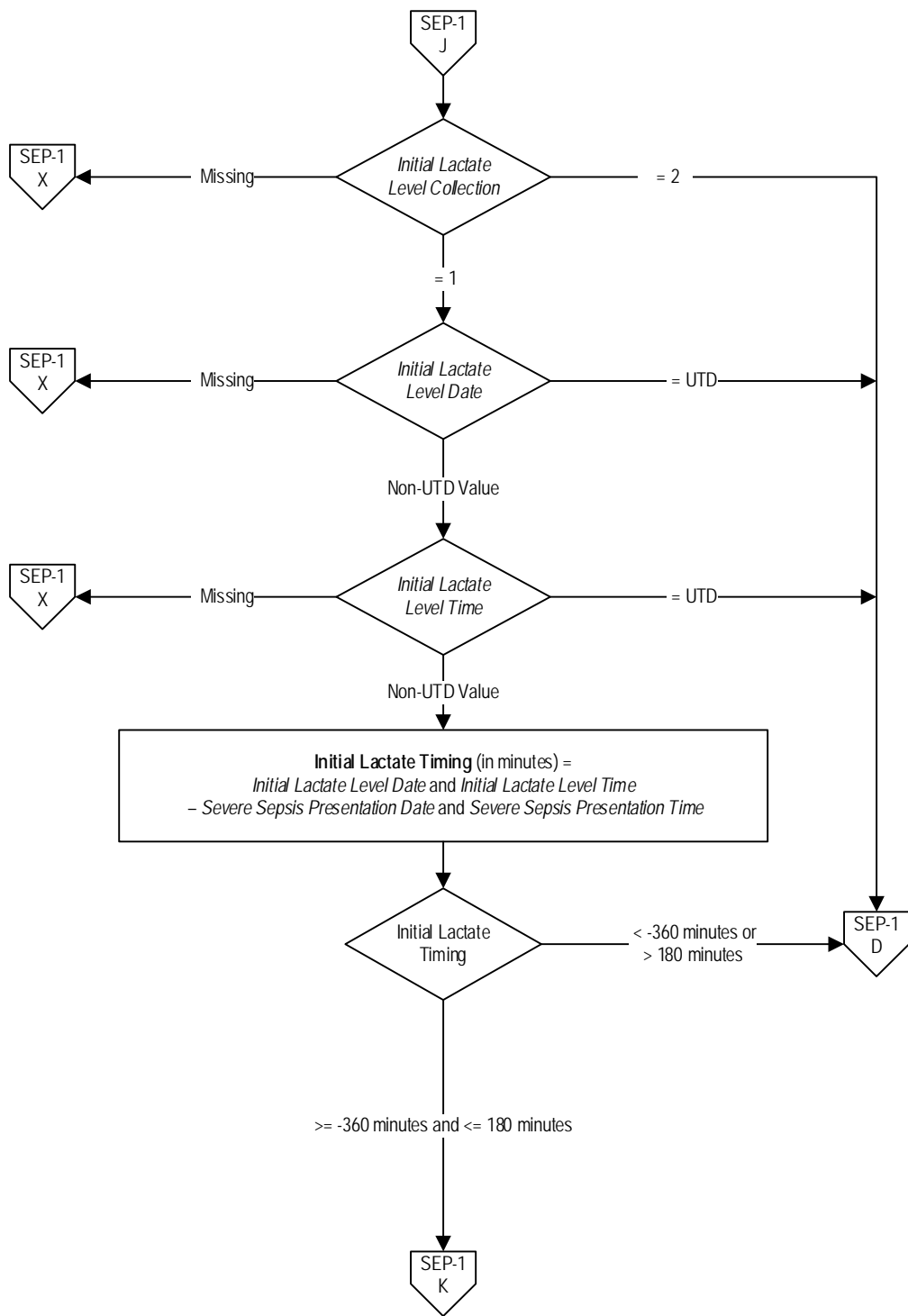
Denominator: Inpatients age 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis or Septic Shock as defined in Appendix A, Table 4.01

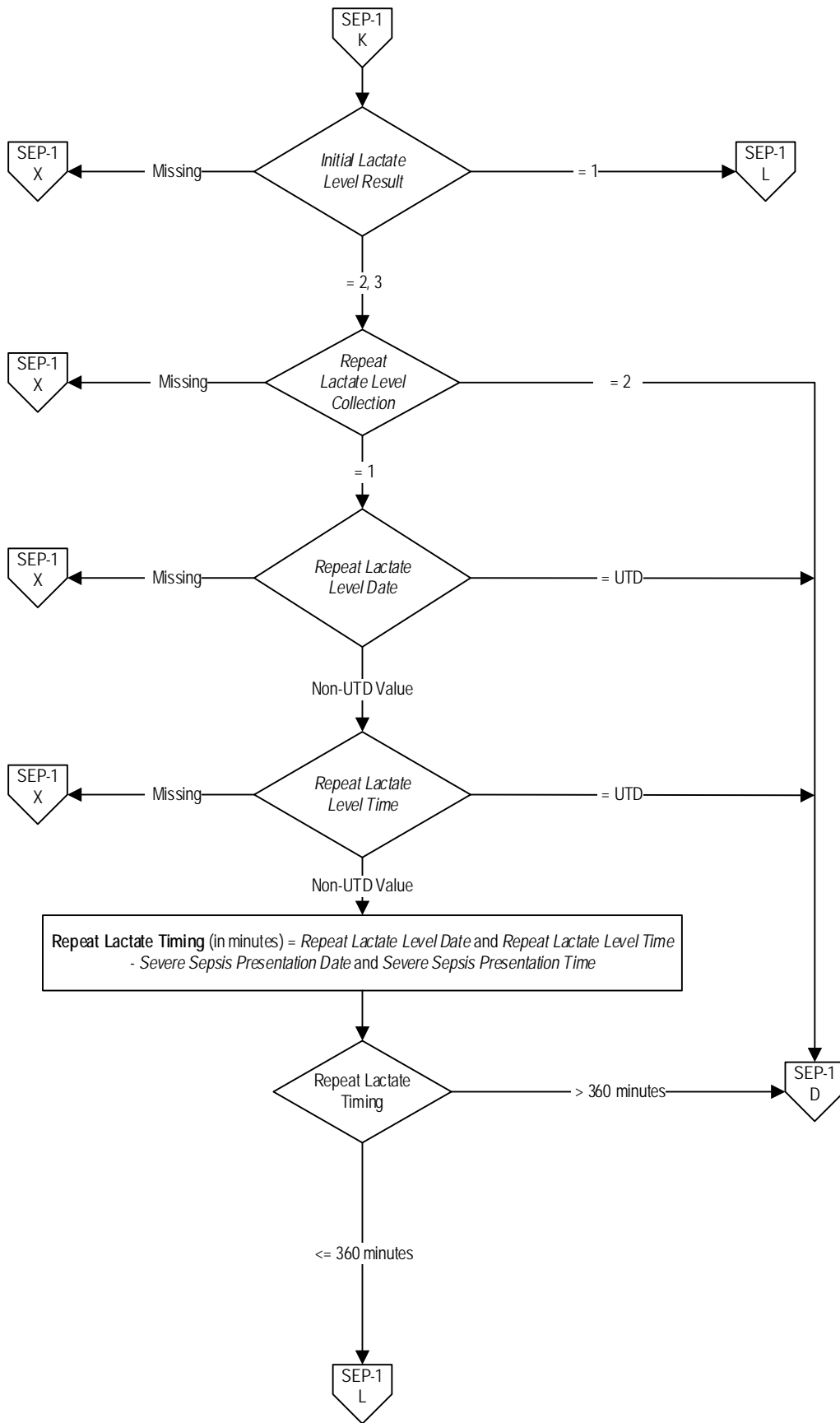


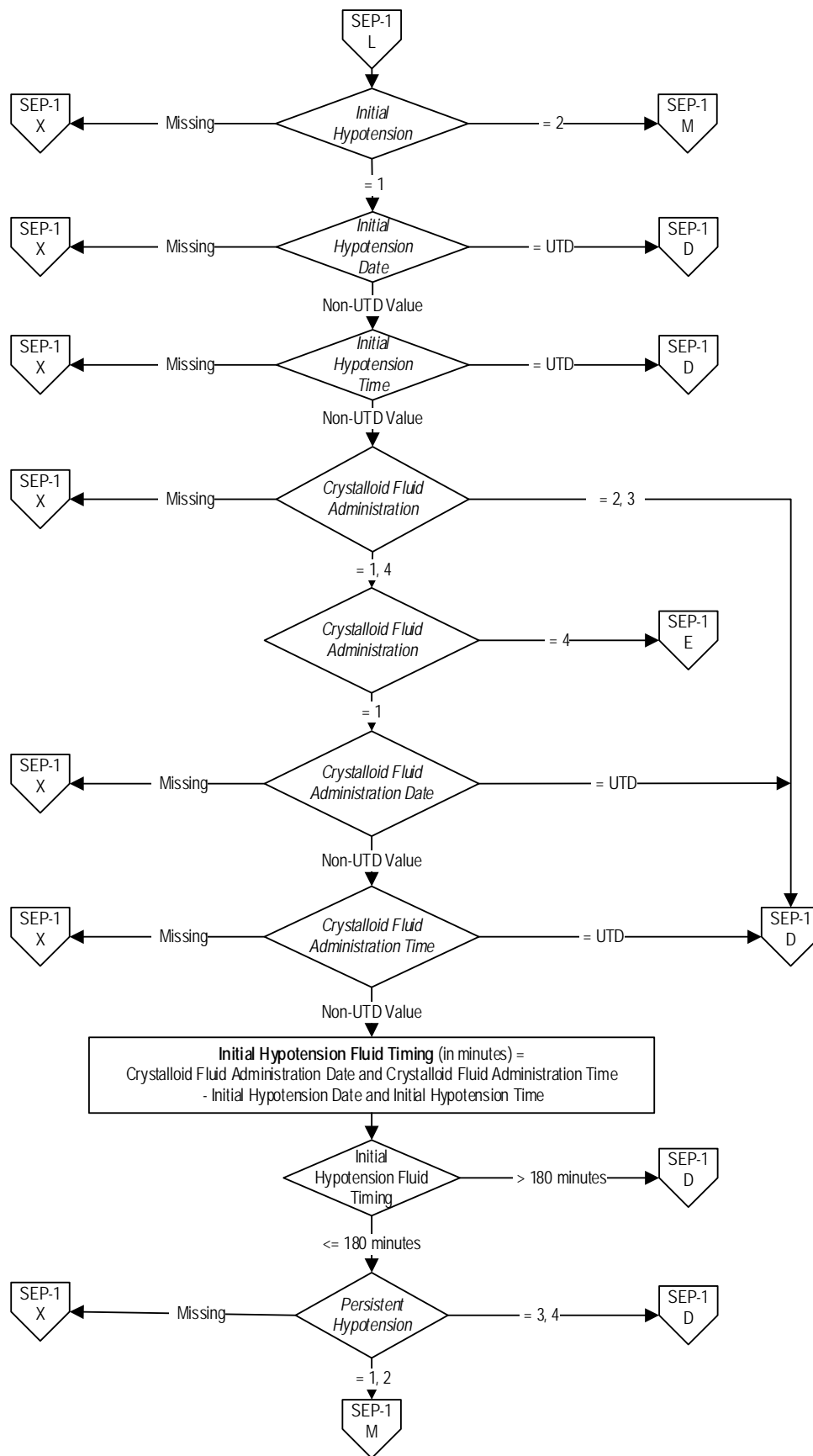


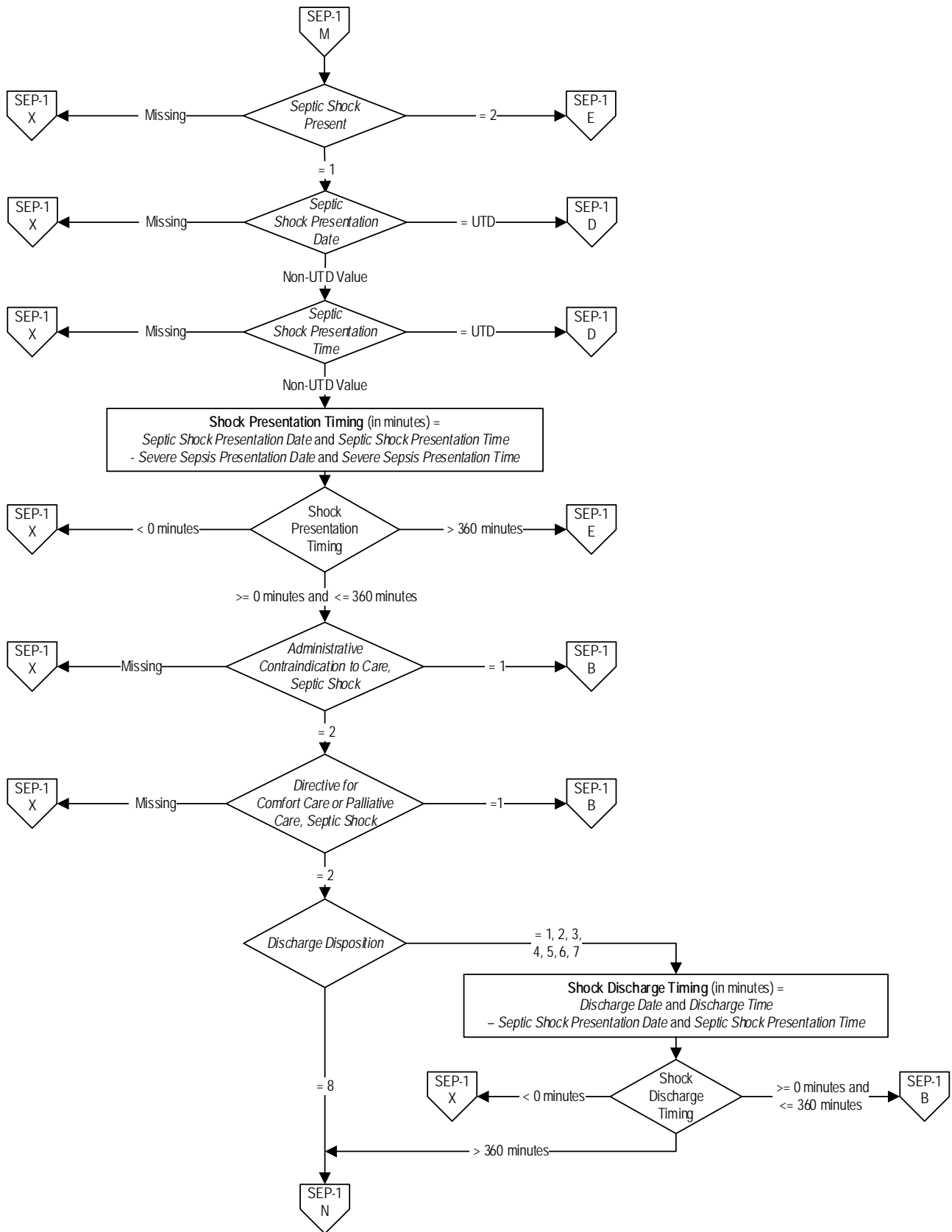


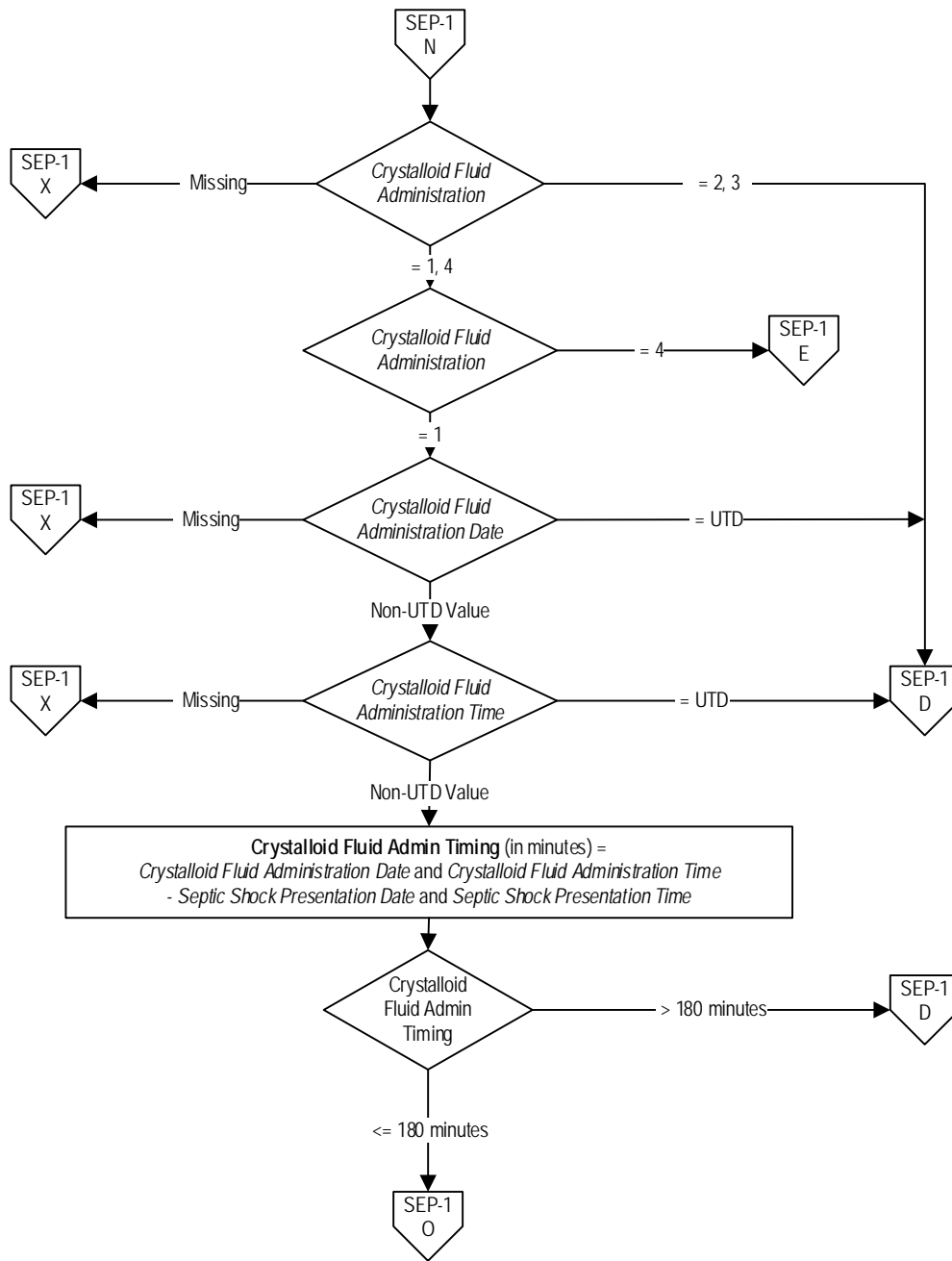


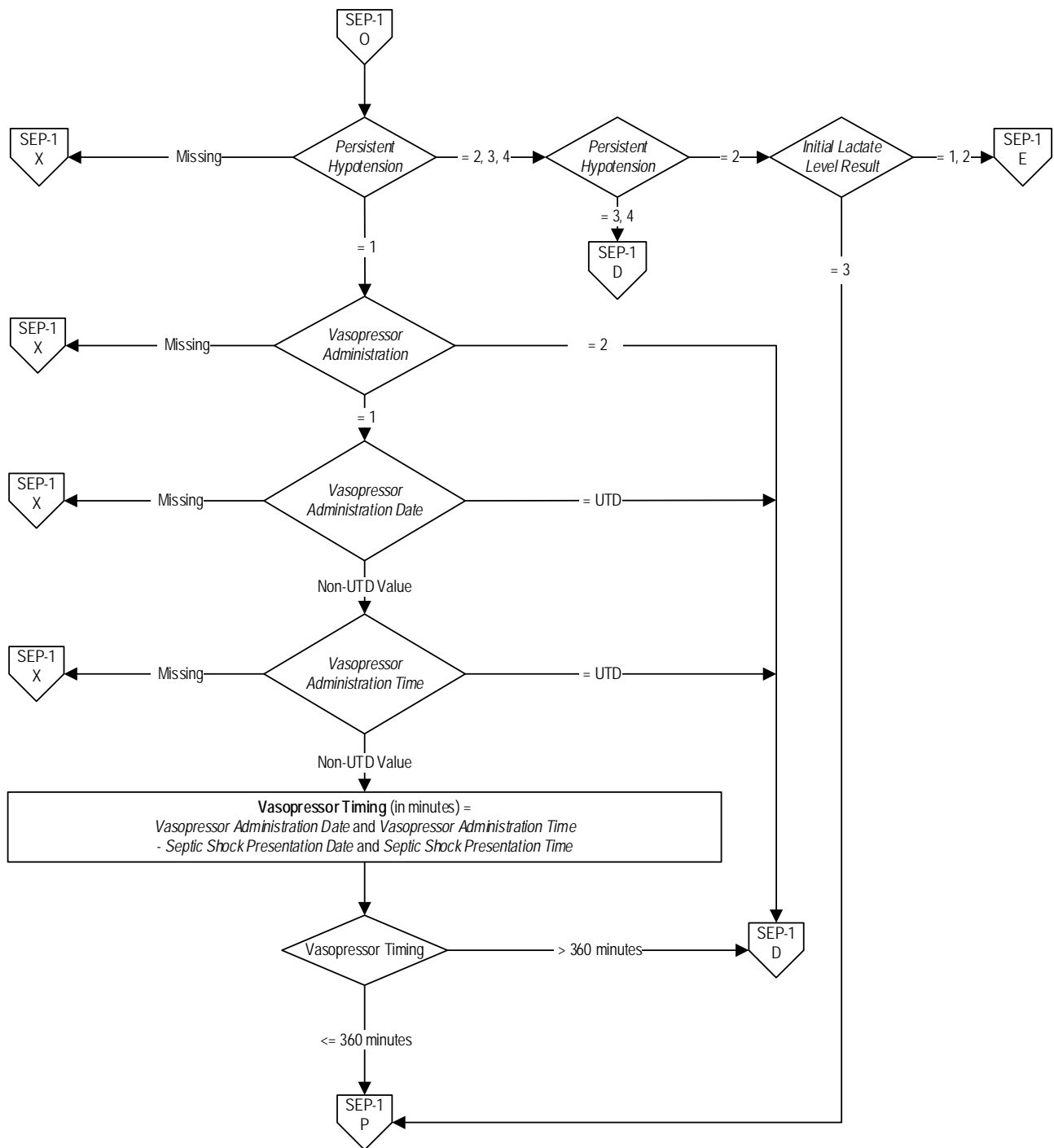


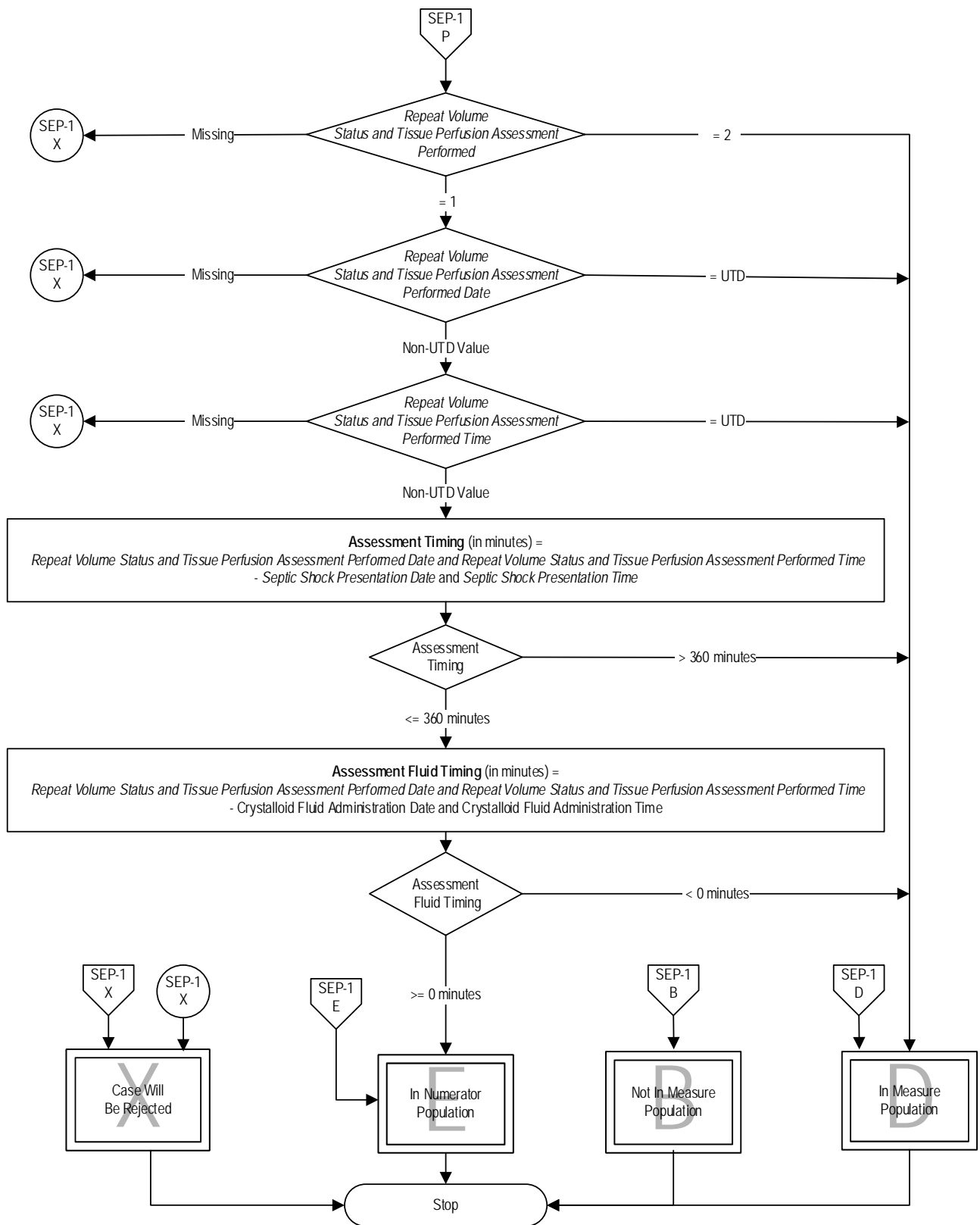












Algorithm Narrative

Sepsis (SEP)-1: Early Management Bundle, Severe Sepsis/Septic Shock

Numerator: Patients who received ALL of the following:

Within three hours of presentation of severe sepsis:

- Initial lactate level measurement
- Broad spectrum or other antibiotics administered
- Blood cultures drawn prior to antibiotics

AND received within six hours of presentation of severe sepsis, ONLY if the initial lactate is elevated:

- Repeat lactate level measurement

AND within three hours of Initial Hypotension:

- Resuscitation with 30 mL/kg crystalloid fluids

OR within three hours of septic shock:

- Resuscitation with 30 mL/kg crystalloid fluids

AND within six hours of septic shock presentation, ONLY if hypotension persists after fluid administration:

- Vasopressors are administered

AND within six hours of septic shock presentation, if hypotension persists after fluid administration or initial lactate ≥ 4 mmol/L:

- Repeat volume status and tissue perfusion assessment is performed

Denominator: Inpatients age 18 and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis or Septic Shock as defined in Appendix A, Table 4.01

Variable Key: Sepsis Discharge Timing, Broad Spectrum Antibiotic Timing, Blood Culture Timing, Blood Culture Antibiotic Timing, Initial Lactate Timing, Repeat Lactate Timing, Initial Hypotension Fluid Timing, Shock Presentation Timing, Shock Discharge Timing, Crystalloid Fluid Admin Timing, Vasopressor Timing, Assessment Timing, Assessment Fluid Timing

1. Start processing. Run cases that are included in the Sepsis Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
2. Check Transfer from Another Hospital or ASC
 - a. If Transfer from Another Hospital or ASC is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Transfer from Another Hospital or ASC equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Transfer from Another Hospital or ASC equals No, continue processing and proceed to Clinical Trial.

3. Check Clinical Trial
 - a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Clinical Trial equals No, continue processing and proceed to Severe Sepsis Present.
4. Check Severe Sepsis Present
 - a. If Severe Sepsis Present is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Severe Sepsis Present equals 2, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Severe Sepsis Present equals 1, continue processing and proceed to Severe Sepsis Presentation Date.
5. Check Severe Sepsis Presentation Date
 - a. If Severe Sepsis Presentation Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Severe Sepsis Presentation Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Severe Sepsis Presentation Date equals a Non Unable to Determine Value, continue processing and proceed to Severe Sepsis Presentation Time.
6. Check Severe Sepsis Presentation Time
 - a. If Severe Sepsis Presentation Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Severe Sepsis Presentation Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Severe Sepsis Presentation Time equals a Non Unable to Determine Value, continue processing and proceed to Administrative Contraindication to Care, Severe Sepsis.
7. Check Administrative Contraindication to Care, Severe Sepsis
 - a. If Administrative Contraindication to Care, Severe Sepsis is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Administrative Contraindication to Care, Severe Sepsis equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.

- c. If Administrative Contraindication to Care, Severe Sepsis equals 2, continue processing and proceed to Directive for Comfort Care or Palliative Care, Severe Sepsis.
8. Check Directive for Comfort Care or Palliative Care, Severe Sepsis
- a. If Directive for Comfort Care or Palliative Care, Severe Sepsis is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Directive for Comfort Care or Palliative Care, Severe Sepsis equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Directive for Comfort Care or Palliative Care, Severe Sepsis equals 2, continue processing and proceed to Discharge Disposition.
9. Check Discharge Disposition
- a. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Discharge Disposition equals 8 continue processing and proceed to Step 13.
 - c. If Discharge Disposition equals 1, 2, 3, 4, 5, 6 or 7, continue processing and proceed to Discharge Time.
10. Check Discharge Time
- a. If Discharge Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Discharge Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Discharge Time equals a Non Unable to Determine Value, continue processing and proceed to Sepsis Discharge Timing calculation.
11. Calculate Sepsis Discharge Timing. Sepsis Discharge Timing, in minutes, is equal to the Discharge Date and Discharge Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.
12. Check Sepsis Discharge Timing
- a. If Sepsis Discharge Timing is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Sepsis Discharge Timing is greater than or equal to 0 minutes and less than or equal to 360 minutes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Sepsis Discharge Timing is greater than 360 minutes, continue processing and proceed to Broad Spectrum or Other Antibiotic Administration.

13. Check Broad Spectrum or Other Antibiotic Administration
 - a. If Broad Spectrum or Other Antibiotic Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Broad Spectrum or Other Antibiotic Administration equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Broad Spectrum or Other Antibiotic Administration equals 1, continue processing and proceed to Broad Spectrum or Other Antibiotic Administration Date.

14. Check Broad Spectrum or Other Antibiotic Administration Date
 - a. If Broad Spectrum or Other Antibiotic Administration Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Broad Spectrum or Other Antibiotic Administration Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Broad Spectrum or Other Antibiotic Administration Date equals a Non Unable to Determine Value, continue processing and proceed to Broad Spectrum or Other Antibiotic Administration Time.

15. Check Broad Spectrum or Other Antibiotic Administration Time
 - a. If Broad Spectrum or Other Antibiotic Administration Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Broad Spectrum or Other Antibiotic Administration Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Broad Spectrum or Other Antibiotic Administration Time equals a Non Unable to Determine Value, continue processing and proceed to Broad Spectrum Antibiotic Timing calculation.

16. Calculate Broad Spectrum Antibiotic Timing. Broad Spectrum Antibiotic Timing, in minutes, is equal to the Broad Spectrum or Other Antibiotic Administration Date and Broad Spectrum or Other Antibiotic Administration Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.

17. Check Broad Spectrum Antibiotic Timing
 - a. If Broad Spectrum Antibiotic Timing is less than -1440 minutes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - b. If Broad Spectrum Antibiotic Timing is greater than 180 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.

- c. If Broad Spectrum Antibiotic Timing is greater than or equal to -1440 minutes and less than 0 minutes, continue processing and proceed to Step 19.
 - d. If Broad Spectrum Antibiotic Timing is greater than or equal to 0 minutes and less than or equal to 180 minutes, continue processing and proceed to Broad Spectrum or Other Antibiotic Administration Selection.
18. Check Broad Spectrum or Other Antibiotic Administration Selection
- a. If Broad Spectrum or Other Antibiotic Administration Selection is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Broad Spectrum or Other Antibiotic Administration Selection equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Broad Spectrum or Other Antibiotic Administration Selection equals 1, continue processing and proceed to Blood Culture Collection.
19. Check Blood Culture Collection
- a. If Blood Culture Collection is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Blood Culture Collection Selection equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Blood Culture Collection Selection equals 1, continue processing and proceed to Blood Culture Collection Date.
20. Check Blood Culture Collection Date
- a. If Blood Culture Collection Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Blood Culture Collection Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Blood Culture Collection Date equals a Non Unable to Determine Value, continue processing and proceed to Blood Culture Collection Time.
21. Check Blood Culture Collection Time
- a. If Blood Culture Collection Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Blood Culture Collection Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Blood Culture Collection Time equals a Non Unable to Determine Value, continue processing and proceed to Blood Culture Timing calculation.

22. Calculate Blood Culture Timing. Blood Culture Timing, in minutes, is equal to the Blood Culture Collection Date and Blood Culture Collection Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.
23. Check Blood Culture Timing
 - a. If Blood Culture Timing is less than -2880 minutes or greater than 180 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Blood Culture Timing is greater than or equal to -2880 minutes and less than or equal to 180 minutes, continue processing and proceed to Blood Culture Antibiotic Timing calculation.
24. Calculate Blood Culture Antibiotic Timing. Blood Culture Antibiotic Timing, in minutes, is equal to the Broad Spectrum or Other Antibiotic Administration Date and Broad Spectrum or Other Antibiotic Administration Time minus the Blood Culture Collection Date and Blood Culture Collection Time.
25. Check Blood Culture Antibiotic Timing
 - a. If Blood Culture Antibiotic Timing is greater than or equal to 0 minutes, continue processing and proceed to Step 27.
 - b. If Blood Culture Antibiotic Timing is less than 0 minutes, continue processing and proceed to Blood Culture Collection Acceptable Delay.
26. Check Blood Culture Collection Acceptable Delay
 - a. If Blood Culture Collection Acceptable Delay is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Blood Culture Collection Acceptable Delay equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Blood Culture Collection Acceptable Delay equals 1, continue processing and proceed to Initial Lactate Level Collection.
27. Check Initial Lactate Level Collection
 - a. If Initial Lactate Level Collection is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Lactate Level Collection equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Initial Lactate Level Collection equals 1, continue processing and proceed to Initial Lactate Level Date.
28. Check Initial Lactate Level Date
 - a. If Initial Lactate Level Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

- b. If Initial Lactate Level Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Initial Lactate Level Date equals a Non Unable to Determine Value, continue processing and proceed to Initial Lactate Level Time.
29. Check Initial Lactate Level Time
- a. If Initial Lactate Level Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Lactate Level Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Initial Lactate Level Time equals a Non Unable to Determine Value, continue processing and proceed to Initial Lactate Timing calculation.
30. Calculate Initial Lactate Timing. Initial Lactate Timing, in minutes, is equal to the Initial Lactate Level Date and Initial Lactate Level Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.
31. Check Initial Lactate Timing
- a. If Initial Lactate Timing is less than -360 minutes or greater than 180 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Initial Lactate Timing is greater than or equal to -360 minutes and less than or equal to 180 minutes, continue processing and proceed to Initial Lactate Level Result.
32. Check Initial Lactate Level Result
- a. If Initial Lactate Level Result is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Lactate Level Result equals 1, continue processing and proceed to Step 38.
 - c. If Initial Lactate Level Result equals 2 or 3, continue processing and proceed to Repeat Lactate Level Collection.
33. Check Repeat Lactate Level Collection
- a. If Repeat Lactate Level Collection is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Lactate Level Collection equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Lactate Level Collection equals 1, continue processing and proceed to Repeat Lactate Level Date.

34. Check Repeat Lactate Level Date
 - a. If Repeat Lactate Level Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Lactate Level Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Lactate Level Date equals a Non Unable to Determine Value, continue processing and proceed to Repeat Lactate Level Time.
35. Check Repeat Lactate Level Time
 - a. If Repeat Lactate Level Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Lactate Level Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Lactate Level Time equals a Non Unable to Determine Value, continue processing and proceed to Repeat Lactate Timing calculation.
36. Calculate Repeat Lactate Timing. Repeat Lactate Timing, in minutes, is equal to the Repeat Lactate Level Date and Repeat Lactate Level Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.
37. Check Repeat Lactate Timing
 - a. If Repeat Lactate Timing is greater than 360 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Repeat Lactate Timing is less than or equal to 360 minutes, continue processing and proceed to Initial Hypotension.
38. Check Initial Hypotension
 - a. If Initial Hypotension is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Hypotension equals 2, continue processing and proceed to Step 47.
 - c. If Initial Hypotension equals 1, continue processing and proceed to Initial Hypotension Date.
39. Check Initial Hypotension Date
 - a. If Initial Hypotension Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Hypotension Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Initial Hypotension Date equals a Non Unable to Determine Value, continue processing and proceed to Initial Hypotension Time.

40. Check Initial Hypotension Time
 - a. If Initial Hypotension Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Initial Hypotension Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Initial Hypotension time equals a Non Unable to Determine Value, continue processing and proceed to Crystalloid Fluid Administration.
41. Check Crystalloid Fluid Administration
 - a. If Crystalloid Fluid Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration equals 2 or 3, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration equals 4, the case will proceed to a Measure Category Assignment of E and will be in the numerator population. Stop processing.
 - d. If Crystalloid Fluid Administration equals 1, continue processing and proceed to Crystalloid Fluid Administration Date.
42. Check Crystalloid Fluid Administration Date
 - a. If Crystalloid Fluid Administration Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration Date equals a Non Unable to Determine Value, continue processing and proceed to Crystalloid Fluid Administration Time.
43. Check Crystalloid Fluid Administration Time
 - a. If Crystalloid Fluid Administration Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration Time equals a Non Unable to Determine Value, continue processing and proceed to Initial Hypotension Fluid timing Calculation.
44. Initial Hypotension Fluid Timing. Initial Hypotension Fluid Timing, in minutes, is equal to the Crystalloid Fluid Administration Date and Crystalloid Fluid Administration Time minus the Initial Hypotension Date and Initial Hypotension Time.

45. Check Initial Hypotension Fluid Timing
 - a. If Initial Hypotension Fluid Timing is greater than 180 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Initial Hypotension Fluid Timing is less than or equal to 180 minutes, continue processing and proceed to Persistent Hypotension.
46. Check Persistent Hypotension
 - a. If Persistent Hypotension is missing, the case will proceed to Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Persistent Hypotension equals 3 or 4, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Persistent Hypotension equals 1 or 2, continue processing and proceed to Septic Shock Present.
47. Check Septic Shock Present
 - a. If Septic Shock Present is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Septic Shock Present equals 2, the case will proceed to a Measure Category Assignment of E and will be in the numerator population. Stop processing.
 - c. If Septic Shock Present equals 1, continue processing and proceed to Septic Shock Presentation Date.
48. Check Septic Shock Presentation Date
 - a. If Septic Shock Presentation Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Septic Shock Presentation Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Septic Shock Presentation Date equals a Non Unable to Determine Value, continue processing and proceed to Septic Shock Presentation Time.
49. Check Septic Shock Presentation Time
 - a. If Septic Shock Presentation Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Septic Shock Presentation Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Septic Shock Presentation Time equals a Non Unable to Determine Value, continue processing and proceed to Shock Presentation Timing calculation.
50. Calculate Shock Presentation Timing. Shock Presentation Timing, in minutes, is equal to the Septic Shock Presentation Date and Septic Shock Presentation Time minus the Severe Sepsis Presentation Date and Severe Sepsis Presentation Time.

51. Check Shock Presentation Timing
 - a. If Shock Presentation Timing is greater than 360 minutes, the case will proceed to a Measure Category Assignment of E, and will be in the numerator population. Stop processing.
 - b. If Shock Presentation Timing is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - c. If Shock Presentation Timing is greater than or equal to 0 minutes and less than or equal to 360 minutes, continue processing and proceed to Administrative Contraindication to Care, Septic Shock.
52. Check Administrative Contraindication to Care, Septic Shock
 - a. If Administrative Contraindication to Care, Septic Shock is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Administrative Contraindication to Care, Septic Shock equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Administrative Contraindication to Care, Septic Shock equals 2, continue processing and proceed to Directive for Comfort Care or Palliative Care, Septic Shock.
53. Check Directive for Comfort Care or Palliative Care, Septic Shock
 - a. If Directive for Comfort Care or Palliative Care, Septic Shock is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Directive for Comfort Care or Palliative Care, Septic Shock equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
 - c. If Directive for Comfort Care or Palliative Care, Septic Shock equals 2, continue processing and proceed to Discharge Disposition.
54. Check Discharge Disposition
 - a. If Discharge Disposition equals 8 continue processing and proceed to Step 57.
 - b. If Discharge Disposition equals 1, 2, 3, 4, 5, 6 or 7, continue processing and proceed to Shock Discharge Timing calculation.
55. Calculate Shock Discharge Timing. Shock Discharge Timing, in minutes, is equal to the Discharge Date and Discharge Time minus the Septic Shock Presentation Date and Septic Shock Presentation Time.
56. Check Shock Discharge Timing
 - a. If Shock Discharge Timing is greater than or equal to 0 minutes and less than or equal to 360 minutes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population.

- b. If Shock Discharge Timing is less than 0 minutes, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - c. If Shock Discharge Timing is greater than 360 minutes, continue processing and proceed to Crystalloid Fluid Administration.
57. Check Crystalloid Fluid Administration
- a. If Crystalloid Fluid Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration equals 2 or 3, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration equals 4, the case will proceed to a Measure Category Assignment of E and will be in the numerator population. Stop processing.
 - d. If Crystalloid Fluid Administration equals 1, continue processing and proceed to Crystalloid Fluid Administration Date.
58. Check Crystalloid Fluid Administration Date
- a. If Crystalloid Fluid Administration Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration Date equals a Non Unable to Determine Value, continue processing and proceed to Crystalloid Fluid Administration Time.
59. Check Crystalloid Fluid Administration Time
- a. If Crystalloid Fluid Administration Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Crystalloid Fluid Administration Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Crystalloid Fluid Administration Time equals a Non Unable to Determine Value, continue processing and proceed to Crystalloid Fluid Admin Timing calculation.
60. Calculate Crystalloid Fluid Admin Timing. Crystalloid Fluid Admin Timing, in minutes, is equal to the Crystalloid Fluid Administration Date and Crystalloid Fluid Administration Time minus the Septic Shock Presentation Date and Septic Shock Presentation Time.
61. Check Crystalloid Fluid Admin Timing
- a. If Crystalloid Fluid Admin Timing is greater than 180 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.

- b. If Crystalloid Fluid Admin Timing is less than or equal to 180 minutes, continue processing and proceed to Persistent Hypotension.
62. Check Persistent Hypotension
- a. If Persistent Hypotension is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Persistent Hypotension equals 1, continue processing and proceed to Step 64.
 - c. If Persistent Hypotension equals 2, continue processing and proceed to Initial Lactate Level Result.
 - d. If Persistent Hypotension equals 3 or 4, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
63. Check Initial Lactate Level Result
- a. If Initial Lactate Level Result equals 1 or 2, the case will proceed to a Measure Category Assignment of E and will be in the numerator population.
 - b. If Initial Lactate Level Result equals 3, continue processing and proceed to Step 69.
64. Check Vasopressor Administration
- a. If Vasopressor Administration is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Vasopressor Administration equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Vasopressor Administration equals 1, continue processing and proceed to Vasopressor Administration Date.
65. Check Vasopressor Administration Date
- a. If Vasopressor Administration Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Vasopressor Administration Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Vasopressor Administration Date equals a Non Unable to Determine Value, continue processing and proceed to Vasopressor Administration Time.
66. Check Vasopressor Administration Time
- a. If Vasopressor Administration Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Vasopressor Administration Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Vasopressor Administration Time equals a Non Unable to Determine Value, continue processing and proceed to Vasopressor Timing calculation.

67. Calculate Vasopressor Timing. Vasopressor Timing, in minutes, is equal to the Vasopressor Administration Date and Vasopressor Administration Time minus the Septic Shock Presentation Date and Septic Shock Presentation Time.
68. Check Vasopressor Timing
 - a. If Vasopressor Timing is greater than 360 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Vasopressor Timing is less than or equal to 360 minutes, continue processing and proceed to Repeat Volume Status and Tissue Perfusion Assessment Performed.
69. Check Repeat Volume Status and Tissue Perfusion Assessment Performed
 - a. If Repeat Volume Status and Tissue Perfusion Assessment Performed is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Volume Status and Tissue Perfusion Assessment Performed equals 2, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Volume Status and Tissue Perfusion Assessment Performed equals 1, continue processing and proceed to Repeat Volume Status and Tissue Perfusion Assessment Performed Date.
70. Check Repeat Volume Status and Tissue Perfusion Assessment Performed Date
 - a. If Repeat Volume Status and Tissue Perfusion Assessment Performed Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Volume Status and Tissue Perfusion Assessment Performed Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Volume Status and Tissue Perfusion Assessment Performed Date equals a Non Unable to Determine Value, continue processing and proceed to Repeat Volume Status and Tissue Perfusion Assessment Performed Time.
71. Check Repeat Volume Status and Tissue Perfusion Assessment Performed Time
 - a. If Repeat Volume Status and Tissue Perfusion Assessment Performed Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Repeat Volume Status and Tissue Perfusion Assessment Performed Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - c. If Repeat Volume Status and Tissue Perfusion Assessment Performed Time equals a Non Unable to Determine Value, continue processing and proceed to Assessment Timing calculation.

72. Calculate Assessment Timing. Assessment Timing, in minutes, is equal to the Repeat Volume Status and Tissue Perfusion Assessment Performed Date and Repeat Volume Status and Tissue Perfusion Assessment Performed Time minus Septic Shock Presentation Date and Septic Shock Presentation Time.
73. Check Assessment Timing
 - a. If Assessment Timing is greater than 360 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Assessment Timing is less than or equal to 360 minutes, continue processing to Assessment Fluid Timing calculation.
74. Calculate Assessment Fluid Timing. Calculate Assessment Fluid Timing, in minutes, is equal to the Repeat Volume Status and Tissue Perfusion Assessment Performed Date and Repeat Volume Status and Tissue Perfusion Assessment Performed Time minus Crystalloid Fluid Administration Date and Crystalloid Fluid Administration Time.
75. Check Assessment Fluid Timing
 - a. If Assessment Fluid Timing is less than 0 minutes, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.
 - b. If Assessment Timing is greater than or equal to 0 minutes, the case will proceed to a Measure Category Assignment of E and will be in the numerator population. Stop processing.

**VENOUS THROMBOEMBOLISM (VTE)
NATIONAL HOSPITAL INPATIENT QUALITY MEASURES**

Collected For: The Joint Commission Only

VTE Measure Set Table

| Set Measure ID # | Measure Short Name |
|-------------------------|--|
| VTE-6 | Hospital Acquired Potentially-Preventable Venous Thromboembolism |

VTE DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|--|--|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Date</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Joint Commission's aggregate data file and the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Element Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |

VTE Data Elements Table

| Name | Collected For: |
|--|----------------|
| <i>Clinical Trial</i> | VTE-6 |
| <i>Comfort Measures Only</i> | VTE-6 |
| <i>Reason for No Administration of VTE Prophylaxis</i> | VTE-6 |
| <i>VTE Confirmed</i> | VTE-6 |
| <i>VTE Diagnostic Test</i> | VTE-6 |
| <i>VTE Present At Admission</i> | VTE-6 |
| <i>VTE Prophylaxis Status</i> | VTE-6 |

Venous Thromboembolism (VTE) Initial Patient Population

The VTE measure set is unique in that there is only one sub-population within the measure set.

Initial Patient Population Definitions Table

| Measures | Initial Patient Population definition |
|----------|---|
| VTE-6 | The count of all patients in sub-population 3 |

The VTE sub-population utilizes four data elements:

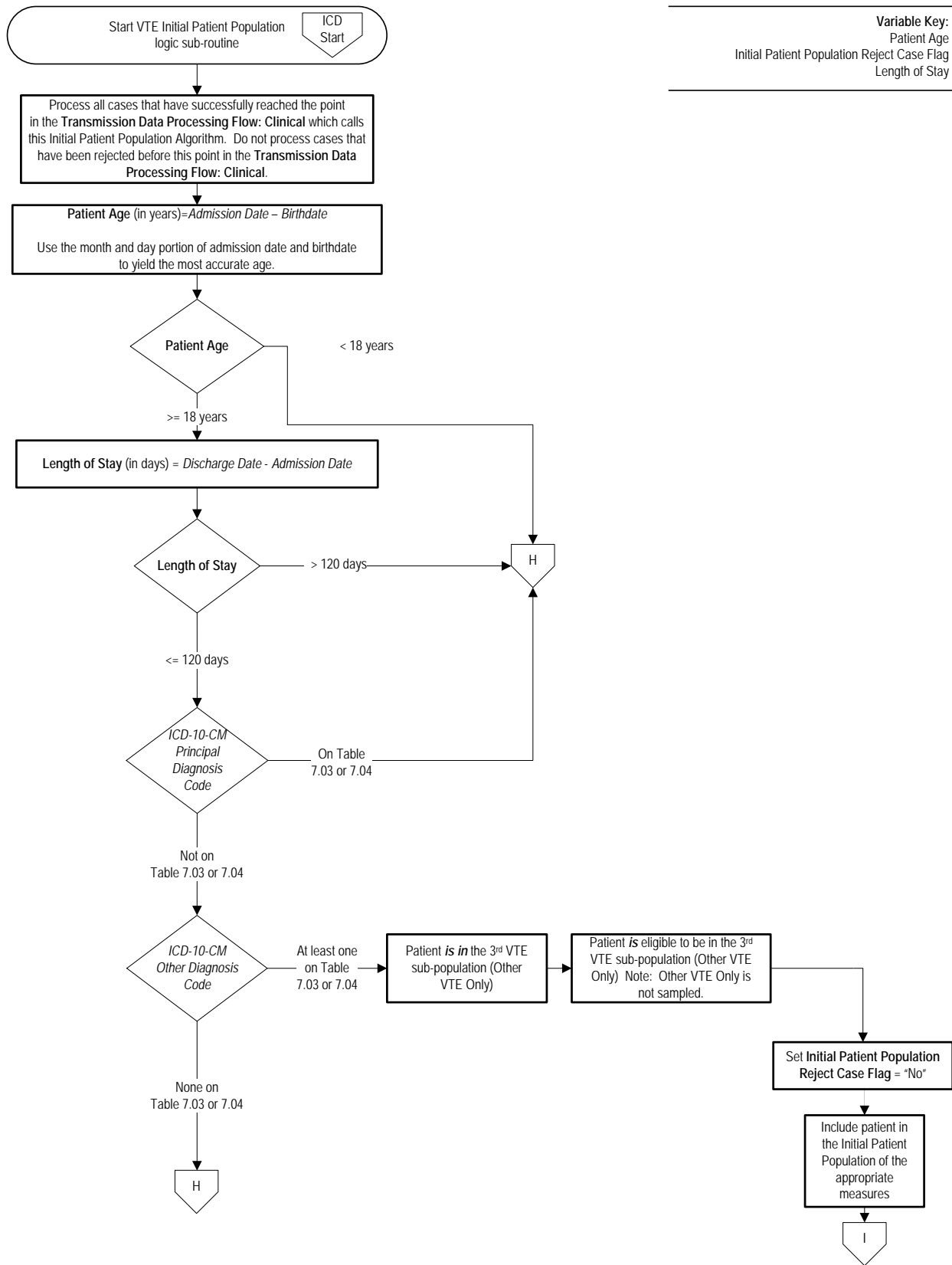
- *Admission Date*
- *Birthdate*
- *Discharge Date*
- *ICD-10-CM Other Diagnosis Code*

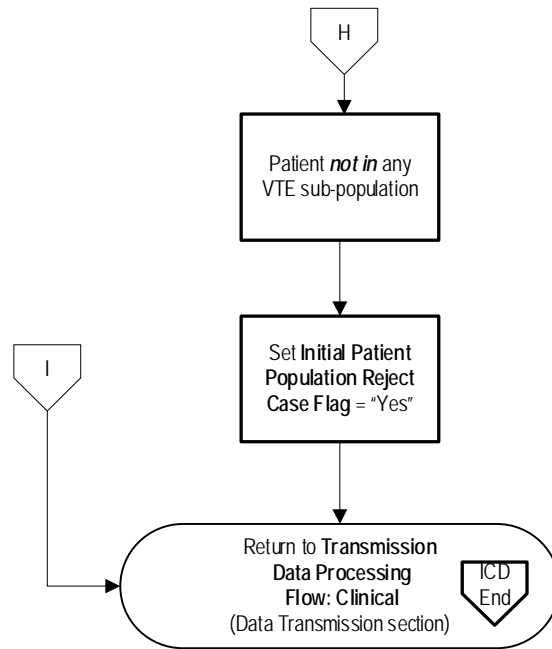
Patients admitted to the hospital for inpatient acute care are included in the VTE ICD sub-populations if they have:

1 – No VTE sub-population – is retired.

2 – Principal VTE sub-population – is retired.

3 – Other VTE Only sub-population – Patients with **an** *ICD-10-CM Other Diagnosis Code* as defined in Appendix A, Tables 7.03 and 7.04, a Patient Age (*Admission Date* minus *Birthdate*) greater than or equal to 18 years, and a Length of Stay (*Discharge Date* minus *Admission Date*) less than or equal to 120 days. The patients cannot have an *ICD-10-CM Principal Diagnosis Code* as defined in Appendix A, Tables 7.03 and 7.04.





Algorithm Narrative

Venous Thromboembolism (VTE) Initial Patient Population

Variable Key: Patient Age, Initial Patient Population Reject Case Flag and Length of Stay

1. Start VTE Initial Patient Population logic sub-routine. Process all cases that have successfully reached the point in the Transmission Data Processing Flow: Clinical which calls this Initial Patient Population Algorithm. Do not process cases that have been rejected before this point in the Transmission Data Processing Flow: Clinical.
2. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age.
3. Check Patient Age
 - a. If the Patient Age is less than 18 years, the patient is not in any VTE sub-population and is not eligible to be sampled for any VTE sub-population. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Patient Age is greater or equal to 18 years, continue processing and proceed to Length of Stay Calculation.
4. Calculate the Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
5. Check Length of Stay
 - a. If the Length of Stay is greater than 120 days, the patient is not in any VTE sub-population and is not eligible to be sampled for any VTE sub-population. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Length of Stay is less than or equal to 120 days, continue processing and proceed to ICD-10-CM Principal Diagnosis Code.
6. Check ICD-10-CM Principal Diagnosis Code
 - a. If the ICD-10-CM Principal Diagnosis Code is on Table 7.03 or 7.04, the patient is not in any VTE sub-population. Set the Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the ICD-10-CM Principal Diagnosis Code is not on Table 7.03 or 7.04, continue processing and proceed to ICD-10-CM Other Diagnosis Code.

7. Check ICD-10-CM Other Diagnosis Code
 - a. If at least one of the ICD-10-CM Other Diagnosis Codes is on Table 7.03 or 7.04, the patient is in the third or Other VTE Only sub-population. Note: Other VTE only is not sampled. Set the Initial Patient Population Reject Case Flag to equal No. Include the patient in the Initial Patient Population of the appropriate measures. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If none of the ICD-10-CM Other Diagnosis Code is on Table 7.03 or 7.04 the patient is not in any of the VTE sub-populations and is not eligible to be sampled for any VTE sub-population. Set Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

Sample Size Requirements

Hospitals that choose to sample have the option of sampling quarterly or sampling monthly. A hospital may choose to use a larger sample size than is required. Hospitals whose Initial Patient Population size is less than the minimum number of cases per quarter/month for the sub-population cannot sample that sub-population. Hospitals that have five or fewer discharges for the VTE sub-population (both Medicare and non-Medicare combined) are not required to submit VTE patient level data to the Joint Commission's Data Warehouse.

Regardless of the option used, hospital samples must be monitored to ensure that sampling procedures consistently produce statistically valid and useful data. Due to exclusions and contraindications, hospitals selecting sample cases **MUST** submit **AT LEAST** the minimum required sample size.

The following sample size tables for each option automatically build in the number of cases needed to obtain the required sample sizes. For information concerning how to perform sampling, refer to the Population and Sampling Specifications section in this manual.

Quarterly Sampling

Sampling for VTE Sub-population **3** – The Other VTE Only sub-population is not eligible for sampling and will use the entire Initial Patient Population for reporting.

To determine if a hospital may choose to not submit VTE patient level data to the Joint Commission's Data Warehouse, the count of discharges, for the quarter, for the Other VTE Only sub-population must be five or less.

Monthly Sampling

Sampling for VTE Sub-population **3** – The Other VTE Only sub-population is not eligible for sampling and will use the entire Initial Patient Sub-Population for reporting.

Measure Information Form

Collected For: The Joint Commission Only

Measure Set: Venous Thromboembolism (VTE)

Set Measure Set ID #: VTE-6

Performance Measure Name: Hospital Acquired Potentially-Preventable Venous Thromboembolism

Description: This measure assesses the number of patients diagnosed with confirmed VTE during hospitalization (not present at admission) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date.

Rationale: The concept of “failure to prevent” has generated interest in national health policy organizations to identify evidence-based practice that will improve patient safety in the hospital setting (Wachter et al 2001). The incidence of preventable venous thromboembolism (VTE) among hospitalized patients is overwhelming, and contributes to extended hospital stays, and the rising cost of health care. Zhan 2003, states that “VTE was the second most common medical complication of postoperative patients, the second most common cause of excess length of stay, and the third most common cause of excess mortality and excess charges”. According to Arnold, D.M. (2001), preventable VTE is defined as “objectively diagnosed Deep Vein Thrombosis (DVT) or Pulmonary Emboli (PE) that occurred in a setting in which thromboprophylaxis was indicated but was either administered inadequately or not administered at all.” In spite of formal guidelines, and recommendations for preventative care, pulmonary embolism is still the most common preventable cause of death among hospitalized patients (Wachter et al 2001).

Type of Measure: Outcome

Improvement Noted As: A decrease in the rate

Numerator Statement: Patients who received no VTE prophylaxis prior to the VTE diagnostic test order date.

Included Populations: Not Applicable

Excluded Populations: None

Data Elements:
VTE Prophylaxis Status

Denominator Statement: Patients who developed confirmed VTE during hospitalization.

Included Populations:

Discharges with an *ICD-10-CM Other Diagnosis Codes* of VTE as defined in Appendix A, Table 7.03 or 7.04

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a length of stay greater than 120 days
- Patients with *Comfort Measures Only* documented
- Patients enrolled in clinical trials
- Patients with *ICD-10-CM Principal Diagnosis Code* of VTE as defined in Appendix A, Table 7.03 or 7.04
- Patients with *VTE Present at Admission*
- Patients with reasons for not administering mechanical and pharmacologic prophylaxis
- Patients without VTE confirmed by diagnostic testing

Data Elements:

- *Admission Date*
- *Birthdate*
- *Clinical Trial*
- *Comfort Measures Only*
- *Discharge Date*
- *ICD-10-CM Other Diagnosis Codes*
- *ICD-10-CM Principal Diagnosis Code*
- *Reason for No Administration of VTE Prophylaxis*
- *VTE Confirmed*
- *VTE Diagnostic Test*
- *VTE Present at Admission*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Variation may exist in the assignment of ICD-10 codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: In order to identify areas for improvement, hospitals may want to stratify the numerator cases by patient age, diagnosis, or service designation. Patients that developed a VTE during hospitalization (denominator) that received prophylaxis could be evaluated in a separate analysis to determine if appropriate prophylaxis (modality, start time, duration) was administered.

Sampling: No, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:

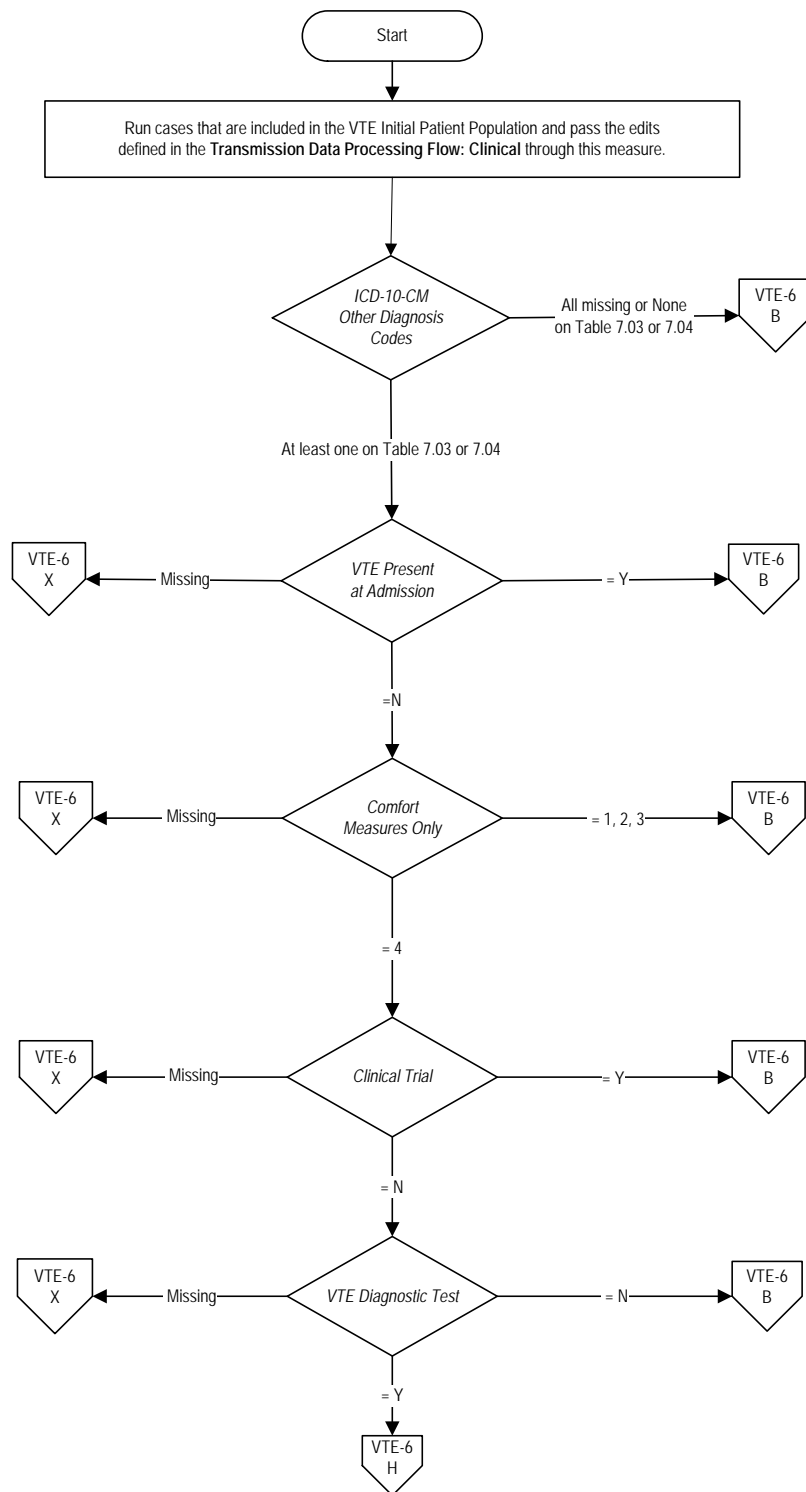
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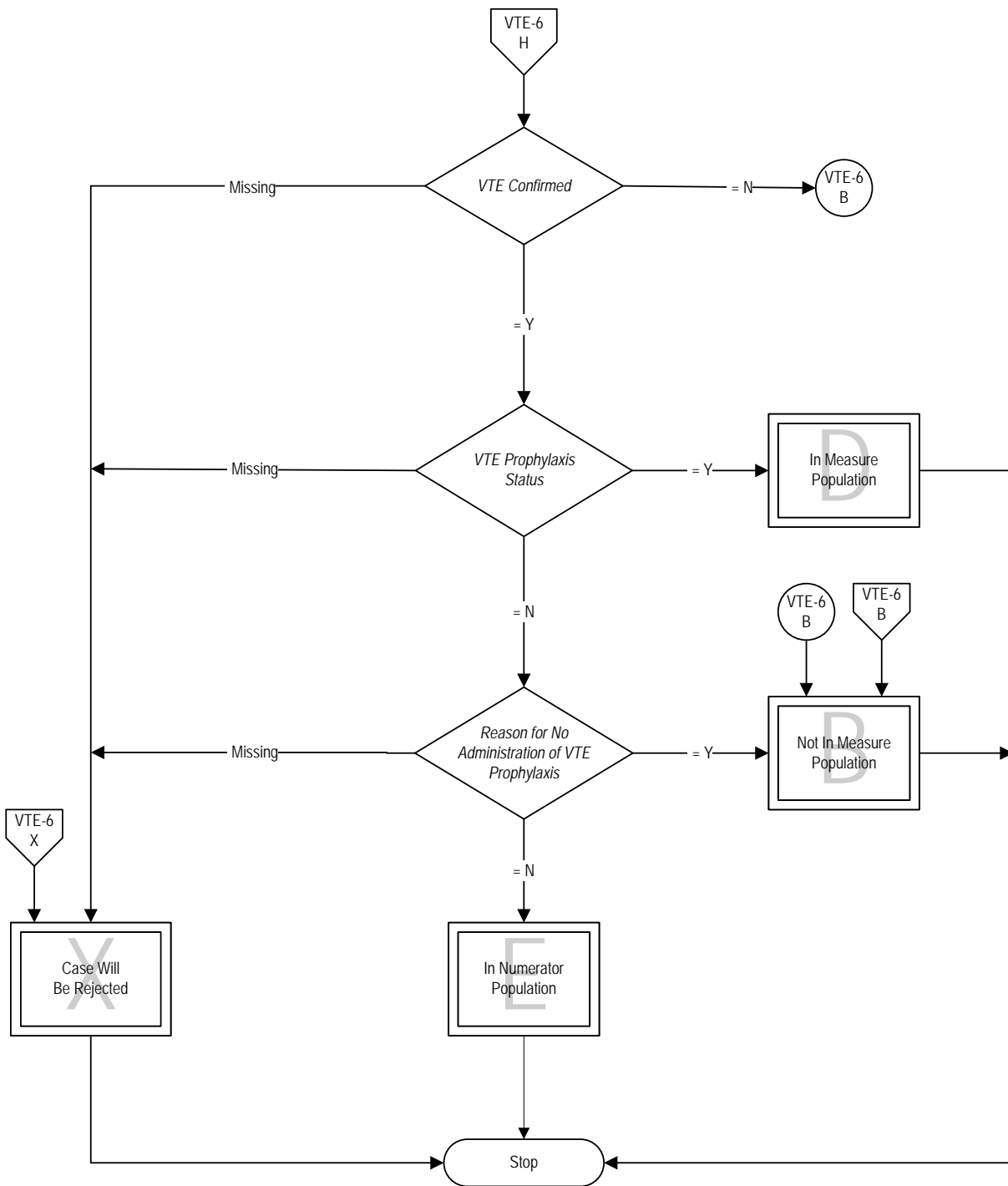
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VTE-6: Hospital Acquired Potentially-Preventable Venous Thromboembolism

Numerator: Patients who received no VTE prophylaxis prior to the VTE diagnostic test order date

Denominator: Patients who developed confirmed VTE during hospitalization





Algorithm Narrative

VTE-6: Hospital Acquired Potentially-Preventable Venous Thromboembolism

Numerator: Patients who received no VTE prophylaxis prior to the VTE diagnostic test order date.

Denominator: Patients who developed confirmed VTE during hospitalization.

1. Start processing. Run cases that are included in the VTE Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
2. Check ICD-10-CM Other Diagnosis Codes
 - a. If all ICD-10-CM Other Diagnosis Codes are missing or none of them on Table 7.03 or 7.04, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - b. If at least one of the ICD-10-CM Other Diagnosis Codes is on Table 7.03 or 7.04, continue processing and proceed to VTE Present at Admission.
3. Check VTE Present at Admission
 - a. If VTE Present at Admission is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If VTE Present at Admission equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If VTE Present at Admission equals No, continue processing and proceed to Comfort Measures Only.
4. Check Comfort Measures Only
 - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Comfort Measures Only equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If Comfort Measures Only equals 4, continue processing and proceed to Clinical Trial.
5. Check Clinical Trial
 - a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If Clinical Trial equals No, continue processing and proceed to VTE Diagnostic Test.

6. Check VTE Diagnostic Test
 - a. If VTE Diagnostic Test is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If VTE Diagnostic Test equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If VTE Diagnostic Test equals Yes, continue processing and proceed to VTE Confirmed.
7. Check VTE Confirmed
 - a. If VTE Confirmed is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If VTE Confirmed equals No, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If VTE Confirmed equals Yes, continue processing and proceed to VTE Prophylaxis Status.
8. Check VTE Prophylaxis Status
 - a. If VTE Prophylaxis Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If VTE Prophylaxis Status equals Yes, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
 - c. If VTE Prophylaxis Status equals No, continue processing and proceed to Reason for No Administration of VTE Prophylaxis.
9. Check Reason for No Administration of VTE Prophylaxis
 - a. If Reason for No Administration of VTE Prophylaxis is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Reason for No Administration of VTE Prophylaxis equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If Reason for No Administration of VTE Prophylaxis equals No, the case will proceed to a Measure Category Assignment of E and will be in Numerator Population. Stop processing.

Global National Hospital Inpatient Quality Measures

Global Initial Patient Population

Global is an umbrella name for four measure sets, Emergency Department (ED), Immunization (IMM), Substance Use (SUB) and Tobacco Treatment (TOB). The purpose of defining an umbrella name was to apply one population flow and one sampling on the Global population and reduce the burden of sampling for four measure sets or any number of these four measure sets that are selected. Therefore, if only two of the Global measure sets are selected and reported, the process would only apply for those two measure sets.

The Global Initial Patient Population is defined by two data elements:

- *Admission Date*
- *Discharge Date*

All patients discharged from acute inpatient care with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days are included in the Global Initial Population and are eligible for sampling.

The cases that are accepted into the Global Initial patient population and are sampled would be selected for the specific measure set and return to the **Transmission Data Processing Flow: Clinical** in the Data Transmission section.

For The Joint Commission, hospitals must submit the same case for all applicable measure sets elected by the hospital (i.e., ED, IMM, SUB and TOB) under the Global Initial Patient Population.

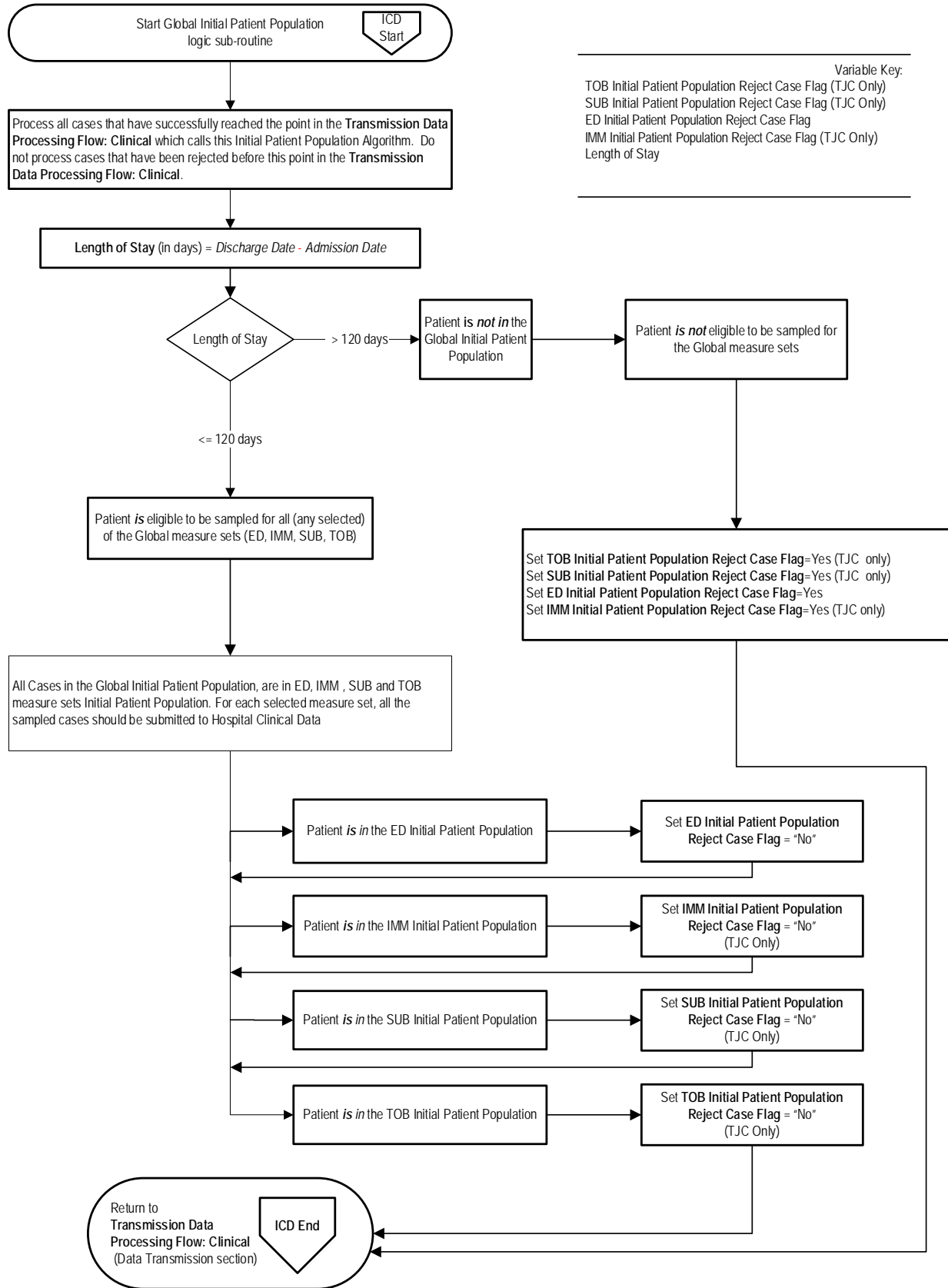
Example:

If a hospital has elected to submit ED, TOB and IMM to The Joint Commission, for every ED case that is submitted the same case must also be submitted as a TOB case and an IMM case to The Joint Commission's Data Warehouse. The same holds true regardless of the combination of measure sets (ED, IMM, SUB, TOB) the hospital has elected to submit to The Joint Commission.

The Global Initial Patient Population only contains the population information and flow. There is no measure associated to Global; therefore there is no measure flow or MIF for Global.

For Emergency Department (ED), Immunization (IMM), Substance Use (SUB) and Tobacco Treatment (TOB) Initial Patient Population definitions and algorithms, please refer to the Global Initial Patient Population.

Global Initial Patient Population Algorithm



Algorithm Narrative Global Initial Patient Population

Variable Key:

Length of Stay

TOB Initial Patient Population Reject Case Flag (TJC only)

SUB Initial Patient Population Reject Case Flag (TJC only)

ED Initial Patient Population Reject Case Flag

IMM Initial Patient Population Reject Case Flag (TJC only)

1. Start Global Initial Patient Population logic sub-routine. Process all cases that have successfully reached the point in the Transmission Data Processing Flow: Clinical, which calls this Initial Patient Population Algorithm. Do not process cases that have been rejected before this point in the Transmission Data Processing Flow: Clinical.
2. Calculate the Length of Stay, in days, which is equal to the Discharge Date minus the Admission Date.
3. Check Length of Stay
 - a. If the Length of Stay is greater than 120 days, the patient is not in the Global Initial Patient Population and is not eligible to be sampled for the Global measure sets. For CMS and The Joint Commission, set the ED Initial Patient Population Reject Case Flag to equal Yes. For The Joint Commission Only, set the IMM, TOB and SUB Initial Patient Population Reject Case Flag to equal Yes. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.
 - b. If the Length of Stay is less than or equal to 120 days, the patient is eligible to be sampled for all (any selected) of the Global measure sets. All Cases in the Global Initial Patient Population are in ED, IMM, SUB, and TOB measure sets Initial Patient Population. For each selected measure set, all the sampled cases should be submitted to Hospital Clinical Data. Continue processing.
4. For CMS and The Joint Commission set the ED Initial Patient Population Reject Case Flag to equal No. For The Joint Commission Only set the IMM, TOB and SUB Initial Patient Population Reject Case Flag to equal No. Return to Transmission Data Processing Flow: Clinical in the Data Transmission section.

Global Sample Size Requirements

Hospitals that choose to sample have the option of sampling quarterly or sampling monthly. A hospital may choose to use a larger sample size than is required. Hospitals whose Initial Patient Population size is less than the minimum number of cases per quarter for the measure set cannot sample.

Regardless of the option used, hospital samples must be monitored to ensure that sampling procedures consistently produce statistically valid and useful data. Due to exclusions, hospitals selecting sample cases **MUST** submit **AT LEAST** the minimum required sample size.

To reduce the burden of multiple sampling for different measure sets, those hospitals that are submitting any of the measure sets under the Global Initial Patient Population, the pulled sample must be used to identify the data for all measure sets or stratum that are transmitted to the CMS Clinical Warehouse and The Joint Commission's Data Warehouse. For more information concerning how to perform sampling and using the Global sample size for other measure sets, please refer to the Population and Sampling Specifications section in this manual.

The following sample size tables for each option automatically build in the number of cases needed to obtain the required sample sizes for the measure sets under the Global initial patient population.

Quarterly Sampling

Hospitals performing quarterly sampling for Global must ensure that its Initial Patient Population and sample size meet the following conditions:

Quarterly Sample Size Based on Hospital's Initial Patient Population Size for the Global Measures

| Average Quarterly Initial Patient Population Size "N" | Minimum Required Sample Size "n" |
|--|---|
| ≥ 1530 | 306 |
| 765 – 1529 | 20% of Initial Patient Population size |
| 153 – 764 | 153 |
| 6 – 152 | No sampling; 100% Initial Patient Population required |
| 0 - 5 | Submission of patient level data is encouraged but not required: <ul style="list-style-type: none">• CMS: if submission occurs, 1 – 5 cases of the Initial Patient Population may be submitted• The Joint Commission: if submission occurs, 100% Initial Patient Population required |

Monthly Sampling

Hospitals performing monthly sampling for Global must ensure that its Initial Patient Population and sample size meet the following conditions:

Monthly Sample Size Based on Hospital's Global Initial Patient Population Size Measures

| Average Monthly Initial Patient Population Size "N" | Minimum Required Sample Size "n" |
|--|---|
| ≥ 510 | 102 |
| 255 – 509 | 20% of Initial Patient Population size |
| 51 – 254 | 51 |
| < 51 | No sampling; 100% Initial Patient Population required |

Sample Size Examples

- *Quarterly Sampling*
 - A hospital's Global Initial Patient Population size is 3000 patients during the fourth quarter. The required sample size is seen to be a minimum of 306 Global patients for this quarter.
 - A hospital's Global Initial Patient Population size 803 patients during the third quarter. The required sample size is 20% of the patient population or 161 cases for the quarter (twenty percent of 803 equals 160.6 rounded to the next highest whole number equals 161).
 - A hospital's Global Initial Patient Population size is 4 patients during the first quarter. Submission of patient level data is not required. If the hospital chooses to submit patient level data:
 - CMS: the quarterly sample size would be 1 – 4 cases for the quarter
 - The Joint Commission: the required quarterly sample size would be 100% of the patient population or 4 cases for the quarter.
- *Monthly Sampling*
 - A hospital's Global Initial Patient Population size is 600 patients during March. The required sample size is 102 cases from the patient population.
 - A hospital's Global Initial Patient Population size is 303 patients during July. The required sample size is 20% of the patient population or 61 cases for the month (twenty percent of 303 equals 60.6 rounded to the next highest whole number equals 61).

**EMERGENCY DEPARTMENT (ED)
NATIONAL HOSPITAL INPATIENT QUALITY MEASURES**

ED Measure Set Table

| Set Measure ID # | Measure Short Name |
|-------------------------|---|
| ED-1a | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Overall Rate |
| ED-1b | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Reporting Measure |
| ED-1c | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Psychiatric/Mental Health Patients |
| ED-2a | Admit Decision Time to ED Departure Time for Admitted Patients – Overall Rate |
| ED-2b | Admit Decision Time to ED Departure Time for Admitted Patients – Reporting Measure |
| ED-2c | Admit Decision Time to ED Departure Time for Admitted Patients –Psychiatric/Mental Health Patients |

ED DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|--|---|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>First Name</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Date</i> | All Records |
| <i>Last Name</i> | All Records |
| <i>Patient Identifier</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Physician 1</i> | Optional for All Records |
| <i>Physician 2</i> | Optional for All Records |
| <i>Postal Code</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Elements Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |
| <i>Measurement Value</i> | Used in the calculation of aggregate data and Continuous Variable Measures (All ED Measures) |

ED DATA ELEMENT LIST

ED Data Elements Table

| Name | Collected For: |
|-------------------------------|-----------------------|
| <i>Arrival Date</i> | ED-1 |
| <i>Arrival Time</i> | ED-1 |
| <i>Decision to Admit Date</i> | ED-2 |
| <i>Decision to Admit Time</i> | ED-2 |
| <i>ED Departure Date</i> | ED-1, ED-2 |
| <i>ED Departure Time</i> | ED-1, ED-2 |
| <i>ED Patient</i> | ED-1, ED-2 |

Emergency Department (ED) Initial Patient Population

Please refer to the Global Initial Patient Population document and Global List, for the ED Initial Patient Population Processing definition and Flow.

Emergency Department (ED) Sample Size Requirements

Please refer to the Global Initial Patient Population document and Global List, for the sampling requirements for the Emergency Department (ED) Measures.

Measure Information Form

Collected For: The Joint Commission Only

Measure Set: Emergency Department

Set Measure ID #: ED-1

Performance Measure Name: Median Time from ED Arrival to ED Departure for Admitted ED Patients

ED-1 Measure Set Table

| Set Measure ID # | Performance Measure Name |
|------------------|---|
| ED-1a | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Overall Rate |
| ED-1b | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Reporting Measure |
| ED-1c | Median Time from ED Arrival to ED Departure for Admitted ED Patients – Psychiatric/Mental Health Patients |

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

Rationale: Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment. In recent times, EDs have experienced significant overcrowding. Although once only a problem in large, urban, teaching hospitals, the phenomenon has spread to other suburban and rural healthcare organizations. According to a 2002 national U.S. survey, more than 90% of large hospitals report EDs operating "at" or "over" capacity. Approximately one third of hospitals in the US report increases in ambulance diversion in a given year, whereas up to half report crowded conditions in the ED. In a recent national survey, 40% of hospital leaders viewed ED crowding as a symptom of workforce shortages. ED crowding may result in delays in the administration of medication such as antibiotics for pneumonia and has been associated with perceptions of compromised emergency care. For patients with non-ST-segment-elevation myocardial infarction, long ED stays were associated with decreased use of guideline-recommended therapies and a higher risk of recurrent myocardial infarction. Overcrowding and heavy emergency resource demand have led to a number of problems, including ambulance refusals, prolonged patient waiting times, increased suffering for those who wait, rushed and unpleasant treatment environments, and potentially poor patient outcomes. When EDs are overwhelmed, their ability to respond to community emergencies and disasters may be compromised.

Type of Measure: Process

Improvement Noted As: A decrease in the median value

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

Included Populations:

Any *ED Patient* from the facility's emergency department

Excluded Populations:

Patients who are not an *ED Patient*

Data Elements:

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

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunity for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: None

Measure Analysis Suggestions: None

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

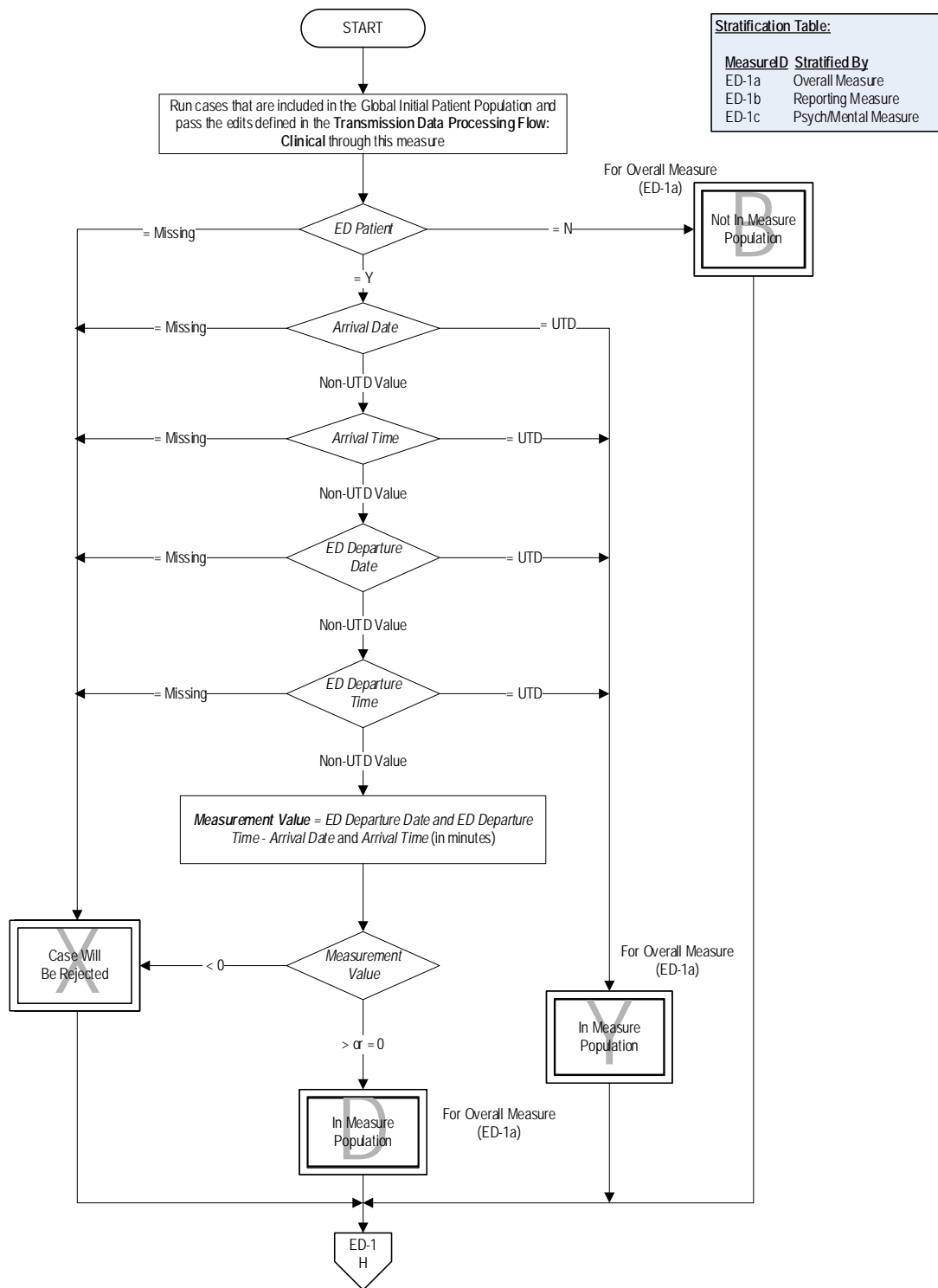
Data Reported As: Aggregate measure of central tendency

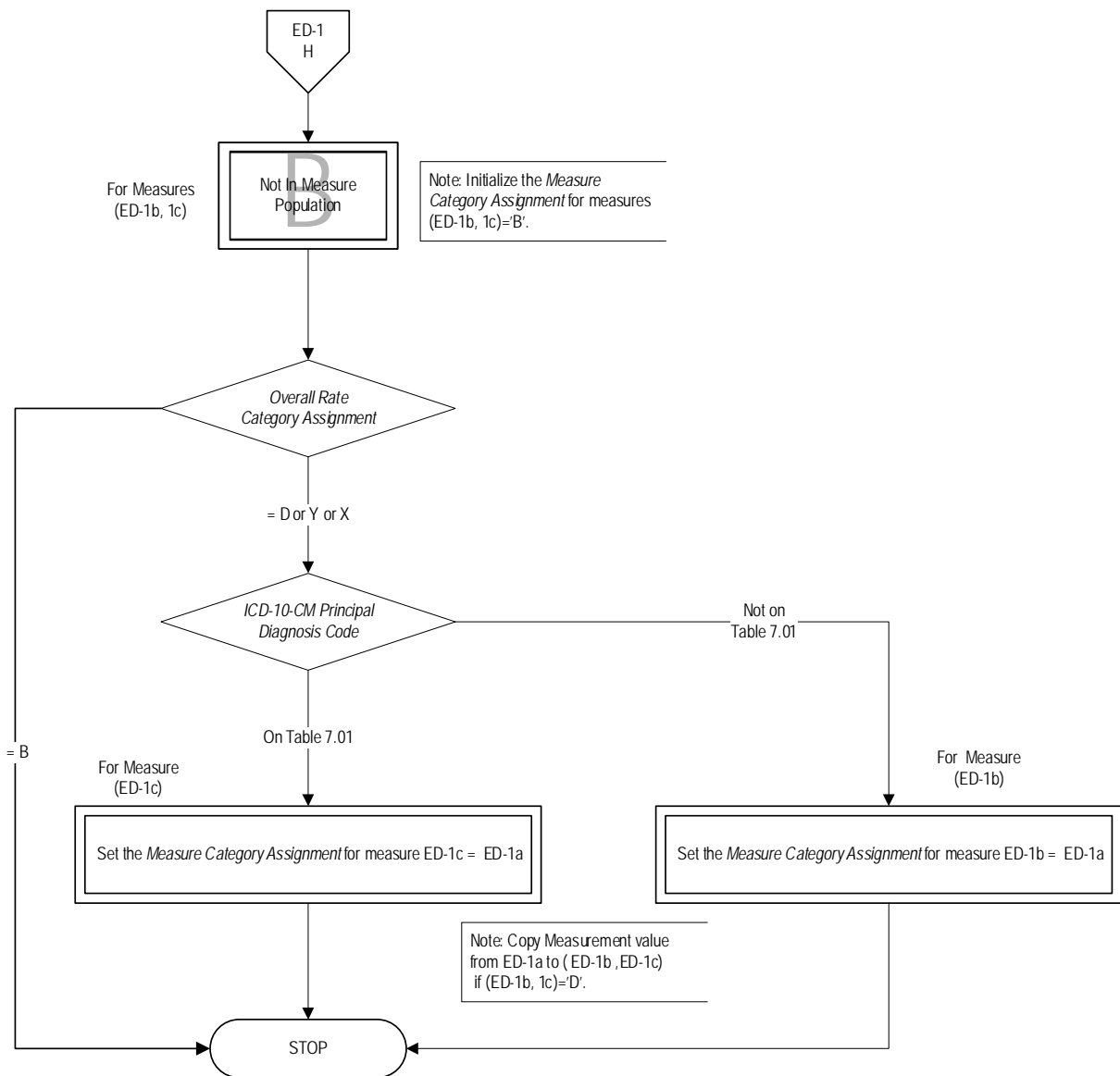
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ED-1: Median Time from ED Arrival to ED Departure for Admitted ED Patients

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





Algorithm Narrative

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.

Stratification Table: The Stratification Table includes the Measure ID and Stratified By.

| Set Measure ID# | Stratified By |
|-----------------|----------------------|
| ED-1a | Overall Measure |
| ED-1b | Reporting Measure |
| ED-1c | Psych/Mental Measure |

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. 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. 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. 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. 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. 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. 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.
 - 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.

Measure Information Form

Measure Set: Emergency Department

Set Measure ID #: ED-2

Performance Measure Name: Admit Decision Time to ED Departure Time for Admitted Patients

ED-2 Measure Set Table

| Set Measure ID# | Performance Measure Name |
|-----------------|--|
| ED-2a | Admit Decision Time to ED Departure Time for Admitted Patients – Overall Rate |
| ED-2b | Admit Decision Time to ED Departure Time for Admitted Patients – Reporting Measure |
| ED-2c | Admit Decision Time to ED Departure Time for Admitted Patients –Psychiatric/Mental Health Patients |

Description: Median time from admit decision time to time of departure from the emergency department for admitted patients.

Rationale: Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment. In recent times, EDs have experienced significant overcrowding. Although once only a problem in large, urban, teaching hospitals, the phenomenon has spread to other suburban and rural healthcare organizations. According to a 2002 national U.S. survey, more than 90% of large hospitals report EDs operating "at" or "over" capacity. Approximately one third of hospitals in the US report increases in ambulance diversion in a given year, whereas up to half report crowded conditions in the ED. In a recent national survey, 40% of hospital leaders viewed ED crowding as a symptom of workforce shortages. ED crowding may result in delays in the administration of medication such as antibiotics for pneumonia and has been associated with perceptions of compromised emergency care. For patients with non-ST-segment-elevation myocardial infarction, long ED stays were associated with decreased use of guideline-recommended therapies and a higher risk of recurrent myocardial infarction. Overcrowding and heavy emergency resource demand have led to a number of problems, including ambulance refusals, prolonged patient waiting times, increased suffering for those who wait, rushed and unpleasant treatment environments, and potentially poor patient outcomes. When EDs are overwhelmed, their ability to respond to community emergencies and disasters may be compromised.

Type of Measure: Process

Improvement Noted As: A decrease in the median value

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

Included Populations:

Any *ED Patient* from the facility's emergency department

Excluded Populations:

Patients who are not an *ED Patient*

Data Elements:

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

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunity for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: None

Measure Analysis Suggestions: None

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate measure of central tendency

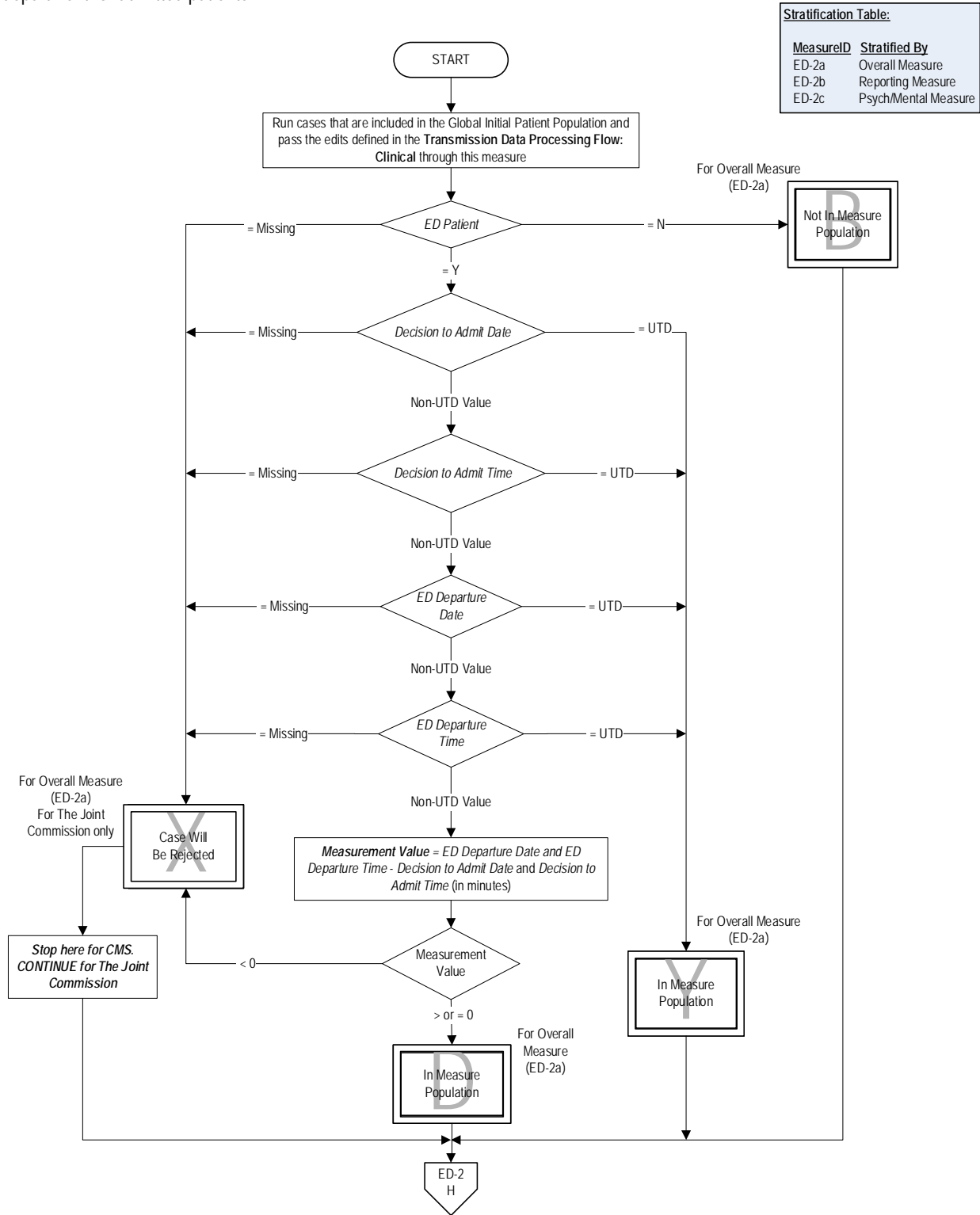
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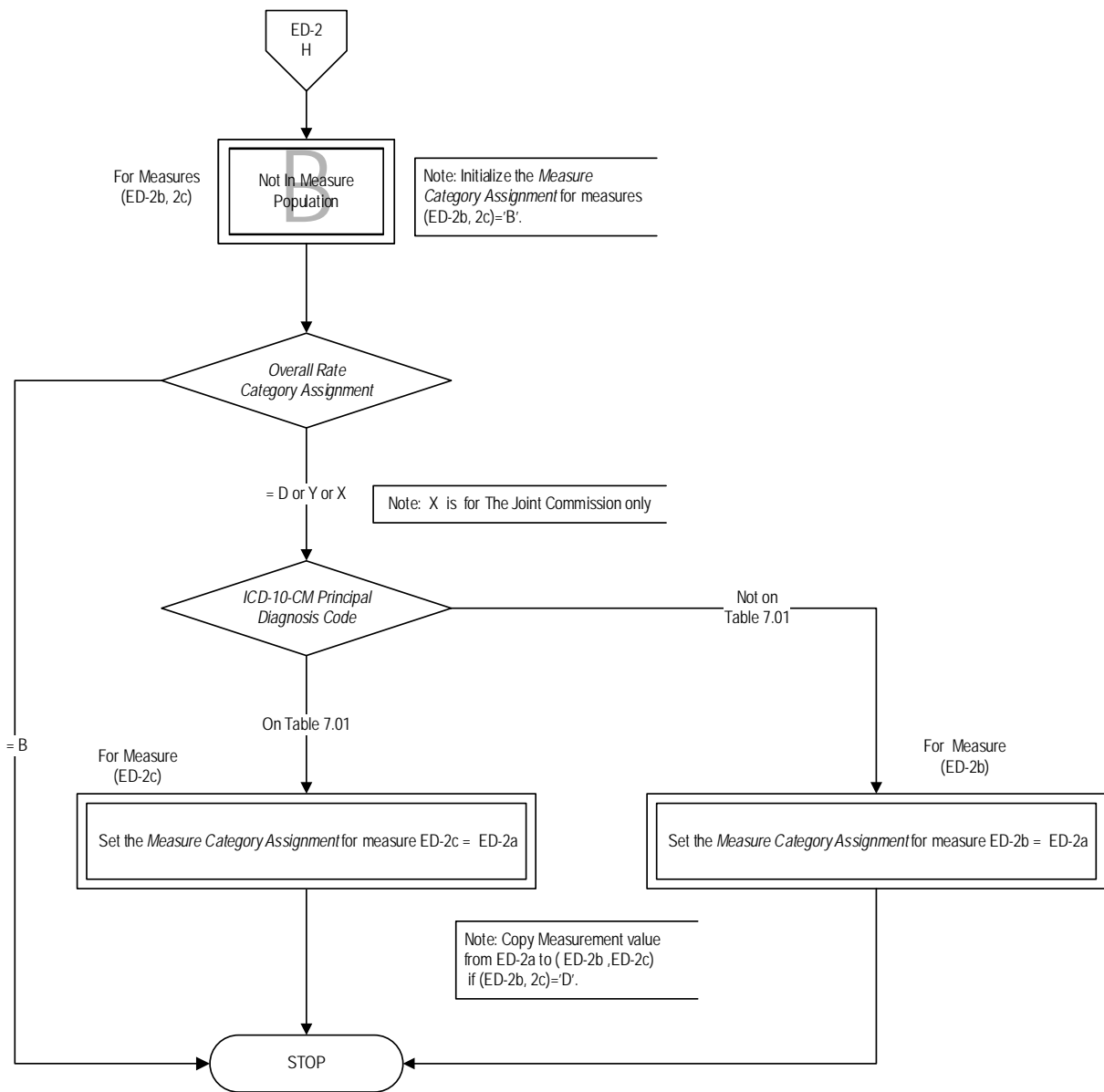
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ED-2: Admit Decision Time to ED Departure Time for Admitted Patients

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





Algorithm Narrative
**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.

Stratification Table: The Stratification Table includes the Measure ID and Stratified By.

| Set Measure ID # | Stratified By |
|------------------|----------------------|
| ED-2a | Overall Measure |
| ED-2b | Reporting Measure |
| ED-2c | Psych/Mental Measure |

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.
 - 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 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. 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 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.

IMMUNIZATION (IMM) NATIONAL HOSPITAL INPATIENT QUALITY MEASURES

Collected For: The Joint Commission Only

IMM Measure Set Table

| Set Measure ID# | Measure Short Name |
|------------------------|---------------------------|
| IMM-2 | Influenza Immunization |

IMMUNIZATION DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|--|--|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Date</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Joint Commission's aggregate data file and the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Element Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |

IMM Data Elements Table

| Name | Collected For: |
|-------------------------------------|----------------|
| <i>Discharge Disposition</i> | IMM-2 |
| <i>Influenza Vaccination Status</i> | IMM-2 |

Immunization Initial Patient Population

Please refer to the Global Initial Patient Population document and Global List for the Immunization Initial Patient Population definition.

Immunization Measure Set Sample Size Requirements

Please refer to the Global Initial Patient Population document and Global List for the sampling requirements for the Immunization Measures.

NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

Measure Information Form

Collected For: The Joint Commission Only

Measure Set: Immunization

Set Measure ID #: IMM-2

Performance Measure Name: Influenza Immunization

Description: This prevention measure addresses acute care hospitalized inpatients age 6 months and older who were screened for seasonal influenza immunization status and were vaccinated prior to discharge if indicated. The numerator captures two activities: screening and the intervention of vaccine administration when indicated. As a result, patients who had documented contraindications to the vaccine, patients who were offered and declined the vaccine and patients who received the vaccine during the current year's influenza season but prior to the current hospitalization are captured as numerator events.

Influenza (flu) is an acute, contagious, viral infection of the nose, throat and lungs (respiratory illness) caused by influenza viruses. Outbreaks of seasonal influenza occur annually during late autumn and winter months although the timing and severity of outbreaks can vary substantially from year to year and community to community. Influenza activity most often peaks in February, but can peak rarely as early as November and as late as April. In order to protect as many people as possible before influenza activity increases, most flu vaccine is administered in September through November, but vaccine is recommended to be administered throughout the influenza season as well. Because the flu vaccine usually first becomes available in September, health systems can usually meet public and patient needs for vaccination in advance of widespread influenza circulation.

Rationale: Up to 1 in 5 people in the United States get influenza every season (CDC, Key Facts 2015). Each year an average of approximately 226,000 people in the US are hospitalized with complications from influenza and between 3,000 and 49,000 die from the disease and its complications (Thompson 2003). Combined with pneumonia, influenza is the nation's 8th leading cause of death (Heron 2012). Up to two-thirds of all deaths attributable to pneumonia and influenza occur in the population of patients that have been hospitalized during flu season regardless of age (Fedson 2000). The Advisory Committee on Immunization Practices (ACIP) recommends seasonal influenza vaccination for all persons 6 months of age and older to highlight the importance of preventing influenza. Vaccination is associated with reductions in influenza among all age groups (Kostova 2013).

The influenza vaccination is the most effective method for preventing influenza virus infection and its potentially severe complications. Screening and vaccination of

inpatients is recommended, but hospitalization is an underutilized opportunity to provide vaccination to persons 6 months of age or older.

Type of Measure: Process

Improvement Noted As: An increase in the rate

Numerator Statement: Inpatient discharges who were screened for influenza vaccine status and were vaccinated prior to discharge if indicated.

Included Populations:

- Patients who received the influenza vaccine during this inpatient hospitalization
- Patients who received the influenza vaccine during the current year's flu season but prior to the current hospitalization
- Patients who were offered and declined the influenza vaccine
- Patients who have an allergy/sensitivity to the influenza vaccine, anaphylactic latex allergy or anaphylactic allergy to eggs, or for whom the vaccine is not likely to be effective because of bone marrow transplant within the past 6 months, or history of Guillian-Barre Syndrome within 6 weeks after a previous influenza vaccination

Excluded Populations: None

Data Elements:

- *ICD-10-CM Other Diagnosis Codes*
- *ICD-10-PCS Other Procedure Codes*
- *ICD-10-CM Principal Diagnosis Code*
- *ICD-10-PCS Principal Procedure Code*
- *Influenza Vaccination Status*

Denominator Statement: Acute care hospitalized inpatients age 6 months and older discharged during October, November, December, January, February or March.

Included Populations: Inpatient discharges 6 months of age and older

Excluded Populations:

- Patients less than 6 months of age
- Patients who expire prior to hospital discharge
- Patients with an organ transplant during the current hospitalization (Appendix A, Table 12.10)
- Patients for whom vaccination was indicated, but supply had not been received by the hospital due to problems with vaccine production or distribution
- Patients who have a Length of Stay greater than 120 days
- Patients who are transferred or discharged to another acute care hospital
- Patients who leave Against Medical Advice (AMA)

Data Elements:

- *Admission Date*
- *Birthdate*
- *Discharge Date*
- *Discharge Disposition*
- *ICD-10-PCS Other Procedure Codes*
- *ICD-10-PCS Principal Procedure Code*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Variation may exist in the assignment of ICD-10 codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to analyze the measure data by individual high risk populations, for example, diabetes, COPD, etc., in order to determine if all defined high risk populations are equally vaccinated or if there are opportunities to improve care to a specific population of patients.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:

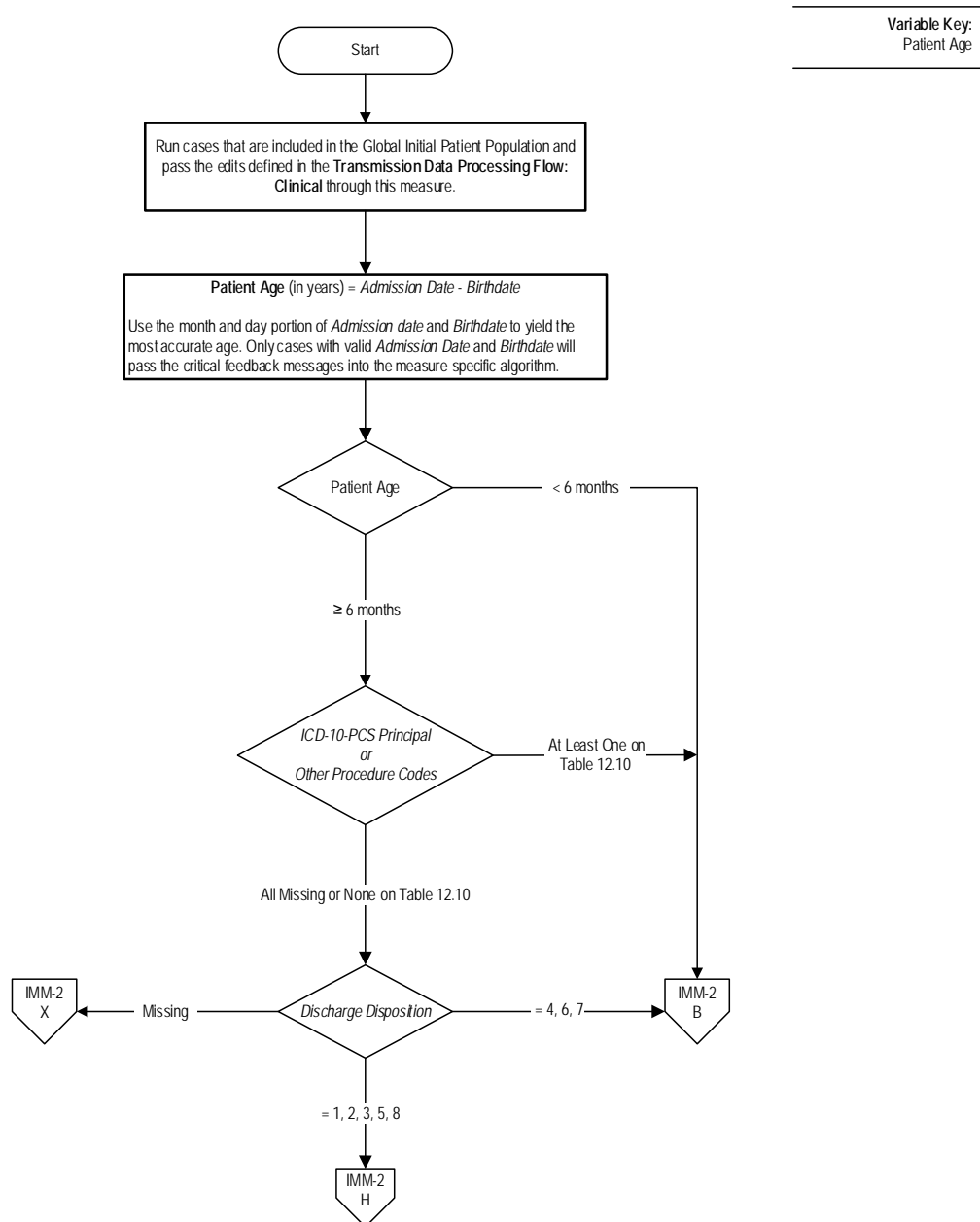
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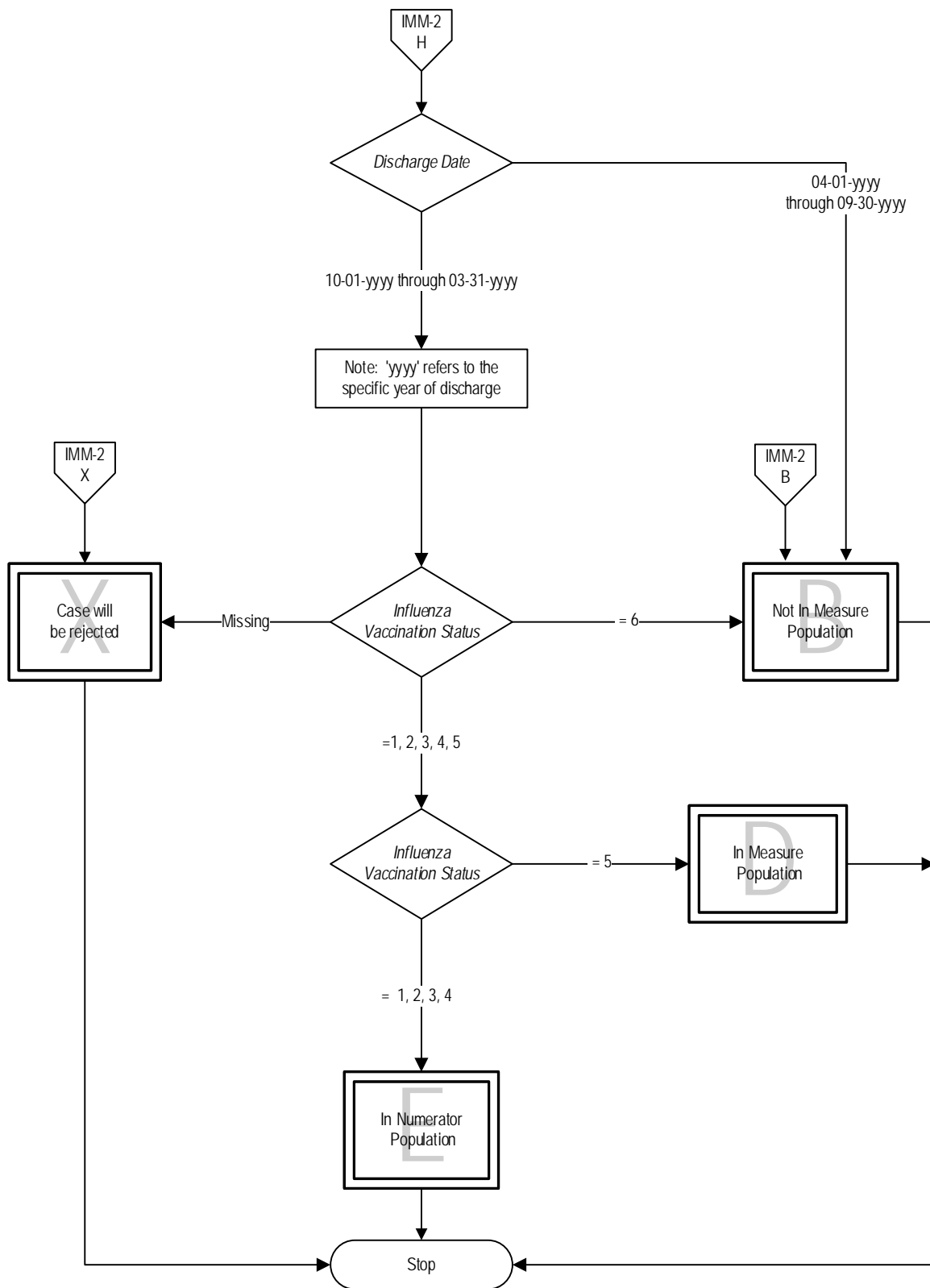
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IMM-2: Influenza Immunization

Numerator Statement: Inpatient discharges who were screened for Influenza vaccine status and were vaccinated prior to discharge if indicated.

Denominator Statement: Acute care hospitalized inpatients age 6 months and older discharged during October, November, December, January, February or March.





Algorithm Narrative

IMM-2: Influenza Immunization

Numerator: Inpatient discharges who were screened for Influenza vaccine status and were vaccinated prior to discharge if indicated.

Denominator: Acute care hospitalized inpatients age 6 months and older discharged during October, November, December, January, February or March.

Variable Key: Patient Age

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. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the critical feedback messages into the measure specific algorithms.
3. Check Patient Age
 - a. If the Patient Age is less than 6 months old, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - b. If the Patient Age is greater than or equal to 6 months, continue processing and proceed to ICD-10-PCS Principal or Other Procedure Codes.
4. Check ICD-10-PCS Principal or Other Procedure Codes
 - a. If at least one of ICD-10-PCS Principal or Other Procedure Codes is on Table 12.10 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - b. If all of ICD-10-PCS Principal or Other Procedure Codes are missing or none of ICD-10-PCS Principal or Other Procedure Codes is on Table 12.10, continue processing and check Discharge Disposition.
5. Check Discharge Disposition
 - a. If Discharge Disposition equals 4, 6, or 7 the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - b. If Discharge Disposition equals 1, 2, 3, 5, or 8 continue processing and proceed to Discharge Date.
 - c. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

6. Check Discharge Date. Note: 'yyyy' refers to the specific year of discharge.
 - a. If the Discharge Date is 04-01-yyyy through 09-30-yyyy, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - b. If the Discharge Date is 10-01-yyyy through 03-31-yyyy, continue processing and proceed to Influenza Vaccination Status.
7. Check Influenza Vaccination Status
 - a. If Influenza Vaccination Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
 - b. If Influenza Vaccination Status equals 6, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
 - c. If Influenza Vaccination Status equals 1, 2, 3, 4, or 5, continue processing and recheck Influenza Vaccination Status.
8. Recheck Influenza Vaccination Status
 - a. If Influenza Vaccination Status equals 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
 - b. If Influenza Vaccination Status equals 1, 2, 3, or 4 the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

SUBSTANCE USE (SUB) NATIONAL HOSPITAL INPATIENT QUALITY MEASURES

**Collected For:
The Joint Commission Only**

SUB Measure Set Table

| Set Measure ID# | Measure Short Name |
|------------------------|--|
| SUB-2 | Alcohol Use Brief Intervention Provided or Offered |
| SUB-2a | Alcohol Use Brief Intervention |
| SUB-3 | Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge |
| SUB-3a | Alcohol and Other Drug Use Disorder Treatment at Discharge |

SUB DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|--|--|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Date</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Joint Commission's aggregate data file and the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Element Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |

SUB Data Elements Table

| Name | Collected For: |
|---|----------------|
| <i>Alcohol Use Status</i> | SUB-2, SUB-3 |
| <i>Brief Intervention</i> | SUB-2 |
| <i>Comfort Measures Only</i> | SUB-2, SUB-3 |
| <i>Discharge Disposition</i> | SUB-3 |
| <i>Prescription for Alcohol or Drug Disorder Medication</i> | SUB-3 |
| <i>Referral for Addictions Treatment</i> | SUB-3 |

Substance Use (SUB) Initial Patient Population

Please refer to the Global Initial Patient Population document and Global List for the SUB Initial Patient Population Processing definition and flow.

Substance Use (SUB) Sample Size Requirements

Please refer to the Global Initial Patient Population document and Global List for the sampling requirements for the Substance Use (SUB) Measures.

**Measure Information Form
Collected For: The Joint Commission Only**

Measure Set: Substance Use (SUB)

Set Measure ID #: SUB-2

Performance Measure Name:

SUB-2 Alcohol Use Brief Intervention Provided or Offered

SUB-2a Alcohol Use Brief Intervention

Description:

SUB-2 Patients who screened positive for unhealthy alcohol use who received or refused a brief intervention during the hospital stay.

SUB-2a Patients who received the brief intervention during the hospital stay.

The measure is reported as an overall rate which includes all patients to whom a brief intervention was provided, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received a brief intervention. The Provided or Offered rate (SUB-2), describes patients who screened positive for unhealthy alcohol use who received or refused a brief intervention during the hospital stay. The Alcohol Use Brief Intervention (SUB-2a) rate describes only those who received the brief intervention during the hospital stay. Those who refused are not included.

Rationale: Excessive use of alcohol and drugs has a substantial harmful impact on health and society in the United States. It is a drain on the economy, and a source of enormous personal tragedy (The National Quality Forum, A consensus Report, 2007). In 1998 the economic costs to society were 185 billion dollars for alcohol misuse and 143 billion dollars for drug misuse (Harwood 2000). Health care spending was 19 billion dollars for alcohol problems and 14 billion dollars was spent treating drug problems.

Nearly a quarter of a trillion dollars per year in lost productivity is attributable to substance use. More than 537,000 die each year as a consequence of alcohol, drug, and tobacco use, making use of these substances the cause of one out of four deaths in the United States (Mokdad 2004).

An estimated 22.6 million adolescents and adults meet criteria for a substance use disorder. In a multi-state study that screened 459,599 patients in general hospital and medical settings, 23% of patients screened positive (Madras 2009).

Clinical trials have demonstrated that brief interventions, especially prior to the onset of addiction, significantly improve health and reduce costs, and that similar benefits occur in those with addictive disorders who are referred to treatment (Fleming 2002).

In a study on the provision of evidence-based care and preventive services provided in hospitals for 30 different medical conditions, quality varied substantially according to diagnosis. Adherence to recommended practices for treatment of substance use ranked

last, with only 10% of patients receiving proper care (Gentilello 2005). Currently, less than one in twenty patients with an addiction are referred for treatment (Gentilello 1999).

Hospitalization provides a prime opportunity to address the entire spectrum of substance use problems within the health care system (Bernstein 2005).

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement:

SUB-2: The number of patients who received or refused a brief intervention.

SUB-2a: The number of patients who received a brief intervention.

SUB-2 Numerator Statement Table

| | SUB-2 | SUB-2a |
|-----------------------------|---|---------------------------|
| Included Populations | Patients who refuse/decline the offered brief intervention. | Not Applicable |
| Excluded Populations | None | None |
| Data Elements | <i>Brief Intervention</i> | <i>Brief Intervention</i> |

Denominator Statement: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).

Included Populations: Not applicable

Excluded Populations:

- Patients less than 18 years of age
- Patient who are cognitively impaired
- Patients who refused or were not screened for alcohol use during the hospital stay
- Patients who have a duration of stay less than or equal to one day or greater than 120 days
- Patients receiving *Comfort Measures Only* documented

Data Elements:

- *Admission Date*
- *Alcohol Use Status*
- *Birthdate*
- *Comfort Measures Only*
- *Discharge Date*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This

approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Data accuracy is enhanced when all definitions are used without modification. The data dictionary should be referenced for definitions and abstraction notes when questions arise during data collection.

Measure Analysis Suggestions: None

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:

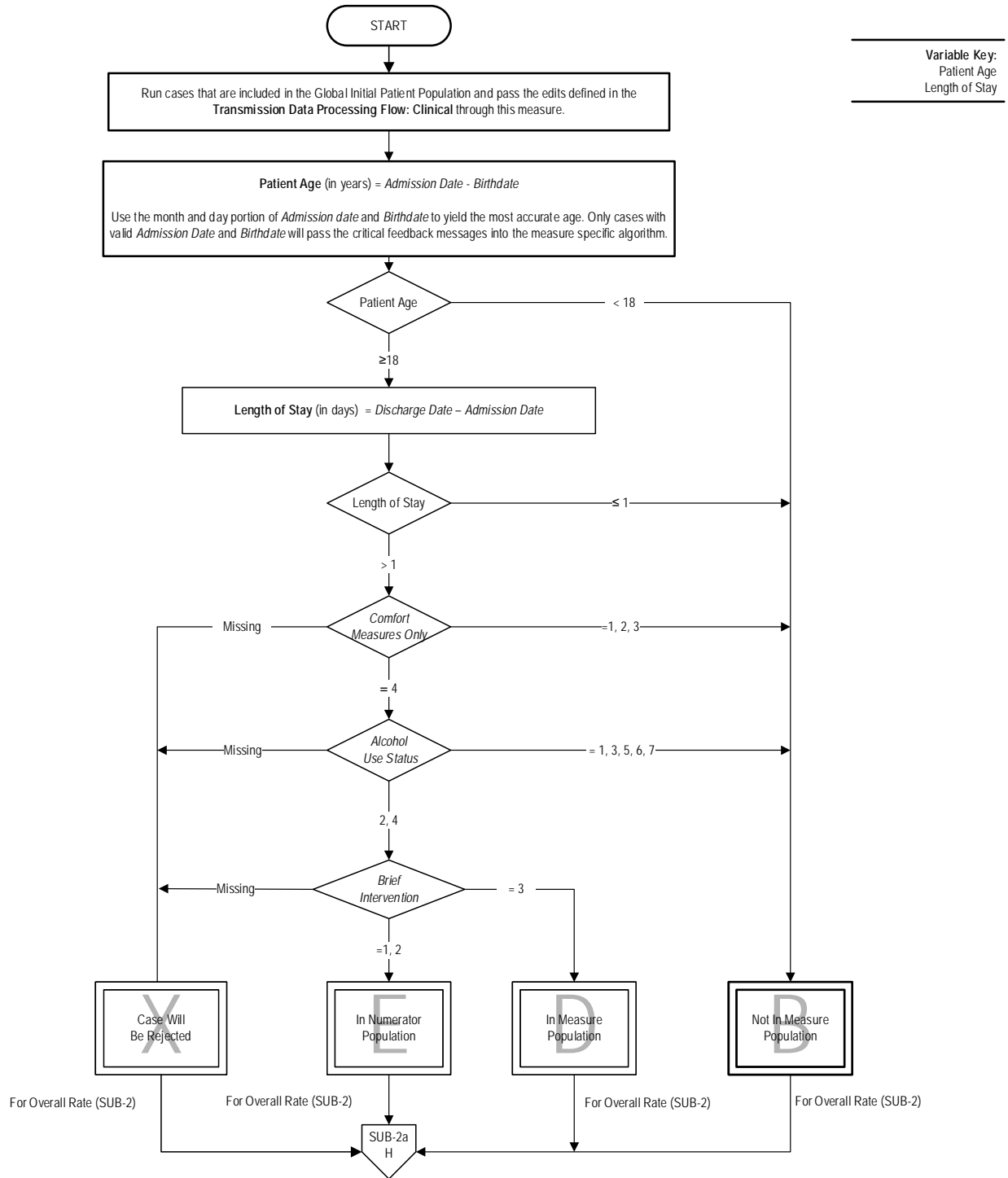
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- McGlynn EA, Asch SM, Adams J. The Quality of Healthcare Delivered to Adults in the United States. *N Engl J Med*. 2003 Jun 26;348(26):2635-45.
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- Whitlock EP, Polen MR, Green CA, Orleans T, Klein J. Behavioral Counseling Interventions in Primary Care To Reduce Risky/Harmful Alcohol Use by Adults: A Summary of the Evidence for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2004;140:557-568.

SUB-2: Alcohol Use-Brief Intervention Provided or Offered

Numerator: The number of patients who received or refused a brief intervention.

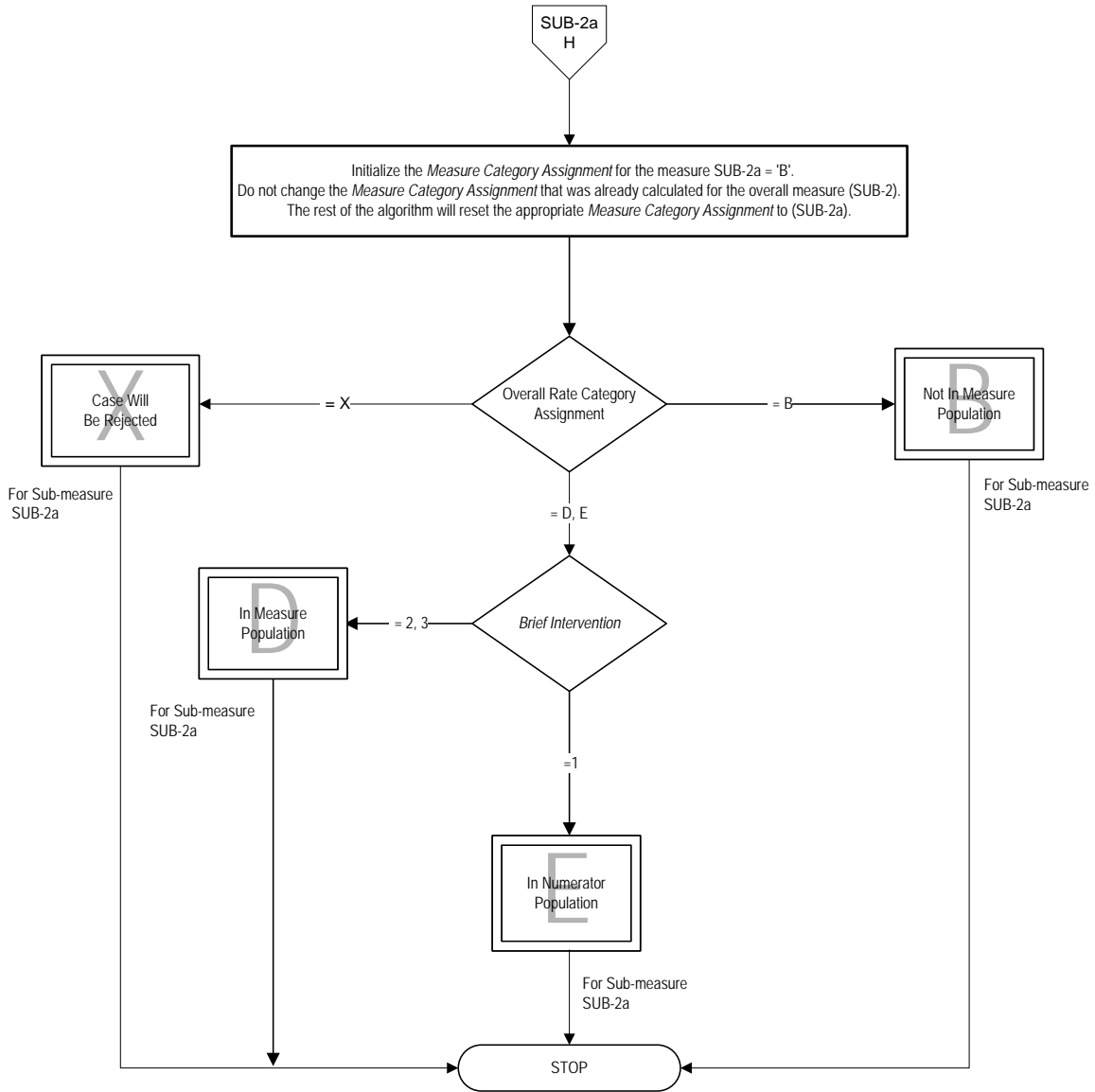
Denominator: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).



SUB-2a: Alcohol Use-Brief Intervention

Numerator: The number of patients who received a brief intervention.

Denominator: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).



Algorithm Narrative

SUB-2: Alcohol Use Brief Intervention Provided or Offered

Numerator: The number of patients who received or refused a brief intervention.

Denominator: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).

Variable key: Patient Age
Length of Stay

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. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of Admission Date and Birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the front end edits into the measure specific algorithms.
3. Check Patient Age
 - a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B for overall rate SUB-2 and will not be in the Measure Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - b. If Patient Age is equal to or greater than 18 years, continue processing and proceed to calculate Length of Stay.
4. Calculate Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
5. Check Length of Stay
 - a. If Length of Stay is equal to or less than 1 day, the case will proceed to a Measure Category Assignment of B for overall rate SUB-2 and will not be in the Measure Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - b. If Length of Stay is greater than 1 day, continue processing and proceed to check Comfort Measures Only.
6. Check Comfort Measures Only
 - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-2 and will be rejected. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - b. If Comfort Measures Only is equal to 1, 2 or 3, the case will proceed to a Measure Category Assignment of B for overall rate SUB-2 and will not be in the Measure Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.

- c. If Comfort Measures Only is equal to 4, continue processing and proceed to check Alcohol Use Status.
- 7. Check Alcohol Use Status
 - a. If Alcohol Use Status is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-2 and will be rejected. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - b. If Alcohol Use Status equals 1, 3, 5, 6 or 7, the case will proceed to a Measure Category Assignment of B for overall rate SUB-2 and will not be in the Measure Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - c. If Alcohol Use Status equals 2 or 4, continue processing and proceed to check Brief Intervention.
- 8. Check Brief Intervention
 - a. If Brief Intervention is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-2 and will be rejected. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - b. If Brief Intervention equals 3, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.
 - c. If Brief Intervention equals 1 or 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Continue processing and proceed to Step 9 to Initialize Measure Category Assignment for sub-measure SUB-2a.

Algorithm Narrative
SUB-2a: Alcohol Use Brief Intervention

Numerator: The number of patients who received a brief intervention.

Denominator: The number of hospitalized inpatients 18 years of age and older who screen positive for unhealthy alcohol use or an alcohol use disorder (alcohol abuse or alcohol dependence).

9. Initialize the Measure Category Assignment for sub-measure SUB-2a to Measure Category Assignment B. Do not change the Measure Category Assignment that was already calculated for the overall measure SUB-2. The rest of the algorithm will reset the appropriate Measure Category Assignment to SUB-2a.
10. Check Overall Rate Category Assignment
 - a. If Overall Rate Category Assignment equals X, the case will proceed to a Measure Category Assignment of X and will not be in the Measure Population for sub-measure SUB-2a. Stop Processing.
 - b. If Overall Rate Category Assignment equals B, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for sub-measure SUB-2a. Stop Processing.
 - c. If Overall Rate Category Assignment equals D or E, continue processing and proceed to check Brief Intervention.
11. Check Brief Intervention
 - a. If Brief Intervention equals 2 or 3, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population for sub-measure SUB-2a. Stop Processing.
 - b. If Brief Intervention equals 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure SUB-2a. Stop Processing.

**Measure Information Form
Collected For: The Joint Commission Only**

Measure Set: Substance Use (SUB)

Set Measure ID #: SUB-3

Performance Measure Name:

SUB-3 Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge

SUB-3a Alcohol and Other Drug Use Disorder Treatment at Discharge

Description:

SUB-3 Patients who are identified with alcohol or drug use disorder who receive or refuse at discharge a prescription for FDA-approved medications for alcohol or drug use disorder, OR who receive or refuse a referral for addictions treatment.

SUB-3a Patients who are identified with alcohol or drug disorder who receive a prescription for FDA-approved medications for alcohol or drug use disorder OR a referral for addictions treatment.

The measure is reported as an overall rate which includes all patients to whom alcohol or drug use disorder treatment was provided, or offered and refused, at the time of hospital discharge, and a second rate, a subset of the first, which includes only those patients who received alcohol or drug use disorder treatment at discharge. The Provided or Offered rate (SUB-3) describes patients who are identified with alcohol or drug use disorder who receive or refuse at discharge a prescription for FDA-approved medications for alcohol or drug use disorder, OR who receive or refuse a referral for addictions treatment. The Alcohol and Other Drug Disorder Treatment at Discharge (SUB-3a) rate describes only those who receive a prescription for FDA-approved medications for alcohol or drug use disorder OR a referral for addictions treatment. Those who refused are not included.

Rationale: Excessive use of alcohol and drugs has a substantial harmful impact on health and society in the United States. It is a drain on the economy and a source of enormous personal tragedy (The National Quality Forum, A Consensus Report 2007). In 1998 the economic costs to society were \$185 billion dollars for alcohol misuse, and 143 billion dollars for drug misuse (Harwood 2000). Health care spending was 19 billion dollars for alcohol problems, and 14 billion dollars was spent treating drug problems.

Nearly a quarter of a trillion dollars per year in lost productivity is attributable to substance use. More than 537,000 die each year as a consequence of alcohol, drug, and tobacco use making use of these substances the cause of one out of four deaths in the United States (Mokdad 2005).

An estimated 22.6 million adolescents and adults meet criteria for a substance use disorder. In a multi-state study that screened 459,599 patients in general hospital and medical settings, 23% of patients screened positive (Madras 2009).

Clinical trials have demonstrated that brief interventions, especially prior to the onset of addiction, significantly improve health and reduce costs, and that similar benefits occur in those with addictive disorders who are referred to treatment (Fleming 2002).

In a study on the provision of evidence-based care and preventive services provided in hospitals for 30 different medical conditions, quality varied substantially according to diagnosis. Adherence to recommended practices for treatment of substance use ranked last, with only 10% of patients receiving proper care (Gentilello 2005). Currently, less than one in twenty patients with an addiction are referred for treatment (Gentilello 1999).

Hospitalization provides a prime opportunity to address the entire spectrum of substance use problems within the health care system (Gentilello 2005, 1999). Approximately 8% of general hospital inpatients and 40 to 60 percent of traumatically-injured inpatients and psychiatric inpatients have substance use disorders (Gentilello 1999).

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement:

SUB-3: The number of patients who received or refused at discharge a prescription for medication for treatment of alcohol or drug use disorder OR received or refused a referral for addictions treatment.

SUB-3a: The number of patients who received a prescription at discharge for medication for treatment of alcohol or drug use disorder OR a referral for addictions treatment.

SUB-3 Numerator Statement Table

| | SUB-3 | SUB-3a |
|-----------------------------|---|---|
| Included Populations | Patients who refused a prescription for FDA-approved medication for treatment of an alcohol or drug dependence. Patients who refused a referral for addictions treatment. | Not Applicable |
| Excluded Populations | None | None |
| Data Elements | <i>Prescription for Alcohol or Drug Disorder Medication Referral for Addictions Treatment</i> | <i>Prescription for Alcohol or Drug Disorder Medication Referral for Addictions Treatment</i> |

Denominator Statement: The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder.

Included Populations:

- Patients with ICD-10-CM Principal or Other Diagnosis Code for alcohol or drug use disorder listed on Table 13.1 and 13.2
- Patients with a Principal or Other ICD-10-PCS Procedure Code listed on Table 13.3

Excluded Populations:

- Patients less than 18 years of age
- Patient drinking at unhealthy levels who do not meet criteria for an alcohol use disorder
- Patients who are cognitively impaired
- Patients who expire
- Patients discharged to another hospital
- Patients who left against medical advice
- Patients discharged to another healthcare facility
- Patients discharged to home or another healthcare facility for hospice care
- Patients who have a duration of stay less than or equal to one day or greater than 120 days
- Patients who do not reside in the United States
- Patients receiving *Comfort Measures Only* documented

Data Elements:

- *Admission Date*
- *Alcohol Use Status*
- *Birthdate*
- *Comfort Measures Only*
- *Discharge Date*
- *Discharge Disposition*
- *ICD-10-CM Other Diagnosis Codes*
- *ICD-10-PCS Other Procedure Codes*
- *ICD-10-CM Principal Diagnosis Code*
- *ICD-10-PCS Principal Procedure Code*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Data accuracy is enhanced when all definitions are used without modification. The data dictionary should be referenced for definitions and abstraction notes when questions arise during data collection.

Variation may exist in the assignment of ICD-10 codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to analyze data to show patients that refused both a medication prescription and referral and those who refused only one or the other.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:

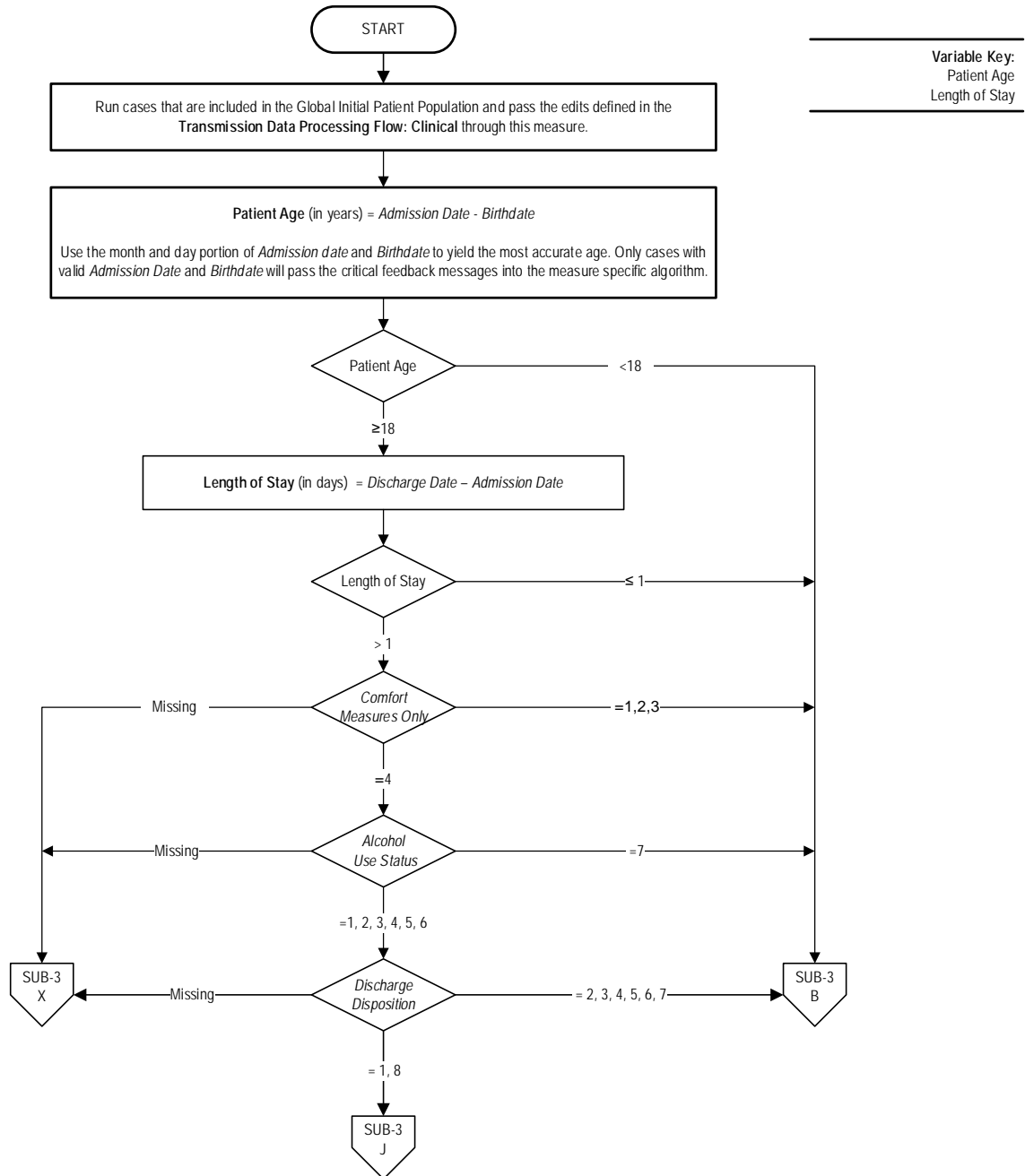
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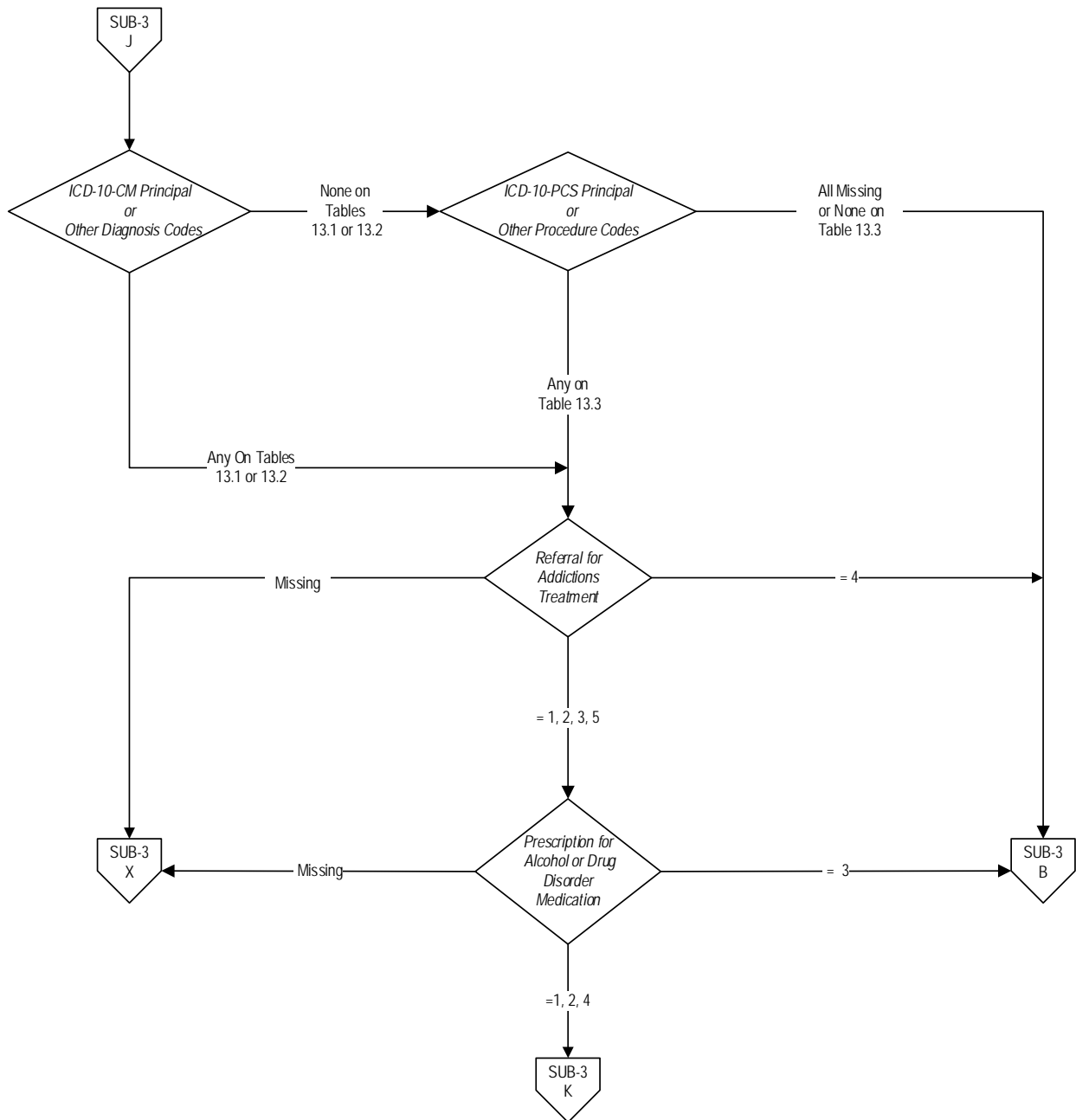
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- Prochaska JJ, Gill PH, Stephen E, Hall SM. Identification and Treatment of Substance Misuse on an Inpatient Psychiatry Unit. Psychiatr Serv. 2005 Mar;56(3):347-9.
- Smothers BA, Yahr HT, Ruhl CE. Detection of alcohol use disorders in general hospital admissions in the United States. Arch Intern Med. 2004 Apr 12;164(7):749-56.
- The National Quality Forum, National Voluntary Consensus Standards for the Treatment of Substance Use Conditions: Evidence-Based Treatment Practices; A Consensus Report; 2007.

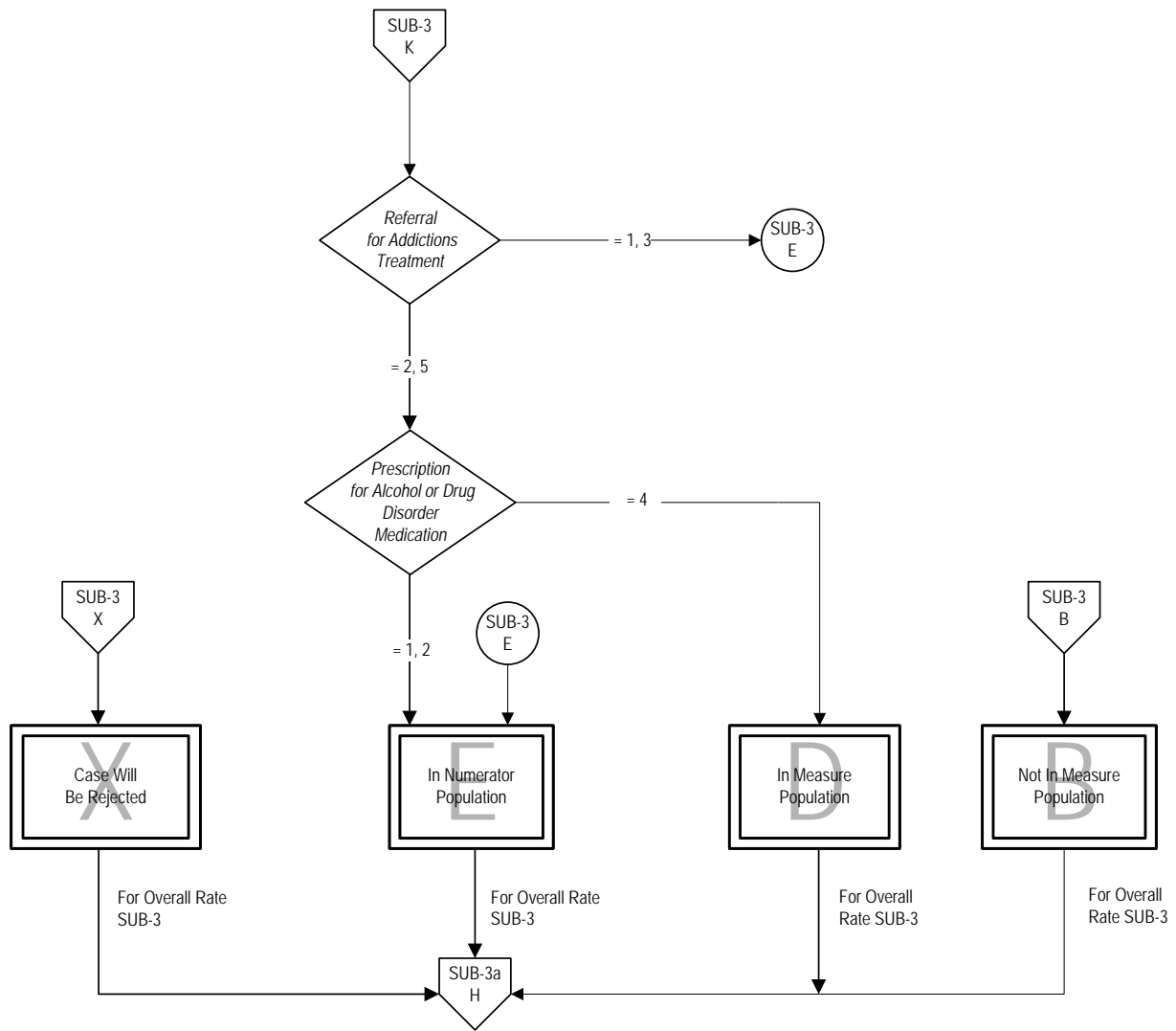
SUB-3: Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge

Numerator: The number of patients who received or refused at discharge a prescription for medication for treatment of alcohol or drug use disorder OR received or refused a referral for addictions treatment.

Denominator: The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder.



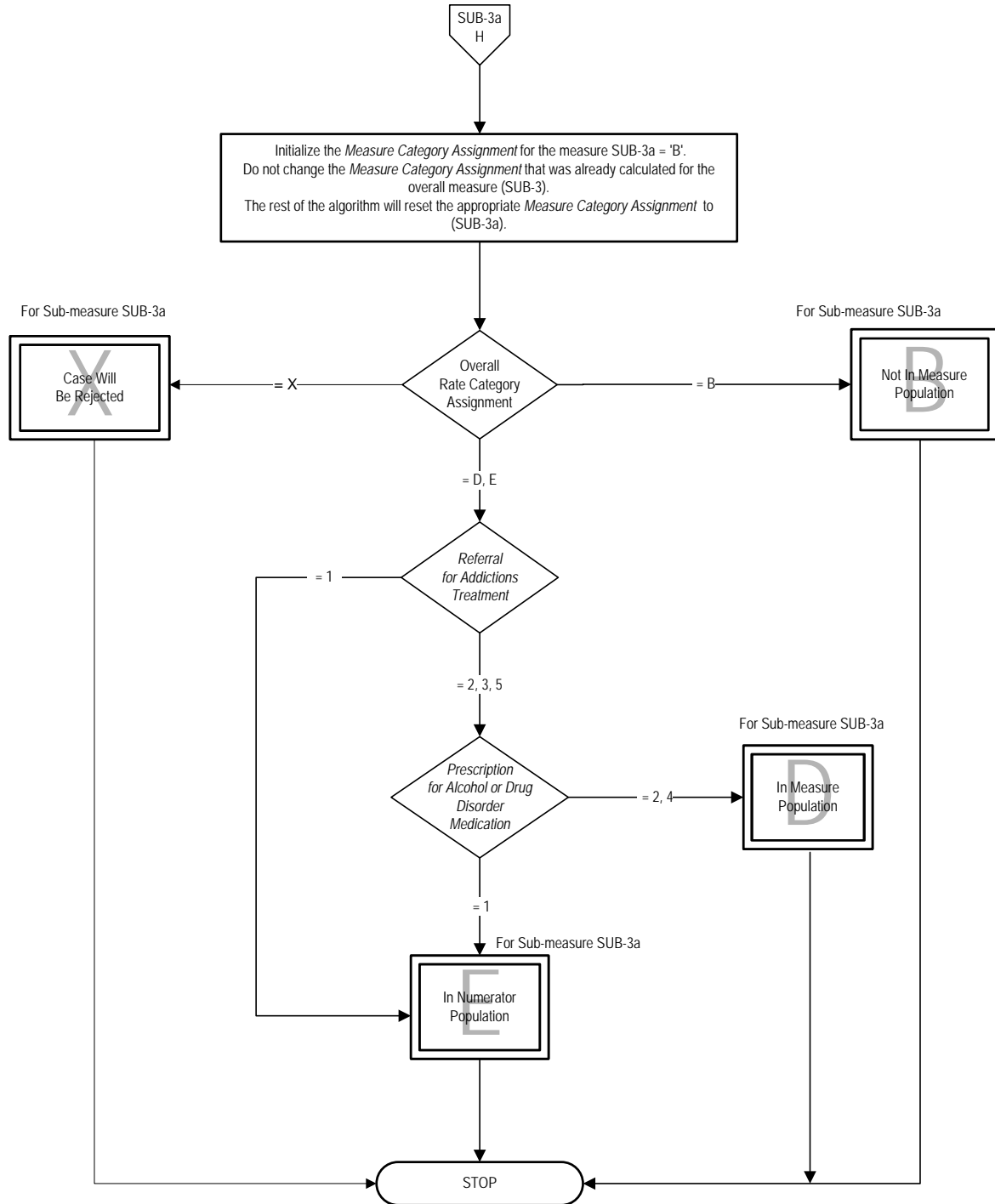




SUB-3a: Alcohol and Other Drug Use Disorder Treatment at Discharge

Numerator: The number of patients who received a prescription at discharge for medication for treatment of alcohol or drug use disorder OR a referral for addictions treatment.

Denominator: The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder.



Algorithm Narrative

SUB-3: Alcohol and Other Drug Use Disorder Treatment Provided or Offered at Discharge

Numerator: The number of patients who received or refused at discharge a prescription for medication for treatment of alcohol or drug use disorder OR received or refused a referral for addictions treatment.

Denominator: The number of hospitalized inpatients 18 years of age and older identified with an alcohol or drug use disorder.

Variable key: Patient Age
Length of Stay

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. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of Admission Date and Birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the front end edits into the measure specific algorithms.
3. Check Patient Age
 - a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Patient Age is equal to or greater than 18 years, continue processing and proceed to calculate of Length of Stay.
4. Calculate Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
5. Check Length of Stay
 - a. If Length of Stay is equal to or less than 1 day, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Length of Stay is greater than 1 day, continue processing and proceed to check Comfort Measures Only.
6. Check Comfort Measures Only
 - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-3 and will be rejected. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Comfort Measures Only is equal to 1, 2 or 3, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be

- in the Measure Population. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
- c. If Comfort Measures Only is equal to 4, continue processing and proceed to check Alcohol Use Status.
7. Check Alcohol Use Status
 - a. If Alcohol Use Status is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-3 and will be rejected. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Alcohol Use Status equals 7, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - c. If Alcohol Use Status equals 1,2,3,4,5, or 6, continue processing and proceed to check Discharge Disposition.
 8. Check Discharge Disposition
 - a. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-3 and will be rejected. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Discharge Disposition equals 2, 3, 4, 5, 6 or 7, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 16 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - c. If Discharge Disposition equals 1 or 8, continue processing and proceed to check ICD-10-CM Principal or Other Diagnosis Codes.
 9. Check ICD-10-CM Principal or Other Diagnosis Codes
 - a. If none of ICD-10-CM Principal or Other Diagnosis Codes is on Table 13.1 or 13.2, continue processing and proceed to check ICD-10-PCS Principal or Other Procedure Codes.
 - b. If any of ICD-10-CM Principal or Other Diagnosis Codes is on Table 13.1 or 13.2, continue processing and proceed to Step 11 to check Referral for Addictions Treatment.
 10. Check ICD-10-PCS Principal or Other Procedure Codes
 - a. If all missing or none of ICD-10-PCS Principal or Other Procedure Codes is on Table 13.3, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If any of ICD-10-PCS Principal or Other Procedure Codes is on Table 13.3, continue processing and proceed to check Referral for Addictions Treatment.

11. Check Referral for Addictions Treatment
 - a. If Referral for Addictions Treatment is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-3 and will be rejected. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Referral for Addictions Treatment equals 4, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - c. If Referral for Addictions Treatment equals 1, 2, 3 or 5, continue processing and proceed to check Prescription for Alcohol or Drug Disorder Medication.
12. Check Prescription for Alcohol or Drug Disorder Medication
 - a. If Prescription for Alcohol or Drug Disorder Medication is missing, the case will proceed to a Measure Category Assignment of X for overall rate SUB-3 and will be rejected. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Prescription for Alcohol or Drug Disorder Medication equals 3, the case will proceed to a Measure Category Assignment of B for overall rate SUB-3 and will not be in the Measure Population. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - c. If Prescription for Alcohol or Drug Disorder Medication equals 1, 2 or 4, continue processing and proceed to recheck Referral for Addictions Treatment.
13. Recheck Referral for Addictions Treatment
 - a. If Referral for Addictions Treatment equals 1 or 3, the case will proceed to a Measure Category Assignment of E for overall rate SUB-3 and will be in the Numerator Population. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Referral for Addictions Treatment equals 2 or 5, continue processing and proceed to recheck Prescription for Alcohol or Drug Disorder Medication.
14. Recheck Prescription for Alcohol or Drug Disorder Medication
 - a. If Prescription for Alcohol or Drug Disorder Medication equals 4, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for the overall measure rate SUB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.
 - b. If Prescription for Alcohol or Drug Disorder Medication equals 1 or 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate SUB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure SUB-3a.

Algorithm Narrative
SUB-3a: Alcohol and Other Drug Use Disorder Treatment at Discharge

Numerator: The number of patients who received a prescription at discharge for medication for treatment of alcohol or drug use disorder OR a referral for addictions treatment.

Denominator: The number of hospitalized inpatients 18 years of age and older identified with alcohol or drug disorder.

15. Initialize the Measure Category Assignment for the sub-measure SUB-3a to Measure Category Assignment B. Do not change the Measure Category Assignment that was already calculated for the overall measure SUB-3. The rest of the algorithm will reset the appropriate Measure Category Assignment to SUB-3a.
16. Check Overall Rate Category Assignment
 - a. If Overall Rate Category Assignment equals X, the case will proceed to a Measure Category Assignment of X for sub-measure SUB-3a and will not be in the Measure Population. Stop processing.
 - b. If Overall Rate Category Assignment equals B, the case will proceed to a Measure Category Assignment of B for sub-measure SUB-3a and will not be in the Measure Population. Stop processing
 - c. If Overall Rate Category Assignment equals D or E, continue processing and proceed to recheck Referral for Addictions Treatment.
17. Recheck Referral for Addictions Treatment
 - a. If Referral for Addictions Treatment equals 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure SUB-3a. Stop processing.
 - b. If Referral for Addictions Treatment equals 2, 3 or 5, continue processing and proceed to recheck Prescription for Alcohol or Drug Disorder Medication.
18. Recheck Prescription for Alcohol or Drug Disorder Medication
 - a. If Prescription for Alcohol or Drug Disorder Medication equals 2 or 4, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population for sub-measure SUB-3a. Stop processing.
 - b. If Prescription for Alcohol or Drug Disorder Medication equals 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure SUB-3a. Stop processing.

TOBACCO TREATMENT (TOB) NATIONAL HOSPITAL INPATIENT QUALITY MEASURES

**Collected for:
The Joint Commission Only**

TOB Measure Set Table

| Set Measure ID # | Measure Short Name |
|-------------------------|--|
| TOB-2 | Tobacco Use Treatment Provided or Offered |
| TOB-2a | Tobacco Use Treatment |
| TOB-3 | Tobacco Use Treatment Provided or Offered at Discharge |
| TOB-3a | Tobacco Use Treatment at Discharge |

TOB DATA ELEMENT LIST

General Data Elements Table

| Name | Collected For: |
|--|--|
| <i>Admission Date</i> | All Records |
| <i>Birthdate</i> | All Records |
| <i>Discharge Date</i> | All Records |
| <i>Hispanic Ethnicity</i> | All Records |
| <i>ICD-10-CM Other Diagnosis Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Codes</i> | All Records |
| <i>ICD-10-PCS Other Procedure Dates</i> | All Records |
| <i>ICD-10-CM Principal Diagnosis Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Code</i> | All Records |
| <i>ICD-10-PCS Principal Procedure Date</i> | All Records |
| <i>Payment Source</i> | All Records |
| <i>Race</i> | All Records |
| <i>Sample</i> | Used in transmission of the Joint Commission's aggregate data file and the Hospital Clinical Data file |
| <i>Sex</i> | All Records |

Algorithm Output Data Element Table

| Name | Collected For: |
|------------------------------------|---|
| <i>Measure Category Assignment</i> | Used in the calculation of the Joint Commission's aggregate data and in the transmission of the Hospital Clinical Data file |

TOB DATA ELEMENT LIST

TOB Data Elements Table

| Name | Collected For: |
|--|----------------|
| <i>Comfort Measures Only</i> | TOB-2, TOB-3 |
| <i>Discharge Disposition</i> | TOB-3 |
| <i>Prescription for Tobacco Cessation Medication</i> | TOB-3 |
| <i>Reason for No Tobacco Cessation Medication at Discharge</i> | TOB-3 |
| <i>Reason for No Tobacco Cessation Medication During the Hospital Stay</i> | TOB-2 |
| <i>Referral for Outpatient Tobacco Cessation Counseling</i> | TOB-3 |
| <i>Tobacco Use Status</i> | TOB-2, TOB-3 |
| <i>Tobacco Use Treatment FDA-Approved Cessation Medication</i> | TOB-2 |
| <i>Tobacco Use Treatment Practical Counseling</i> | TOB-2 |

Tobacco Treatment (TOB) Initial Patient Population

Please refer to the Global Initial Patient Population document and Global List for the TOB Initial Patient Population Processing definition and Flow.

Tobacco Treatment (TOB) Sample Size Requirements

Please refer to the Global Initial Patient Population document and Global List for the sampling requirements for the Tobacco Treatment (TOB) Measures.

Measure Information Form
Collected For: The Joint Commission Only

Measure Set: Tobacco Treatment (TOB)

Set Measure ID #: TOB-2

Performance Measure Name:

TOB-2 Tobacco Use Treatment Provided or Offered

TOB-2a Tobacco Use Treatment

Description:

TOB-2 Patients identified as tobacco product users within the past 30 days who receive or refuse practical counseling to quit AND receive or refuse FDA-approved cessation medications during the hospital stay.

TOB-2a Patients who received counseling AND medication as well as those who received counseling and had reason for not receiving the medication during the hospital stay.

The measure is reported as an overall rate which includes all patients to whom tobacco use treatment was provided, or offered and refused, and a second rate, a subset of the first, which includes only those patients who received tobacco use treatment. The Provided or Offered rate (TOB-2), describes patients identified as tobacco product users within the past 30 days who receive or refuse practical counseling to quit AND receive or refuse FDA-approved cessation medications during the hospital stay. The Tobacco Use Treatment (TOB-2a) rate describes only those who received counseling AND medication as well as those who received counseling and had reason for not receiving the medication. Those who refused are not included.

Rationale: Tobacco use is the single greatest cause of disease in the United States today and accounts for more than 480,000 deaths each year (CDC MMWR 2014). Smoking is a known cause of multiple cancers, heart disease, stroke, complications of pregnancy, chronic obstructive pulmonary disease, other respiratory problems, poorer wound healing, and many other diseases (DHHS 2014). Tobacco use creates a heavy cost to society as well as to individuals. Smoking-attributable health care expenditures are estimated to be at least \$130 billion per year in direct medical expenses for adults, and over \$150 billion in lost productivity (DHHS 2014).

There is strong and consistent evidence that tobacco dependence interventions, if delivered in a timely and effective manner, significantly reduce the user's risk of suffering from tobacco-related disease and improve outcomes for those already suffering from a tobacco-related disease (DHHS 2000; Baumeister 2007; Lightwood 2003 and 1997; Rigotti 2012). Effective, evidence-based tobacco dependence interventions have been clearly identified and include brief clinician advice, individual, group, or telephone counseling, and use of FDA-approved medications. These treatments are clinically effective and extremely cost-effective relative to other

commonly used disease prevention interventions and medical treatments. Hospitalization (both because hospitals are a tobacco-free environment and because patients may be more motivated to quit as a result of their illness) offers an ideal opportunity to provide cessation assistance that may promote the patient's medical recovery. Patients who receive even brief advice and intervention from their care providers are more likely to quit than those who receive no intervention (DHHS, 2008).

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement:

TOB-02: The number of patients who received or refused practical counseling to quit AND received or refused FDA-approved cessation medications during the hospital stay.

TOB-2a: The number of patients who received practical counseling to quit AND received FDA-approved cessation medications during the hospital stay.

TOB-2 Numerator Statement Table

| | TOB-2 | TOB-2a |
|---|--|--|
| Included Populations | <ul style="list-style-type: none"> • Patients who refuse counseling • Patients who refuse FDA-Approved cessation medication | Not Applicable |
| Excluded Populations (for FDA approved medications only) | For Medications Only <ul style="list-style-type: none"> • Smokeless tobacco users • Pregnant smokers • Light smokers • Patients with reasons for not administering FDA-approved cessation medication. | For Medications Only <ul style="list-style-type: none"> • Smokeless tobacco users • Pregnant smokers • Light smokers • Patients with reasons for not administering FDA-approved cessation medications. |
| Data Elements | <ul style="list-style-type: none"> • <i>Reason for No Tobacco Cessation Medication During the Hospital Stay</i> • <i>Tobacco Use Status</i> • <i>Tobacco Use Treatment FDA-Approved Cessation Medication</i> • <i>Tobacco Use Treatment Practical Counseling</i> | <ul style="list-style-type: none"> • <i>Reason for No Tobacco Cessation Medication During the Hospital Stay</i> • <i>Tobacco Use Status</i> • <i>Tobacco Use Treatment FDA-Approved Cessation Medication</i> • <i>Tobacco Use Treatment Practical Counseling</i> |

Denominator Statement: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

Included Populations: Not applicable

Excluded Populations:

- Patients less than 18 years of age
- Patient who are cognitively impaired
- Patients who are not current tobacco users
- Patients who refused or were not screened for tobacco use during the hospital stay
- Patients who have a duration of stay less than or equal to one day or greater than 120 days
- Patients with *Comfort Measures Only* documented

Data Elements:

- *Admission Date*
- *Birthdate*
- *Comfort Measures Only*
- *Discharge Date*
- *Tobacco Use Status*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Data accuracy is enhanced when all definitions are used without modification. The data dictionary should be referenced for definitions and abstraction notes when questions arise during data collection.

Variation may exist in the assignment of ICD-10 codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to identify those patients that refused either counseling or medications or both so as to have a better understand of which treatment type is refused so that efforts can be directed toward improving care.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

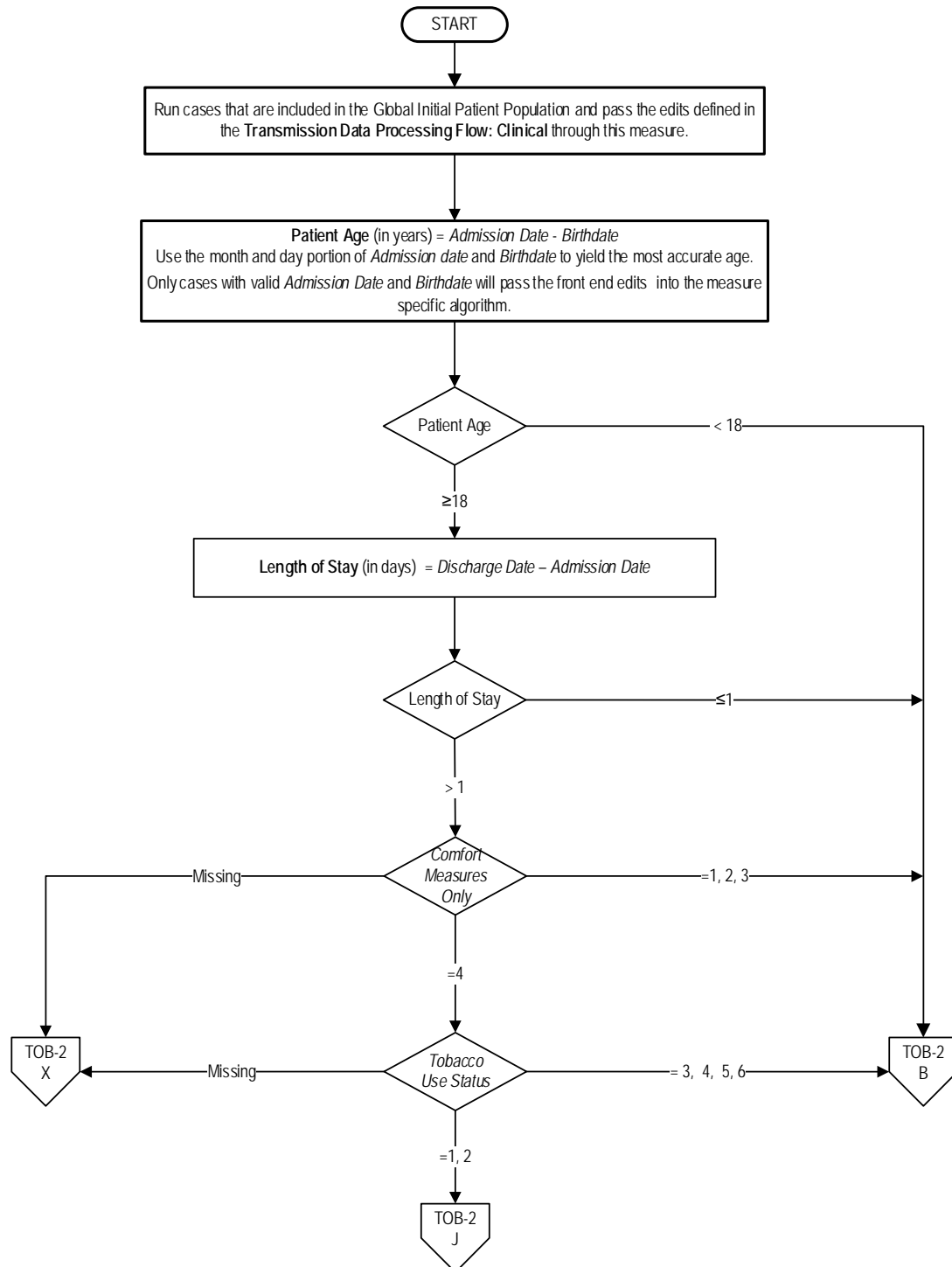
Selected References:

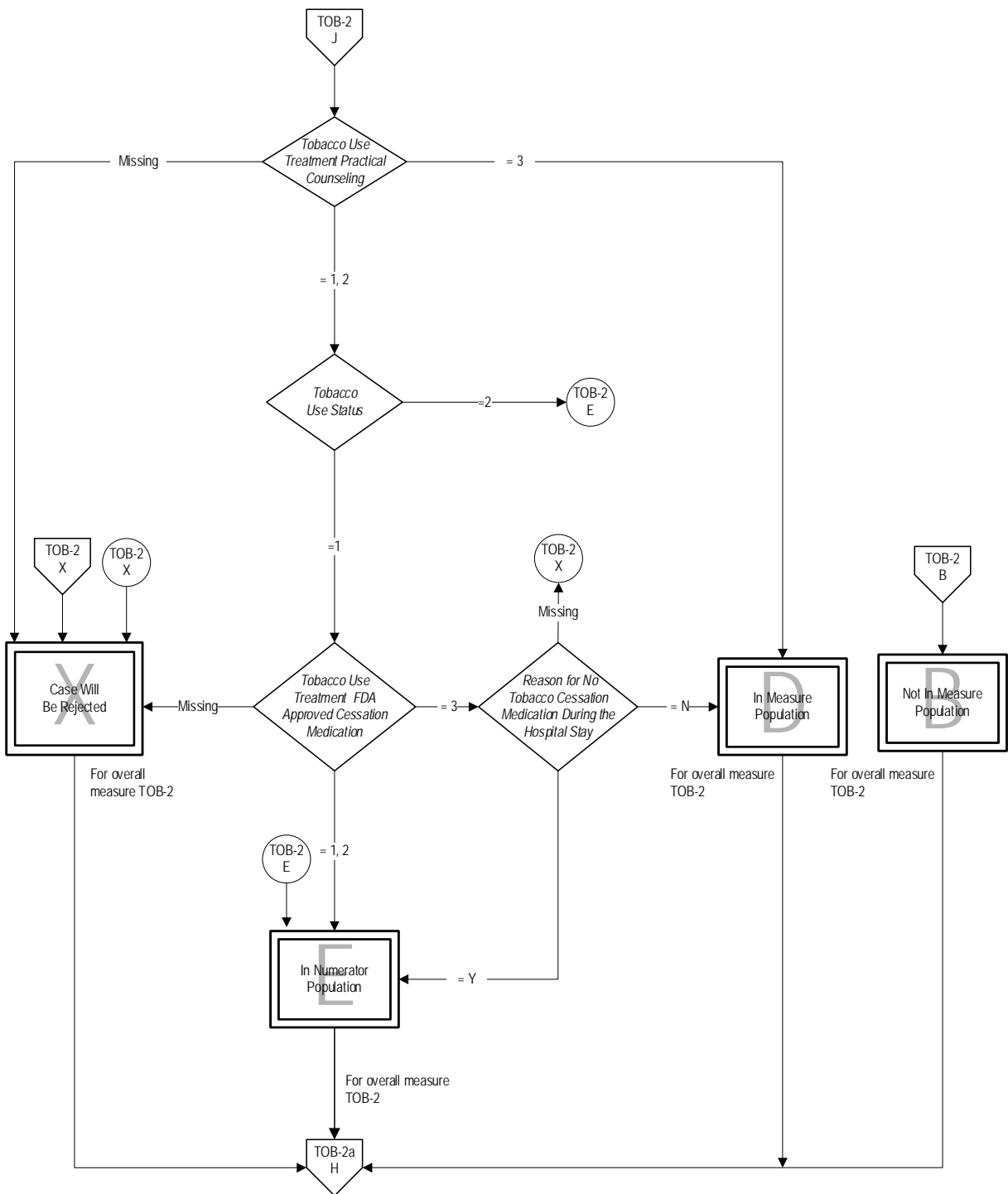
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- U.S. Department of Health and Human Services. (2008). *Tobacco use and dependence guideline panel. Treating tobacco use and dependence: 2008 update*. Rockville, MD: U.S. Department of Health and Human Services. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK63952/>.
- U.S. Department of Health and Human Services. (2000). *Reducing tobacco use: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

TOB-2: Tobacco Use Treatment Provided or Offered

Numerator: The number of patients who received or refused practical counseling to quit AND received or refused FDA-approved cessation medications during the hospital stay.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

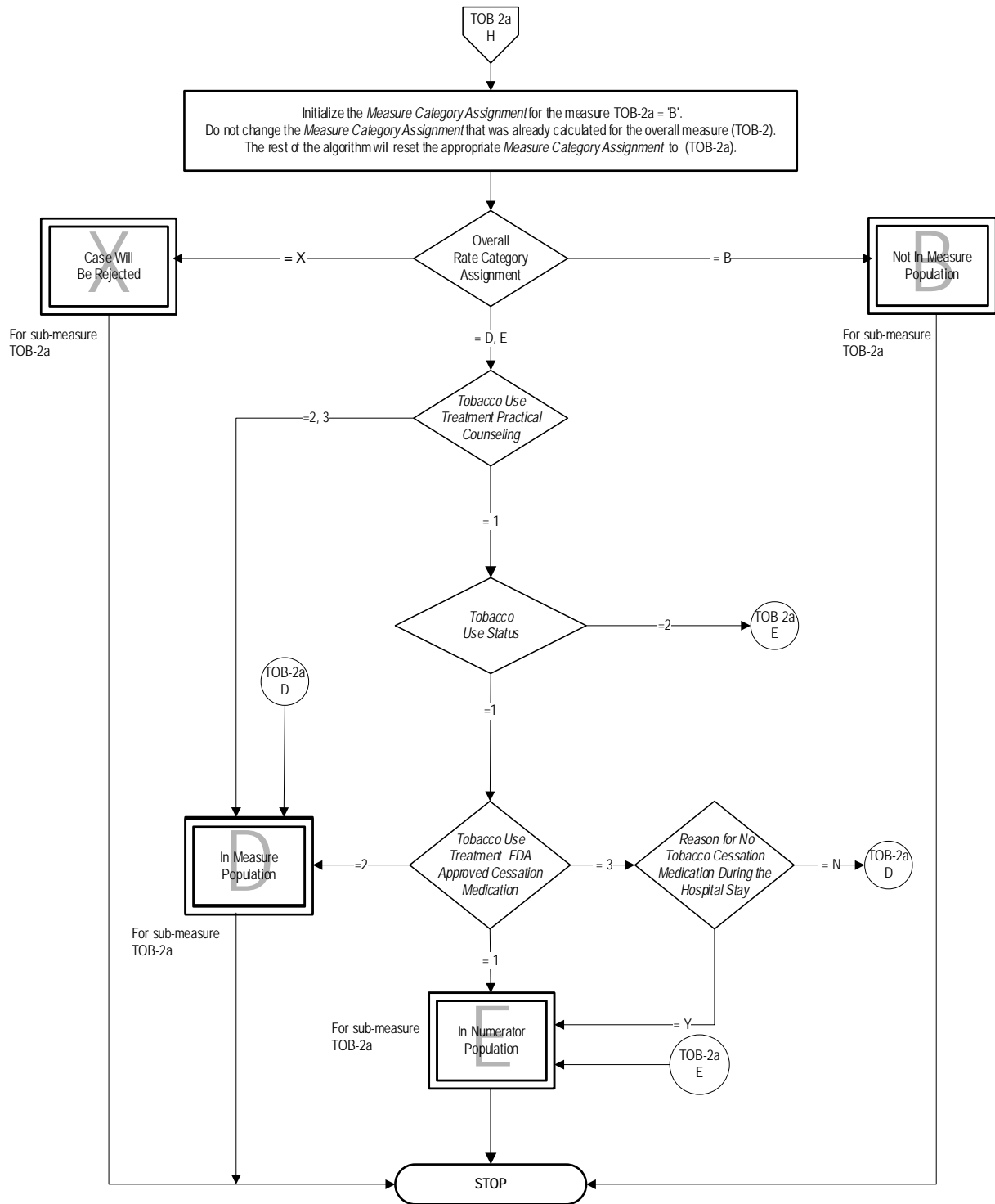




TOB-2a: Tobacco Use Treatment Provided or Offered

Numerator: The number of patients who received practical counseling to quit AND received FDA-approved cessation medications during the hospital stay.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.



Algorithm Narrative
TOB-2: Tobacco Use Treatment Provided or Offered

Numerator: The number of patients who received or refused practical counseling to quit AND received or refused FDA-approved cessation medications during the hospital stay.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

Variable key: Patient Age
Length of Stay

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. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of Admission Date and Birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the front end edits into the measure specific algorithms.
3. Check Patient Age
 - a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Patient Age is equal to or greater than 18 years, continue processing and proceed to calculate Length of Stay.
4. Calculate Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
5. Check Length of Stay
 - a. If Length of Stay is equal to or less than 1 day, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Length of Stay is greater than 1 day, continue processing and proceed to check Comfort Measures Only.
6. Check Comfort Measures Only
 - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.

- b. If Comfort Measures Only is equal to 1, 2, or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - c. If Comfort Measures Only is equal to 4, continue processing and proceed to check Tobacco Use Status.
- 7. Check Tobacco Use Status
 - a. If Tobacco Use Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Tobacco Use Status equals 3, 4, 5, or 6, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - c. If Tobacco Use Status equals 1 or 2, continue processing and proceed to check Tobacco Use Treatment Practical Counseling.
- 8. Check Tobacco Use Treatment Practical Counseling
 - a. If Tobacco Use Treatment Practical Counseling is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Tobacco Use Treatment Practical Counseling equals 3, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - c. If Tobacco Use Treatment Practical Counseling equals 1 or 2, continue processing and proceed to Recheck Tobacco Use Status.
- 9. Recheck Tobacco Use Status
 - a. If Tobacco Use Status equals 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Tobacco Use Status equals 1, continue processing and proceed to Tobacco Use Treatment FDA-Approved Cessation Medication.
- 10. Check Tobacco Use Treatment FDA-Approved Cessation Medication
 - a. If Tobacco Use Treatment FDA-Approved Cessation Medication is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.

- b. If Tobacco Use Treatment FDA-Approved Cessation Medication equals 3 continue processing and proceed to Reason for No Tobacco Cessation Medication During the Hospital Stay.
 - c. If Tobacco Use Treatment FDA-Approved Cessation Medication equals 1 or 2 the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
11. Check Reason for No Tobacco Cessation Medication During the Hospital Stay
- a. If Reason for No Tobacco Cessation Medication the During Hospital Stay is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - b. If Reason for No Tobacco Cessation Medication During the Hospital Stay equals N, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.
 - c. If Reason for No Tobacco Cessation Medication During the Hospital Stay equals Y, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-2. Continue processing and proceed to Step 12 to Initialize Measure Category Assignment for sub-measure TOB-2a.

Algorithm Narrative TOB-2a: Tobacco Use Treatment

Numerator: The number of patients who received practical counseling to quit AND received FDA-approved cessation medications during the hospital stay.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

12. Initialize Measure Category Assignment for sub-measure TOB-2a to Measure Category Assignment of B. Do not change the Measure Category Assignment that was already calculated for the overall measure TOB-2. The rest of the algorithm will reset the appropriate Measure Category Assignment to TOB-2a.
13. Check Overall Rate Category Assignment
 - a. If Overall Rate Category Assignment equals X, the case will proceed to a Measure Category Assignment of X and will not be in the Measure Population for sub-measure TOB-2a. Stop processing.
 - b. If the Overall Rate Category Assignment equals B, the case will proceed to Measure Category Assignment of B and will not be in the Measure Population for sub-measure TOB-2a. Stop processing.
 - c. If Overall Rate Category Assignment equals D or E, continue processing and proceed to recheck Referral for Tobacco Use Treatment Practical Counseling.
14. Recheck Tobacco Use Treatment Practical Counseling
 - a. If Tobacco Use Treatment Practical Counseling equals 2 or 3, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-2a. Stop processing.
 - b. If Tobacco Use Treatment Practical Counseling equals 1, continue processing and proceed to Recheck Tobacco Use Status.
15. Recheck Tobacco Use Status
 - a. If Tobacco Use Status equals 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-2a. Stop processing.
 - b. If Tobacco Use Status equals 1, continue processing and proceed to recheck Tobacco Use Treatment FDA-Approved Cessation Medication.
16. Recheck Tobacco Use Treatment FDA-Approved Cessation Medication
 - a. If Tobacco Use Treatment FDA-Approved Cessation Medication equals 2, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-2a. Stop processing.
 - b. If Tobacco Use Treatment FDA-Approved Cessation Medication equals 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-2a. Stop processing.

- c. If Tobacco Use Treatment FDA-Approved Cessation Medication equals 3, continue processing and proceed to recheck Reason for No Tobacco Cessation Medication During the Hospital Stay.
- 17. Recheck Reason for No Tobacco Cessation Medication During the Hospital Stay
 - a. If Reason for No Tobacco Cessation Medication During the Hospital Stay equals N, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-2a. Stop processing.
 - b. If Reason for No Tobacco Cessation Medication During the Hospital Stay equals Y, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-2a. Stop processing.

**Measure Information Form
Collected For: The Joint Commission Only**

Measure Set: Tobacco Treatment (TOB)

Set Measure ID #: TOB-3

Performance Measure Name:

TOB-3 Tobacco Use Treatment Provided or Offered at Discharge

TOB-3a Tobacco Use Treatment at Discharge

Description:

TOB-3 Patients identified as tobacco product users within the past 30 days who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication upon discharge.

TOB-3a Patients who were referred to evidence-based outpatient counseling AND received a prescription for FDA-approved cessation medication upon discharge as well as those who were referred to outpatient counseling and had reason for not receiving a prescription for medication.

The measure is reported as an overall rate which includes all patients to whom tobacco use treatment was provided, or offered and refused, at the time of hospital discharge, and a second rate, a subset of the first, which includes only those patients who received tobacco use treatment at discharge. The Provided or Offered rate (TOB-3) describes patients identified as tobacco product users within the past 30 days who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication upon discharge. The Tobacco Use Treatment at Discharge (TOB-3a) rate describes only those who were referred to evidence-based outpatient counseling AND received a prescription for FDA-approved cessation medication upon discharge as well as those who were referred to outpatient counseling and had reason for not receiving a prescription for medication. Those who refused are not included.

Rationale: Tobacco use is the single greatest cause of disease in the United States today and accounts for more than 480,000 deaths each year (CDC MMWR 2014). Smoking is a known cause of multiple cancers, heart disease, stroke, complications of pregnancy, chronic obstructive pulmonary disease, other respiratory problems, poorer wound healing, and many other diseases (DHHS 2014). Tobacco use creates a heavy cost to society as well as to individuals. Smoking-attributable health care expenditures are estimated to be at least \$130 billion per year in direct medical expenses for adults, and over \$150 billion in lost productivity (DHHS 2014).

There is strong and consistent evidence that tobacco dependence interventions, if delivered in a timely and effective manner, significantly reduce the user's risk of

suffering from tobacco-related disease and improve outcomes for those already suffering from a tobacco-related disease (DHHS 2000; Baumeister 2007; Lightwood 2003 and 1997; Rigotti 2012). Effective, evidence-based tobacco dependence interventions have been clearly identified and include brief clinician advice, individual, group, or telephone counseling, and use of FDA-approved medications. These treatments are clinically effective and extremely cost-effective relative to other commonly used disease prevention interventions and medical treatments. Hospitalization (both because hospitals are a tobacco-free environment and because patients may be more motivated to quit as a result of their illness) offers an ideal opportunity to provide cessation assistance that may promote the patient's medical recovery. Patients who receive even brief advice and intervention from their care providers are more likely to quit than those who receive no intervention (DHHS, 2008).

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement:

TOB-3: The number of patients who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication at discharge.

TOB-3a: The number of patients who were referred to evidence-based outpatient counseling AND received a prescription for FDA-approved cessation medication at discharge.

TOB-3 Numerator Statement Table

| | TOB-3 | TOB-3a |
|---|---|--|
| Included Populations | <ul style="list-style-type: none"> • Patients who refused a prescription for FDA-Approved tobacco cessation medication at discharge. • Patients who refused a referral to evidence-based outpatient counseling. | Not Applicable |
| Excluded Populations (for FDA approved medications only) | <ul style="list-style-type: none"> • Smokeless tobacco users • Pregnant smokers • Light smokers • Patients with reasons for not administering FDA-approved cessation medication. | <ul style="list-style-type: none"> • Smokeless tobacco users • Pregnant smokers • Light smokers • Patients with reasons for not administering FDA-approved cessation medication. |

TOB-3 Numerator Statement Table

| | TOB-3 | TOB-3a |
|----------------------|--|--|
| Data Elements | <ul style="list-style-type: none"> • <i>Prescription for Tobacco Cessation Medication</i> • <i>Reason for No Tobacco Cessation Medication at Discharge</i> • <i>Referral for Outpatient Tobacco Cessation Counseling</i> • <i>Tobacco Use Status</i> | <ul style="list-style-type: none"> • <i>Prescription for Tobacco Cessation Medication</i> • <i>Reason for No Tobacco Cessation Medication at Discharge</i> • <i>Referral for Outpatient Tobacco Cessation Counseling</i> • <i>Tobacco Use Status</i> |

Denominator Statement: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

Included Populations: Not applicable

Excluded Populations:

- Patients less than 18 years of age
- Patient who are cognitively impaired
- Patients who are not current tobacco users
- Patients who refused or were not screened for tobacco use status during the hospital stay
- Patients who have a duration of stay less than or equal to one day or greater than 120 days
- Patients who expired
- Patients who left against medical advice
- Patients discharged to another hospital
- Patients discharged to another health care facility
- Patients discharged to home for hospice care
- Patients who do not reside in the United States
- Patients with *Comfort Measures Only* documented

Data Elements:

- *Admission Date*
- *Birthdate*
- *Comfort Measures Only*
- *Discharge Date*
- *Discharge Disposition*
- *Tobacco Use Status*

Risk Adjustment: No

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-10 diagnosis and procedure codes, which require retrospective data entry.

Data Accuracy: Data accuracy is enhanced when all definitions are used without modification. The data dictionary should be referenced for definitions and abstraction notes when questions arise during data collection.

Variation may exist in the assignment of ICD-10 codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to identify those patients that refused either counseling or medications or both at discharge so as to have a better understanding of which treatment type was accepted or refused so that efforts can be directed toward improving care.

Sampling: Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

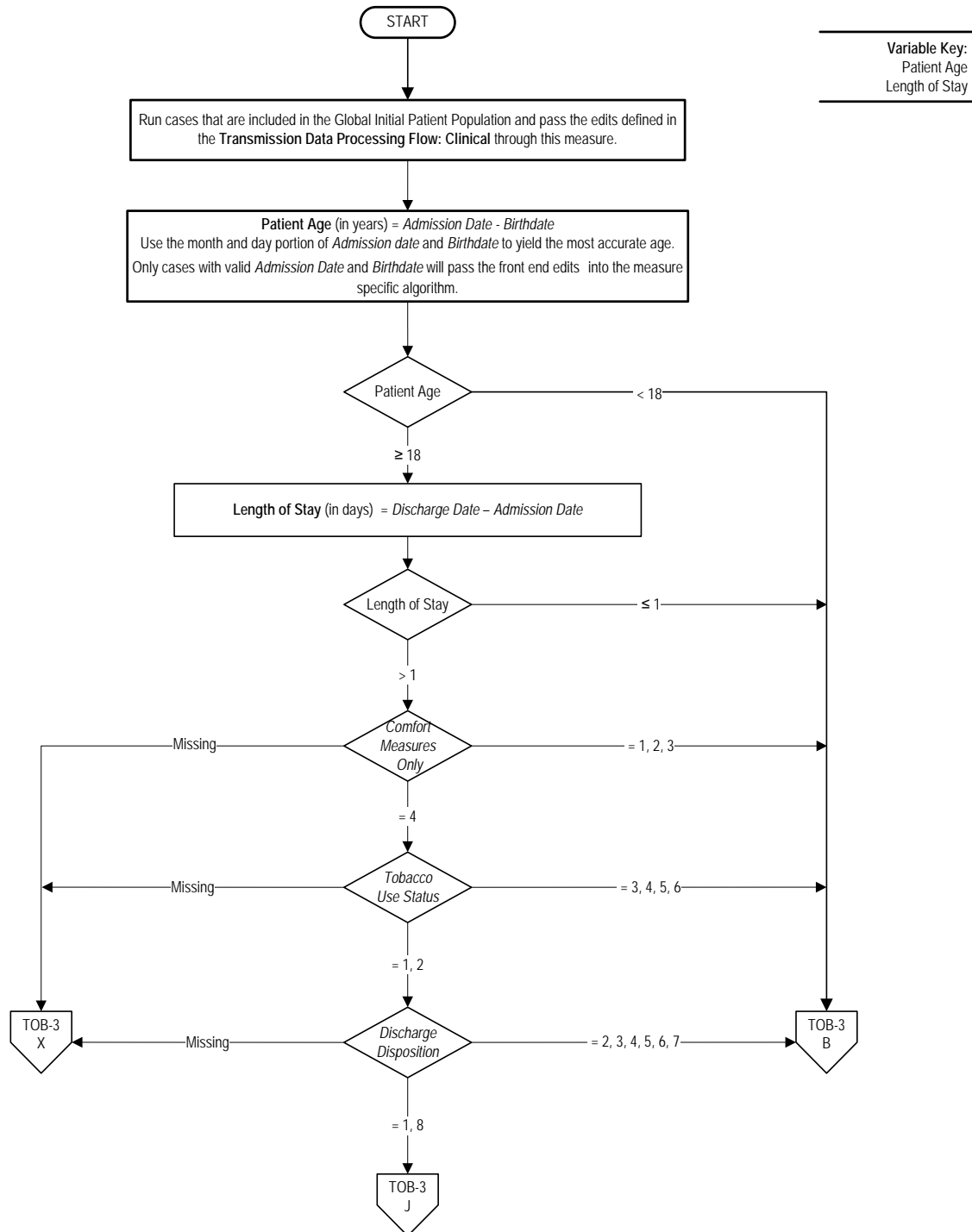
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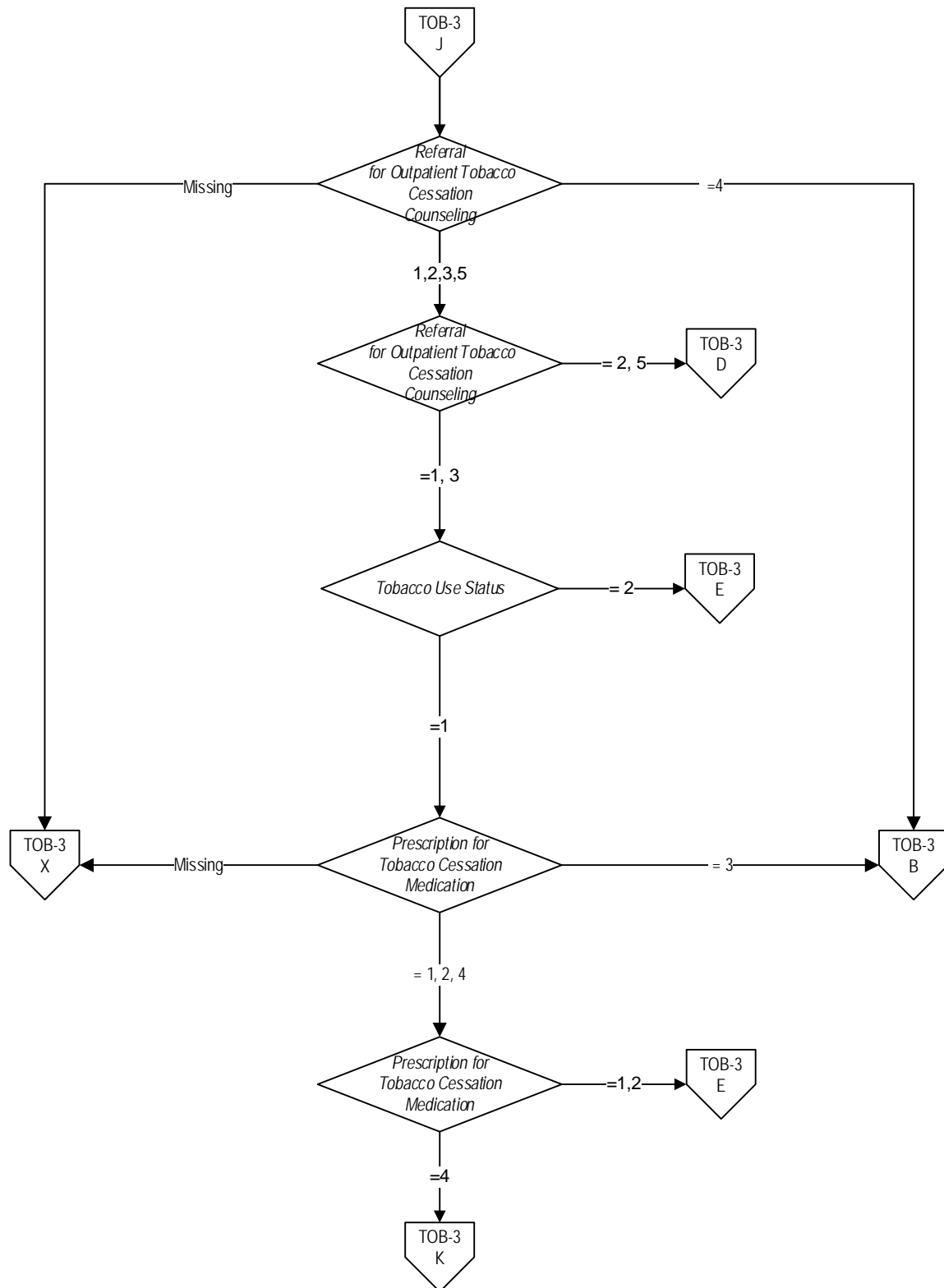
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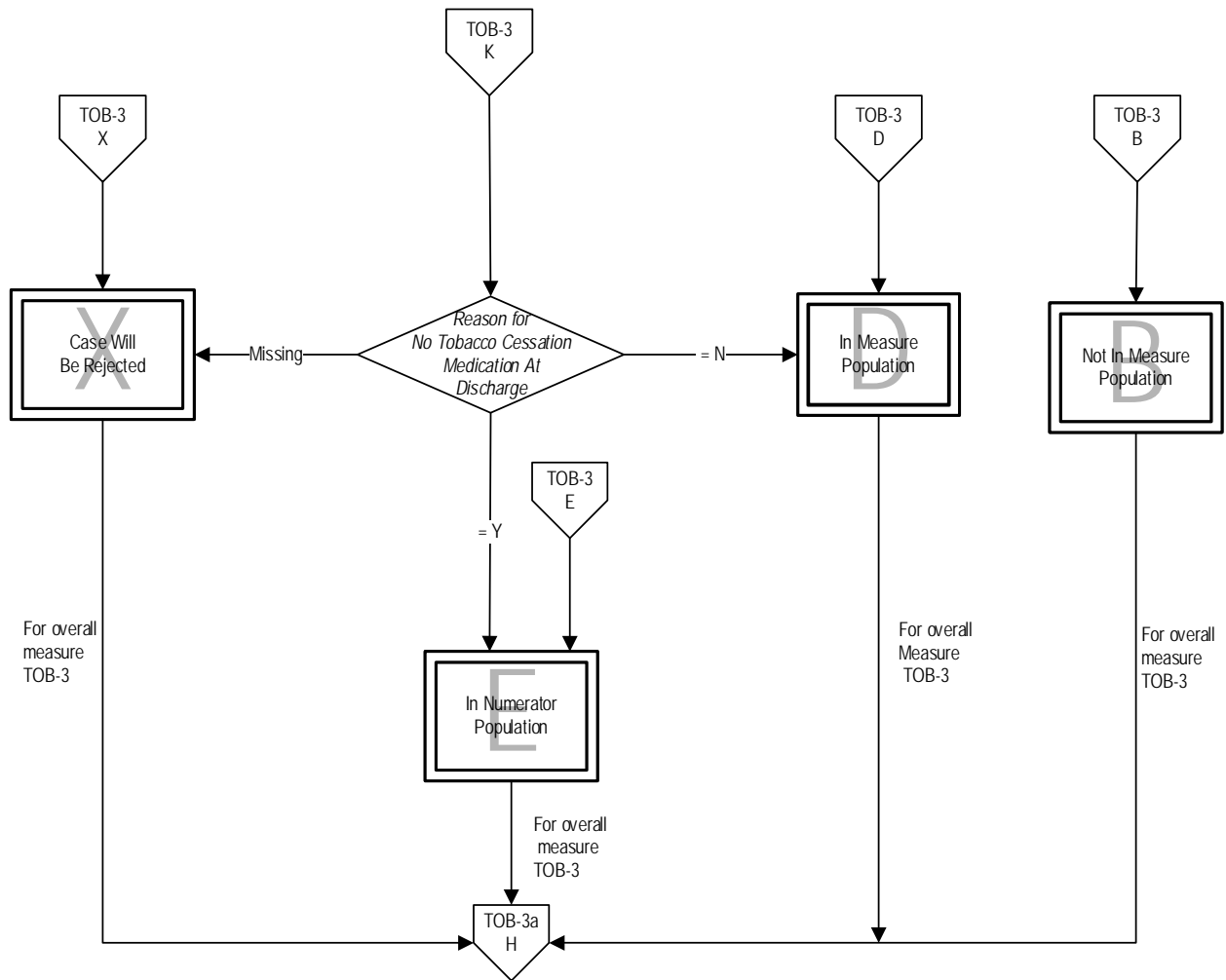
TOB-3: Tobacco Use Treatment Provided or Offered at Discharge

Numerator: The number of patients who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication at discharge.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.



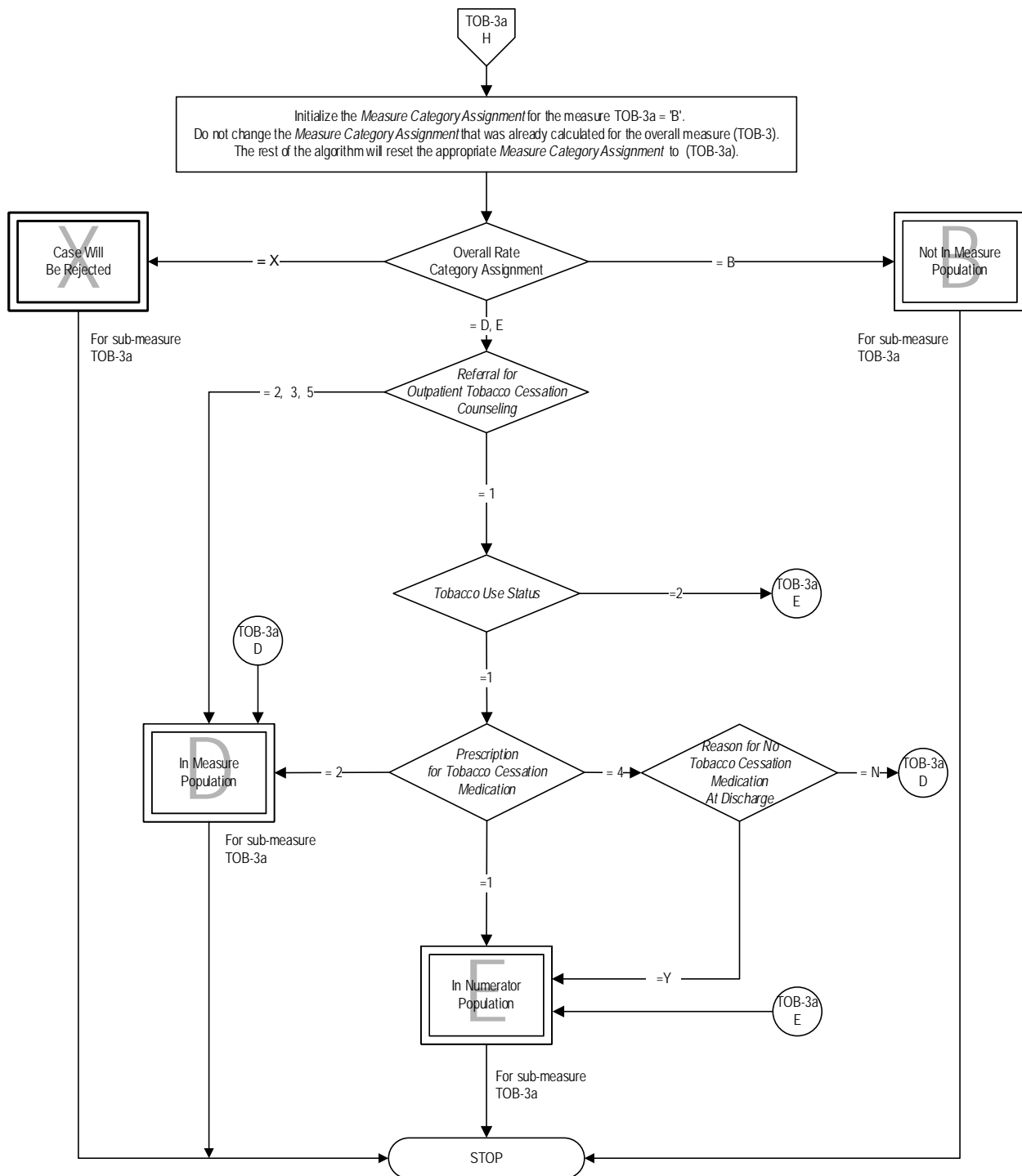




TOB-3a: Tobacco Use Treatment Provided or Offered at Discharge

Numerator: The number of patients who were referred to evidence-based outpatient counseling AND received a prescription for FDA- approved cessation medication at discharge.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.



Algorithm Narrative
TOB-3: Tobacco Use Treatment Provided or Offered at Discharge

Numerator: The number of patients who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication at discharge.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

Variable key: Patient Age
Length of Stay

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. Calculate Patient Age. Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of Admission Date and Birthdate to yield the most accurate age. Only cases with valid Admission Date and Birthdate will pass the front end edits into the measure specific algorithms.
3. Check Patient Age
 - a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Patient Age is equal to or greater than 18 years, continue processing and proceed to calculate Length of Stay.
4. Calculate Length of Stay. Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
5. Check Length of Stay
 - a. If Length of Stay is equal to or less than 1 day, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Length of Stay is greater than 1 day, continue processing and proceed to check Comfort Measures Only.
6. Check Comfort Measures Only
 - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.

- b. If Comfort Measures Only is equal to 1, 2 or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - c. If Comfort Measures Only is equal to 4, continue processing and proceed to check Tobacco Use Status.
- 7. Check Tobacco Use Status
 - a. If Tobacco Use Status is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Tobacco Use Status equals 3, 4, 5 or 6, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - c. If Tobacco Use Status equals 1 or 2, continue processing and proceed to check Discharge Disposition.
- 8. Check Discharge Disposition
 - a. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Discharge Disposition equals 2, 3, 4, 5, 6 or 7, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - c. If Discharge Disposition equals 1 or 8, continue processing and proceed to check Referral for Outpatient Tobacco Cessation Counseling.
- 9. Check Referral for Outpatient Tobacco Cessation Counseling
 - a. If Referral for Outpatient Tobacco Cessation Counseling is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Referral for Outpatient Tobacco Cessation Counseling equals 4, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.

- c. If Referral for Outpatient Tobacco Cessation Counseling equals 1, 2, 3 or 5, continue processing and recheck Referral for Outpatient Tobacco Cessation Counseling.
10. Recheck Referral for Outpatient Tobacco Cessation Counseling
- a. If Referral for Outpatient Tobacco Cessation Counseling equals 2 or 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Referral for Outpatient Tobacco Cessation Counseling equals 1 or 3, continue processing and proceed to Recheck Tobacco Use Status.
11. Recheck Tobacco Use Status
- a. If Tobacco Use Status equals 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Tobacco Use Status equals 1, continue processing and proceed to Prescription for Tobacco Cessation Medication.
12. Check Prescription for Tobacco Cessation Medication
- a. If Prescription for Tobacco Cessation Medication is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Prescription for Tobacco Cessation Medication equals 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - c. If Prescription for Tobacco Cessation Medication equals 1, 2 or 4, continue processing and proceed to recheck Prescription for Tobacco Cessation Medication.
13. Recheck Prescription for Tobacco Cessation Medication
- a. If Prescription for Tobacco Cessation Medication equals 1 or 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Prescription for Tobacco Cessation Medication equals 4, continue processing and proceed to check Reason for No Tobacco Cessation Medication at Discharge.

14. Check Reason for No Tobacco Cessation Medication at Discharge
 - a. If Reason for No Tobacco Cessation Medication at Discharge is missing, the case will proceed to a Measure Category Assignment of X and will be rejected for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - b. If Reason for No Tobacco Cessation Medication at Discharge equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.
 - c. If Reason for No Tobacco Cessation Medication at Discharge equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for the overall measure rate TOB-3. Continue processing and proceed to Step 15 to Initialize Measure Category Assignment for sub-measure TOB-3a.

Algorithm Narrative
TOB-3a: Tobacco Use Treatment at Discharge

Numerator: The number of patients who were referred to evidence-based outpatient counseling AND received a prescription for FDA-approved cessation medication at discharge.

Denominator: The number of hospitalized inpatients 18 years of age and older identified as current tobacco users.

15. Initialize Measure Category Assignment for sub-measure TOB-3a to Measure Category Assignment of B. Do not change the Measure Category Assignment that was already calculated for the overall measure TOB-3. The rest of the algorithm will reset the appropriate Measure Category Assignment to TOB-3a.
16. Check Overall Rate Category Assignment
 - a. If the Overall Rate Category Assignment equals X, the case will proceed to a Measure Category Assignment of X and will not be in the Measure Population for the sub-measure TOB-3a. Stop processing.
 - b. If the Overall Rate Category Assignment equals B, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population for the sub-measure TOB-3a. Stop processing.
 - c. If Overall Rate Category Assignment equals D or E, continue processing and proceed to recheck Referral for Outpatient Tobacco Cessation Counseling.
17. Recheck Referral for Outpatient Tobacco Cessation Counseling
 - a. If Referral for Outpatient Tobacco Cessation Counseling equals 2, 3 or 5 the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-3a. Stop processing.
 - b. If Referral for Outpatient Tobacco Cessation Counseling equals 1, continue processing and proceed to Recheck Tobacco Use Status.
18. Recheck Tobacco Use Status
 - a. If Tobacco Use Status equals 2, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-3a. Stop processing.
 - b. If Tobacco Use Status equals 1, continue processing and proceed to recheck Prescription for Tobacco Cessation Medication.
19. Recheck Prescription for Tobacco Cessation Medication
 - a. If Prescription for Tobacco Cessation Medication equals 2, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-3a. Stop processing.
 - b. If Prescription for Tobacco Cessation Medication equals 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-3a. Stop processing.

- c. If Prescription for Tobacco Cessation Medication equals 4, continue processing and proceed to recheck Reason for No Tobacco Cessation Medication at Discharge.
20. Recheck Reason for No Tobacco Cessation Medication at Discharge
- a. If Reason for No Tobacco Cessation Medication at Discharge equals No, the case will proceed to Measure Category Assignment of D and will be in the Measure Population for sub-measure TOB-3a. Stop processing.
 - b. If Reason for No Tobacco Cessation Medication at Discharge equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population for sub-measure TOB-3a. Stop processing.

Missing and Invalid Data

Introduction

Missing data refers to data elements, required for calculating a national hospital quality measure, that have no values present for one or more episodes of care (EOC) records. Invalid data refers to data element values, required for calculating a national hospital quality measure, that fall outside of the range of allowable values defined by The Joint Commission and Centers for Medicare & Medicaid Services (CMS) for that data element.

Reducing missing and invalid data minimizes the bias to a measure rate, because episodes of care with missing or invalid data cannot be included in the calculation of the observed measure rate. A measure's observed rate may not accurately reflect the patient population, if the excluded EOC records differ significantly from the EOCs with no missing data that were included in the measure calculation.

Data Collection and the Unable to be Determined (UTD) Allowable Value

Abstractors must 'touch' and provide an answer to every data element that is applicable per the combined skip logic of all of the measures in a topic. While there is an expectation that all data elements are collected, it is recognized that in certain situations information may not be available (dates, times, codes, etc.). If, after due diligence, the abstractor determines that a value is not documented or is not able to determine the answer value, the abstractor must select "Unable to Determine (UTD)" as the answer. The "UTD" allowable value is used as follows:

- *Admission Date, Birthdate, Discharge Date, ICD-10-CM Principal and Other Diagnosis Codes, and ICD-10-PCS Principal and Other Procedure Codes* do not have an "UTD" allowable value for transmission to CMS and The Joint Commission. EOC records containing "UTD" for any of these data elements are rejected when submitted to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse.
- Date, time, and numeric data elements, other than *Admission Date, Birthdate, and Discharge Date*, have an "UTD" allowable value option.
 - Rate-based algorithms evaluate EOC records to a *Measure Category Assignment* equals "D" (failed) when a date, time, or numeric data element containing an allowable value of "UTD" is evaluated.
 - Continuous variable algorithms evaluate EOC records to a *Measure Category Assignment* equals "Y" (UTD value exists) when a date, time, or numeric data element containing an allowable value of "UTD" is evaluated.
 - The method by which data collection software collects "UTD" information is determined by each software vendor; except the **software cannot automatically default an "UTD" answer**. The decision to enter an "UTD" for each data element is up to the abstractor, not the software.
 - There are specific requirements pertaining to the transmission of this value. Refer to the Transmission section in this manual for more information.

- Yes/No data elements: The allowable value “No” incorporates “UTD” into the definition. Refer to the measure algorithms in which each Yes/No data element is used to determine how the EOC record is treated.
- Data elements containing two or more categorical values: The “UTD” value is either classified as a separate allowable value (e.g., *Blood Culture Collection Date*) or included in the same category as “Not documented or UTD” (e.g., *Discharge Disposition*). Refer to the measure algorithms in which each categorical data element is used to determine how the EOC record is treated.

Missing and Invalid Episode of Care (EOC) Data

The CMS Clinical Warehouse and the Joint Commission’s Data Warehouse evaluate patient data using the missing, invalid and data integrity edits. Refer to the Feedback Messages documents located on QualityNet for CMS, and on the Upload/Download page in the HCD section on PET for Joint Commission, for a complete listing of all critical and informational edits. Differences in the acceptance and rejection of patient data may occur due to differences in hospitals measure selections with the two organizations and how CMS only and Joint Commission only data elements evaluate. Refer to the Alphabetical Data Element List in the Data Dictionary for information concerning which data elements are CMS or Joint Commission only. **Rejected data must be corrected and resubmitted before the transmission deadline in order for it to be accepted by either warehouse.**

- The majority of general data elements that are missing data* cause the EOC record to be rejected. These data elements include *Admission Date, Birthdate, Discharge Date, ICD-10-CM Principal Diagnosis Codes*. Refer to the Introduction to the Data Dictionary in this manual for the complete list of general data elements.
 - Not all patients have an *ICD-10-CM Other Diagnosis Code* or an *ICD-10-PCS Principal and Other Procedure Codes*. Records will be accepted missing data* for these general data elements.
- Measure-specific data elements that are missing data* cause the EOC record to be rejected if any measure algorithm results in a *Measure Category Assignment* equals “X” (missing data). If no measure evaluates to a category assignment of “X”, the EOC record will be accepted.
- General and measure specific data elements that contain invalid data cause the EOC record to be rejected.
- All cases submitted to the CMS Clinical Warehouse or the Joint Commission Data Warehouse are required to be complete if they have data related to:
 - Procedure Codes

If the abstractor, after due diligence, is not able to determine an answer, a value of “UTD” may be selected for the applicable data element. This includes:

- ICD-10-PCS Principal Procedure Codes and ICD-10-PCS Other Procedure Codes require the data element ICD-10-PCS Principal Procedure Date and ICD-10-PCS Other Procedure Date to be submitted with the case. Please see the data element definitions for further details on allowable values. If the case is missing the corresponding allowable answer value, the case will be rejected from the CMS Clinical Warehouse and the Joint Commission Warehouse.

Abstraction Software Skip Logic and Missing Data

Skip logic allows hospitals and vendors to minimize abstraction burden by using vendor software edit logic to bypass abstraction of data elements not utilized in the measure algorithm. However, these bypassed elements also negatively impact data quality and the hospital's CMS chart audit validation results when elements are incorrectly abstracted and subsequent data elements are bypassed and left blank.

The use of skip logic by hospitals and ORYX® Vendors is optional and not required by CMS and The Joint Commission. Hospitals should be aware of the potential impact of skip logic on data quality, abstraction burden, and CMS chart audit validation scores. Vendors and hospitals utilizing skip logic should closely monitor the accuracy rate of abstracted data elements, particularly data elements placed higher in the algorithm flow (e.g., Comfort Measures data element).

Historically, CMS chart audit validation results have been used in previous payment years as one of many requirements in the Hospital Inpatient Quality Reporting Program. Please refer to the Federal Register and the QualityNet website for the current payment year's proposed and final requirements for acute care Inpatient Prospective Payment System (IPPS) hospitals.

Missing, Invalid, UTD Data Summary

- Missing Data: No data element value is present (blank or "null").
- Invalid Data: The data element value falls outside of the range of defined allowable values.
- UTD: The allowable value of "UTD" is present for the data element.

***Note:** A missing value occurs when the abstractor does not select an answer for a data element (leaves it blank) or the software incorrectly transmits a "null" instead of the correct value for a data element. A "UTD" allowable value is not considered missing data.

Population and Sampling Specifications

Introduction

Population

Defining the population is the first step to estimate a hospital's performance. A population is generally defined as a collection of patients sharing a common set of universally measured characteristics, such as an ICD-10 principal diagnosis or procedure code. The Initial Patient Population and diagnosis codes meet this description for the national quality measures. For the purpose of measuring national quality measures, the term "Initial Patient Population" is defined below:

An "Initial Patient Population" refers to all patients (Medicare and non-Medicare) who share a common set of specified, administratively derived data elements, with a length of stay less than or equal to 120 days (*Admission Date* minus *Discharge Date* less than or equal to 120 days). This may include ICD-10-CM diagnosis codes or other population characteristics such as age. For example, the population for the Sepsis measure includes all patients with an *ICD-10-CM Principal or Other Diagnosis Code* as defined in Appendix A, Table 4.01 and a Patient Age (*Admission Date* minus *Birthdate*) greater than or equal to 18 years.

Cases identified as being in the Initial Patient Population for the measure set, strata, or sub-population are eligible to be sampled. For the definition of the Initial Patient Population(s) for each measure set, refer to the appropriate Initial Patient Population discussion in the Measure Information section of this manual.

Sampling

Sampling is a process of selecting a representative part of a population in order to estimate the hospital's performance, without collecting data for its entire population. Using a statistically valid sample, a hospital can measure its performance in an effective and efficient manner. Sampling is a particularly useful technique for performance measures that require primary data collection from a source such as the medical record. Sampling should not be used unless the hospital has a large number of cases in the Initial Patient Population because a fairly large number of sample cases are needed to achieve a representative sample of the population. For the purpose of sampling national quality measures, the terms "sample" and "case" are defined as below:

- The "sample" is the fraction of the population that is selected for further study.
- A "case" refers to a single record (or an episode of care [EOC]) within the population. For example, during the first quarter a hospital may have 100 patients who had an other diagnosis associated to the VTE-6 measure. The hospital's Initial Patient Population would include 100 cases or 100 patient records for this measure during the first quarter.

To obtain statistically valid sample data, the sample size should be carefully determined and the sample cases should be randomly selected in such a way that the individual cases in the population have an equal chance of being selected. Only when the sample data truly represent the whole population can the sample-based performance measure data be meaningful and useful.

Each hospital is ultimately responsible that sampling techniques applied for their hospital adhere to the sampling requirements outlined in this manual. ORYX® Vendors are responsible for ensuring that the sampling techniques are applied consistently across their client hospitals.

Sampling is done by national quality inpatient measure set, except for the following measure sets. Venous Thromboembolism (VTE) is sampled by sub-populations. Sampling for the Global (GLB) measure sets, which includes Emergency Department (ED), Immunization (IMM), Substance Use (SUB), and Tobacco Treatment (TOB) is done once for all the cases that fall into the Global and not for each individual measure set. For The Joint Commission, hospitals must submit the same case for all applicable measure sets (i.e., ED, IMM, SUB and TOB) under the Global Initial Patient Population.

Example:

Joint Commission Data Warehouse: If a hospital has elected to submit ED, TOB and IMM to The Joint Commission, for every ED case, the hospital is encouraged to submit the same case also as a TOB case and an IMM case. The same holds true regardless of the combination of measure sets (ED, IMM, SUB, TOB) the hospital has elected to submit to The Joint Commission.

For CMS, only the ED measure set is required and is allowed to be submitted to the CMS Clinical Warehouse. For measures requiring medical record abstraction, sampling must be done using available databases that contain all discharges for the transmission quarter.

Note:

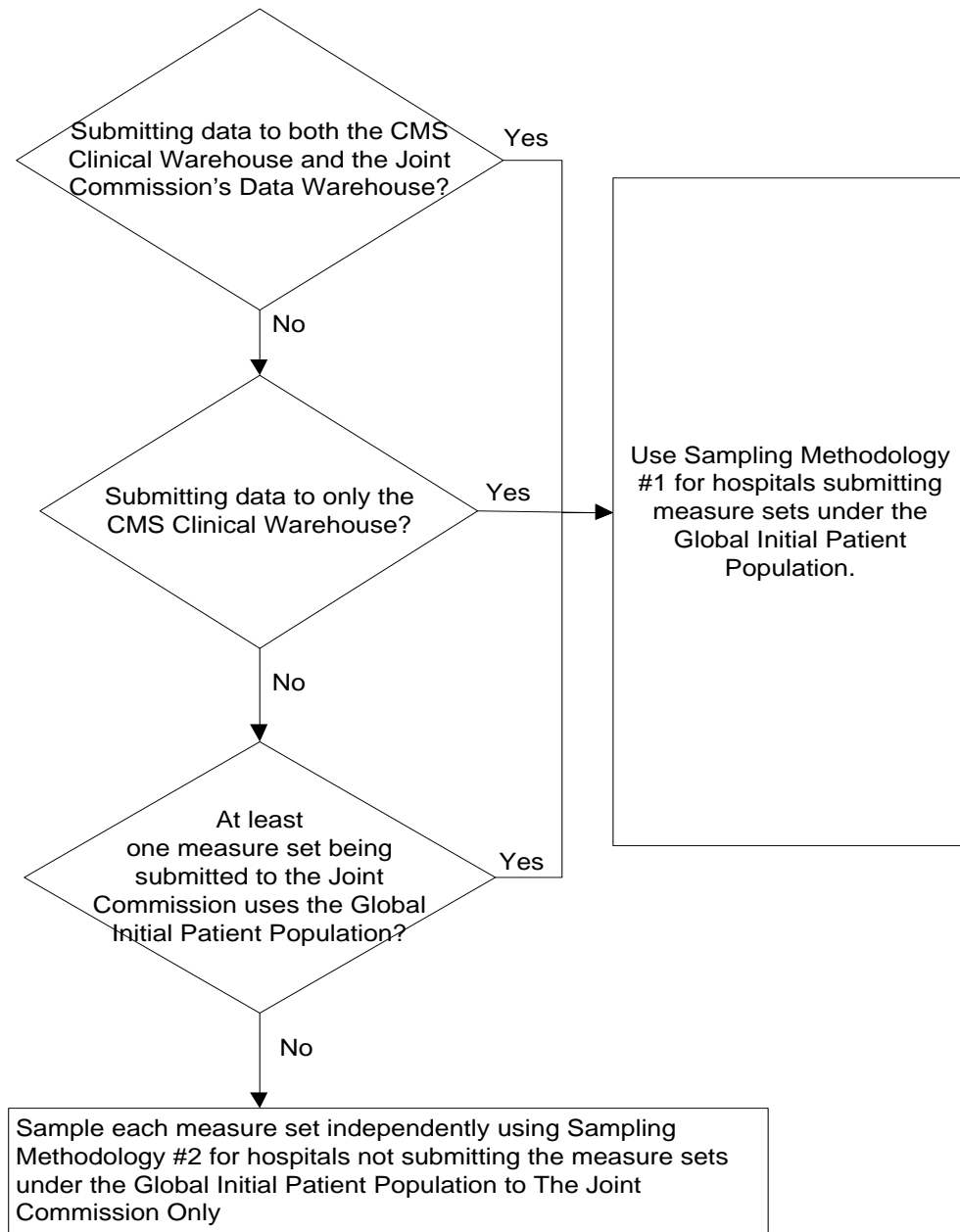
Hospitals are NOT required to sample their data. If sampling offers minimal benefit (i.e., a hospital has 80 cases for the quarter and must select a sample of 76 cases) the hospital may choose to use all cases.

Order of Data Flow

The required sampling methodology is dependent upon the measure sets being submitted to the CMS Clinical Warehouse and/or Joint Commission's Data Warehouse.

- If the hospital is submitting data to both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse, use sampling methodology number one.
- If the hospital is submitting to only the CMS Clinical Warehouse use sampling methodology number one.
- If the hospital is submitting at least one measure set to the Joint Commission that uses the Global Initial Patient Population, use sampling methodology number one.

- If the hospital is submitting data to only The Joint Commission:
 - If the hospital is submitting at least one measure set that uses the Global Initial Patient Population, use sampling methodology number one.
 - If the hospital is not submitting any of the measure sets that use the Global Initial Patient Population, sample each measure set independently using sampling methodology number two.



1. Hospitals Submitting Measure Sets Under the Global Initial Patient Population to Both the CMS Clinical Warehouse and The Joint Commission's Data Warehouse

For the submission of the Global Initial Patient Population and associated measure sets (i.e., ED, IMM, TOB, and/or SUB) the following data flow or process steps should be used to identify the data for all measure sets or stratum that are transmitted to the CMS Clinical Warehouse and Joint Commission's Data Warehouse. These process steps are:

Identify Global Cases To Be Abstracted (ED, IMM, SUB, TOB)

- Identify the Global Initial Patient Population. The Global Initial Patient Population is used for the ED, IMM, TOB, and SUB measure sets. This data pull utilizes administrative data such as admission date and discharge date. This identification process must be completed prior to the application of data integrity filter, measure exclusions, and the application of sampling methodology. For specific Global Initial Patient Population definitions, refer to the Global Initial Patient Population discussion in the Measure Information section of this manual. This data pull is completed once for each hospital. This is not performed for each measure set that utilizes the Global population.
 - If the hospital is sampling, use the Global Initial Patient Population identified above and pull the sample of medical records for the ED, IMM, TOB, and/or SUB measure sets using the Sample Size Requirements defined in the Global Initial Patient Population Information section of this manual. Note: This is completed once for each hospital. This is not performed for each measure set that utilizes the Global population.
- Collect or abstract from the identified medical records the general and measure specific data elements that are needed for the measure set. Run the data through the algorithms for the measure sets under the Global Initial Patient Population (ED, IMM, SUB and/or TOB). The count of the number of cases used in this step is collected in the Global Initial Patient Population and Sample Size data elements.
- If the hospital is only submitting the measure sets under the Global Initial Patient Population (i.e., ED, IMM, SUB or TOB), the process is complete.

Identify Cases To Be Abstracted For The Remaining Measure Sets, Strata, and Sub-populations (SEP, VTE)

- Identify the Initial Patient Population for the other measure sets (SEP), strata or sub-populations (VTE). This data pull utilizes administrative data such as ICD-10 diagnosis and procedure codes, admission date, and birthdate. All ICD-10 diagnosis and procedure codes included in the Initial Patient Population definition must be applied. This identification process must be completed prior to the application of data integrity filter, measure exclusions, and the application of sampling methodology. For specific measure set definitions, refer to the Initial Patient Population discussion in the Measure Information section of this manual. The number of cases in the Initial Patient

Population of each measure set, strata, and sub-population are collected in the appropriate Initial Patient Population Size data elements.

- If the hospital is not sampling, collect or abstract from the identified medical records the general and measure specific data elements that are needed for the measure set(s), strata or sub-populations. The count of the number of cases used in this step is collected in the Sample Size data elements.
- If the hospital is sampling, use the Initial Patient Population (N) identified above and pull the sample of medical records for the measure set, strata or sub-population using the “Sample Size Requirements” in the appropriate sampling discussion in the Measure Information section of this manual.
- Using the Global Initial Patient Population identified above, identify and count the number of cases that are also in the other Measure Sets (e.g., SEP), strata or sub-populations (e.g., VTE) Initial Patient Population(s). Determine the number of cases that need to be sampled (n) from the cases in the other measure set(s) or stratum(s) Initial Patient Population (N). Use the “Sample Size Requirements” in the appropriate sampling discussion in the Measure Information section of this manual.
 - If there are enough Initial Patient Population cases in the Global sample pull to meet the specific initial patient population and sampling requirements for the measure set(s), strata, or sub-populations, then no additional sampling is required. Collect or abstract from the identified medical records the general and measure specific data elements that are needed for the measure set(s), strata, or sub-populations. The count of the number of cases used in this step is collected in the Sample Size data elements.
 - If there are not enough Initial Patient Population cases in the Global sample pull to meet the specific initial patient population and sampling requirements for the measure set(s), strata or sub-populations, complete the sample by pulling additional cases from the other measure set(s), strata or sub-populations Initial Patient Population(s). Use the “Sample Size Requirements” in the appropriate Sampling discussion in the Measure Information section of this manual. Collect or abstract from the identified medical records the general and measure specific data elements that are needed for the measure set(s). The count of the number of cases used in this step is collected in the Sample Size data elements.

Example:

For 4th quarter the Global Initial Patient Population is 1550 and 100 for SEP. If the hospital is sampling, the minimum number of cases that would be required to be sampled would be 306 for Global (ED, IMM, TOB, and/or SUB) and 30 for SEP.

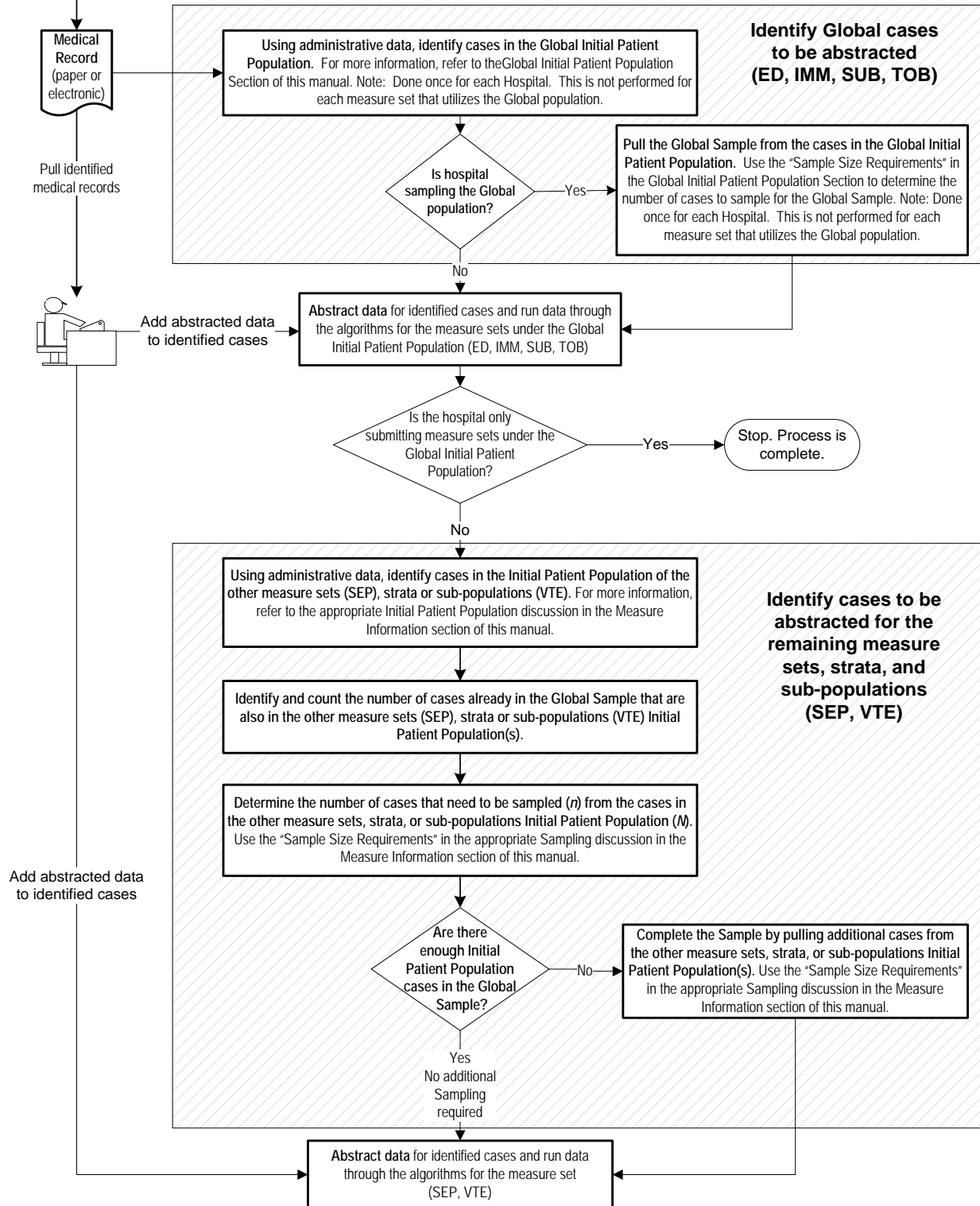
The hospital would pull 306 cases for the Global sample. From those 306 cases the hospital would determine how many of those cases were also SEP cases that met the initial patient population. If there are enough SEP cases in the Global sample pull to meet the minimum sampling requirements for that measure set, then no additional sample pull is needed.

If there are not enough cases in the Global sample pull to meet the SEP measure set minimum sampling requirements then an additional sample pull is needed. For example, from the Global sample pull there were 20 SEP cases identified that met the initial population criteria for the SEP measure set. As the minimum sample requirements for SEP is 30, 10 additional SEP cases would need to be pulled from the SEP Initial Patient Population.



Medical Providers

Global Order of Data Flow/Process Steps



2. Hospitals Not Submitting the Measure Sets Under the Global Initial Patient Population to The Joint Commission Only

For hospitals not submitting the measure sets under the Global Initial Patient Population to The Joint Commission only, an independent sample pull should be used to pull the sample for the applicable measure sets (i.e., SEP and VTE).

Each measure set, stratum, or sub-population has a unique definition of Initial Patient Population and sample size requirement. However, the same data flow or process steps can be used to identify the data that is transmitted to the Joint Commission's Data Warehouse. These process steps are:

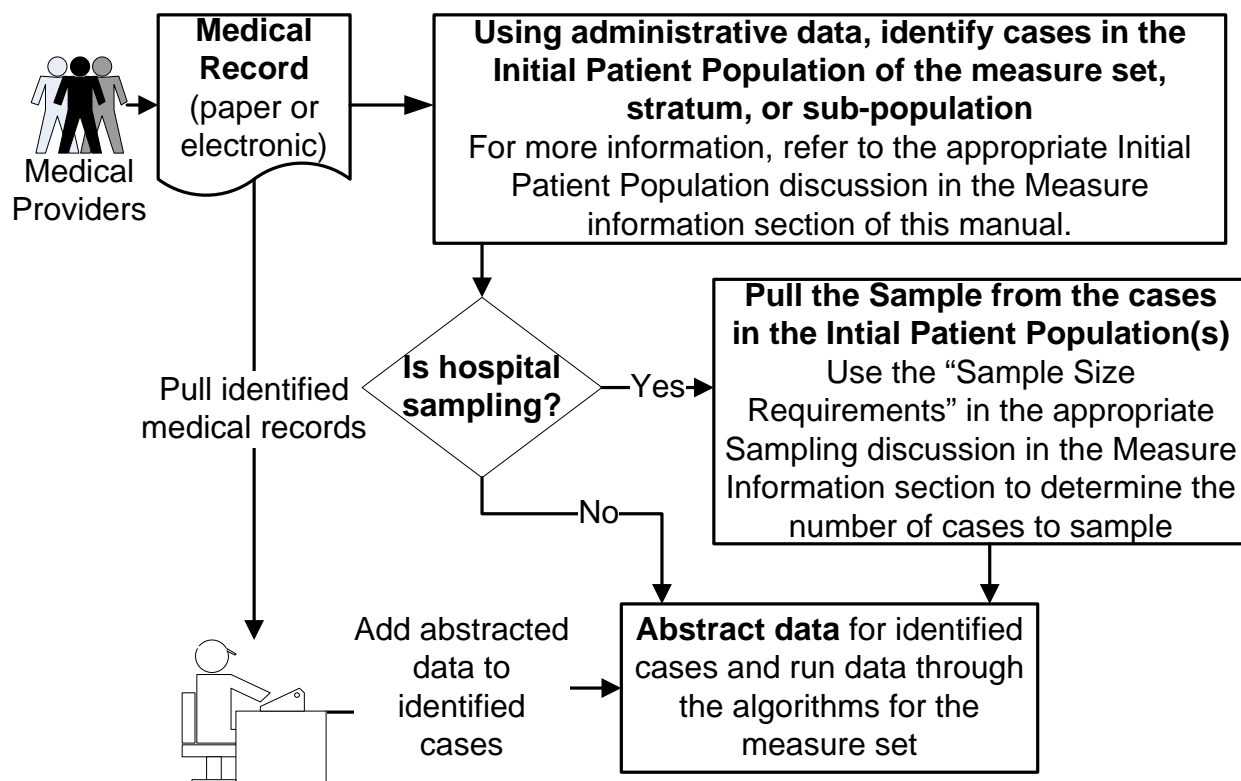
- First, identify the Initial Patient Population for the measure set. An Initial Patient Population is defined for each measure set, stratum, and sub-population and the count is collected in the Initial Patient Population Size data elements. This data pull utilizes administrative data such as ICD-10 diagnosis and procedure codes, admission date, and birthdate.

All ICD-10 diagnosis and procedure codes included in the appropriate Initial Patient Population definition must be applied. This identification process must be completed prior to the application of data integrity filter, measure exclusions, and the application of sampling methodology.

For specific measure set, strata, and sub-population definitions, refer to the appropriate Initial Patient Population discussion in the Measure Information section of this manual.

- Second, if the hospital is sampling, use the Initial Patient Population identified above and pull the sample of medical records for each measure set, stratum, or sub-population using the Sample Size Requirements defined in the appropriate Measure Information section of this manual.
- Third, collect or abstract from the identified medical records the general and measure specific data elements that are needed for the measure set. The count of the number of cases used in this step is collected in the *Sample Size* data elements.
 - If the hospital is not sampling, use the medical records identified in the first data pull.
 - If the hospital is sampling, use the medical records from the cases in the identified sample.

Order of Data Flow/Process Steps



Sample Size Requirements

Hospitals that choose to sample have the option of sampling quarterly or sampling monthly. The sample size requirements for each of these options are described in turn. Hospitals need to use the next highest whole number when determining their required sample size. See below for rounding examples. For each measure sets sample size requirements, refer to the appropriate measure set's Measure Information section in this manual.

Hospitals choosing to sample the Global population must use the same sample for all measure sets that utilize the Global population (e.g., ED, IMM, SUB, TOB). Hospitals choosing to not sample the Global population must use the entire population for all measure sets that utilize the Global population (e.g., ED, IMM, SUB, TOB).

Hospitals selecting sample cases for measure sets that are not stratified (e.g., SEP) must ensure that its Initial Patient Population(s) and sample size(s) meet the conditions stated in the measure set's Sample Size Requirements.

For hospitals selecting sample cases for stratified measure sets or measure sets with sub-populations (e.g., VTE), a modified sampling procedure is required. Hospitals selecting sample cases for these sets must ensure that each individual stratum's Population/sub-population and sample size meets the conditions stated in the measure set's Sample Size Requirements.

Regardless of the option used, hospital samples must be monitored to ensure that sampling procedures consistently produce statistically valid and useful data. Due to exclusions, hospitals selecting sample cases MUST submit AT LEAST the minimum required sample size. The sample size tables for each option automatically build the number of cases needed to obtain the required sample sizes.

Hospitals that sample, should sample by their *CMS Certification Number (CCN)*. For most organizations, there is a one to one correspondence between their CCN and the Joint Commission's *Health Care Organization Identifier*. Sampling by CCN may cause those organizations that have chosen to be accredited such that they have multiple CCN combined under one *Health Care Organization Identifier* to over sample from the Joint Commission's perspective. Organizations reporting data to CMS must sample at the level of the individual CCN. All data that are sampled (by *CMS Certification Number*) must be transmitted to both CMS and The Joint Commission.

A hospital may choose to use a larger sample size than is required. Hospitals whose Initial Patient Population size is less than the minimum number of cases per quarter/month for the measure set, stratum, or sub-population, cannot sample. Hospitals that have five or fewer GLB (ED, IMM, SUB, TOB), or VTE discharges (both Medicare and non-Medicare combined) are not required to submit patient level data to the CMS Clinical Warehouse and Joint Commission's Data Warehouse. Hospitals that have five or fewer SEP discharges (both Medicare and non-Medicare combined) are not required to submit patient level data to the CMS Clinical Warehouse. Refer to the Sample Size Requirement tables provided in each measure set's Measure Information section to determine the minimum number of cases that need to be sampled for each population.

Quarterly Sampling Examples

Quarterly Example 1: Measure set is Not Stratified

Hospitals selecting sample cases for measure set ABC, which is not stratified, must ensure that its Initial Patient Population and quarterly sample size meet the following conditions:

**Quarterly Sample Size
Based on Hospital’s Initial Patient Population for the ABC Measure Set**

| Average Quarterly Initial Patient Population “N” | Minimum Required Sample Size “n” |
|---|--|
| ≥ 1551 | 311 |
| 391 - 1550 | 20% of the Initial Patient Population |
| 78 - 390 | 78 |
| 6 - 77 | No sampling; 100% of the Initial Patient Population is required |
| 0 - 5 | Submission of patient level data is encouraged but not required: <ul style="list-style-type: none"> • CMS: if submission occurs, 1 – 5 cases of the Initial Patient Population may be submitted • The Joint Commission: if submission occurs, 100% Initial Patient Population required |

Examples

- A hospital’s ABC Initial Patient Population is 77 patients during the first quarter. Using the above table, no sampling is allowed – 100 percent (%) of the population is required.
- A hospital’s ABC Initial Patient Population is 100 patients during the second quarter. Using the above table, the required sample size is seen to be a minimum of 78 ABC patients for this quarter.
- A hospital’s ABC Initial Patient Population is 401 patients during the third quarter. Using the above table, the required sample size is seen to be 20 percent (%) of the population, or 81 cases for the quarter (twenty percent of 401 equals 80.2 rounded to the next whole number equals 81).
- A hospital’s ABC Initial Patient Population is 1551 patients during the fourth quarter. Using the above table, the required sample size is seen to be a minimum of 311 ABC patients for this quarter.
- A hospital’s ABC Initial Patient Population is 5 patients during the first quarter. Using the above table, submission of patient level data is not required. If the hospital chooses to submit patient level data:
 - CMS: the quarterly sample size would be 1 – 5 cases for the quarter
 - The Joint Commission: the required quarterly sample size would be 100 percent (%) of the patient population or 5 cases for the quarter.

Quarterly Example 2: Measure set is stratified

For hospitals selecting sample cases for measure set XYZ which contains 8 strata, a modified sampling procedure is required. Hospitals selecting sample cases for these sets must ensure that each individual stratum’s population and quarterly sample size meets the following conditions.

Select within each of the seven individual measure stratum and the 8th XYZ stratum.

**Quarterly Sample Size
Based on Hospital’s Initial Patient Population for the XYZ Measure Set**

| Average Quarterly Stratum Initial Patient Population “N” | Minimum Required Stratum Sample Size “n” |
|---|---|
| ≥471 | 48 |
| 161 - 470 | 10% of the Initial Patient Population |
| 16 - 160 | 16 |
| <16 | No sampling; 100% of the Initial Patient Population is required |

Examples

- The XYZ Initial Patient Population sizes for a hospital are 5, 50, 15, 140, 35, 201, 3, and 481 patients respectively per stratum for the quarter. Since the total Initial Patient Population for XYZ is 930, the hospital must submit patient level data. The required quarterly sample sizes for each stratum would be 5, 16, 15, 16, 16, 21, 3, and 48.
 - The 1st, 3rd, and 7th strata are less than the minimum required quarterly sample size, so 100 percent (%) of each of these strata is sampled.
 - The 2nd, 4th, and 5th strata each require 16 cases to be sampled.
 - The 6th stratum has 201 patients per quarter, which requires a 10 percent (%) sample size, or 21 cases (twenty percent of 201 equals 20.1 rounded to the next whole number equals 21).
 - The 8th stratum is more than the maximum required quarterly sample size, so this stratum requires 48 cases to be sampled.
- The XYZ Initial Patient Population sizes for a hospital are 1, 1, 0, 0, 1, 0, 1, and 1 patients respectively per stratum for the quarter. Since the total Initial Patient Population for XYZ is 5, the hospital may choose to not submit patient level data. If the hospital chooses to submit patient level data, the required quarterly sample sizes for each stratum would be 1, 1, 0, 0, 1, 0, 1, and 1.
 - The 1st, 2nd, 5th, 7th, and 8th strata are less than the minimum required quarterly sample size, so 100% of each of these strata is sampled.
 - There is no data to sample for the 3rd, 4th, and 6th strata.

Quarterly Example 3: Measure set has sub-populations

For hospitals selecting sample cases for measure set DEF which contains 3 independent sub-populations a modified sampling procedure is required. The three sub-populations must be sampled independently from each other.

1 - Hospitals selecting sample cases for sub-population 1 must ensure that the Initial Patient Population and sample size for the sub-population 1 meet the following conditions:

**Quarterly Sample Size
Based on Hospital’s Initial Patient Population Size for the
Patient Sub-Population 1**

| Average Quarterly Initial Patient Sub-Population Size “N” | Minimum Required Sub-Population Sample Size “n” |
|---|---|
| ≥896 | 180 |
| 226 - 895 | 20% of Initial Patient Population size |
| 45 - 225 | 45 |
| <45 | No sampling; 100% Initial Patient Population required |

2 - Hospitals selecting sample cases for sub-population 2 must ensure that the Initial Patient Population and sample size for sub-population 2 meet the following conditions:

**Quarterly Sample Size
Based on Hospital’s Initial Patient Population Size for the
Patient Sub-Population 2**

| Average Quarterly Initial Patient Sub-Population Size “N” | Minimum Required Sub-Population Sample Size “n” |
|---|---|
| ≥1796 | 360 |
| 451 - 1795 | 20% of Initial Patient Population size |
| 90 - 450 | 90 |
| <90 | No sampling; 100% Initial Patient Population required |

3 – Sub-population 3 *is not eligible* for sampling and will use the entire Initial Patient Population for reporting.

Examples

1. Quarterly sampling for sub-population 1:
 - A hospital's sub-population 1 is 752 during the second quarter. Using the quarterly sampling table for sub-population 1, the sample size required is 20 percent (%) of this sub-population, or 151 cases for the quarter (twenty percent of 752 equals 150.4 rounded up to the next whole number equals 151).
 - A hospital's sub-population 1 is 5 during the first quarter. Using the quarterly sampling table for sub-population 1, the sample size is less than

the minimum required quarterly sample size, so 100 percent (%) of this sub-population is sampled.

- A hospital's sub-population 1 is 99 during the third quarter. The required quarterly sample is 45 cases.
2. Quarterly sampling for sub-population 2:
- A hospital's sub-population 2 is 511 during the second quarter. Using the quarterly sampling table for sub-population 2, the sample size required is 20 percent (%) of this sub-population, or 103 cases for the quarter (twenty percent of 511 equals 102.2 rounded up to the next whole number equals 103).
 - A hospital's sub-population 2 is 3 during the first quarter. Using the quarterly sampling table for sub-population 2, the sample size is less than the minimum required quarterly sample size, so 100 percent (%) of this sub-population is sampled.
 - A hospital's sub-population 2 is 300 during the third quarter. The required quarterly sample is 90 cases.
3. Quarterly sampling for sub-population 3:
- Sub-population *is not eligible* for sampling and will use the entire Initial Patient Sub-Population for reporting.

Monthly Sampling Examples

Monthly Example 1: Measure set is Not Stratified

Hospitals selecting sample cases for ABC measure set must ensure that its Initial Patient Population and monthly sample size meet the following conditions:

**Monthly Sample Size
Based on Hospital's Initial Patient Population for the ABC Measure Set**

| Average Monthly Initial Patient Population "N" | Minimum Required Sample Size "n" |
|--|---|
| ≥516 | 104 |
| 131-515 | 20% of the Initial Patient Population |
| 26-130 | 26 |
| <26 | No sampling; 100% of the Initial Patient Population is required |

Examples

- A hospital's ABC Initial Patient Population is 25 patients during January. Using the above table, no sampling is allowed – 100 percent (%) of the population is required.
- A hospital's ABC Initial Patient Population is 130 patients during February. Using the above table, the required sample size is seen to be a minimum of 26 ABC patients for this month.

- A hospital's ABC Initial Patient Population is 301 patients during March. Using the above table, the required sample size is seen to be 20 percent (%) of the population, or 61 cases for the month (twenty percent of 301 equals 60.2 rounded to the next whole number equals 61).
- A hospital's ABC Initial Patient Population is 516 patients during April. Using the above table, the required sample size is seen to be a minimum of 104 ABC patients for this month.

Monthly Example 2: Measure set is Stratified

For hospitals selecting sample cases for the XYZ measure set, a modified sampling procedure is required. Hospitals selecting sample cases for this set must ensure that each individual strata population and monthly sample size meets the following conditions:

Select within each of the seven individual measure stratum and the 8th XYZ stratum.

**Monthly Sample Size
Based on Hospital's Initial Patient Population for the XYZ Measure Set**

| Average Monthly Stratum Initial Patient Population "N" | Minimum Required Stratum Sample Size "n" |
|---|---|
| ≥151 | 16 |
| 61 - 150 | 10% of the Initial Patient Population |
| 6 - 60 | 6 |
| <6 | No sampling; 100% of the Initial Patient Population is required |

Example

- The XYZ Initial Patient Population sizes for a hospital are 5, 50, 15, 141, 35, 201, 3, and 481 patients respectively in June. The required monthly sample sizes would be 5, 6, 6, 15, 6, 16, 3, and 16.
 - The 1st and 7th strata are less than the minimum required monthly sample size, so 100 percent (%) of each of these strata is sampled.
 - The 2nd, 3rd, and 5th strata each require 6 cases to be sampled.
 - The 4th stratum has 141 patients per month, which requires a 10 percent (%) sample size, or 15 cases (twenty percent of 141 equals 14.1 rounded to the next whole number equals 15).
 - The 6th and 8th strata are each more than the maximum required monthly sample size, so this stratum requires 16 cases to be sampled.

Monthly Example 3: Measure set has sub-populations

For hospitals selecting sample cases for measure set DEF which contains 3 independent sub-populations a modified sampling procedure is required. The three sub-populations must be sampled independently from each other.

1 - Hospitals selecting sample cases for sub-population 1 must ensure that the Initial Patient Population and sample size for sub-population 1 meet the following conditions:

**Monthly Sample Size
Based on Hospital's Initial Patient Population Size for the
Patient Sub-Population 1**

| Average Monthly Initial Patient Sub-Population Size "N" | Minimum Required Sub-Population Sample Size "n" |
|---|---|
| ≥ 296 | 60 |
| 76 - 295 | 20% of Initial Patient Population size |
| 15 - 75 | 15 |
| <15 | No sampling; 100% Initial Patient Population required |

2 - Hospitals selecting sample cases for sub-population 2 must ensure that the Initial Patient Population and sample size for sub-population 2 meet the following conditions:

**Monthly Sample Size
Based on Hospital's Initial Patient Population Size for the
Patient Sub-Population 2**

| Average Monthly Initial Patient Sub-Population Size "N" | Minimum Required Sub-Population Sample Size "n" |
|---|---|
| ≥596 | 120 |
| 151 - 595 | 20% of Initial Patient Population size |
| 30 - 150 | 30 |
| <30 | No sampling; 100% Initial Patient Population required |

3 – Sub-population 3 *is not eligible* for sampling and will use the entire Initial Patient Sub-Population for reporting.

Examples

1. Monthly sampling for sub-population 1:
 - A hospital's sub-population 1 is 81 during March. Using the monthly sampling table for sub-population 1, the sample size required is 20 percent (%) of this sub-population, or 17 cases for the month (twenty percent of 81 equals 16.2 rounded up to the next whole number equals 17).
 - A hospital's sub-population 1 is 5 during February. Using the monthly sampling table for sub-population 2, the sample size is less than the minimum required monthly sample size, so 100 percent (%) of this sub-population is sampled.
 - A hospital's sub-population 1 is 45 during January. The required monthly sample is 15 cases.
2. Monthly sampling for sub-population 2:
 - A hospital's sub-population is 387 during March. Using the monthly sampling table for sub-population 2, the sample size required is 20 percent (%) of this sub-population, or 78 cases for the month (twenty

percent of 387 equals 77.4 rounded up to the next whole number equals 78).

- A hospital's sub-population 2 is 3 during February. Using the monthly sampling table for sub-population 2, the sample size is less than the minimum required monthly sample size, so 100 percent (%) of this sub-population is sampled.
 - A hospital's sub-population 2 is 47 during January. The required monthly sample is 30 cases.
3. Monthly sampling for sub-population 3:
Sub-population 3 *is not eligible* for sampling and will use the entire Initial Patient Sub-Population for reporting.

Sampling Approaches

As previously stated in this section, hospitals have the option to sample from their population, or submit their entire population. Hospitals that choose to sample must ensure that the sampled data represent their Initial Patient Population by using either the simple random sampling or systematic random sampling methods and that the sampling techniques are applied consistently within a quarter. For example, monthly samples for a measure set, stratum, or sub-population must use consistent sampling techniques across the quarterly submission period.

- Simple random sampling - selecting a sample size (n) from a population of size (N) in such a way that every case has the same chance of being selected.
- Systematic random sampling - selecting every kth record from a population of size N in such a way that a sample size of n is obtained, where k is less than or equal to N/n. The first sample record (i.e., the starting point) must be randomly selected before taking every kth record. This is a two-step process:
 1. Randomly select the starting point by choosing a number between one and k using a table of random numbers or a computer-generated random number; and
 2. Then select every k^{th} record thereafter until the selection of the sample size is completed.

Each hospital is ultimately responsible that sampling techniques applied for their hospital adhere to the sampling requirements outlined in this manual. ORYX Vendors are responsible for ensuring that the sampling techniques are applied consistently across their client hospitals.

Sampling Approach Examples

For a hospital with an Initial Patient Population size of 350 ABC measure set discharges per quarter, the sample size would be 78. To select a random sample of 78 ABC patients:

- Simple random sampling:
 1. Generate random numbers for individual ABC patient records from a random number function using a statistical software package or computer programming language.
 2. Sort data by the random numbers either in an increasing or decreasing order.

Select the first 78 ABC patient records as the random sample.

- Systematic random sampling:
 1. In this example, the hospital's Initial Patient Population size equals 350 and the sample size equals 78. Divide the Initial Patient Population size by the sample size and take the quotient (i.e., the integer portion) as the sampling interval k . The sampling interval k equals $350/78$ equals 4.5. Thus, every 4th ABC patient record will be selected from the Initial Patient Population until 78 cases are selected.
 2. To ensure that each ABC patient has an equal chance of being selected, the "starting point" must be randomly determined before selecting every 4th ABC patient record. This can be done using a computer random number generator or a random number table to randomly choose a number between 1 and 4 as the starting point.

Transmission of Initial Patient Population and Sample Data Elements

CMS and The Joint Commission require transmission of Initial Patient Population and sample count data for all chart abstracted measure sets. Transmission of Initial Patient Population and sample count data elements are used to assist in evaluating completeness of submission in accordance with CMS/The Joint Commission sampling requirements.

The Initial Patient Population Size refers to all patients (Medicare and non-Medicare) who share common payment sources which can be identified by utilizing administrative data such as the UB-04. All ICD-10 diagnosis and procedure codes included in the appropriate Initial Patient Population definition must be applied. This identification process must be completed prior to the application of data integrity filter, measure exclusions, and the application of sampling methodology. For specific measure set and strata definitions, refer to the appropriate Initial Patient Population discussion in the Measure Information section of this manual.

The Initial Patient Population and sample data elements are:

- Initial Patient Population Size – Medicare Only*
- Initial Patient Population Size – Non-Medicare Only*
- Sample
- Sampling Frequency*
- Sample Size – Medicare Only*
- Sample Size – Non-Medicare Only*

* The Joint Commission and CMS: Transmitted in the Hospital Initial Patient Population data file. Refer to the *Hospital Initial Patient Population Data XML File Layout* in the Transmission section of this manual.

Sample indicates whether or not the hospital has sampled data for the specified time period. *Sampling Frequency* indicates if the hospital has sampled using the monthly or quarterly methodology, whether the entire population was used for the specified time period or the hospital had five or fewer discharges for the discharge quarter and did not submit patient level data.

Initial Patient Population Size – Medicare Only includes all patients that are billed under Medicare or Title 18. Medicare can be listed as a primary, secondary, tertiary or lower on the list of payment sources for the patient. In addition, patients who are participating as a member of a Medicare HMO/Medicare Advantage are included in the Medicare counts, e.g., Medicare Blue, Humana Gold, Secure Horizons, AARP, Coventry Advantra, etc.

Initial Patient Population and Sample Size Examples

Example 1 – Hospital does not sample

A hospital uses the Initial Patient Population(s) for the ABC measure set to identify 120 cases in the ABC Initial Patient Population during the second quarter. The hospital does not sample the ABC measure set, so data for all 120 cases are collected and used to calculate the hospital's rate for each ABC measure. 40 of the 120 cases in the ABC Initial Patient Population are Medicare patients.

The breakdown of data by month and Medicare/Non-Medicare is:

| Initial Patient Population and Sample Size | April | May | June | Total |
|--|--------------|------------|-------------|--------------|
| Initial Patient Population – Medicare patients | 10 | 15 | 15 | 40 |
| Initial Patient Population – Non-Medicare patients | 20 | 30 | 30 | 80 |
| Total Initial Patient Population Size | 30 | 45 | 45 | 120 |
| Sample Size – Medicare patients | 10 | 15 | 15 | 40 |
| Sample Size – Non-Medicare patients | 20 | 30 | 30 | 80 |
| Total Sample Size | 30 | 45 | 45 | 120 |

The following is transmitted for each month in the quarter:

| Initial Patient Population and Sample Size | April | May | June |
|--|--------------|------------|-------------|
| <i>ICD Population Size</i> | 30 | 45 | 45 |
| <i>(Initial Patient Population Size – Medicare Only + Initial Patient Population Size – Non-Medicare Only)</i> | | | |
| <i>Initial Patient Population Size – Medicare Only</i> | 10 | 15 | 15 |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 20 | 30 | 30 |
| <i>Sample</i> | N | N | N |
| <i>Sampling Frequency (3 = not sampling)</i> | 3 | 3 | 3 |
| <i>Sample Size – Medicare Only</i> | 10 | 15 | 15 |
| <i>Sample Size – Non-Medicare Only</i> | 20 | 30 | 30 |

Example 2 – Hospital samples monthly

A hospital uses the Initial Patient Population(s) for the ABC measure set to identify 120 cases in the ABC Initial Patient Population during the second quarter. From these 120 cases, the hospital uses the monthly sample size requirements and randomly selects a sample of 26 cases for each month. Data for these 26 cases are collected and used to calculate the hospital's rate for each ABC measure. 40 of the 120 cases in the ABC Initial Patient Population are Medicare patients and 24 of these cases were included in the sample.

The breakdown of data by month and Medicare/Non-Medicare is:

| Initial Patient Population and Sample Size | April | May | June | Total |
|--|--------------|------------|-------------|--------------|
| Initial Patient Population – Medicare patients | 10 | 15 | 15 | 40 |
| Initial Patient Population – Non-Medicare patients | 20 | 30 | 30 | 80 |
| Total Initial Patient Population Size | 30 | 45 | 45 | 120 |
| Sample Size – Medicare patients | 8 | 9 | 7 | 24 |
| Sample Size – Non-Medicare patients | 18 | 17 | 19 | 54 |
| Total Sample Size | 26 | 26 | 26 | 78 |

The following is transmitted for each month in the quarter:

| Initial Patient Population and Sample Size | April | May | June |
|--|--------------|------------|-------------|
| <i>ICD Population Size</i> | 30 | 45 | 45 |
| <i>(Initial Patient Population Size – Medicare Only + Initial Patient Population Size – Non-Medicare Only)</i> | | | |
| <i>Initial Patient Population Size – Medicare Only</i> | 10 | 15 | 15 |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 20 | 30 | 30 |
| <i>Sample</i> | Y | Y | Y |
| <i>Sampling Frequency (1 = sampling data monthly)</i> | 1 | 1 | 1 |
| <i>Sample Size – Medicare Only</i> | 8 | 9 | 7 |
| <i>Sample Size – Non-Medicare Only</i> | 18 | 17 | 19 |

Example 3 – Hospital samples quarterly

A hospital uses the Initial Patient Population(s) for the ABC measure set to identify 120 cases in the ABC Initial Patient Population during the second quarter. From these 120 cases, the hospital uses the quarterly sample size requirements and randomly selects a sample of 78 cases. Data for these 78 cases are collected and are then used to calculate the hospital's rate for each ABC measure. 40 of the 120 cases in the ABC Initial Patient Population are Medicare patients and 20 of these cases were included in the sample.

The breakdown of data by month and Medicare/Non-Medicare are:

| Initial Patient Population and Sample Size | April | May | June | Total |
|--|--------------|------------|-------------|--------------|
| Initial Patient Population – Medicare patients | 10 | 15 | 15 | 40 |
| Initial Patient Population – Non-Medicare patients | 20 | 30 | 30 | 80 |
| Total Initial Patient Population Size | 30 | 45 | 45 | 120 |
| Sample Size – Medicare patients | 5 | 10 | 5 | 20 |
| Sample Size – Non-Medicare patients | 10 | 20 | 28 | 58 |
| Total Sample Size | 15 | 30 | 33 | 78 |

The following is transmitted for each month in the quarter:

| Initial Patient Population and Sample Size | April | May | June |
|--|-------|-----|------|
| <i>ICD Population Size</i> <i>(Initial Patient Population Size – Medicare Only +</i> <i>Initial Patient Population Size – Non-Medicare Only)</i> | 30 | 45 | 45 |
| <i>Initial Patient Population Size – Medicare Only</i> | 10 | 15 | 15 |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 20 | 30 | 30 |
| <i>Sample</i> | Y | Y | Y |
| <i>Sampling Frequency (2 = sampling data quarterly)</i> | 2 | 2 | 2 |
| <i>Sample Size – Medicare Only</i> | 5 | 10 | 5 |
| <i>Sample Size – Non-Medicare Only</i> | 10 | 20 | 28 |

Example 4 – Hospital has five or fewer discharges and chooses to not submit patient level data

A hospital uses the Initial Patient Population(s) for the ABC measure set to identify 5 cases in the ABC Initial Patient Population for the entire measure set during the second quarter. Since the total Initial Patient Population for ABC is 5, the hospital chooses to not submit patient level data.

The breakdown of data by month and Medicare/Non-Medicare is:

| Initial Patient Population and Sample Size | April | May | June | Total |
|--|----------|----------|----------|--------------|
| Initial Patient Population – Medicare patients | 1 | 0 | 2 | 3 |
| Initial Patient Population – Non-Medicare patients | 0 | 1 | 1 | 2 |
| Total Initial Patient Population Size | 1 | 1 | 3 | 5 |
| Sample Size – Medicare patients | 0 | 0 | 0 | 0 |
| Sample Size – Non-Medicare patients | 0 | 0 | 0 | 0 |
| Total Sample Size | 0 | 0 | 0 | 0 |

The following is transmitted for each month in the quarter:

| Initial Patient Population and Sample Size | April | May | June |
|--|-------|-----|------|
| <i>ICD Population Size</i> <i>(Initial Patient Population Size – Medicare Only +</i> <i>Initial Patient Population Size – Non-Medicare Only)</i> | 1 | 1 | 3 |
| <i>Initial Patient Population Size – Medicare Only</i> | 1 | 0 | 2 |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 0 | 1 | 1 |
| <i>Sample (clinical XML file)</i> | N/A | N/A | N/A |
| <i>Sample (Joint Commission’s HCO-level file)</i> | N | N | N |
| <i>Sampling Frequency (4 = N/A)</i> | 4 | 4 | 4 |
| <i>Sample Size – Medicare Only</i> | 0 | 0 | 0 |
| <i>Sample Size – Non-Medicare Only</i> | 0 | 0 | 0 |

Example 5 – Hospital has five or fewer discharges and chooses to submit patient level data

A hospital uses the Initial Patient Population(s) for the ABC measure set to identify 5 cases in the ABC Initial Patient Population for the entire measure set during the second quarter. Even though the total Initial Patient Population for ABC is 5, the hospital chooses to submit patient level data.

The breakdown of data by month and Medicare/Non-Medicare is:

| Initial Patient Population and Sample Size | April | May | June | Total |
|--|--------------|------------|-------------|--------------|
| Initial Patient Population – Medicare patients | 1 | 0 | 2 | 3 |
| Initial Patient Population – Non-Medicare patients | 0 | 1 | 1 | 2 |
| Total Initial Patient Population Size | 1 | 1 | 3 | 5 |
| Sample Size – Medicare patients | 1 | 0 | 2 | 3 |
| Sample Size – Non-Medicare patients | 0 | 1 | 1 | 2 |
| Total Sample Size | 1 | 1 | 3 | 5 |

The following is transmitted for each month in the quarter:

| Initial Patient Population and Sample Size | April | May | June |
|--|--------------|------------|-------------|
| <i>ICD Population Size</i> <i>(Initial Patient Population Size – Medicare Only +</i> <i>Initial Patient Population Size – Non-Medicare Only)</i> | 1 | 1 | 3 |
| <i>Initial Patient Population Size – Medicare Only</i> | 1 | 0 | 2 |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 0 | 1 | 1 |
| <i>Sample</i> | N | N | N |
| <i>Sampling Frequency (3 = Not Sampling)</i> | 3 | 3 | 3 |
| <i>Sample Size – Medicare Only</i> | 1 | 0 | 2 |
| <i>Sample Size – Non-Medicare Only</i> | 0 | 1 | 1 |

Data Transmission

Introduction

This section of the manual is provided to highlight the unique data transmission specifications for national hospital quality inpatient measure data for The Joint Commission compared to the Centers for Medicare & Medicaid Services (CMS) and the CMS Clinical Warehouse.

This section is divided into five parts: Joint Commission Data Transmission, CMS Data Transmission, Guidelines for Submission of Data, Transmission Alphabetical Data Dictionary, and Transmission Data Processing Flows.

The Joint Commission section provides information related to the transmission of national hospital quality measure data to the Joint Commission's Data Warehouse.

The CMS transmission section provides the user with the data standards required for submission to the CMS Clinical Warehouse.

The Guidelines for Submission of Data includes an overview of the data required to be submitted to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse, as well as the Hospital Clinical Data XML file layout and the Hospital Initial Patient Population Data XML File Layout.

The Transmission Alphabetical Data Dictionary describes the data elements that are either used to identify the hospital and measure set associated to the transmitted data or are calculated by the vendor using the hospital's patient-level data and measure results. These data elements are not used in the Initial Patient Population Algorithms or Measure Algorithms.

The Transmission Data Processing Flows contain information regarding the order in which both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse evaluate the national hospital quality inpatient measures and the population and sampling data. In addition, it highlights the processing differences between the two warehouses and the decision points as to when cases are rejected from the respective warehouses. Refer to the Edit Message documents located on *QualityNet* for CMS, and on the Upload/Download page in the HCD section of PET for The Joint Commission, for a complete listing of all critical and informational edits.

Joint Commission Data Transmission

Overview

The Joint Commission requires three different data transmissions related to the national hospital quality inpatient measure data. All of these transmissions are submitted by ORYX® Vendors and follow the same data transmission schedule used to submit ORYX® data to The Joint Commission. The most significant items related to the transmission of national hospital quality inpatient measure data are listed here, but this is not an exhaustive list. Refer to the appropriate documents as detailed below for more information.

Hospital Initial Patient Population Data

The Joint Commission collects Initial Patient Population and sampling information by *Measure Set* for VTE and by the Global Initial Patient Population for ED, IMM, SUB and TOB. This data is required to be submitted to The Joint Commission on a quarterly basis. All Initial Patient Population and sampling data will be submitted in an XML file that adheres to the *Hospital Initial Patient Population Data XML File Layout* specifications and guidelines provided later in this section. Each file may contain data for only one provider.

Hospital Clinical Data

Hospital clinical data is required to be submitted to The Joint Commission no less than on a quarterly basis. All patient-level data submitted to The Joint Commission must adhere to the *Hospital Clinical Data XML File Layout* specifications and guidelines provided later in this section. The hospital clinical data submitted to The Joint Commission is anonymous because no direct patient identifiers are included in the *Hospital Clinical Data XML File*.

Each case must have a separate XML file. For example, if 12 records have been abstracted, there must be 12 separate XML files. If more than one measure set has been abstracted for a single patient stay, then a separate XML file must be created for each measure set. Each measure set can only be abstracted once for the same medical record.

The Joint Commission will utilize the same XML file layout, guidelines, and edits as CMS with the following exceptions:

- **Unique Key Identifier:** The Joint Commission's Data Warehouse uses a different key identifier than the CMS Clinical Warehouse due to the Joint Commission's data being blinded as to whom the hospital and patient are:
 - Performance Measurement System Identifier*– not part of the file, captured at the point the file is uploaded to The Joint Commission
 - Vendor Tracking ID – fictitious identifier generated by the ORYX® Vendor to differentiate between individual patient records from each hospital
 - Admission Date
 - Discharge Date
 - Measure Set
 - Health Care Organization Identifier

* **Note:** Refer to the *ORYX® Technical Implementation Guide* for more information concerning the Performance Measurement System Identifier.

- **Transaction Processing:** Data can be added, replaced, and deleted during the current reporting quarter using the Action-Code in the XML file. In order to delete an existing file, the files must match on the unique key data elements as defined above. In order to update a key element in an existing file, the file must be deleted and a new file must be submitted. If the element to update is not a key element, then the file can be resubmitted using the 'Add' Action-Code; there is no need to delete the file first as long as the file matches on the unique key data elements.
- **Measure Selection:** Data that passes all edits and contains all data required to calculate the measures will be accepted as long as the hospital (identified by the Health Care Organization Identifier) has selected the measure set for the reporting quarter with the ORYX® Vendor that is submitting the data.
- **Sample:** All EOC records included in the sample, or if the hospital is not sampling the Initial Patient Population, must be transmitted to The Joint Commission. This is true regardless of whether or not any measure for the record calculates to a Measure Category Assignment equals "X".
- **Data Elements Not Accepted by The Joint Commission:** The following data elements may be transmitted to CMS, but cannot be transmitted to The Joint Commission because the data transmitted to The Joint Commission is anonymous. Files transmitted to The Joint Commission that contain the following data will be rejected:
 - Patient Identifier
 - First Name
 - Last Name
 - Postal Code
- **Data Elements Required by The Joint Commission That Are Not Required by CMS:** In order to support the Joint Commission's data quality analysis and continuous measure verification process the following data elements are required to be transmitted for each measure in the measure set.
 - Measure Category Assignment
 - Measurement Value
 - Predicted Value (Note: Currently there is no active risk-adjusted measure which uses this data element.)
- A fictitious identifier is generated by the ORYX® Vendor to differentiate between individual patient records from each hospital because the Joint Commission's data are blinded as to whom the patient is. The following data element is used to transmit this fictitious identifier.
 - Vendor Tracking ID

For each patient episode of care the following patient identifiers should match for each *Measure Set* that is submitted:

- *Vendor Tracking Identifier*
- *Admission Date*
- *Discharge Date*
- *Birthdate*
- *Healthcare Organization Identifier*

For example, if the hospital submits a separate XML file for ED and TOB, the above identifiers should be the same in each of the XML files.

Hospitals who are submitting cases for the measure sets under the Global Initial Patient Population (i.e., ED, IMM, SUB and TOB), are encouraged to submit the same case for all measure sets being submitted. For example, if the hospital has elected to submit ED, TOB and IMM, for every ED case that is submitted to The Joint Commission's Data Warehouse, the hospital is encouraged to submit the same case as a TOB case and an IMM case.

Information The Joint Commission Provides To ORYX® Vendors

Risk Adjustment: The Joint Commission will provide ORYX® Vendors with risk adjustment model information for active national hospital quality inpatient measures that require risk adjustment. ORYX® Vendors must apply the risk model information to their patient-level data and generate aggregate risk adjustment data for submission to The Joint Commission as a part of HCO-level data elements. Additional specifics include:

- ORYX® Vendors will have access to current national hospital quality inpatient measure risk model information files through the Performance Measurement System Extranet Track (PET).
- Details related to the risk model information file, its usage by ORYX® Vendors and a list of significant risk factors are provided in the *ORYX® Risk Adjustment Guide*. This guide is available to the public on the Joint Commission's website and, in addition, it is available to ORYX® Vendors via the Joint Commission's extranet site for ORYX® Vendors (PET).
- National hospital quality inpatient measure risk models must not be used for any purposes other than calculating risk-adjusted data elements.
- For assistance with the national hospital quality inpatient measure risk model information, please contact the ORYX® statistical support e-mail box at <http://manual.jointcommission.org>.
- For more information refer to the Specifications Manual for Joint Commission National Quality Core Measures.

National Comparison Group: The Joint Commission will provide ORYX® Vendors participating in the ORYX® national hospital quality inpatient measure initiative with national comparison group data. ORYX® Vendors may use this information to prepare feedback reports for client organizations. Additional details in regard to this process include:

- ORYX® Vendors will have access to national comparison group data through the Performance Measurement System Extranet Track (PET).
- Refer to the *ORYX® Data Quality Manual* for the list of national comparison group data elements, how ORYX® Vendors may utilize this data, and related information.
- For assistance with the national hospital quality inpatient measure national comparison group, please contact the ORYX® statistical support e-mail box at <http://manual.jointcommission.org>.

CMS Data Transmission

Overview

Data collected for Centers for Medicare & Medicaid Services (CMS) is transmitted to the CMS Clinical Warehouse, CMS's central repository for clinical data. All data submitted is required to meet transmission requirements. The file layout requirements are included in the sections that follow.

Hospitals currently submit patient-level clinical data to the CMS Clinical Warehouse, and hospitals submit the Medicare and non-Medicare Initial Patient Population Size, by measure set, and designation of sampling for the Medicare and non-Medicare sample size. Please refer to the *Hospital Clinical Data XML File Layout* and/or the *Hospital Initial Patient Population Data XML File Layout* for specific national hospital quality measure data transmission requirements. Additionally, please refer to the *QualityNet* website for the current annual Hospital Inpatient Quality Reporting Program submission requirements for patient-level clinical data and Initial Patient Population data.

Submission of Hospital Clinical Data

Hospital Clinical Data is submitted to the CMS Clinical Warehouse on a quarterly submission schedule. Only data containing dates applicable to a specified quarter of data transmission will be allowed into the CMS Clinical Warehouse. Data submitted for discharge quarters outside of the current submission deadline will be rejected. All clinical data submitted to the CMS Clinical Warehouse must adhere to the *Hospital Clinical Data XML File Layout* specifications provided later in the transmission section. Each case must have a separate XML file. For example, if you have 12 records that you have abstracted, you must have 12 separate XML files. If you have abstracted more than one *Measure Set* for a patient stay, then a separate XML file must be created for each *Measure Set*. Each *Measure Set* can only be abstracted once for the same medical record.

For each patient episode of care the following patient identifiers should match for each *Measure Set* that is submitted:

- *CMS Certification Number*
- *Patient Identifier*
- *Admission Date*
- *Discharge Date*
- *Birthdate*

For example, if the hospital submits a separate XML file for ED and SEP, the above identifiers should be the same in each of the XML files.

Submission of Hospital Initial Patient Population Data

CMS collects Initial Patient Population Size and declaration of sampling, by *Measure Set* on all chart abstracted measure sets on a quarterly basis. For hospitals submitting the Hospital Initial Patient Population Data, information may be submitted via an XML file to the CMS Clinical Warehouse. All Initial Patient Population data submitted to the CMS Clinical Warehouse must adhere to the *Hospital Initial Patient Population Data XML File Layout* specifications provided later in the transmission section. Each file may contain data for only one provider.

Additional guidelines related to the submission of Hospital Clinical Data and Hospital Initial Patient Population Data are outlined below.

CMS and Joint Commission Guidelines for Submission of Data

Overview

The below guidelines are for the submission of Hospital Clinical Data and Hospital Initial Patient Population Data to both CMS and The Joint Commission. Additionally, for the current Feedback Messages document (Error Messages, Missing Messages, and Measure Messages) for the CMS Clinical Warehouse please refer to the *QualityNet* website. For the Joint Commission's Hospital Clinical Data Feedback Messages, please refer to the Joint Commission's extranet for ORYX® Vendors (PET).

- Error Messages provide feedback regarding submitted data, file structure and data integrity that either cause the case to be rejected from the warehouses (Critical) or ask for further verification (Informational). Cases with any critical error messages will not be processed or stored in the warehouse. For cases to be accepted into the warehouses all critical errors must be corrected and the case resubmitted. Informational errors are feedback that warn of potential issues and ask for verification. Cases that receive no error messages or that receive informational messages only will be processed as per the measure algorithm.
- Missing Messages are critical edits that will cause the case to be rejected from the warehouses due to missing data, as per the measure algorithms, resulting in a measure outcome of "X" (Data are Missing).
- Measure Messages provide feedback related to the outcome of the case, as per the measure algorithm, resulting in any other measure outcome, i.e., "B" (Not in Measure Population/Excluded), "D" (In Measure Population/Failed), "E" (In Numerator Population/Passed), or "Y" (Unable to Determine Allowable Value Does Not Allow Calculation of the Measure/UTD).

CMS and Joint Commission Guidelines for Submission of Hospital Clinical Data

Minimum Data Requirements

Prior to processing measure outcomes all data will be verified according to the rules in the data transmission section and the Feedback Messages documents. Cases submitted to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse that does not meet the requirements outlined in these documents will be rejected.

Allowable Measure Set Combination per Patient Episode of Care

Submission of multiple files for different measure sets for a single episode of care is allowable for the following *Measure Set* combinations:

1. CMS Clinical Warehouse only
 - a. ED and SEP for patients age 18 and older
2. Joint Commission's Data Warehouse only
 - a. ED, IMM, TOB, SUB, and VTE-Other VTE Only sub-population for patients age 18 and older

For The Joint Commission, hospitals are encouraged to submit the same case for all applicable measure sets (i.e., ED, IMM, SUB and TOB) under the Global Initial Patient Population.

Example:

If a hospital has elected to submit ED, TOB and IMM to The Joint Commission, for every ED case that is submitted, the hospital is encouraged to submit the same case as a TOB case and an IMM case to The Joint Commission's Data Warehouse. The same holds true regardless of the combination of measure sets (ED, IMM, SUB, TOB) the hospital has elected to submit to The Joint Commission.

Requirements for XML Tags and Associated Data

Do not put spaces between XML tags and associated data. Cases with inappropriate spaces will be rejected from both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse.

Export File Character Limitations

Per *QualityNet* standards, a file name length, for cases exported for submission to the CMS Clinical Warehouse, can be up to 260 characters as long as they are in a zip file and the zip file's name is less than 50 characters. Cases that are not submitted in a zip file may not have greater than 50 characters in the file name.

ORYX® Vendors should refer to the *ORYX® Technical Implementation Guide* for guidelines related to file naming for submission of data to the Joint Commission's Data Warehouse.

Missing Data Policy

All cases submitted to the CMS Clinical Warehouse and Joint Commission's Data Warehouse must have all data required to calculate the measures. Files submitted which are missing data required to calculate measures (any case that would result in a Measure Category "X" assignment) will be rejected from both warehouses. These cases should be reviewed by the provider and resubmitted with an allowable value indicated for any data element that was missing. Please refer to the Missing and Invalid Data Section for additional information.

In addition, all cases submitted to the CMS Clinical Warehouse or the Joint Commission's Data Warehouse are required to be complete if they have data related to:

- Procedures Codes

If the abstractor, after due diligence, is not able to determine an answer, a value of "UTD" must be selected for the applicable data element. This includes:

- *ICD-10-PCS Principal Procedure Code* and *ICD-10-PCS Other Procedure Codes* require the data element *ICD-10-PCS Principal Procedure Date* and *ICD-10-PCS Other Procedure Dates* to be submitted with the case. Please see the data element definitions for further details on allowable values. If the case is missing the corresponding allowable answer value, the case will be rejected from the CMS Clinical Warehouse and the Joint Commission's Data Warehouse.

Data Elements Not Accepted by The Joint Commission

The following data elements are transmitted to CMS, but cannot be transmitted to The Joint Commission. Files transmitted to The Joint Commission that contain the following data will be rejected:

- *Patient Identifier*
- *First Name*
- *Last Name*
- *Postal Code*

Data Elements Not Accepted by CMS

The following data elements must be transmitted to The Joint Commission, but cannot be transmitted to CMS. Files transmitted to CMS that contain the following data will be rejected:

- *Measure Category Assignment*
- *Measurement Value*
- *Predicted Value* (Note: Currently there is no active risk-adjusted measure which uses this data element.)

Required Patient Identifiers Based on Payment Source

1. All cases submitted to the CMS Clinical Warehouse are required to include the *Patient Identifier*. Please refer to the data dictionary for the definition of this data element.

Unique Record Key (What fields make a record unique?)

CMS Clinical Warehouse:

CMS Certification Number, Patient Identifier, Admission Date, Discharge Date and Measure Set

For each patient episode of care the following patient identifiers should match for each *Measure Set* that is submitted:

- *CMS Certification Number*
- *Patient Identifier*
- *Admission Date*
- *Discharge Date*
- *Birthdate*

For example, if the hospital submits a separate XML file for ED and SEP, the above identifiers should be the same in each of the XML files.

Joint Commission's Data Warehouse:

Performance Measurement System Identifier, Vendor Tracking ID, Admission Date, Discharge Date, Measure Set, and Health Care Organization Identifier.*

For each patient episode of care the following patient identifiers should match for each *Measure Set* that is submitted:

- *Vendor Tracking Identifier*
- *Admission Date*
- *Discharge Date*
- *Birthdate*
- *Healthcare Organization Identifier*

For example, if the hospital submits a separate XML file for ED and TOB, the above identifiers should be the same in each of the XML files.

Principal and Other Diagnosis and Procedure Codes

- Only valid ICD diagnosis and ICD procedure codes, as per the CMS master code tables, will be accepted into the CMS Clinical Warehouse and Joint Commission's Data Warehouse. Submission of other codes not included on the CMS master code tables will result in cases being rejected from both warehouses.
- Effective March 1, 2007, The National Uniform Billing Committee has implemented a Present on Admission indicator for Principal and Other Diagnosis codes. Data submitted to the CMS Clinical Warehouse and Joint Commission's Data Warehouse must have the Present on Admission Indicator removed prior to submission. Failure to remove the indicator will result in cases being rejected from both warehouses.

* **Note:** Refer to the *ORYX® Technical Implementation Guide* for more information concerning the Performance Measurement System Identifier.

Patient-Level Clinical Data XML File Layout

The XML File Layout is divided into the following five main sections (Please refer to Hospital Clinical Data XML File Layout for details).

Submission

1. Type – Describes the setting for which the data is being collected (Hospital)
2. Data – Describes the type of data being submitted (Clinical).
3. Version – Describes the version of the XML file layout.
4. Action-Code – Describes the action intended with the submission of the file. Options include:
 - a. Add (applicable to a file submitted for the first time for the hospital/time period or to a file being submitted as an update/replacement of an existing file already submitted for a provider).
 - b. Delete (utilize when the file is submitted for the purpose of deleting a file already submitted to the CMS Clinical Warehouse or Joint Commission's Data Warehouse.)

Note: In order to replace or delete an existing file utilizing the Add or Delete action codes, the files must match on the following fields:

CMS Clinical Warehouse - *CMS Certification Number, Patient Identifier, Admission Date, Discharge Date and Measure Set.*

Joint Commission's Data Warehouse - *Performance Measurement System Identifier*, Vendor Tracking ID, Admission Date, Discharge Date, Measure Set, and Health Care Organization Identifier.*

File Audit Data

Note: This section is not required

1. Create-Date – Indicates the date the file was created.
2. Create-Time – Indicates the time the file was created.
3. Create-By – Indicates who created the file.
4. Version – Indicates the version of the file being submitted.
5. Create-by-Tool – Indicates the software tool utilized to create the file.

Abstraction Audit Data

Note: This section is not required

1. Abstraction-Date – Indicates the date the file was abstracted.
2. Abstractor-id – Indicates the person who abstracted the file.
3. Total-Abstraction-Time – Indicates the time required to abstract the file (in seconds).
4. Comments – Area for entry of any comments regarding the abstraction.

* **Note:** Refer to the *ORYX® Technical Implementation Guide* for more information concerning the Performance Measurement System Identifier.

Provider

Data elements in this section of the XML file relate to Provider identification. These data elements include:

1. *CMS Certification Number* - Hospital's six digit acute CMS Certification Number (CCN), which is required by CMS and optional for The Joint Commission.
2. *NPI* - National Provider Identifier as assigned by CMS, optional for both CMS and The Joint Commission.
3. *HCOID* - Identifies the healthcare organization that is accredited by The Joint Commission and is required as a key element of the patient file for The Joint Commission. Is optional for CMS.

Patient

Data elements in this section of the XML file relate to patient demographic information such as *First Name* and *Last Name*, *Birthdate*, *Sex*, *Race*, *Hispanic Ethnicity*, and *Postal Code*.

For algorithms that calculate the patient age, *Admission Date* minus the *Birthdate*, use the month and day portion of admission date and birthdate to yield the most accurate age. The traditional approach of counting months or years by the birthday date or the first day of the next month, when the exact date does not exist in the calendar for the end point, must be used when calculating the patient age. For example, if calculating the age by year, a patient born on March 31st turns one year older on March 31st. A patient born on February 29th, in a leap year, has a birthday on February 29th on all leap years, and March 1st in all non-leap years. Or if calculating age by month, if a patient is born on March 31st the patient turns 6 months on October 1st and not on September 30th. Since the date 31 date does not exist in September, you would move to the first day of the next month, which would be October 1st, to add one month to the patient age.

Episode of Care

Data in this section of the XML file relate to the acute inpatient stay and clinical data associated with the stay. Examples of associated data elements include:

1. *Admission Date*
2. *Discharge Date*
3. *Patient Identifier*
4. *Vendor Tracking Identifier*
5. *Measure Set*
6. Clinical Questions and answer codes

The Joint Commission

Data in this section of the XML file support the Joint Commission's data quality analysis and continuous measure verification process of ORYX[®] Vendors. The following data elements are required to be transmitted to The Joint Commission for each measure in the measure set.

1. *Measure Category Assignment*
2. *Measurement Value*
3. *Predicted Value* (Note: Currently there is no active risk-adjusted measure which uses this data element.)

Please refer to the data dictionary for further definition of these data elements.

Abstraction Software Skip Logic and Missing Data

Skip logic allows hospitals and vendors to minimize abstraction burden by using vendor software edit logic to bypass abstraction of data elements not utilized in the measure algorithm. However, these bypassed elements also negatively impact data quality and the hospital's CMS chart audit validation results when elements are incorrectly abstracted and subsequent data elements are bypassed and left blank.

The use of skip logic by hospitals and ORYX® vendors is optional and not required by CMS and The Joint Commission. Hospitals should be aware the potential impact of skip logic on data quality, abstraction burden, and CMS chart audit validation scores. Vendors and hospitals utilizing skip logic should closely monitor the accuracy rate of abstracted data elements, particularly data elements placed higher in the algorithm flow (e.g., Comfort Measures data element).

Historically, CMS chart audit validation results have been used in previous payment years as one of many requirements in the Hospital Inpatient Quality Reporting Program. Please refer to the Federal Register and the *QualityNet* website for the current payment year's proposed and final requirements for acute care Inpatient Prospective Payment System (IPPS) hospitals.

CMS and Joint Commission Guidelines for Submission of Hospital Initial Patient Population Data

Hospitals must submit to CMS and The Joint Commission on a quarterly basis the aggregate population and sample counts for Medicare and non-Medicare discharges for each of the chart abstracted measure sets. If the aggregate population count is zero, the hospital is still required to submit the Hospital Initial Inpatient Population Data file and would submit zero as the population and sample counts. In addition, the Hospital Initial Inpatient Population Data file must be transmitted to both the CMS Clinical Warehouse and Joint Commission's Data Warehouse even if the hospital has elected to not report the patient data when they have five or fewer cases for an appropriate measure set during the quarter.

Hospital Initial Patient Population Data XML File Layout

The XML File Layout is divided into the following five main sections (Please refer to Hospital Initial Patient Population Data XML File Layout for details).

Submission

1. Type – Describes the setting for which the data is being collected (Hospital).
2. Data – Describes the type of data being submitted (Population).
3. Version – Describes the version of the XML file layout.
4. Action-Code – Describes the action intended with the submission of the file. The "Add" action-code is required for all initial patient population files submitted.

Note: In order to replace an existing file utilizing the Add action code, the files must match on:

CMS Clinical Warehouse - CMS Certification Number, Time-Period and Measure-Set

In order to replace an existing file all XML tags must be present, however, only the XML tags mentioned above (*CMS Certification Number*, *Time-Period*, and *Measure-Set*) need to be submitted with values.

Joint Commission's Data Warehouse - Health Care Organization ID, Time-Period and Measure-Set

In order to replace an existing file all XML tags must be present, however, only the XML tags mentioned above (*Health Care Organization ID*, *Time-Period*, and *Measure-Set*) need to be submitted with values.

File Audit Data

Note: This section is not required.

1. Create-Date – Indicates the date the file was created.
2. Create-Time – Indicates the time the file was created.
3. Create-By – Indicates who created the file.
4. Version – Indicates the version of the file being submitted.
5. Create-by-Tool – Indicates the software tool utilized to create the file.

Provider Data

Data elements in this section of the XML file relate to Provider identification. These data elements include:

1. *CMS Certification Number* - Hospital's six digit acute CMS Certification Number (*CCN*), which is required by CMS and optional for The Joint Commission.
2. *NPI* - National Provider Identifier as assigned by CMS, optional for both CMS and The Joint Commission.
3. *HCOID* - Identifies the healthcare organization that is accredited by The Joint Commission and is required as a key element of the patient file for The Joint Commission. Is optional for CMS.

Time Period

Time-Period – Dates in this field should reflect the discharge time period related to the data being submitted. Time period start and end dates must reflect full month increments, and may not be greater than one month. Files submitted to the CMS Clinical Warehouse and the Joint Commission's Data Warehouse are required to contain a three monthly time periods which comprise the calendar quarter for which data is being submitted.

Example:

If the Hospital Initial Patient Population File is being submitted for second quarter 2007, the file must contain the following time periods and appropriate associated data (including all data elements is the Population Details section that follows):

April 2007

May 2007

June 2007

Files submitted with time periods that do not meet the above requirements will be rejected from the CMS Clinical Warehouse and the Joint Commission's Data Warehouse.

Population Details

1. Measure-Set – Indicates the *Measure Set* for which the data is being submitted (Valid Ids include SEP, VTE, and GLB).
2. Stratum – Indicates the stratum or sub-population related to the data being submitted. (Note: This applies to VTE only).

Additional data elements include *Initial Patient Population Size – Medicare*, *Initial Patient Population Size – Non-Medicare*, *Sampling Frequency*, *Sample Size – Medicare*, and *Sample Size – Non-Medicare*. Please refer to the Transmission Data Dictionary for further definition of these data elements. Please refer to Hospital Initial Patient Population Data XML File Layout for further information on details of the XML file format. All data elements are based on discharges that occurred during the associated time period.

Transmission Alphabetical Data Dictionary

These data elements are either used to identify the hospital and measure set associated to the transmitted data **or** are calculated by the vendor using the hospital's patient-level data and measure results. These data elements are not used in the Initial Patient Population Algorithms or Measure Algorithms.

Transmission Data Elements Table

| Name | Page # | Collected For: |
|--|---------------|---|
| <i>CMS Certification Number</i> | 9-16 | All Records |
| <i>Health Care Organization Identifier</i> | 9-17 | Used in transmission of the Joint Commission's aggregate data file, the Hospital Initial Patient Population Data file and Hospital Clinical Data |
| <i>Initial Patient Population Size – Medicare Only</i> | 9-18 | Used in transmission of the Hospital Initial Patient Population Data file |
| <i>Initial Patient Population Size – Non-Medicare Only</i> | 9-20 | Used in transmission of the Hospital Initial Patient Population Data file |
| <i>Measure Set</i> | 9-22 | Used in transmission of the Hospital Initial Patient Population Data file and the Hospital Clinical Data file |
| <i>National Provider Identifier (NPI)</i> | 9-23 | Optional for All Records |
| <i>Predicted Value</i> | 9-24 | Used in the calculation of the Joint Commission's aggregate data for Risk Adjusted Measures and in the transmission of the Hospital Clinical Data file Note: Currently there is no active risk-adjusted measure which uses this data element |
| <i>Sample Size – Medicare Only</i> | 9-26 | Used in transmission of the Hospital Initial Patient Population Data file |
| <i>Sample Size – Non-Medicare Only</i> | 9-28 | Used in transmission of the Hospital Initial Patient Population Data file |
| <i>Sampling Frequency</i> | 9-30 | Used in transmission of the Hospital Initial Patient Population Data file |
| <i>Vendor Tracking Identifier</i> | 9-31 | Used in transmission of hospital clinical data to the Joint Commission |

Data Element Name: *CMS Certification Number*

Collected For: All Records

Definition: Hospital's six digit acute care CMS Certification Number (CCN).

Suggested Data Collection Question: What is the hospital's six-digit acute care CMS Certification Number?

Format:

Length: 6

Type: Character

Occurs: 1

Allowable Values:

Any valid six digit CMS Certification Number.

The first two digits are the numeric state code. The third digit of zero represents an acute facility. The third digit of "1" and fourth digit of "3" represents a Critical Access Hospital (CAH).

Notes for Abstraction:

None

Suggested Data Sources:

None

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Health Care Organization Identifier*

Collected For: The Joint Commission Only: Used in transmission of the Joint Commission's aggregate data file, in the Hospital Initial Patient Population Data file and Hospital Clinical Data.

Definition: A unique number, assigned by the Joint Commission, to identify the health care organization that is accredited by the Joint Commission. This number is used to identify and group a health care organization's HCO-Level performance measure data.

Suggested Data Collection Question: What is the Joint Commission's unique identification number for the provider?

Format:

Length: 6

Type: Numeric

Occurs: 1

Allowable Values:

1 – 999,999

Notes for Abstraction:

None

Suggested Data Sources:

Does not apply, assigned by The Joint Commission.

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Patient Population Size – Medicare Only*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file.

Note: Refer to the Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Definition: Indicates the number of episode of care (EOC) records identified for a hospital with Medicare listed as a payment source prior to the application of data integrity filters, measure exclusions, and/or sampling methodology for the specified time period.

The data element is based on the hospital's initial identification of Medicare EOC records for a measure set, stratum, or sub-population. *Initial Patient Population Size – Medicare Only* includes all patients that are billed under Medicare or Title 18. Medicare can be listed as a primary, secondary, tertiary or lower on the list of payment sources for the patient. In addition, patients who are participating as a member of a Medicare HMO/Medicare Advantage are included in the Medicare counts, e.g., Medicare Blue, Humana Gold, Secure Horizons, AARP, Coventry Advantra, etc. This initial data pull utilizes administrative data such as ICD-10 diagnosis and procedure codes, admission date, and birthdate.

For specific measure set, stratum, or sub-population definitions, refer to the appropriate Initial Patient Population discussion in the Measure Information section of this manual.

Note: If the hospital's data has been sampled, this field contains the population from which the sample was originally drawn, NOT the sample size.

Suggested Data Collection Question: Not Applicable

Format:

Length: 6

Type: Numeric

Occurs: Non-stratified Measure Sets

One *Initial Patient Population Size - Medicare Only* per hospital's measure set (e.g. GLB and SEP).

Stratified Measure Sets

One *Initial Patient Population Size – Medicare Only* per measure set, stratum or sub-population the hospital is participating in.

The VTE measure set has one occurrence for the Other VTE Only sub-population.

Allowable Values:

0 through 999,999

Notes for Abstraction:

Initial Patient Population Size – Medicare Only must contain the actual number of patients in the population even if the hospital has five or fewer discharges (both Medicare and non-Medicare combined) in a quarter and has decided to not submit patient level data.

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Initial Patient Population Size – Non-Medicare Only*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file.

Note: Refer to the Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Definition: Indicates the number of episode of care (EOC) records identified for a hospital with Medicare NOT listed as a payment source prior to the application of data integrity filters, measure exclusions, and/or sampling methodology for the specified time period.

The data element is based on the hospital's initial identification of non-Medicare EOC records for a measure set, stratum, or sub-population. This initial data pull utilizes administrative data such as ICD-10 diagnosis and procedure codes, admission date, and birthdate.

For specific measure set, stratum, or sub-population definitions, refer to the appropriate Initial Patient Population discussion in the Measure Information section of this manual.

Note: If the hospital's data has been sampled, this field contains the population from which the sample was originally drawn, NOT the sample size.

Suggested Data Collection Question: Not Applicable

Format:

Length: 6

Type: Numeric

Occurs: **Non-stratified Measure Sets**

One *Initial Patient Population Size – Non-Medicare Only* per hospital's measure set (e.g. GLB and SEP).

Stratified Measure Sets

One *Initial Patient Population Size – Non-Medicare Only* per measure set, stratum or sub-population the hospital is participating in.

The VTE measure set has one occurrence for the Other VTE Only sub-population.

Allowable Values:

0 through 999,999

Notes for Abstraction:

Initial Patient Population Size – Non-Medicare Only must contain the actual number of patients in the population even if the hospital has five or fewer discharges (both Medicare and non-Medicare combined) in a quarter and has decided to not submit patient level data.

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Measure Set*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file and the Hospital Clinical Data file

Definition: Indicates which measure set (topic) is being transmitted for a hospital.

Suggested Data Collection Question: Not Applicable

Format:

Length: 10

Type: Character

Occurs: Hospital Clinical Data file: 1

Hospital Initial Patient Population Data file: 1 - 3

Allowable Values:

Refer to the Hospital Clinical Data XML File Layout and the Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Notes for Abstraction:

None

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *National Provider Identifier (NPI)*

Collected For: CMS/The Joint Commission: Optional for All Records

Definition: All Health Insurance Portability and Accountability Act of 1996 (HIPAA) covered healthcare providers must obtain a National Provider Identifier (NPI). The NPI may be provided in addition to the CMS Certification Number (CCN).

Suggested Data Collection Question: What is the NPI for this provider?

Format:

Length: 10

Type: Numeric

Occurs: 1

Allowable Values:

Any valid 10 digit NPI number. The 10th digit is a numeric check digit based off the first 9 digits.

Notes for Abstraction:

None

Suggested Data Sources:

UB-04

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Predicted Value*

Collected For: The Joint Commission Only: Used in the calculation of the Joint Commission's aggregate data for risk-adjusted measures, and in the transmission of the Hospital Clinical Data file.

Note:

- Currently there is no active risk-adjusted measure which uses this data element; therefore no measure should report this data.
- The ORYX® Vendor's calculated *Predicted Value* will be transmitted for an active risk adjusted measure to The Joint Commission on a quarterly basis with the associated hospital clinical data. These measure results will be used in the Joint Commission's data quality analysis and continuous measure verification process. ORYX® Vendors can refer to the Joint Commission's *ORYX® Data Quality Manual* and *ORYX® Risk Adjustment Guide* for more information.

Definition: This data element is used to store the calculated predicted value that results from applying the appropriate Joint Commission risk model to the data.

Note: Used in conjunction with Measure Category Assignment when its allowable value equals "D" (In Measure Population) or "E" (In Numerator Population).

Suggested Data Collection Question: Not Applicable

Format:

Length: 2-9 (including decimal)

Type: Numeric

Occurs: One Predicted Value is expected per EOC for every risk-adjusted measure that a hospital is participating in.

Allowable Values:

.00000001 – .99999999

JOINT COMMISSION NOTE TO PROGRAMMERS:

- Round to 8 decimal positions.
- Use only the twenty-five ICD-10-CM Diagnosis Codes that are transmitted as part of the patient record when evaluating the patient against the risk model. Do not use additional ICD-10-CM Diagnosis Codes that may be available in the medical record or from the UB download.

Notes for Abstraction:

None

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Sample Size – Medicare Only*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file.

Note: For more information refer to the Population and Sampling Specifications section and Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Definition: Indicates the number of episode of care (EOC) records identified for a hospital with Medicare listed as a payment source for a hospital to perform data abstraction on. This count is after the appropriate sampling methodology, if any, has been applied for the specific time period.

Notes:

- If the hospital is sampling the measure set, then the *Sample Size – Medicare Only* should be equal or less than the *Initial Patient Population Size – Medicare Only* for the set, stratum, or sub-population.
- If the hospital is not sampling the measure set, then the *Sample Size – Medicare Only* will equal the *Initial Patient Population Size – Medicare Only* for the set, stratum, or sub-population. For CMS, there may be instances where the *Sample Size – Medicare Only* may be lower than the Initial Patient Population Size. Hospitals selecting sample cases must ensure that its Initial Patient Population(s) and sample size(s) meet the conditions stated in the measure set's Sample Size Requirements.
- Hospitals should submit the same case for all applicable measure sets (i.e., ED, IMM, SUB and TOB) under the Global Initial Patient Population.

Example:

- If a hospital has elected to submit ED, TOB and IMM to The Joint Commission, for every ED case that is submitted, the hospital is encouraged to submit the same case as a TOB case and an IMM case to The Joint Commission's Data Warehouse. The same holds true regardless of the combination of measure sets (ED, IMM, SUB, TOB) the hospital has elected to submit to The Joint Commission.

Suggested Data Collection Question: Not Applicable

Format:

Length: 6

Type: Numeric

Occurs: **Non-stratified Measure Sets**

One *Sample Size - Medicare Only* per hospital's measure set (e.g. GLB and SEP).

Stratified Measure Sets

One *Sample Size – Medicare Only* per measure set, stratum or sub-population the hospital is participating in.

The VTE measure set has one occurrence for the Other VTE Only sub-population.

Allowable Values:

0 through 999,999

Notes for Abstraction:

When *Sampling Frequency* equals 'N/A' because the hospital has five or fewer discharges (both Medicare and non-Medicare combined) in a quarter and has decided to not submit patient level data, *Sample Size – Medicare Only* should equal zero.

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Sample Size – Non-Medicare Only*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file.

Note: For more information, refer to the Population and Sampling Specifications section and Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Definition: Indicates the number of episode of care (EOC) records identified for a hospital with Medicare NOT listed as a payment source for a hospital to perform data abstraction on. This count is after the appropriate sampling methodology, if any, has been applied for the specific time period.

Notes:

- If the hospital **is** sampling the measure set, then the *Sample Size – Non-Medicare Only* should be equal or less than the *Initial Patient Population Size – Non-Medicare Only* for the set, stratum, and sub-population.
- If the hospital **is not** sampling the measure set, then the *Sample Size – Non-Medicare Only* will equal the *Initial Patient Population Size – Non-Medicare Only* for the set, stratum, and sub-population. For CMS, there may be instances where the *Sample Size – Non-Medicare Only* may be lower than the Initial Patient Population Size. Hospitals selecting sample cases must ensure that it's Initial Patient Population(s) and sample size(s) meet the conditions stated in the measure set's Sample Size Requirements.
- Hospitals should submit the same case for all applicable measure sets (i.e., ED, IMM, SUB and TOB) under the Global Initial Patient Population.

Example:

- If a hospital has elected to submit ED, TOB and IMM to The Joint Commission, for every ED case that is submitted, the hospital is encouraged to submit the same case as a TOB case and an IMM case to The Joint Commission's Data Warehouse. The same holds true regardless of the combination of measure sets (ED, IMM, SUB, TOB) the hospital has elected to submit to The Joint Commission.

Suggested Data Collection Question: Not Applicable

Format:

Length: 6

Type: Numeric

Occurs: Non-stratified Measure Sets

One *Sample Size – Non-Medicare Only* per hospital's measure set (e.g. GLB and SEP).

Stratified Measure Sets

One *Sample Size – Non-Medicare Only* per measure set, stratum or sub-population the hospital is participating in.

The VTE measure set has one occurrence for the Other VTE Only sub-population.

Allowable Values:

0 through 999,999

Notes for Abstraction:

When *Sampling Frequency* equals 'N/A' because the hospital has five or fewer discharges (both Medicare and non-Medicare combined) in a quarter and has decided to not submit patient level data, *Sample Size – Non-Medicare Only* should equal zero.

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Sampling Frequency*

Collected For: CMS/The Joint Commission: Used in transmission of the Hospital Initial Patient Population Data file.

Note: Refer to the Population and Sampling Specifications section and Hospital Initial Patient Population Data XML File Layout in the Transmission section of this manual.

Definition: Indicates if the data being transmitted for a hospital has been sampled (either monthly or quarterly), or represents an entire population for the specified time period.

Suggested Data Collection Question: Not Applicable

Format:

Length: 1

Type: Character

Occurs: Non-stratified Measure Sets

One *Sampling Frequency* per hospital's measure set (e.g. GLB and SEP).

Stratified Measure Sets

One *Sampling Frequency* per measure set, stratum or sub-population the hospital is participating in.

The VTE measure set has one occurrence for the Other VTE Only sub-population.

Allowable Values:

- 1 Yes, the hospital is sampling data monthly.
- 2 Yes, the hospital is sampling data quarterly.
- 3 No, the hospital is not sampling.
- 4 N/A, submission of patient level data is not required.

Notes for Abstraction:

- *Sampling Frequency* must be consistent across a discharge time period. Example: If the *Sampling Frequency* for April is monthly, then the *Sampling Frequency* for May and June must also be monthly.
- Hospitals with five or fewer discharges (both Medicare and non-Medicare combined) in a quarter are not required to submit patient level data.

Suggested Data Sources:

Not Applicable

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Data Element Name: *Vendor Tracking Identifier*

Collected For: The Joint Commission Only: Used in transmission of hospital clinical data to The Joint Commission

Definition: An ORYX® Vendor-generated identifier that uniquely identifies this patient's stay or episode of care. It is a fictitious identifier generated by the ORYX® Vendor to differentiate between individual patients in each hospital.

This identifier cannot be derived from or related to information about the patient in such a way that it is possible to identify the patient via a review or manipulation of the data.

Since this identifier is transmitted to The Joint Commission, ORYX® Vendors must be able to link this tracking identifier to the original record (patient) in the event that data quality issues arise. Any data that require correction and re-transmission must use the same tracking identifier as that used in the original transmission or a duplication of data within the Joint Commission's database will occur.

Suggested Data Collection Question: Not applicable, this data element is not data entered.

Format:

Length: 100

Type: Character

Occurs: 1

Allowable Values:

Up to 100 letters, numbers, and/or special characters can be entered.

Note: Only the following special characters will be allowed:

~ ! @ # \$ % ^ * () _ + { } | : ? ` - = [] \ ; ' . , / and space

The identifier cannot be left blank or be the patient's social security number, Medicare number, driver license number, medical record number, account number, or other identifier assigned to the patient for purposes other than transmission of data to The Joint Commission. In addition, this identifier cannot be a combination of data in which one portion of the data directly identifies the patient or the combination of data identifies the patient.

Notes for Abstraction:

None

Suggested Data Sources:

Unique measurement system generated identifier

NOTE TO PROGRAMMERS:

A measurement system may have its own case identifier. We are not requesting that systems change their internal processes; rather, this tracking identifier is needed for transmission of the hospital clinical data to The Joint Commission.

Inclusion Guidelines for Abstraction:

None

Exclusion Guidelines for Abstraction:

None

Transmission Data Processing Flow: Clinical

Introduction

This section contains information regarding the order in which both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse evaluates the national hospital quality inpatient measures. In addition, it highlights the processing differences between the two warehouses.

The transmission data processing flow ensures that only valid data are used in the measure algorithms and the Joint Commission's risk models. Each case that is rejected by the process will be listed on a report along with a brief description of the problem. Each warehouse has reports available to assist the submitter to determine how the data was processed. For the CMS Clinical Warehouse, please refer to the My QualityNet User's Guide, Section 2, which is located on QualityNet (<https://www.qualitynet.org>), for more information about the data upload process and these reports. For The Joint Commission, vendors will access the APLD Reports via the Performance Measurement System Extranet Track (PET).

Transmission Data Processing Flow

All data transmitted pass through the following process:

1. If appropriate, files are verified to be proper zip and XML files.
 - If the files are invalid, reject the file(s) and stop processing.
 - If the files are valid, continue processing.
2. If the files are submitted to The Joint Commission, the data are verified that no unexpected protected health information (PHI) (e.g., Patient Identifier and Postal Code) are present.
 - If unexpected PHI exists, reject the file(s) and stop processing.
 - If **no** unexpected PHI exists, continue processing.
3. If the files are submitted to CMS, the data are verified that no Joint Commission only data (e.g., measure-results, measure-category, and measure-value XML tags) are present.
 - If Joint Commission only data exists, reject the file(s) and stop processing.
 - If no Joint Commission only data exists, continue processing.

Starting with this step, processing is per case (individual XML file):

4. Data are evaluated to ensure the quarter associated to the *Discharge Date* is open for data transmission.
 - If the Data Collection quarter is closed, reject the XML file and stop processing.
 - If the Data Collection quarter is open, continue processing.
5. Data are evaluated to ensure the *Measure Set* is expected from the submitter for the time frame (*Discharge Date*) in question. In addition, the CMS Clinical Warehouse verifies the data is expected for the *CMS Certification Number* and Joint Commission warehouse verifies the data is expected for the *Healthcare Organization Identifier*.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.

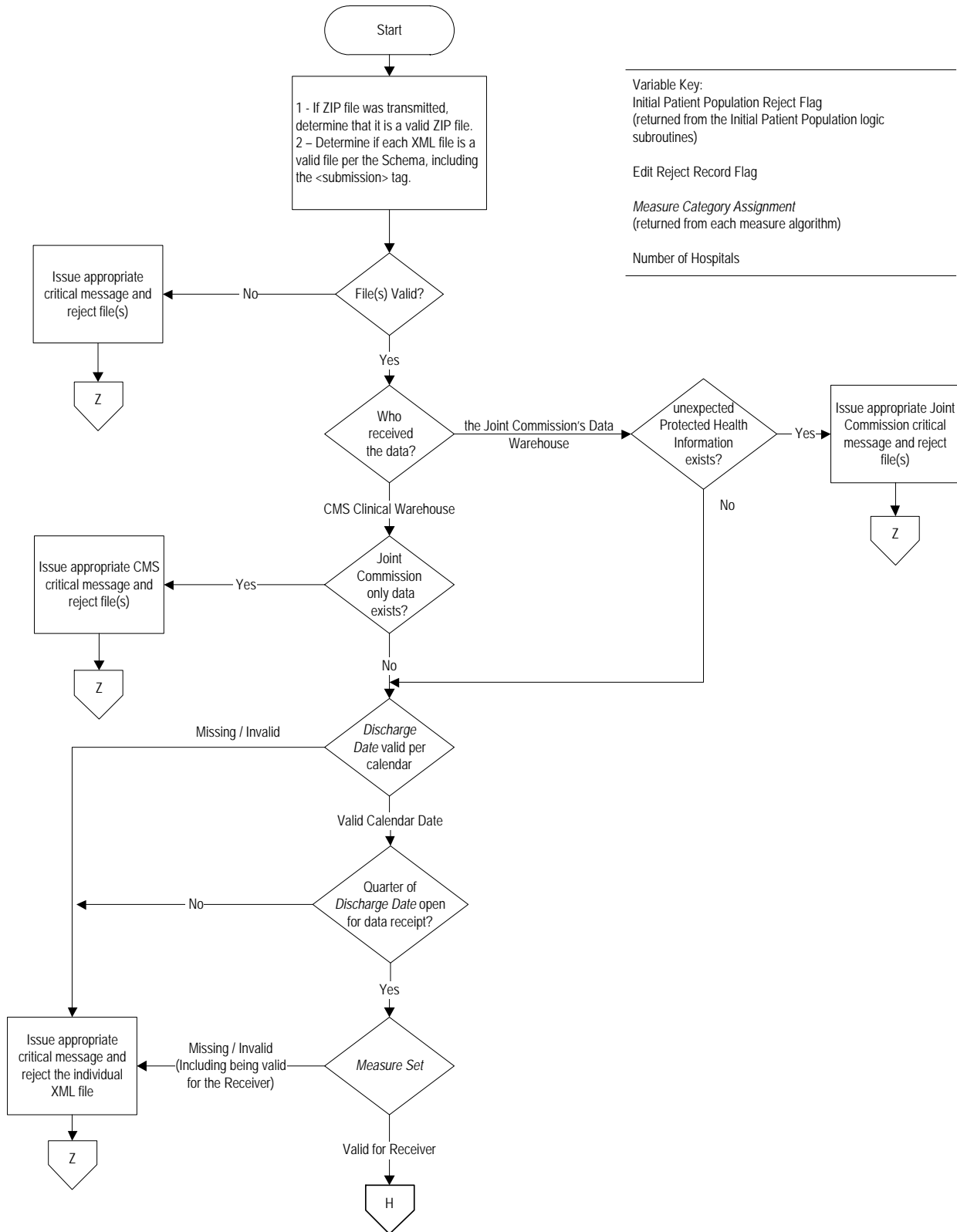
6. Check the action-code
 - If the action-code equals ADD, continue with step 7.
 - If the action-code equals DELETE, continue with step 15.
7. The general data elements, as defined in the Introduction to the Data Dictionary section, are evaluated to ensure they exist and contain valid allowable values. These data elements are required for all *Measure Sets*.
 - If any general data elements fall outside of the data integrity checks, reject the XML file and stop processing.
 - If any general data element is missing or invalid, reject the XML file and stop processing.
 - If all general data elements exist and contain valid allowable values, continue processing.
8. The Initial Patient Population Algorithm associated to the *Measure Set* is evaluated to ensure that the data is in the population of the set. Refer to the appropriate *Measure Set Data Element List* for the algorithm.
 - If the Initial Patient Population Algorithm returns an **Initial Patient Population Reject Case Flag** equals “Yes” (case is not in the Initial Patient Population), reject the XML file and stop processing.
 - If the Initial Patient Population Algorithm returns an **Initial Patient Population Reject Case Flag** equals “No” (case is in the Initial Patient Population), continue processing.
9. The *Measure Set* specific data elements are evaluated to ensure they contain valid allowable values. This step does not evaluate for missing data because that is performed by the measure algorithms.
 - If any measure set specific data elements fall outside of the data integrity checks, reject the XML file and stop processing.
 - If any measure set specific data elements are invalid, reject the XML file and stop processing.
 - If all measure set specific data elements contain valid allowable values, continue processing.
10. If appropriate for the *Measure Set*, grid data elements are evaluated to ensure each row does not contain missing data. This step does not ensure that the entire grid is empty because that evaluation is performed by the measure algorithms.
 - If any row of the grid is missing data, reject the XML file and stop processing.
 - If the grid is empty or all data elements exist in each row, continue processing.
11. Each XML file is evaluated for unexpected data. While a case may be in the population of more than one measure set, each XML file is associated to only one set.
 - If any data exists that is not expected for the *Measure Set*, reject the XML file and stop processing.
 - If no unexpected data for the *Measure Set* exists, continue processing.
12. Each XML file is evaluated to ensure that it and existing data in the database for the patient does not create an incorrect measure set combinations. Refer to the CMS and Joint Commission Guidelines for Submission of Hospital Clinical Data in the Data Transmission section for list of invalid measure set combinations.

- If this record will create an incorrect measure set combination, reject the XML file and stop processing.
 - If this record will not create an incorrect measure set combination, continue processing.
13. Execute each measure algorithm associated to the measures the hospital has selected for the *Measure Set*. Refer to the appropriate Measure Information Forms for the *Measure Set* for the measure algorithms.
- If any measure evaluates with a *Measure Category Assignment* equals “X,” reject the XML file and stop processing.
 - If all measures evaluate with *Measure Category Assignments* equals “B,” “D,” “E,” and/or “Y,” continue processing.
14. The case is accepted into both the CMS Clinical Warehouse and the Joint Commission’s Data Warehouse.
For the data submitted to The Joint commission evaluate if any of the measures in the measure set are Risk Adjusted.
- If yes, then execute the measure risk model on xml file and then stop processing.
 - If no, stop processing.

The following steps are performed if the record’s action-code equals DELETE:

15. The remaining data elements that are part of the Unique Record Key, as defined in the CMS and Joint Commission Guidelines for Submission of Hospital Clinical Data in the Data Transmission section, are evaluated to ensure they exist and contain valid allowable values. These data elements are required for all *Measure Sets*.
- If any Unique Record Key data element is missing or invalid, reject the XML file and stop processing.
 - If all Unique Record Key data elements exist and contain valid allowable values, continue processing.
16. The database is checked to see if a record with the same Unique Record Key already exists.
- If the case does not already exist in the database, then the transmitted DELETE record is rejected.
 - If the record already exists in the database, it is deleted.

Transmission Data Processing Flow: Clinical

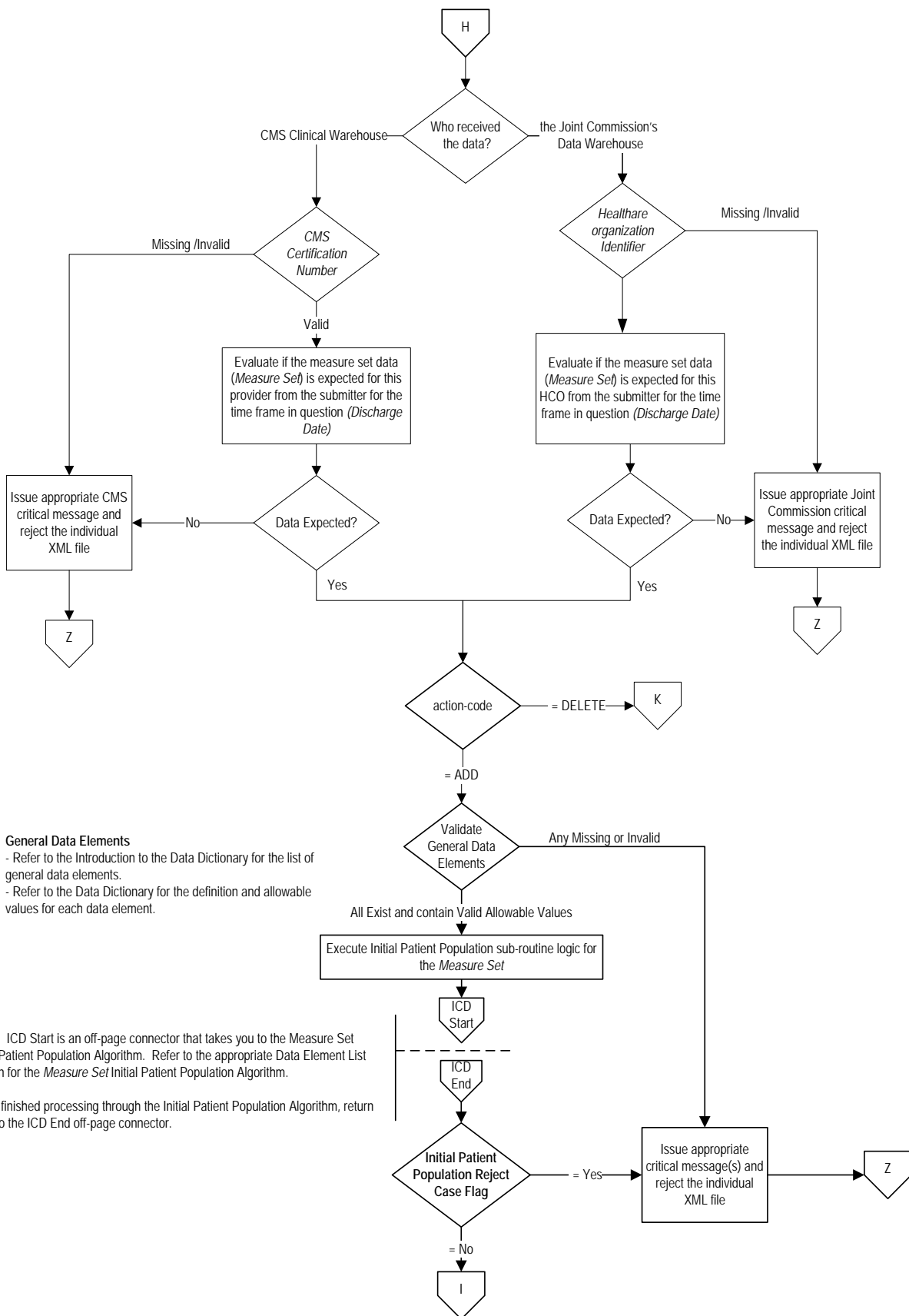


Variable Key:
 Initial Patient Population Reject Flag
 (returned from the Initial Patient Population logic subroutines)

Edit Reject Record Flag

Measure Category Assignment
 (returned from each measure algorithm)

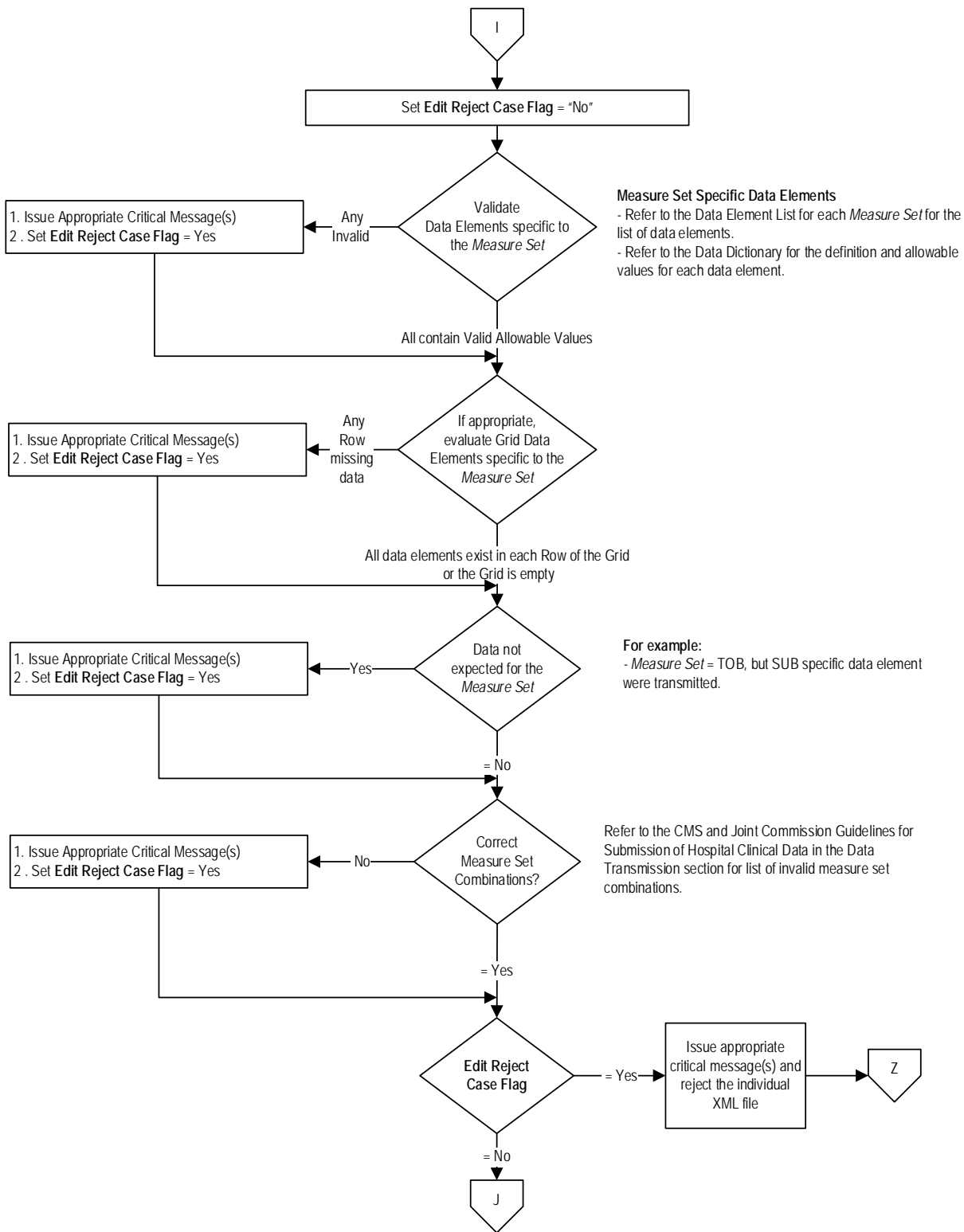
Number of Hospitals

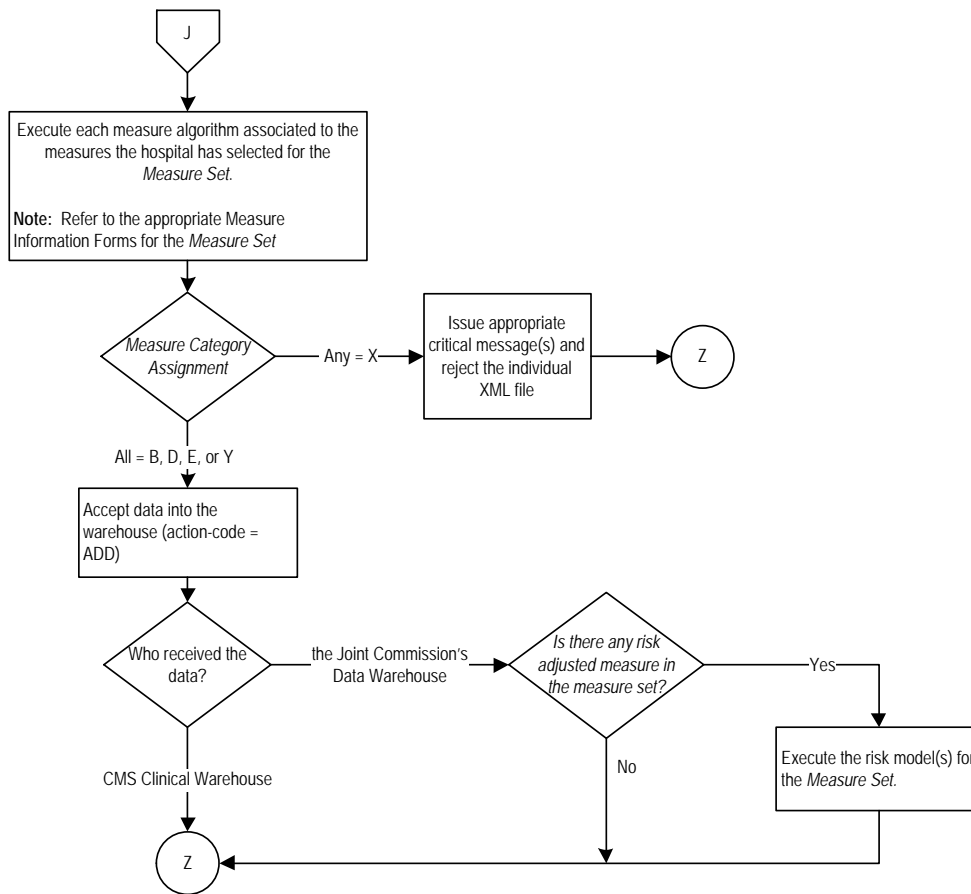


General Data Elements
 - Refer to the Introduction to the Data Dictionary for the list of general data elements.
 - Refer to the Data Dictionary for the definition and allowable values for each data element.

Note: ICD Start is an off-page connector that takes you to the Measure Set Initial Patient Population Algorithm. Refer to the appropriate Data Element List section for the *Measure Set* Initial Patient Population Algorithm.

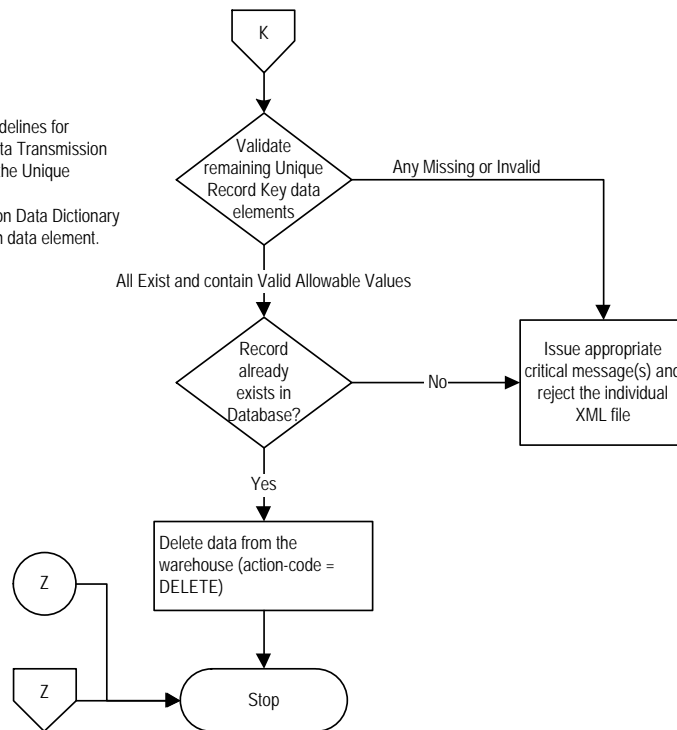
When finished processing through the Initial Patient Population Algorithm, return back to the ICD End off-page connector.





Key Data Elements

- Refer to the CMS and Joint Commission Guidelines for Submission of Hospital Clinical Data in the Data Transmission section for list of data elements that make up the Unique Record Key.
- Refer to the Data Dictionary and Transmission Data Dictionary for the definition and allowable values for each data element.



Transmission Data Processing Flow: Population and Sampling

Introduction

This section contains information regarding the order in which both the CMS Clinical Warehouse and the Joint Commission's Data Warehouse evaluate submitted files, which contain aggregate population and sampling counts. Transmission of population and sampling counts are used to assist in evaluating completeness of submission in accordance with CMS and The Joint Commission sampling requirements. In addition, it highlights the processing differences between the two warehouses.

Each warehouse has reports available to assist the submitter to determine how the file was processed. For the CMS Clinical Warehouse, please refer to the QualityNet User's Guide, Section 2, which is located on QualityNet (<https://www.qualitynet.org>), for more information about the data upload process. For The Joint Commission, vendors will access the APLD Reports via the Performance Measurement System Extranet Track (PET).

Transmission Data Processing Flow

All data transmitted pass through the following process:

1. If appropriate, files are verified to be proper zip and XML files.
 - If the files are invalid, reject the file(s) and stop processing.
 - If the files are valid, continue processing.

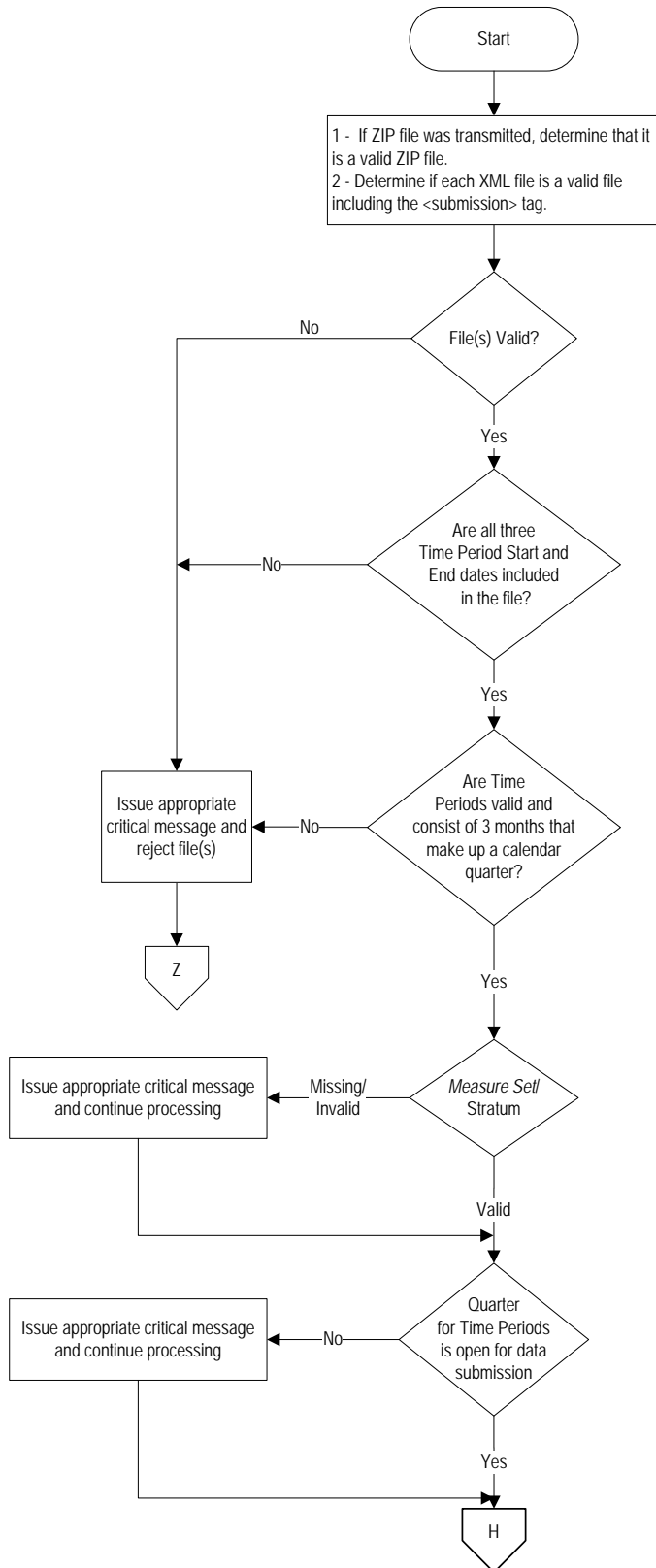
Starting with this step, processing is per XML file:

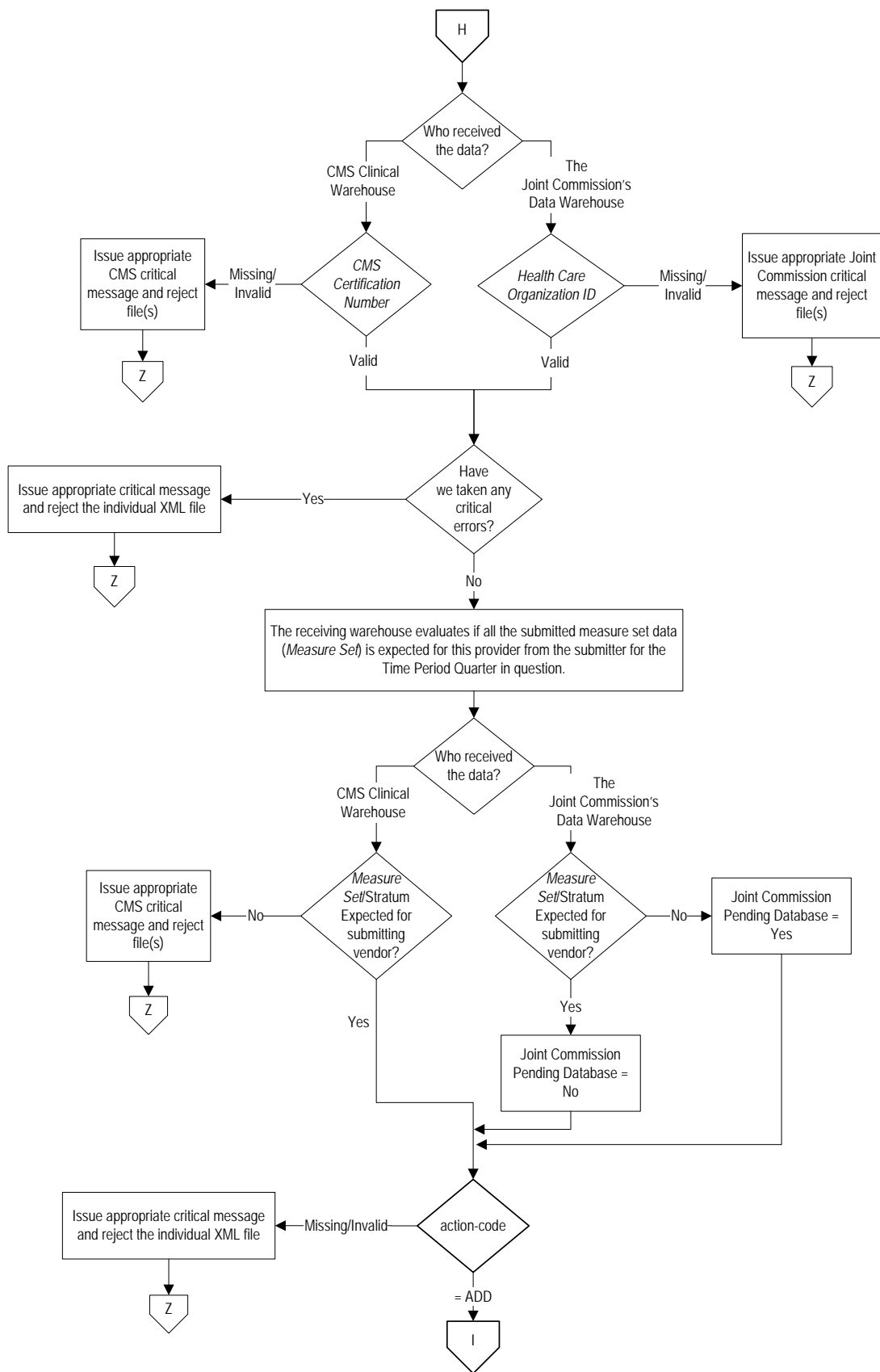
2. Data are evaluated to ensure that three individual time periods, which make up a calendar quarter, exist within the file.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.
3. The *Measure Set/Stratum* is evaluated to ensure a valid value is submitted.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.
4. Data are evaluated to ensure the quarter for Time Periods is open for data submission.
 - If the Data Collection quarter is closed, reject the XML file and stop processing.
 - If the Data Collection quarter is open, continue processing.
- 5a. If the files are submitted to CMS: The *CMS Certification Number* is evaluated to ensure a valid value is submitted.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.
- 5b. If the files are submitted to The Joint Commission: The Health Care Organization Identifier is evaluated to ensure a valid value is submitted.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.

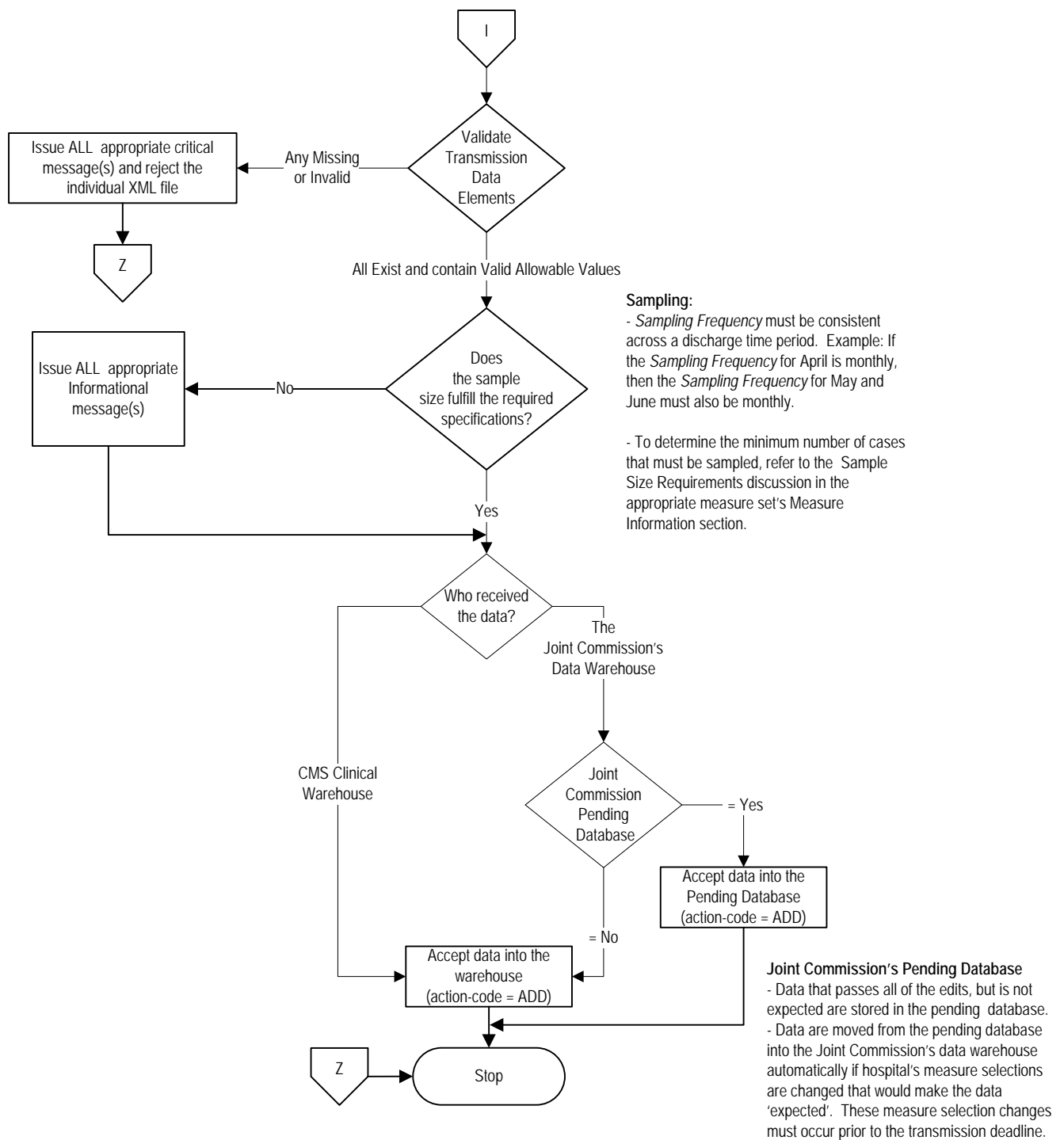
- 6a. If the files are submitted to CMS: If a vendor is submitting the file, data are evaluated to ensure the Measure Set(s) or Strata are expected from the submitter.
 - If the data are not expected, reject the XML file and stop processing.
 - If the data are expected, continue processing.
- 6b. If the files are submitted to The Joint Commission: Data are evaluated to ensure the Measure Set(s) or Strata are expected from the submitter.
 - If the data are not expected, set the reject 'Pending Database' flag to equal Yes, continue processing.
 - If the data are expected, set the reject 'Pending Database' flag to equal No, continue processing.
7. Check the action-code.
 - If the action-code equals ADD, continue processing.
 - If the action-code is missing or invalid, reject the XML file and stop processing.
8. The transmission data elements, as defined in the Transmission Alphabetical Data Dictionary, are evaluated to ensure they exist and contain valid allowable values. These transmission data elements are required for all submitted files.
 - If any transmission data elements fall outside of the data integrity checks, reject the XML file and stop processing.
 - If any transmission data element is missing or invalid, reject the XML file and stop processing.
 - If all transmission data elements exist and contain valid allowable values, continue processing.
9. Data are evaluated to ensure that the sample size fulfills the required specifications. *Sample Frequency* must be consistent across all three time periods within a calendar quarter.
 - If the data are not expected, informational messages generated, continue processing.
 - If the data are expected, continue processing.
- 10a. If the files are submitted to CMS: The case is accepted into the CMS Clinical Warehouse.
- 10b. If the files are submitted to The Joint Commission:
 - If the Pending Database flag equals No, the case is accepted into the Joint Commission's Data Warehouse.
 - If the Pending Database flag equals Yes, the case is accepted into the Joint Commission's Pending Database. Data are moved from the pending database into the Joint Commission's Data Warehouse automatically if hospital's measure selections are changed that would make the data 'expected' (refer to step 6b above). These measure selection changes must occur prior to the transmission deadline.

Transmission Data Processing Flow: Population and Sampling

Variable Key:
Joint Commission Pending Database







Centers for Medicare & Medicaid Services (CMS) Outcome Measures

Introduction

The Centers for Medicare & Medicaid Services (CMS) uses a variety of data sources to determine the quality of care that Medicare beneficiaries receive. Each measure set is calculated using a separate, distinct methodology and, in some cases, separate discharge periods.

CMS Patient Safety Indicators (CMS PSIs)

The CMS PSIs reflect hospital quality of care for adult patients. CMS PSIs focus on potentially avoidable complications and iatrogenic events. The CMS PSI for the Hospital Inpatient Quality Reporting (IQR) Program includes:

- *PSI 4 (PSI/NSI) - Death among Surgical Inpatients with Serious, Treatable Complications*

Measure Information

Information and resources regarding this measure can be accessed on *QualityNet* at www.qualitynet.org, by selecting the “**Claims-Based and Hybrid Measure**” link under the “**Hospital-Inpatient**” tab in the left navigation bar and then the “**CMS Patient Safety Indicators (PSIs)**” link;

OR

Select the following link:

<https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695321101>.

Questions and Comments

If you have questions regarding the CMS Patient Safety Indicators (PSIs), collected for the Hospital IQR Program, please go to the Questions and Comments page on the *QualityNet* website here:

<https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228753514347>.

For additional support on the CMS PSI measure specifications email the QualityNet Help Desk at qnet support@hcqis.org.

Healthcare Associated Infection (HAI)

Healthcare-Associated Infection (HAI) measure data are collected by the Centers for Disease Control and Prevention (CDC) via the National Healthcare Safety Network (NHSN) tool. The NHSN is a secure, internet-based surveillance system maintained and managed by the CDC. Hospitals must enroll and complete NHSN training to comply with The Centers for Medicare & Medicaid Services (CMS) Hospital Inpatient Quality Reporting (IQR) Program HAI requirements.

Below is a list of the CMS adopted HAI measures:

- *National Healthcare Safety Network (NHSN) Central Line-Associated Bloodstream Infection (CLABSI) Outcome Measure and NHSN Catheter-associated Urinary Tract Infection (CAUTI) Outcome Measure*
 - ❖ Quarterly data collection and submission.

Acute care hospitals are required to report CLABSI and CAUTI data from all patient-care locations that are mapped as NHSN adult and pediatric medical, surgical, and medical/surgical wards, in addition to the ongoing reporting from intensive care units (ICUs).

Hospitals that have no ICUs and no units mapped, as per the CDC, must submit an IPPS Measure Exception Form.
- *American College of Surgeons – Centers for Disease Control and Prevention (ACS-CDC) Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure*
 - *Colon Procedures*
 - *Abdominal Hysterectomy Procedures*
 - ❖ Quarterly data collection and submission.

Hospitals that performed nine or fewer of any of the specified colon and abdominal hysterectomy SSI procedures combined in the calendar year prior to the reporting year can request an exception for submission of SSI measures to fulfill the CMS Hospital IQR Program HAI reporting requirement. If a waiver is not requested, SSI data must be reported.
- *National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital-onset Methicillin-resistant Staphylococcus aureus (MRSA) Bacteremia Outcome Measure*
 - ❖ Quarterly data collection and submission.
- *National Healthcare Safety Network (NHSN) Hospital-wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure*
 - ❖ Quarterly data collection and submission.
- *Influenza Vaccination Coverage Among Healthcare Personnel*
 - ❖ Hospitals must collect and submit HCP data annually. The submission period corresponds to the typical flu season (October 1 – March 31), and data for this measure are due annually by May 15 each year following the end of the flu season. Please note: This measure is not considered a Healthcare Associated Infection (HAI) but included under the HAI section as it is submitted through NHSN.

Information about the requirements and technical specifications can be accessed on *QualityNet* at www.qualitynet.org, by selecting the “**Healthcare Associated Infections (HAI)**” link under the “**Hospital-Inpatient**” tab in the left navigation bar;

OR

Select the following link:

<https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228760487021>

For additional information about the NHSN measures, see the resources located at <http://www.cdc.gov/nhsn/acute-care-hospital/index.html>.

Questions and Comments

If you have questions regarding the HAI Measures that are collected for the Hospital IQR Program, please go to the *QualityNet* web site www.qualitynet.org and select “Hospitals-Inpatient” under “Questions & Answers” to submit your questions.

Direct questions regarding NHSN training, enrollment, HAI data collection and data submission to: NHSN@cdc.gov

Risk-Standardized Measures

The Centers for Medicare & Medicaid Services (CMS) contracted with Yale-New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (YNHHSC/CORE) to develop, reevaluate, and support the implementation of the risk-standardized Mortality, Readmission, Complication, and Payment outcome measures.

The risk-standardized outcome measures assess a broad set of healthcare activities that affect patients' well-being. Patients who receive high-quality care during their hospitalizations and their transition to the outpatient setting will likely have better outcomes, such as survival, functional ability, and quality of life.

Measure Information

The measure methodology regarding the risk-standardized outcome measures is available through the *CMS.gov* website here: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

Questions and Comments

Please submit questions by selecting an e-mail address under the respective measure topic listed below. To ensure proper handling of inquiries, please specify the measure(s) and program(s) to which your questions are related.

- **Complication Measures**

- *Hospital-Level Risk-Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA)*
 - Submit questions to: cmscomplicationmeasures@yale.edu.

- **Mortality Measures**

- *Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization*
- *Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Coronary Artery Bypass Graft (CABG) Surgery*
- *Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate Following Pneumonia Hospitalization*
- *Stroke 30-day Mortality Rate*
 - Submit questions to: cmsmortalitymeasures@yale.edu.

- **Payment Measures**

- *Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Acute Myocardial Infarction (AMI)*
- *Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care For Heart Failure (HF)*
- *Hospital-Level, Risk-Standardized Payment Associated with a 30-day Episode-of-Care For Pneumonia*
- *Hospital-Level, Risk-Standardized Payment Associated with an Episode-of-Care for Primary Elective Total Hip Arthroplasty and/or Total Knee Arthroplasty*
 - Submit questions to: cmsepisodepaymentmeasures@yale.edu.

- **Readmission and Excess Days in Acute Care (EDAC) Measures**
 - *Excess Days in Acute Care after Hospitalization for Acute Myocardial Infarction*
 - *Excess Days in Acute Care after Hospitalization for Heart Failure*
 - *Excess Days in Acute Care after Hospitalization for Pneumonia*
 - *Hospital-Wide All-Cause Unplanned Readmission Measure (HWR)*
 - Submit readmission measure questions to:
cmsreadmissionmeasures@yale.edu.
 - Submit EDAC measure questions to: cmsedacmeasures@yale.edu.

NOTE: Do NOT submit patient-identifiable information (e.g., Date of Birth, Social Security Number, Health Insurance Claim Number) to these addresses.

Inpatient Web-Based Measure

Hospitals participating in the Hospital Inpatient Quality Reporting Program are required to complete the Web-Based Measure questions quarterly. Data entry is achieved through the secure side of QualityNet.org via an online tool available to authorized users, similar to the process for entry of structural measures.

The Inpatient Web-Based Measure is:

- **Elective Delivery**

Documents the number of patients with elective vaginal deliveries or elective cesarean sections at ≥ 37 and < 39 weeks of gestation completed.

NOTE: Data collected and reported to CMS is in aggregate. The collection and submission for The Joint Commission is patient level.

For more information about the requirements and specifications of this measure, refer to <https://manual.jointcommission.org/bin/view/Manual/WebHome>.

CMS Data Submission Period: Data collection for this web-based measure effective with 1st Quarter data (January 1, 2013), follows the same reporting requirements as for other measures collected for the Hospital IQR Program.

CMS Data Submission Period Table

| Discharges | Data Submission Period |
|-------------------------|------------------------|
| January 1 – March 31 | July 1- August 15 |
| April 1 – June 30 | October 1- November 15 |
| July 1 – September 30 | January 1- February 15 |
| October 1 – December 31 | April 1- May 15 |

The Joint Commission submission period remains unchanged.

The Initial Patient Population, numerator, denominator, and total exclusions are to be determined using the specifications developed by the Joint Commission for this measure. Full definitions and other relevant information can be found at <https://manual.jointcommission.org/bin/view/Manual/WebHome>.

Appendix A.1
ICD-10 Code Tables

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Table 4.01: Severe Sepsis and Septic Shock (SEP)

| ICD-10-CM Code | Code Description |
|----------------|---|
| A021 | Salmonella sepsis |
| A227 | Anthrax sepsis |
| A267 | Erysipelothrix sepsis |
| A327 | Listerial sepsis |
| A400 | Sepsis due to streptococcus, group A |
| A401 | Sepsis due to streptococcus, group B |
| A403 | Sepsis due to Streptococcus pneumoniae |
| A408 | Other streptococcal sepsis |
| A409 | Streptococcal sepsis, unspecified |
| A4101 | Sepsis due to Methicillin susceptible Staphylococcus aureus |
| A4102 | Sepsis due to Methicillin resistant Staphylococcus aureus |
| A411 | Sepsis due to other specified staphylococcus |
| A412 | Sepsis due to unspecified staphylococcus |
| A413 | Sepsis due to Hemophilus influenzae |
| A414 | Sepsis due to anaerobes |
| A4150 | Gram-negative sepsis, unspecified |
| A4151 | Sepsis due to Escherichia coli [E. coli] |
| A4152 | Sepsis due to Pseudomonas |
| A4153 | Sepsis due to Serratia |
| A4159 | Other Gram-negative sepsis |
| A4181 | Sepsis due to Enterococcus |
| A4189 | Other specified sepsis |
| A419 | Sepsis, unspecified organism |
| A427 | Actinomycotic sepsis |
| A5486 | Gonococcal sepsis |
| R6520 | Severe sepsis without septic shock |
| R6521 | Severe sepsis with septic shock |

Last Updated: Version 5.4a

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| F0150 | Vascular dementia without behavioral disturbance |
| F0151 | Vascular dementia with behavioral disturbance |
| F0390 | Unspecified dementia without behavioral disturbance |
| F0391 | Unspecified dementia with behavioral disturbance |
| F04 | Amnesic disorder due to known physiological condition |
| F05 | Delirium due to known physiological condition |
| F060 | Psychotic disorder with hallucinations due to known physiological condition |
| F061 | Catatonic disorder due to known physiological condition |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| F062 | Psychotic disorder with delusions due to known physiological condition |
| F0630 | Mood disorder due to known physiological condition, unspecified |
| F0631 | Mood disorder due to known physiological condition with depressive features |
| F0632 | Mood disorder due to known physiological condition with major depressive-like episode |
| F0633 | Mood disorder due to known physiological condition with manic features |
| F0634 | Mood disorder due to known physiological condition with mixed features |
| F064 | Anxiety disorder due to known physiological condition |
| F068 | Other specified mental disorders due to known physiological condition |
| F070 | Personality change due to known physiological condition |
| F0781 | Postconcussional syndrome |
| F0789 | Other personality and behavioral disorders due to known physiological condition |
| F079 | Unspecified personality and behavioral disorder due to known physiological condition |
| F09 | Unspecified mental disorder due to known physiological condition |
| F1010 | Alcohol abuse, uncomplicated |
| F1011 | Alcohol abuse, in remission |
| F10120 | Alcohol abuse with intoxication, uncomplicated |
| F10121 | Alcohol abuse with intoxication delirium |
| F10129 | Alcohol abuse with intoxication, unspecified |
| F1014 | Alcohol abuse with alcohol-induced mood disorder |
| F10150 | Alcohol abuse with alcohol-induced psychotic disorder with delusions |
| F10151 | Alcohol abuse with alcohol-induced psychotic disorder with hallucinations |
| F10159 | Alcohol abuse with alcohol-induced psychotic disorder, unspecified |
| F10180 | Alcohol abuse with alcohol-induced anxiety disorder |
| F10181 | Alcohol abuse with alcohol-induced sexual dysfunction |
| F10182 | Alcohol abuse with alcohol-induced sleep disorder |
| F10188 | Alcohol abuse with other alcohol-induced disorder |
| F1019 | Alcohol abuse with unspecified alcohol-induced disorder |
| F1020 | Alcohol dependence, uncomplicated |
| F1021 | Alcohol dependence, in remission |
| F10220 | Alcohol dependence with intoxication, uncomplicated |
| F10221 | Alcohol dependence with intoxication delirium |
| F10229 | Alcohol dependence with intoxication, unspecified |
| F10230 | Alcohol dependence with withdrawal, uncomplicated |
| F10231 | Alcohol dependence with withdrawal delirium |
| F10232 | Alcohol dependence with withdrawal with perceptual disturbance |
| F10239 | Alcohol dependence with withdrawal, unspecified |
| F1024 | Alcohol dependence with alcohol-induced mood disorder |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F10250 | Alcohol dependence with alcohol-induced psychotic disorder with delusions |
| F10251 | Alcohol dependence with alcohol-induced psychotic disorder with hallucinations |
| F10259 | Alcohol dependence with alcohol-induced psychotic disorder, unspecified |
| F1026 | Alcohol dependence with alcohol-induced persisting amnestic disorder |
| F1027 | Alcohol dependence with alcohol-induced persisting dementia |
| F10280 | Alcohol dependence with alcohol-induced anxiety disorder |
| F10281 | Alcohol dependence with alcohol-induced sexual dysfunction |
| F10282 | Alcohol dependence with alcohol-induced sleep disorder |
| F10288 | Alcohol dependence with other alcohol-induced disorder |
| F1029 | Alcohol dependence with unspecified alcohol-induced disorder |
| F10920 | Alcohol use, unspecified with intoxication, uncomplicated |
| F10921 | Alcohol use, unspecified with intoxication delirium |
| F10929 | Alcohol use, unspecified with intoxication, unspecified |
| F1094 | Alcohol use, unspecified with alcohol-induced mood disorder |
| F10950 | Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions |
| F10951 | Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations |
| F10959 | Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified |
| F1096 | Alcohol use, unspecified with alcohol-induced persisting amnestic disorder |
| F1097 | Alcohol use, unspecified with alcohol-induced persisting dementia |
| F10980 | Alcohol use, unspecified with alcohol-induced anxiety disorder |
| F10981 | Alcohol use, unspecified with alcohol-induced sexual dysfunction |
| F10982 | Alcohol use, unspecified with alcohol-induced sleep disorder |
| F10988 | Alcohol use, unspecified with other alcohol-induced disorder |
| F1099 | Alcohol use, unspecified with unspecified alcohol-induced disorder |
| F1110 | Opioid abuse, uncomplicated |
| F1111 | Opioid abuse, in remission |
| F11120 | Opioid abuse with intoxication, uncomplicated |
| F11121 | Opioid abuse with intoxication delirium |
| F11122 | Opioid abuse with intoxication with perceptual disturbance |
| F11129 | Opioid abuse with intoxication, unspecified |
| F1114 | Opioid abuse with opioid-induced mood disorder |
| F11150 | Opioid abuse with opioid-induced psychotic disorder with delusions |
| F11151 | Opioid abuse with opioid-induced psychotic disorder with hallucinations |
| F11159 | Opioid abuse with opioid-induced psychotic disorder, unspecified |
| F11181 | Opioid abuse with opioid-induced sexual dysfunction |
| F11182 | Opioid abuse with opioid-induced sleep disorder |
| F11188 | Opioid abuse with other opioid-induced disorder |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F1119 | Opioid abuse with unspecified opioid-induced disorder |
| F1120 | Opioid dependence, uncomplicated |
| F1121 | Opioid dependence, in remission |
| F11220 | Opioid dependence with intoxication, uncomplicated |
| F11221 | Opioid dependence with intoxication delirium |
| F11222 | Opioid dependence with intoxication with perceptual disturbance |
| F11229 | Opioid dependence with intoxication, unspecified |
| F1123 | Opioid dependence with withdrawal |
| F1124 | Opioid dependence with opioid-induced mood disorder |
| F11250 | Opioid dependence with opioid-induced psychotic disorder with delusions |
| F11251 | Opioid dependence with opioid-induced psychotic disorder with hallucinations |
| F11259 | Opioid dependence with opioid-induced psychotic disorder, unspecified |
| F11281 | Opioid dependence with opioid-induced sexual dysfunction |
| F11282 | Opioid dependence with opioid-induced sleep disorder |
| F11288 | Opioid dependence with other opioid-induced disorder |
| F1129 | Opioid dependence with unspecified opioid-induced disorder |
| F1190 | Opioid use, unspecified, uncomplicated |
| F11920 | Opioid use, unspecified with intoxication, uncomplicated |
| F11921 | Opioid use, unspecified with intoxication delirium |
| F11922 | Opioid use, unspecified with intoxication with perceptual disturbance |
| F11929 | Opioid use, unspecified with intoxication, unspecified |
| F1193 | Opioid use, unspecified with withdrawal |
| F1194 | Opioid use, unspecified with opioid-induced mood disorder |
| F11950 | Opioid use, unspecified with opioid-induced psychotic disorder with delusions |
| F11951 | Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations |
| F11959 | Opioid use, unspecified with opioid-induced psychotic disorder, unspecified |
| F11981 | Opioid use, unspecified with opioid-induced sexual dysfunction |
| F11982 | Opioid use, unspecified with opioid-induced sleep disorder |
| F11988 | Opioid use, unspecified with other opioid-induced disorder |
| F1199 | Opioid use, unspecified with unspecified opioid-induced disorder |
| F1210 | Cannabis abuse, uncomplicated |
| F1211 | Cannabis abuse, in remission |
| F12120 | Cannabis abuse with intoxication, uncomplicated |
| F12121 | Cannabis abuse with intoxication delirium |
| F12122 | Cannabis abuse with intoxication with perceptual disturbance |
| F12129 | Cannabis abuse with intoxication, unspecified |
| F12150 | Cannabis abuse with psychotic disorder with delusions |
| F12151 | Cannabis abuse with psychotic disorder with hallucinations |
| F12159 | Cannabis abuse with psychotic disorder, unspecified |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| F12180 | Cannabis abuse with cannabis-induced anxiety disorder |
| F12188 | Cannabis abuse with other cannabis-induced disorder |
| F1219 | Cannabis abuse with unspecified cannabis-induced disorder |
| F1220 | Cannabis dependence, uncomplicated |
| F1221 | Cannabis dependence, in remission |
| F12220 | Cannabis dependence with intoxication, uncomplicated |
| F12221 | Cannabis dependence with intoxication delirium |
| F12222 | Cannabis dependence with intoxication with perceptual disturbance |
| F12229 | Cannabis dependence with intoxication, unspecified |
| F1223 | Cannabis dependence with withdrawal |
| F12250 | Cannabis dependence with psychotic disorder with delusions |
| F12251 | Cannabis dependence with psychotic disorder with hallucinations |
| F12259 | Cannabis dependence with psychotic disorder, unspecified |
| F12280 | Cannabis dependence with cannabis-induced anxiety disorder |
| F12288 | Cannabis dependence with other cannabis-induced disorder |
| F1229 | Cannabis dependence with unspecified cannabis-induced disorder |
| F1290 | Cannabis use, unspecified, uncomplicated |
| F12920 | Cannabis use, unspecified with intoxication, uncomplicated |
| F12921 | Cannabis use, unspecified with intoxication delirium |
| F12922 | Cannabis use, unspecified with intoxication with perceptual disturbance |
| F12929 | Cannabis use, unspecified with intoxication, unspecified |
| F1293 | Cannabis use, unspecified with withdrawal |
| F12950 | Cannabis use, unspecified with psychotic disorder with delusions |
| F12951 | Cannabis use, unspecified with psychotic disorder with hallucinations |
| F12959 | Cannabis use, unspecified with psychotic disorder, unspecified |
| F12980 | Cannabis use, unspecified with anxiety disorder |
| F12988 | Cannabis use, unspecified with other cannabis-induced disorder |
| F1299 | Cannabis use, unspecified with unspecified cannabis-induced disorder |
| F1310 | Sedative, hypnotic or anxiolytic abuse, uncomplicated |
| F1311 | Sedative, hypnotic or anxiolytic abuse, in remission |
| F13120 | Sedative, hypnotic or anxiolytic abuse with intoxication, uncomplicated |
| F13121 | Sedative, hypnotic or anxiolytic abuse with intoxication delirium |
| F13129 | Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified |
| F1314 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13150 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13151 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13159 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F13180 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced anxiety disorder |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F13181 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13182 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13188 | Sedative, hypnotic or anxiolytic abuse with other sedative, hypnotic or anxiolytic-induced disorder |
| F1319 | Sedative, hypnotic or anxiolytic abuse with unspecified sedative, hypnotic or anxiolytic-induced disorder |
| F1320 | Sedative, hypnotic or anxiolytic dependence, uncomplicated |
| F1321 | Sedative, hypnotic or anxiolytic dependence, in remission |
| F13220 | Sedative, hypnotic or anxiolytic dependence with intoxication, uncomplicated |
| F13221 | Sedative, hypnotic or anxiolytic dependence with intoxication delirium |
| F13229 | Sedative, hypnotic or anxiolytic dependence with intoxication, unspecified |
| F13230 | Sedative, hypnotic or anxiolytic dependence with withdrawal, uncomplicated |
| F13231 | Sedative, hypnotic or anxiolytic dependence with withdrawal delirium |
| F13232 | Sedative, hypnotic or anxiolytic dependence with withdrawal with perceptual disturbance |
| F13239 | Sedative, hypnotic or anxiolytic dependence with withdrawal, unspecified |
| F1324 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13250 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13251 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13259 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F1326 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting amnesic disorder |
| F1327 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting dementia |
| F13280 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced anxiety disorder |
| F13281 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13282 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13288 | Sedative, hypnotic or anxiolytic dependence with other sedative, hypnotic or anxiolytic-induced disorder |
| F1329 | Sedative, hypnotic or anxiolytic dependence with unspecified sedative, hypnotic or anxiolytic-induced disorder |
| F1390 | Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F13920 | Sedative, hypnotic or anxiolytic use, unspecified with intoxication, uncomplicated |
| F13921 | Sedative, hypnotic or anxiolytic use, unspecified with intoxication delirium |
| F13929 | Sedative, hypnotic or anxiolytic use, unspecified with intoxication, unspecified |
| F13930 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, uncomplicated |
| F13931 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal delirium |
| F13932 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal with perceptual disturbances |
| F13939 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, unspecified |
| F1394 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13950 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13951 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13959 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F1396 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting amnesic disorder |
| F1397 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting dementia |
| F13980 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced anxiety disorder |
| F13981 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13982 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13988 | Sedative, hypnotic or anxiolytic use, unspecified with other sedative, hypnotic or anxiolytic-induced disorder |
| F1399 | Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic-induced disorder |
| F1410 | Cocaine abuse, uncomplicated |
| F1411 | Cocaine abuse, in remission |
| F14120 | Cocaine abuse with intoxication, uncomplicated |
| F14121 | Cocaine abuse with intoxication with delirium |
| F14122 | Cocaine abuse with intoxication with perceptual disturbance |
| F14129 | Cocaine abuse with intoxication, unspecified |
| F1414 | Cocaine abuse with cocaine-induced mood disorder |
| F14150 | Cocaine abuse with cocaine-induced psychotic disorder with delusions |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F14151 | Cocaine abuse with cocaine-induced psychotic disorder with hallucinations |
| F14159 | Cocaine abuse with cocaine-induced psychotic disorder, unspecified |
| F14180 | Cocaine abuse with cocaine-induced anxiety disorder |
| F14181 | Cocaine abuse with cocaine-induced sexual dysfunction |
| F14182 | Cocaine abuse with cocaine-induced sleep disorder |
| F14188 | Cocaine abuse with other cocaine-induced disorder |
| F1419 | Cocaine abuse with unspecified cocaine-induced disorder |
| F1420 | Cocaine dependence, uncomplicated |
| F1421 | Cocaine dependence, in remission |
| F14220 | Cocaine dependence with intoxication, uncomplicated |
| F14221 | Cocaine dependence with intoxication delirium |
| F14222 | Cocaine dependence with intoxication with perceptual disturbance |
| F14229 | Cocaine dependence with intoxication, unspecified |
| F1423 | Cocaine dependence with withdrawal |
| F1424 | Cocaine dependence with cocaine-induced mood disorder |
| F14250 | Cocaine dependence with cocaine-induced psychotic disorder with delusions |
| F14251 | Cocaine dependence with cocaine-induced psychotic disorder with hallucinations |
| F14259 | Cocaine dependence with cocaine-induced psychotic disorder, unspecified |
| F14280 | Cocaine dependence with cocaine-induced anxiety disorder |
| F14281 | Cocaine dependence with cocaine-induced sexual dysfunction |
| F14282 | Cocaine dependence with cocaine-induced sleep disorder |
| F14288 | Cocaine dependence with other cocaine-induced disorder |
| F1429 | Cocaine dependence with unspecified cocaine-induced disorder |
| F1490 | Cocaine use, unspecified, uncomplicated |
| F14920 | Cocaine use, unspecified with intoxication, uncomplicated |
| F14921 | Cocaine use, unspecified with intoxication delirium |
| F14922 | Cocaine use, unspecified with intoxication with perceptual disturbance |
| F14929 | Cocaine use, unspecified with intoxication, unspecified |
| F1494 | Cocaine use, unspecified with cocaine-induced mood disorder |
| F14950 | Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions |
| F14951 | Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations |
| F14959 | Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified |
| F14980 | Cocaine use, unspecified with cocaine-induced anxiety disorder |
| F14981 | Cocaine use, unspecified with cocaine-induced sexual dysfunction |
| F14982 | Cocaine use, unspecified with cocaine-induced sleep disorder |
| F14988 | Cocaine use, unspecified with other cocaine-induced disorder |
| F1499 | Cocaine use, unspecified with unspecified cocaine-induced disorder |
| F1510 | Other stimulant abuse, uncomplicated |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F1511 | Other stimulant abuse, in remission |
| F15120 | Other stimulant abuse with intoxication, uncomplicated |
| F15121 | Other stimulant abuse with intoxication delirium |
| F15122 | Other stimulant abuse with intoxication with perceptual disturbance |
| F15129 | Other stimulant abuse with intoxication, unspecified |
| F1514 | Other stimulant abuse with stimulant-induced mood disorder |
| F15150 | Other stimulant abuse with stimulant-induced psychotic disorder with delusions |
| F15151 | Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations |
| F15159 | Other stimulant abuse with stimulant-induced psychotic disorder, unspecified |
| F15180 | Other stimulant abuse with stimulant-induced anxiety disorder |
| F15181 | Other stimulant abuse with stimulant-induced sexual dysfunction |
| F15182 | Other stimulant abuse with stimulant-induced sleep disorder |
| F15188 | Other stimulant abuse with other stimulant-induced disorder |
| F1519 | Other stimulant abuse with unspecified stimulant-induced disorder |
| F1520 | Other stimulant dependence, uncomplicated |
| F1521 | Other stimulant dependence, in remission |
| F15220 | Other stimulant dependence with intoxication, uncomplicated |
| F15221 | Other stimulant dependence with intoxication delirium |
| F15222 | Other stimulant dependence with intoxication with perceptual disturbance |
| F15229 | Other stimulant dependence with intoxication, unspecified |
| F1523 | Other stimulant dependence with withdrawal |
| F1524 | Other stimulant dependence with stimulant-induced mood disorder |
| F15250 | Other stimulant dependence with stimulant-induced psychotic disorder with delusions |
| F15251 | Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations |
| F15259 | Other stimulant dependence with stimulant-induced psychotic disorder, unspecified |
| F15280 | Other stimulant dependence with stimulant-induced anxiety disorder |
| F15281 | Other stimulant dependence with stimulant-induced sexual dysfunction |
| F15282 | Other stimulant dependence with stimulant-induced sleep disorder |
| F15288 | Other stimulant dependence with other stimulant-induced disorder |
| F1529 | Other stimulant dependence with unspecified stimulant-induced disorder |
| F1590 | Other stimulant use, unspecified, uncomplicated |
| F15920 | Other stimulant use, unspecified with intoxication, uncomplicated |
| F15921 | Other stimulant use, unspecified with intoxication delirium |
| F15922 | Other stimulant use, unspecified with intoxication with perceptual disturbance |
| F15929 | Other stimulant use, unspecified with intoxication, unspecified |
| F1593 | Other stimulant use, unspecified with withdrawal |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F1594 | Other stimulant use, unspecified with stimulant-induced mood disorder |
| F15950 | Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions |
| F15951 | Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations |
| F15959 | Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified |
| F15980 | Other stimulant use, unspecified with stimulant-induced anxiety disorder |
| F15981 | Other stimulant use, unspecified with stimulant-induced sexual dysfunction |
| F15982 | Other stimulant use, unspecified with stimulant-induced sleep disorder |
| F15988 | Other stimulant use, unspecified with other stimulant-induced disorder |
| F1599 | Other stimulant use, unspecified with unspecified stimulant-induced disorder |
| F1610 | Hallucinogen abuse, uncomplicated |
| F1611 | Hallucinogen abuse, in remission |
| F16120 | Hallucinogen abuse with intoxication, uncomplicated |
| F16121 | Hallucinogen abuse with intoxication with delirium |
| F16122 | Hallucinogen abuse with intoxication with perceptual disturbance |
| F16129 | Hallucinogen abuse with intoxication, unspecified |
| F1614 | Hallucinogen abuse with hallucinogen-induced mood disorder |
| F16150 | Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions |
| F16151 | Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations |
| F16159 | Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified |
| F16180 | Hallucinogen abuse with hallucinogen-induced anxiety disorder |
| F16183 | Hallucinogen abuse with hallucinogen persisting perception disorder (flashbacks) |
| F16188 | Hallucinogen abuse with other hallucinogen-induced disorder |
| F1619 | Hallucinogen abuse with unspecified hallucinogen-induced disorder |
| F1620 | Hallucinogen dependence, uncomplicated |
| F1621 | Hallucinogen dependence, in remission |
| F16220 | Hallucinogen dependence with intoxication, uncomplicated |
| F16221 | Hallucinogen dependence with intoxication with delirium |
| F16229 | Hallucinogen dependence with intoxication, unspecified |
| F1624 | Hallucinogen dependence with hallucinogen-induced mood disorder |
| F16250 | Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions |
| F16251 | Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations |
| F16259 | Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F16280 | Hallucinogen dependence with hallucinogen-induced anxiety disorder |
| F16283 | Hallucinogen dependence with hallucinogen persisting perception disorder (flashbacks) |
| F16288 | Hallucinogen dependence with other hallucinogen-induced disorder |
| F1629 | Hallucinogen dependence with unspecified hallucinogen-induced disorder |
| F1690 | Hallucinogen use, unspecified, uncomplicated |
| F16920 | Hallucinogen use, unspecified with intoxication, uncomplicated |
| F16921 | Hallucinogen use, unspecified with intoxication with delirium |
| F16929 | Hallucinogen use, unspecified with intoxication, unspecified |
| F1694 | Hallucinogen use, unspecified with hallucinogen-induced mood disorder |
| F16950 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions |
| F16951 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations |
| F16959 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified |
| F16980 | Hallucinogen use, unspecified with hallucinogen-induced anxiety disorder |
| F16983 | Hallucinogen use, unspecified with hallucinogen persisting perception disorder (flashbacks) |
| F16988 | Hallucinogen use, unspecified with other hallucinogen-induced disorder |
| F1699 | Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder |
| F1810 | Inhalant abuse, uncomplicated |
| F1811 | Inhalant abuse, in remission |
| F18120 | Inhalant abuse with intoxication, uncomplicated |
| F18121 | Inhalant abuse with intoxication delirium |
| F18129 | Inhalant abuse with intoxication, unspecified |
| F1814 | Inhalant abuse with inhalant-induced mood disorder |
| F18150 | Inhalant abuse with inhalant-induced psychotic disorder with delusions |
| F18151 | Inhalant abuse with inhalant-induced psychotic disorder with hallucinations |
| F18159 | Inhalant abuse with inhalant-induced psychotic disorder, unspecified |
| F1817 | Inhalant abuse with inhalant-induced dementia |
| F18180 | Inhalant abuse with inhalant-induced anxiety disorder |
| F18188 | Inhalant abuse with other inhalant-induced disorder |
| F1819 | Inhalant abuse with unspecified inhalant-induced disorder |
| F1820 | Inhalant dependence, uncomplicated |
| F1821 | Inhalant dependence, in remission |
| F18220 | Inhalant dependence with intoxication, uncomplicated |
| F18221 | Inhalant dependence with intoxication delirium |
| F18229 | Inhalant dependence with intoxication, unspecified |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| F1824 | Inhalant dependence with inhalant-induced mood disorder |
| F18250 | Inhalant dependence with inhalant-induced psychotic disorder with delusions |
| F18251 | Inhalant dependence with inhalant-induced psychotic disorder with hallucinations |
| F18259 | Inhalant dependence with inhalant-induced psychotic disorder, unspecified |
| F1827 | Inhalant dependence with inhalant-induced dementia |
| F18280 | Inhalant dependence with inhalant-induced anxiety disorder |
| F18288 | Inhalant dependence with other inhalant-induced disorder |
| F1829 | Inhalant dependence with unspecified inhalant-induced disorder |
| F1890 | Inhalant use, unspecified, uncomplicated |
| F18920 | Inhalant use, unspecified with intoxication, uncomplicated |
| F18921 | Inhalant use, unspecified with intoxication with delirium |
| F18929 | Inhalant use, unspecified with intoxication, unspecified |
| F1894 | Inhalant use, unspecified with inhalant-induced mood disorder |
| F18950 | Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions |
| F18951 | Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations |
| F18959 | Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified |
| F1897 | Inhalant use, unspecified with inhalant-induced persisting dementia |
| F18980 | Inhalant use, unspecified with inhalant-induced anxiety disorder |
| F18988 | Inhalant use, unspecified with other inhalant-induced disorder |
| F1899 | Inhalant use, unspecified with unspecified inhalant-induced disorder |
| F1910 | Other psychoactive substance abuse, uncomplicated |
| F1911 | Other psychoactive substance abuse, in remission |
| F19120 | Other psychoactive substance abuse with intoxication, uncomplicated |
| F19121 | Other psychoactive substance abuse with intoxication delirium |
| F19122 | Other psychoactive substance abuse with intoxication with perceptual disturbances |
| F19129 | Other psychoactive substance abuse with intoxication, unspecified |
| F1914 | Other psychoactive substance abuse with psychoactive substance-induced mood disorder |
| F19150 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with delusions |
| F19151 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hallucinations |
| F19159 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspecified |
| F1916 | Other psychoactive substance abuse with psychoactive substance-induced persisting amnesic disorder |
| F1917 | Other psychoactive substance abuse with psychoactive substance-induced persisting dementia |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F19180 | Other psychoactive substance abuse with psychoactive substance-induced anxiety disorder |
| F19181 | Other psychoactive substance abuse with psychoactive substance-induced sexual dysfunction |
| F19182 | Other psychoactive substance abuse with psychoactive substance-induced sleep disorder |
| F19188 | Other psychoactive substance abuse with other psychoactive substance-induced disorder |
| F1919 | Other psychoactive substance abuse with unspecified psychoactive substance-induced disorder |
| F1920 | Other psychoactive substance dependence, uncomplicated |
| F1921 | Other psychoactive substance dependence, in remission |
| F19220 | Other psychoactive substance dependence with intoxication, uncomplicated |
| F19221 | Other psychoactive substance dependence with intoxication delirium |
| F19222 | Other psychoactive substance dependence with intoxication with perceptual disturbance |
| F19229 | Other psychoactive substance dependence with intoxication, unspecified |
| F19230 | Other psychoactive substance dependence with withdrawal, uncomplicated |
| F19231 | Other psychoactive substance dependence with withdrawal delirium |
| F19232 | Other psychoactive substance dependence with withdrawal with perceptual disturbance |
| F19239 | Other psychoactive substance dependence with withdrawal, unspecified |
| F1924 | Other psychoactive substance dependence with psychoactive substance-induced mood disorder |
| F19250 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with delusions |
| F19251 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with hallucinations |
| F19259 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, unspecified |
| F1926 | Other psychoactive substance dependence with psychoactive substance-induced persisting amnesic disorder |
| F1927 | Other psychoactive substance dependence with psychoactive substance-induced persisting dementia |
| F19280 | Other psychoactive substance dependence with psychoactive substance-induced anxiety disorder |
| F19281 | Other psychoactive substance dependence with psychoactive substance-induced sexual dysfunction |
| F19282 | Other psychoactive substance dependence with psychoactive substance-induced sleep disorder |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F19288 | Other psychoactive substance dependence with other psychoactive substance-induced disorder |
| F1929 | Other psychoactive substance dependence with unspecified psychoactive substance-induced disorder |
| F1990 | Other psychoactive substance use, unspecified, uncomplicated |
| F19920 | Other psychoactive substance use, unspecified with intoxication, uncomplicated |
| F19921 | Other psychoactive substance use, unspecified with intoxication with delirium |
| F19922 | Other psychoactive substance use, unspecified with intoxication with perceptual disturbance |
| F19929 | Other psychoactive substance use, unspecified with intoxication, unspecified |
| F19930 | Other psychoactive substance use, unspecified with withdrawal, uncomplicated |
| F19931 | Other psychoactive substance use, unspecified with withdrawal delirium |
| F19932 | Other psychoactive substance use, unspecified with withdrawal with perceptual disturbance |
| F19939 | Other psychoactive substance use, unspecified with withdrawal, unspecified |
| F1994 | Other psychoactive substance use, unspecified with psychoactive substance-induced mood disorder |
| F19950 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with delusions |
| F19951 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with hallucinations |
| F19959 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder, unspecified |
| F1996 | Other psychoactive substance use, unspecified with psychoactive substance-induced persisting amnesic disorder |
| F1997 | Other psychoactive substance use, unspecified with psychoactive substance-induced persisting dementia |
| F19980 | Other psychoactive substance use, unspecified with psychoactive substance-induced anxiety disorder |
| F19981 | Other psychoactive substance use, unspecified with psychoactive substance-induced sexual dysfunction |
| F19982 | Other psychoactive substance use, unspecified with psychoactive substance-induced sleep disorder |
| F19988 | Other psychoactive substance use, unspecified with other psychoactive substance-induced disorder |
| F1999 | Other psychoactive substance use, unspecified with unspecified psychoactive substance-induced disorder |
| F200 | Paranoid schizophrenia |
| F201 | Disorganized schizophrenia |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| F202 | Catatonic schizophrenia |
| F203 | Undifferentiated schizophrenia |
| F205 | Residual schizophrenia |
| F2081 | Schizophreniform disorder |
| F2089 | Other schizophrenia |
| F209 | Schizophrenia, unspecified |
| F21 | Schizotypal disorder |
| F22 | Delusional disorders |
| F23 | Brief psychotic disorder |
| F24 | Shared psychotic disorder |
| F250 | Schizoaffective disorder, bipolar type |
| F251 | Schizoaffective disorder, depressive type |
| F258 | Other schizoaffective disorders |
| F259 | Schizoaffective disorder, unspecified |
| F28 | Other psychotic disorder not due to a substance or known physiological condition |
| F29 | Unspecified psychosis not due to a substance or known physiological condition |
| F3010 | Manic episode without psychotic symptoms, unspecified |
| F3011 | Manic episode without psychotic symptoms, mild |
| F3012 | Manic episode without psychotic symptoms, moderate |
| F3013 | Manic episode, severe, without psychotic symptoms |
| F302 | Manic episode, severe with psychotic symptoms |
| F303 | Manic episode in partial remission |
| F304 | Manic episode in full remission |
| F308 | Other manic episodes |
| F309 | Manic episode, unspecified |
| F310 | Bipolar disorder, current episode hypomanic |
| F3110 | Bipolar disorder, current episode manic without psychotic features, unspecified |
| F3111 | Bipolar disorder, current episode manic without psychotic features, mild |
| F3112 | Bipolar disorder, current episode manic without psychotic features, moderate |
| F3113 | Bipolar disorder, current episode manic without psychotic features, severe |
| F312 | Bipolar disorder, current episode manic severe with psychotic features |
| F3130 | Bipolar disorder, current episode depressed, mild or moderate severity, unspecified |
| F3131 | Bipolar disorder, current episode depressed, mild |
| F3132 | Bipolar disorder, current episode depressed, moderate |
| F314 | Bipolar disorder, current episode depressed, severe, without psychotic features |
| F315 | Bipolar disorder, current episode depressed, severe, with psychotic features |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F3160 | Bipolar disorder, current episode mixed, unspecified |
| F3161 | Bipolar disorder, current episode mixed, mild |
| F3162 | Bipolar disorder, current episode mixed, moderate |
| F3163 | Bipolar disorder, current episode mixed, severe, without psychotic features |
| F3164 | Bipolar disorder, current episode mixed, severe, with psychotic features |
| F3170 | Bipolar disorder, currently in remission, most recent episode unspecified |
| F3171 | Bipolar disorder, in partial remission, most recent episode hypomanic |
| F3172 | Bipolar disorder, in full remission, most recent episode hypomanic |
| F3173 | Bipolar disorder, in partial remission, most recent episode manic |
| F3174 | Bipolar disorder, in full remission, most recent episode manic |
| F3175 | Bipolar disorder, in partial remission, most recent episode depressed |
| F3176 | Bipolar disorder, in full remission, most recent episode depressed |
| F3177 | Bipolar disorder, in partial remission, most recent episode mixed |
| F3178 | Bipolar disorder, in full remission, most recent episode mixed |
| F3181 | Bipolar II disorder |
| F3189 | Other bipolar disorder |
| F319 | Bipolar disorder, unspecified |
| F320 | Major depressive disorder, single episode, mild |
| F321 | Major depressive disorder, single episode, moderate |
| F322 | Major depressive disorder, single episode, severe without psychotic features |
| F323 | Major depressive disorder, single episode, severe with psychotic features |
| F324 | Major depressive disorder, single episode, in partial remission |
| F325 | Major depressive disorder, single episode, in full remission |
| F3281 | Premenstrual dysphoric disorder |
| F3289 | Other specified depressive episodes |
| F329 | Major depressive disorder, single episode, unspecified |
| F330 | Major depressive disorder, recurrent, mild |
| F331 | Major depressive disorder, recurrent, moderate |
| F332 | Major depressive disorder, recurrent severe without psychotic features |
| F333 | Major depressive disorder, recurrent, severe with psychotic symptoms |
| F3340 | Major depressive disorder, recurrent, in remission, unspecified |
| F3341 | Major depressive disorder, recurrent, in partial remission |
| F3342 | Major depressive disorder, recurrent, in full remission |
| F338 | Other recurrent depressive disorders |
| F339 | Major depressive disorder, recurrent, unspecified |
| F340 | Cyclothymic disorder |
| F341 | Dysthymic disorder |
| F3481 | Disruptive mood dysregulation disorder |
| F3489 | Other specified persistent mood disorders |
| F349 | Persistent mood [affective] disorder, unspecified |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F39 | Unspecified mood [affective] disorder |
| F4000 | Agoraphobia, unspecified |
| F4001 | Agoraphobia with panic disorder |
| F4002 | Agoraphobia without panic disorder |
| F4010 | Social phobia, unspecified |
| F4011 | Social phobia, generalized |
| F40210 | Arachnophobia |
| F40218 | Other animal type phobia |
| F40220 | Fear of thunderstorms |
| F40228 | Other natural environment type phobia |
| F40230 | Fear of blood |
| F40231 | Fear of injections and transfusions |
| F40232 | Fear of other medical care |
| F40233 | Fear of injury |
| F40240 | Claustrophobia |
| F40241 | Acrophobia |
| F40242 | Fear of bridges |
| F40243 | Fear of flying |
| F40248 | Other situational type phobia |
| F40290 | Androphobia |
| F40291 | Gynephobia |
| F40298 | Other specified phobia |
| F408 | Other phobic anxiety disorders |
| F409 | Phobic anxiety disorder, unspecified |
| F410 | Panic disorder [episodic paroxysmal anxiety] |
| F411 | Generalized anxiety disorder |
| F413 | Other mixed anxiety disorders |
| F418 | Other specified anxiety disorders |
| F419 | Anxiety disorder, unspecified |
| F422 | Mixed obsessional thoughts and acts |
| F423 | Hoarding disorder |
| F424 | Excoriation (skin-picking) disorder |
| F428 | Other obsessive-compulsive disorder |
| F429 | Obsessive-compulsive disorder, unspecified |
| F430 | Acute stress reaction |
| F4310 | Post-traumatic stress disorder, unspecified |
| F4311 | Post-traumatic stress disorder, acute |
| F4312 | Post-traumatic stress disorder, chronic |
| F4320 | Adjustment disorder, unspecified |
| F4321 | Adjustment disorder with depressed mood |
| F4322 | Adjustment disorder with anxiety |
| F4323 | Adjustment disorder with mixed anxiety and depressed mood |
| F4324 | Adjustment disorder with disturbance of conduct |
| F4325 | Adjustment disorder with mixed disturbance of emotions and conduct |
| F4329 | Adjustment disorder with other symptoms |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F438 | Other reactions to severe stress |
| F439 | Reaction to severe stress, unspecified |
| F440 | Dissociative amnesia |
| F441 | Dissociative fugue |
| F442 | Dissociative stupor |
| F444 | Conversion disorder with motor symptom or deficit |
| F445 | Conversion disorder with seizures or convulsions |
| F446 | Conversion disorder with sensory symptom or deficit |
| F447 | Conversion disorder with mixed symptom presentation |
| F4481 | Dissociative identity disorder |
| F4489 | Other dissociative and conversion disorders |
| F449 | Dissociative and conversion disorder, unspecified |
| F450 | Somatization disorder |
| F451 | Undifferentiated somatoform disorder |
| F4520 | Hypochondriacal disorder, unspecified |
| F4521 | Hypochondriasis |
| F4522 | Body dysmorphic disorder |
| F4529 | Other hypochondriacal disorders |
| F4541 | Pain disorder exclusively related to psychological factors |
| F4542 | Pain disorder with related psychological factors |
| F458 | Other somatoform disorders |
| F459 | Somatoform disorder, unspecified |
| F481 | Depersonalization-derealization syndrome |
| F482 | Pseudobulbar affect |
| F488 | Other specified nonpsychotic mental disorders |
| F489 | Nonpsychotic mental disorder, unspecified |
| F5000 | Anorexia nervosa, unspecified |
| F5001 | Anorexia nervosa, restricting type |
| F5002 | Anorexia nervosa, binge eating/purging type |
| F502 | Bulimia nervosa |
| F5081 | Binge eating disorder |
| F5082 | Avoidant/restrictive food intake disorder |
| F5089 | Other specified eating disorder |
| F509 | Eating disorder, unspecified |
| F5101 | Primary insomnia |
| F5102 | Adjustment insomnia |
| F5103 | Paradoxical insomnia |
| F5104 | Psychophysiologic insomnia |
| F5105 | Insomnia due to other mental disorder |
| F5109 | Other insomnia not due to a substance or known physiological condition |
| F5111 | Primary hypersomnia |
| F5112 | Insufficient sleep syndrome |
| F5113 | Hypersomnia due to other mental disorder |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F5119 | Other hypersomnia not due to a substance or known physiological condition |
| F513 | Sleepwalking [somnambulism] |
| F514 | Sleep terrors [night terrors] |
| F515 | Nightmare disorder |
| F518 | Other sleep disorders not due to a substance or known physiological condition |
| F519 | Sleep disorder not due to a substance or known physiological condition, unspecified |
| F520 | Hypoactive sexual desire disorder |
| F521 | Sexual aversion disorder |
| F5221 | Male erectile disorder |
| F5222 | Female sexual arousal disorder |
| F5231 | Female orgasmic disorder |
| F5232 | Male orgasmic disorder |
| F524 | Premature ejaculation |
| F525 | Vaginismus not due to a substance or known physiological condition |
| F526 | Dyspareunia not due to a substance or known physiological condition |
| F528 | Other sexual dysfunction not due to a substance or known physiological condition |
| F529 | Unspecified sexual dysfunction not due to a substance or known physiological condition |
| F530 | Postpartum depression |
| F531 | Puerperal psychosis |
| F550 | Abuse of antacids |
| F551 | Abuse of herbal or folk remedies |
| F552 | Abuse of laxatives |
| F553 | Abuse of steroids or hormones |
| F554 | Abuse of vitamins |
| F558 | Abuse of other non-psychoactive substances |
| F59 | Unspecified behavioral syndromes associated with physiological disturbances and physical factors |
| F600 | Paranoid personality disorder |
| F601 | Schizoid personality disorder |
| F602 | Antisocial personality disorder |
| F603 | Borderline personality disorder |
| F604 | Histrionic personality disorder |
| F605 | Obsessive-compulsive personality disorder |
| F606 | Avoidant personality disorder |
| F607 | Dependent personality disorder |
| F6081 | Narcissistic personality disorder |
| F6089 | Other specific personality disorders |
| F609 | Personality disorder, unspecified |
| F630 | Pathological gambling |
| F631 | Pyromania |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F632 | Kleptomania |
| F633 | Trichotillomania |
| F6381 | Intermittent explosive disorder |
| F6389 | Other impulse disorders |
| F639 | Impulse disorder, unspecified |
| F640 | Transsexualism |
| F641 | Dual role transvestism |
| F642 | Gender identity disorder of childhood |
| F648 | Other gender identity disorders |
| F649 | Gender identity disorder, unspecified |
| F650 | Fetishism |
| F651 | Transvestic fetishism |
| F652 | Exhibitionism |
| F653 | Voyeurism |
| F654 | Pedophilia |
| F6550 | Sadomasochism, unspecified |
| F6551 | Sexual masochism |
| F6552 | Sexual sadism |
| F6581 | Frotteurism |
| F6589 | Other paraphilias |
| F659 | Paraphilia, unspecified |
| F66 | Other sexual disorders |
| F68A | Factitious disorder imposed on another |
| F6810 | Factitious disorder imposed on self, unspecified |
| F6811 | Factitious disorder imposed on self, with predominantly psychological signs and symptoms |
| F6812 | Factitious disorder imposed on self, with predominantly physical signs and symptoms |
| F6813 | Factitious disorder imposed on self, with combined psychological and physical signs and symptoms |
| F688 | Other specified disorders of adult personality and behavior |
| F69 | Unspecified disorder of adult personality and behavior |
| F70 | Mild intellectual disabilities |
| F71 | Moderate intellectual disabilities |
| F72 | Severe intellectual disabilities |
| F73 | Profound intellectual disabilities |
| F78 | Other intellectual disabilities |
| F79 | Unspecified intellectual disabilities |
| F800 | Phonological disorder |
| F801 | Expressive language disorder |
| F802 | Mixed receptive-expressive language disorder |
| F804 | Speech and language development delay due to hearing loss |
| F8081 | Childhood onset fluency disorder |
| F8082 | Social pragmatic communication disorder |
| F8089 | Other developmental disorders of speech and language |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F809 | Developmental disorder of speech and language, unspecified |
| F810 | Specific reading disorder |
| F812 | Mathematics disorder |
| F8181 | Disorder of written expression |
| F8189 | Other developmental disorders of scholastic skills |
| F819 | Developmental disorder of scholastic skills, unspecified |
| F82 | Specific developmental disorder of motor function |
| F840 | Autistic disorder |
| F842 | Rett's syndrome |
| F843 | Other childhood disintegrative disorder |
| F845 | Asperger's syndrome |
| F848 | Other pervasive developmental disorders |
| F849 | Pervasive developmental disorder, unspecified |
| F88 | Other disorders of psychological development |
| F89 | Unspecified disorder of psychological development |
| F900 | Attention-deficit hyperactivity disorder, predominantly inattentive type |
| F901 | Attention-deficit hyperactivity disorder, predominantly hyperactive type |
| F902 | Attention-deficit hyperactivity disorder, combined type |
| F908 | Attention-deficit hyperactivity disorder, other type |
| F909 | Attention-deficit hyperactivity disorder, unspecified type |
| F910 | Conduct disorder confined to family context |
| F911 | Conduct disorder, childhood-onset type |
| F912 | Conduct disorder, adolescent-onset type |
| F913 | Oppositional defiant disorder |
| F918 | Other conduct disorders |
| F919 | Conduct disorder, unspecified |
| F930 | Separation anxiety disorder of childhood |
| F938 | Other childhood emotional disorders |
| F939 | Childhood emotional disorder, unspecified |
| F940 | Selective mutism |
| F941 | Reactive attachment disorder of childhood |
| F942 | Disinhibited attachment disorder of childhood |
| F948 | Other childhood disorders of social functioning |
| F949 | Childhood disorder of social functioning, unspecified |
| F950 | Transient tic disorder |
| F951 | Chronic motor or vocal tic disorder |
| F952 | Tourette's disorder |
| F958 | Other tic disorders |
| F959 | Tic disorder, unspecified |
| F980 | Enuresis not due to a substance or known physiological condition |
| F981 | Encopresis not due to a substance or known physiological condition |
| F9821 | Rumination disorder of infancy |
| F9829 | Other feeding disorders of infancy and early childhood |
| F983 | Pica of infancy and childhood |
| F984 | Stereotyped movement disorders |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| F985 | Adult onset fluency disorder |
| F988 | Other specified behavioral and emotional disorders with onset usually occurring in childhood and adolescence |
| F989 | Unspecified behavioral and emotional disorders with onset usually occurring in childhood and adolescence |
| F99 | Mental disorder, not otherwise specified |
| G2561 | Drug induced tics |
| R401 | Stupor |
| R404 | Transient alteration of awareness |
| R410 | Disorientation, unspecified |
| R411 | Anterograde amnesia |
| R412 | Retrograde amnesia |
| R413 | Other amnesia |
| R4182 | Altered mental status, unspecified |
| R4189 | Other symptoms and signs involving cognitive functions and awareness |
| R440 | Auditory hallucinations |
| R441 | Visual hallucinations |
| R442 | Other hallucinations |
| R443 | Hallucinations, unspecified |
| R448 | Other symptoms and signs involving general sensations and perceptions |
| R450 | Nervousness |
| R451 | Restlessness and agitation |
| R452 | Unhappiness |
| R453 | Demoralization and apathy |
| R454 | Irritability and anger |
| R455 | Hostility |
| R456 | Violent behavior |
| R457 | State of emotional shock and stress, unspecified |
| R4581 | Low self-esteem |
| R4582 | Worries |
| R4583 | Excessive crying of child, adolescent or adult |
| R4584 | Anhedonia |
| R45850 | Homicidal ideations |
| R45851 | Suicidal ideations |
| R4586 | Emotional lability |
| R4587 | Impulsiveness |
| R4589 | Other symptoms and signs involving emotional state |
| R461 | Bizarre personal appearance |
| R462 | Strange and inexplicable behavior |
| R463 | Overactivity |
| R465 | Suspiciousness and marked evasiveness |
| R466 | Undue concern and preoccupation with stressful events |
| R467 | Verbosity and circumstantial detail obscuring reason for contact |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| R4681 | Obsessive-compulsive behavior |
| R4689 | Other symptoms and signs involving appearance and behavior |
| Z554 | Educational maladjustment and discord with teachers and classmates |
| Z563 | Stressful work schedule |
| Z564 | Discord with boss and workmates |
| Z5681 | Sexual harassment on the job |
| Z592 | Discord with neighbors, lodgers and landlord |
| Z600 | Problems of adjustment to life-cycle transitions |
| Z603 | Acculturation difficulty |
| Z604 | Social exclusion and rejection |
| Z605 | Target of (perceived) adverse discrimination and persecution |
| Z620 | Inadequate parental supervision and control |
| Z621 | Parental overprotection |
| Z6222 | Institutional upbringing |
| Z6229 | Other upbringing away from parents |
| Z623 | Hostility towards and scapegoating of child |
| Z626 | Inappropriate (excessive) parental pressure |
| Z62810 | Personal history of physical and sexual abuse in childhood |
| Z62811 | Personal history or psychological abuse in childhood |
| Z62812 | Personal history of neglect in childhood |
| Z62813 | Personal history of forced labor or sexual exploitation in childhood |
| Z62819 | Personal history of unspecified abuse in childhood |
| Z62820 | Parent-biological child conflict |
| Z62821 | Parent-adopted child conflict |
| Z62822 | Parent-foster child conflict |
| Z62890 | Parent-child estrangement NEC |
| Z62891 | Sibling rivalry |
| Z62898 | Other specified problems related to upbringing |
| Z629 | Problem related to upbringing, unspecified |
| Z630 | Problems in relationship with spouse or partner |
| Z631 | Problems in relationship with in-laws |
| Z634 | Disappearance and death of family member |
| Z635 | Disruption of family by separation and divorce |
| Z6371 | Stress on family due to return of family member from military deployment |
| Z6372 | Alcoholism and drug addiction in family |
| Z6379 | Other stressful life events affecting family and household |
| Z638 | Other specified problems related to primary support group |
| Z644 | Discord with counselors |
| Z658 | Other specified problems related to psychosocial circumstances |
| Z69010 | Encounter for mental health services for victim of parental child abuse |
| Z69011 | Encounter for mental health services for perpetrator of parental child abuse |
| Z69020 | Encounter for mental health services for victim of non-parental child abuse |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|---|
| Z69021 | Encounter for mental health services for perpetrator of non-parental child abuse |
| Z6911 | Encounter for mental health services for victim of spousal or partner abuse |
| Z6912 | Encounter for mental health services for perpetrator of spousal or partner abuse |
| Z6981 | Encounter for mental health services for victim of other abuse |
| Z6982 | Encounter for mental health services for perpetrator of other abuse |
| Z700 | Counseling related to sexual attitude |
| Z701 | Counseling related to patient's sexual behavior and orientation |
| Z702 | Counseling related to sexual behavior and orientation of third party |
| Z703 | Counseling related to combined concerns regarding sexual attitude, behavior and orientation |
| Z708 | Other sex counseling |
| Z709 | Sex counseling, unspecified |
| Z7141 | Alcohol abuse counseling and surveillance of alcoholic |
| Z7142 | Counseling for family member of alcoholic |
| Z7151 | Drug abuse counseling and surveillance of drug abuser |
| Z7152 | Counseling for family member of drug abuser |
| Z7189 | Other specified counseling |
| Z7251 | High risk heterosexual behavior |
| Z7252 | High risk homosexual behavior |
| Z7253 | High risk bisexual behavior |
| Z726 | Gambling and betting |
| Z72810 | Child and adolescent antisocial behavior |
| Z72811 | Adult antisocial behavior |
| Z72820 | Sleep deprivation |
| Z7289 | Other problems related to lifestyle |
| Z730 | Burn-out |
| Z731 | Type A behavior pattern |
| Z733 | Stress, not elsewhere classified |
| Z734 | Inadequate social skills, not elsewhere classified |
| Z735 | Social role conflict, not elsewhere classified |
| Z73810 | Behavioral insomnia of childhood, sleep-onset association type |
| Z73811 | Behavioral insomnia of childhood, limit setting type |
| Z73812 | Behavioral insomnia of childhood, combined type |
| Z73819 | Behavioral insomnia of childhood, unspecified type |
| Z7389 | Other problems related to life management difficulty |
| Z8651 | Personal history of combat and operational stress reaction |
| Z8659 | Personal history of other mental and behavioral disorders |
| Z87820 | Personal history of traumatic brain injury |
| Z91410 | Personal history of adult physical and sexual abuse |
| Z91411 | Personal history of adult psychological abuse |
| Z91412 | Personal history of adult neglect |
| Z91419 | Personal history of unspecified adult abuse |

Table 7.01: Mental Disorders

| ICD-10-CM Code | Code Description |
|----------------|--|
| Z9142 | Personal history of forced labor or sexual exploitation |
| Z9149 | Other personal history of psychological trauma, not elsewhere classified |
| Z915 | Personal history of self-harm |

Last Updated: Version 5.0a

Table 7.03: Venous Thromboembolism (VTE)

| ICD-10-CM Code | Code Description |
|----------------|--|
| I2602 | Saddle embolus of pulmonary artery with acute cor pulmonale |
| I2609 | Other pulmonary embolism with acute cor pulmonale |
| I2692 | Saddle embolus of pulmonary artery without acute cor pulmonale |
| I2699 | Other pulmonary embolism without acute cor pulmonale |
| I289 | Disease of pulmonary vessels, unspecified |
| I8010 | Phlebitis and thrombophlebitis of unspecified femoral vein |
| I8011 | Phlebitis and thrombophlebitis of right femoral vein |
| I8012 | Phlebitis and thrombophlebitis of left femoral vein |
| I8013 | Phlebitis and thrombophlebitis of femoral vein, bilateral |
| I80201 | Phlebitis and thrombophlebitis of unspecified deep vessels of right lower extremity |
| I80202 | Phlebitis and thrombophlebitis of unspecified deep vessels of left lower extremity |
| I80203 | Phlebitis and thrombophlebitis of unspecified deep vessels of lower extremities, bilateral |
| I80209 | Phlebitis and thrombophlebitis of unspecified deep vessels of unspecified lower extremity |
| I80221 | Phlebitis and thrombophlebitis of right popliteal vein |
| I80222 | Phlebitis and thrombophlebitis of left popliteal vein |
| I80223 | Phlebitis and thrombophlebitis of popliteal vein, bilateral |
| I80229 | Phlebitis and thrombophlebitis of unspecified popliteal vein |
| I80291 | Phlebitis and thrombophlebitis of other deep vessels of right lower extremity |
| I80292 | Phlebitis and thrombophlebitis of other deep vessels of left lower extremity |
| I80293 | Phlebitis and thrombophlebitis of other deep vessels of lower extremity, bilateral |
| I80299 | Phlebitis and thrombophlebitis of other deep vessels of unspecified lower extremity |
| I803 | Phlebitis and thrombophlebitis of lower extremities, unspecified |
| I80211 | Phlebitis and thrombophlebitis of right iliac vein |
| I80212 | Phlebitis and thrombophlebitis of left iliac vein |
| I80213 | Phlebitis and thrombophlebitis of iliac vein, bilateral |
| I80219 | Phlebitis and thrombophlebitis of unspecified iliac vein |
| I809 | Phlebitis and thrombophlebitis of unspecified site |

Table 7.03: Venous Thromboembolism (VTE)

| ICD-10-CM Code | Code Description |
|----------------|---|
| I82220 | Acute embolism and thrombosis of inferior vena cava |
| I82401 | Acute embolism and thrombosis of unspecified deep veins of right lower extremity |
| I82402 | Acute embolism and thrombosis of unspecified deep veins of left lower extremity |
| I82403 | Acute embolism and thrombosis of unspecified deep veins of lower extremity, bilateral |
| I82409 | Acute embolism and thrombosis of unspecified deep veins of unspecified lower extremity |
| I82411 | Acute embolism and thrombosis of right femoral vein |
| I82412 | Acute embolism and thrombosis of left femoral vein |
| I82413 | Acute embolism and thrombosis of femoral vein, bilateral |
| I82419 | Acute embolism and thrombosis of unspecified femoral vein |
| I82421 | Acute embolism and thrombosis of right iliac vein |
| I82422 | Acute embolism and thrombosis of left iliac vein |
| I82423 | Acute embolism and thrombosis of iliac vein, bilateral |
| I82429 | Acute embolism and thrombosis of unspecified iliac vein |
| I82431 | Acute embolism and thrombosis of right popliteal vein |
| I82432 | Acute embolism and thrombosis of left popliteal vein |
| I82433 | Acute embolism and thrombosis of popliteal vein, bilateral |
| I82439 | Acute embolism and thrombosis of unspecified popliteal vein |
| I824Y1 | Acute embolism and thrombosis of unspecified deep veins of right proximal lower extremity |
| I824Y2 | Acute embolism and thrombosis of unspecified deep veins of left proximal lower extremity |
| I824Y3 | Acute embolism and thrombosis of unspecified deep veins of proximal lower extremity, bilateral |
| I824Y9 | Acute embolism and thrombosis of unspecified deep veins of unspecified proximal lower extremity |
| I82290 | Acute embolism and thrombosis of other thoracic veins |
| I82890 | Acute embolism and thrombosis of other specified veins |
| I8290 | Acute embolism and thrombosis of unspecified vein |

Last Updated: Version 5.4

Table 7.04: Obstetrics - VTE (Venous Thromboembolism)

| ICD-10-CM Code | Code Description |
|----------------|--|
| O032 | Embolism following incomplete spontaneous abortion |
| O0335 | Other venous complications following incomplete spontaneous abortion |
| O037 | Embolism following complete or unspecified spontaneous abortion |
| O047 | Embolism following (induced) termination of pregnancy |
| O072 | Embolism following failed attempted termination of pregnancy |

Table 7.04: Obstetrics - VTE (Venous Thromboembolism)

| ICD-10-CM Code | Code Description |
|----------------|--|
| O0735 | Other venous complications following failed attempted termination of pregnancy |
| O082 | Embolism following ectopic and molar pregnancy |
| O2230 | Deep phlebothrombosis in pregnancy, unspecified trimester |
| O2231 | Deep phlebothrombosis in pregnancy, first trimester |
| O2232 | Deep phlebothrombosis in pregnancy, second trimester |
| O2233 | Deep phlebothrombosis in pregnancy, third trimester |
| O2250 | Cerebral venous thrombosis in pregnancy, unspecified trimester |
| O2251 | Cerebral venous thrombosis in pregnancy, first trimester |
| O2252 | Cerebral venous thrombosis in pregnancy, second trimester |
| O2253 | Cerebral venous thrombosis in pregnancy, third trimester |
| O228X1 | Other venous complications in pregnancy, first trimester |
| O228X2 | Other venous complications in pregnancy, second trimester |
| O228X3 | Other venous complications in pregnancy, third trimester |
| O228X9 | Other venous complications in pregnancy, unspecified trimester |
| O2290 | Venous complication in pregnancy, unspecified, unspecified trimester |
| O2291 | Venous complication in pregnancy, unspecified, first trimester |
| O2292 | Venous complication in pregnancy, unspecified, second trimester |
| O2293 | Venous complication in pregnancy, unspecified, third trimester |
| O871 | Deep phlebothrombosis in the puerperium |
| O873 | Cerebral venous thrombosis in the puerperium |
| O879 | Venous complication in the puerperium, unspecified |
| O88211 | Thromboembolism in pregnancy, first trimester |
| O88212 | Thromboembolism in pregnancy, second trimester |
| O88213 | Thromboembolism in pregnancy, third trimester |
| O88219 | Thromboembolism in pregnancy, unspecified trimester |
| O8822 | Thromboembolism in childbirth |
| O8823 | Thromboembolism in the puerperium |

Last Updated: Version 5.4a

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|---|
| 02YA0Z0 | Transplantation of Heart, Allogeneic, Open Approach |
| 02YA0Z1 | Transplantation of Heart, Syngeneic, Open Approach |
| 02YA0Z2 | Transplantation of Heart, Zooplastic, Open Approach |
| 07YM0Z0 | Transplantation of Thymus, Allogeneic, Open Approach |
| 07YM0Z1 | Transplantation of Thymus, Syngeneic, Open Approach |
| 07YM0Z2 | Transplantation of Thymus, Zooplastic, Open Approach |
| 07YP0Z0 | Transplantation of Spleen, Allogeneic, Open Approach |
| 07YP0Z1 | Transplantation of Spleen, Syngeneic, Open Approach |
| 07YP0Z2 | Transplantation of Spleen, Zooplastic, Open Approach |
| 0BYC0Z0 | Transplantation of Right Upper Lung Lobe, Allogeneic, Open Approach |

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|--|
| 0BYC0Z1 | Transplantation of Right Upper Lung Lobe, Syngeneic, Open Approach |
| 0BYC0Z2 | Transplantation of Right Upper Lung Lobe, Zooplastic, Open Approach |
| 0BYD0Z0 | Transplantation of Right Middle Lung Lobe, Allogeneic, Open Approach |
| 0BYD0Z1 | Transplantation of Right Middle Lung Lobe, Syngeneic, Open Approach |
| 0BYD0Z2 | Transplantation of Right Middle Lung Lobe, Zooplastic, Open Approach |
| 0BYF0Z0 | Transplantation of Right Lower Lung Lobe, Allogeneic, Open Approach |
| 0BYF0Z1 | Transplantation of Right Lower Lung Lobe, Syngeneic, Open Approach |
| 0BYF0Z2 | Transplantation of Right Lower Lung Lobe, Zooplastic, Open Approach |
| 0BYG0Z0 | Transplantation of Left Upper Lung Lobe, Allogeneic, Open Approach |
| 0BYG0Z1 | Transplantation of Left Upper Lung Lobe, Syngeneic, Open Approach |
| 0BYG0Z2 | Transplantation of Left Upper Lung Lobe, Zooplastic, Open Approach |
| 0BYH0Z0 | Transplantation of Lung Lingula, Allogeneic, Open Approach |
| 0BYH0Z1 | Transplantation of Lung Lingula, Syngeneic, Open Approach |
| 0BYH0Z2 | Transplantation of Lung Lingula, Zooplastic, Open Approach |
| 0BYJ0Z0 | Transplantation of Left Lower Lung Lobe, Allogeneic, Open Approach |
| 0BYJ0Z1 | Transplantation of Left Lower Lung Lobe, Syngeneic, Open Approach |
| 0BYJ0Z2 | Transplantation of Left Lower Lung Lobe, Zooplastic, Open Approach |
| 0BYK0Z0 | Transplantation of Right Lung, Allogeneic, Open Approach |
| 0BYK0Z1 | Transplantation of Right Lung, Syngeneic, Open Approach |
| 0BYK0Z2 | Transplantation of Right Lung, Zooplastic, Open Approach |
| 0BYL0Z0 | Transplantation of Left Lung, Allogeneic, Open Approach |
| 0BYL0Z1 | Transplantation of Left Lung, Syngeneic, Open Approach |
| 0BYL0Z2 | Transplantation of Left Lung, Zooplastic, Open Approach |
| 0BYM0Z0 | Transplantation of Bilateral Lungs, Allogeneic, Open Approach |
| 0BYM0Z1 | Transplantation of Bilateral Lungs, Syngeneic, Open Approach |
| 0BYM0Z2 | Transplantation of Bilateral Lungs, Zooplastic, Open Approach |
| 0DY50Z0 | Transplantation of Esophagus, Allogeneic, Open Approach |
| 0DY50Z1 | Transplantation of Esophagus, Syngeneic, Open Approach |
| 0DY50Z2 | Transplantation of Esophagus, Zooplastic, Open Approach |
| 0DY60Z0 | Transplantation of Stomach, Allogeneic, Open Approach |
| 0DY60Z1 | Transplantation of Stomach, Syngeneic, Open Approach |
| 0DY60Z2 | Transplantation of Stomach, Zooplastic, Open Approach |
| 0DY80Z0 | Transplantation of Small Intestine, Allogeneic, Open Approach |
| 0DY80Z1 | Transplantation of Small Intestine, Syngeneic, Open Approach |
| 0DY80Z2 | Transplantation of Small Intestine, Zooplastic, Open Approach |
| 0DYE0Z0 | Transplantation of Large Intestine, Allogeneic, Open Approach |
| 0DYE0Z1 | Transplantation of Large Intestine, Syngeneic, Open Approach |
| 0DYE0Z2 | Transplantation of Large Intestine, Zooplastic, Open Approach |
| 0FY00Z0 | Transplantation of Liver, Allogeneic, Open Approach |
| 0FY00Z1 | Transplantation of Liver, Syngeneic, Open Approach |
| 0FY00Z2 | Transplantation of Liver, Zooplastic, Open Approach |

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|---|
| 0FYG0Z0 | Transplantation of Pancreas, Allogeneic, Open Approach |
| 0FYG0Z1 | Transplantation of Pancreas, Syngeneic, Open Approach |
| 0FYG0Z2 | Transplantation of Pancreas, Zooplastic, Open Approach |
| 0TY00Z0 | Transplantation of Right Kidney, Allogeneic, Open Approach |
| 0TY00Z1 | Transplantation of Right Kidney, Syngeneic, Open Approach |
| 0TY00Z2 | Transplantation of Right Kidney, Zooplastic, Open Approach |
| 0TY10Z0 | Transplantation of Left Kidney, Allogeneic, Open Approach |
| 0TY10Z1 | Transplantation of Left Kidney, Syngeneic, Open Approach |
| 0TY10Z2 | Transplantation of Left Kidney, Zooplastic, Open Approach |
| 0UY00Z0 | Transplantation of Right Ovary, Allogeneic, Open Approach |
| 0UY00Z1 | Transplantation of Right Ovary, Syngeneic, Open Approach |
| 0UY00Z2 | Transplantation of Right Ovary, Zooplastic, Open Approach |
| 0UY10Z0 | Transplantation of Left Ovary, Allogeneic, Open Approach |
| 0UY10Z1 | Transplantation of Left Ovary, Syngeneic, Open Approach |
| 0UY10Z2 | Transplantation of Left Ovary, Zooplastic, Open Approach |
| 0UY90Z0 | Transplantation of Uterus, Allogeneic, Open Approach |
| 0UY90Z1 | Transplantation of Uterus, Syngeneic, Open Approach |
| 0UY90Z2 | Transplantation of Uterus, Zooplastic, Open Approach |
| 0WY20Z0 | Transplantation of Face, Allogeneic, Open Approach |
| 0WY20Z1 | Transplantation of Face, Syngeneic, Open Approach |
| 0XYJ0Z0 | Transplantation of Right Hand, Allogeneic, Open Approach |
| 0XYJ0Z1 | Transplantation of Right Hand, Syngeneic, Open Approach |
| 0XYK0Z0 | Transplantation of Left Hand, Allogeneic, Open Approach |
| 0XYK0Z1 | Transplantation of Left Hand, Syngeneic, Open Approach |
| 30230AZ | Transfusion of Embryonic Stem Cells into Peripheral Vein, Open Approach |
| 30230G0 | Transfusion of Autologous Bone Marrow into Peripheral Vein, Open Approach |
| 30230G2 | Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Open Approach |
| 30230G3 | Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Open Approach |
| 30230G4 | Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Open Approach |
| 30230X0 | Transfusion of Autologous Cord Blood Stem Cells into Peripheral Vein, Open Approach |
| 30230X2 | Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Open Approach |
| 30230X3 | Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Open Approach |
| 30230X4 | Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Open Approach |
| 30230Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Open Approach |

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|--|
| 30230Y2 | Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Open Approach |
| 30230Y3 | Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Open Approach |
| 30230Y4 | Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Open Approach |
| 30233G0 | Transfusion of Autologous Bone Marrow into Peripheral Vein, Percutaneous Approach |
| 30233G2 | Transfusion of Allogeneic Related Bone Marrow into Peripheral Vein, Percutaneous Approach |
| 30233G3 | Transfusion of Allogeneic Unrelated Bone Marrow into Peripheral Vein, Percutaneous Approach |
| 30233G4 | Transfusion of Allogeneic Unspecified Bone Marrow into Peripheral Vein, Percutaneous Approach |
| 30233X2 | Transfusion of Allogeneic Related Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233X3 | Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233X4 | Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233Y2 | Transfusion of Allogeneic Related Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233Y3 | Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30233Y4 | Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Peripheral Vein, Percutaneous Approach |
| 30240AZ | Transfusion of Embryonic Stem Cells into Central Vein, Open Approach |
| 30240G0 | Transfusion of Autologous Bone Marrow into Central Vein, Open Approach |
| 30240G2 | Transfusion of Allogeneic Related Bone Marrow into Central Vein, Open Approach |
| 30240G3 | Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Open Approach |
| 30240G4 | Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Open Approach |
| 30240X0 | Transfusion of Autologous Cord Blood Stem Cells into Central Vein, Open Approach |
| 30240X2 | Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Open Approach |
| 30240X3 | Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Open Approach |

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|---|
| 30240X4 | Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Open Approach |
| 30240Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Open Approach |
| 30240Y2 | Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Open Approach |
| 30240Y3 | Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Open Approach |
| 30240Y4 | Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Open Approach |
| 30243G0 | Transfusion of Autologous Bone Marrow into Central Vein, Percutaneous Approach |
| 30243G2 | Transfusion of Allogeneic Related Bone Marrow into Central Vein, Percutaneous Approach |
| 30243G3 | Transfusion of Allogeneic Unrelated Bone Marrow into Central Vein, Percutaneous Approach |
| 30243G4 | Transfusion of Allogeneic Unspecified Bone Marrow into Central Vein, Percutaneous Approach |
| 30243X2 | Transfusion of Allogeneic Related Cord Blood Stem Cells into Central Vein, Percutaneous Approach |
| 30243X3 | Transfusion of Allogeneic Unrelated Cord Blood Stem Cells into Central Vein, Percutaneous Approach |
| 30243X4 | Transfusion of Allogeneic Unspecified Cord Blood Stem Cells into Central Vein, Percutaneous Approach |
| 30243Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Central Vein, Percutaneous Approach |
| 30243Y2 | Transfusion of Allogeneic Related Hematopoietic Stem Cells into Central Vein, Percutaneous Approach |
| 30243Y3 | Transfusion of Allogeneic Unrelated Hematopoietic Stem Cells into Central Vein, Percutaneous Approach |
| 30243Y4 | Transfusion of Allogeneic Unspecified Hematopoietic Stem Cells into Central Vein, Percutaneous Approach |
| 30250G0 | Transfusion of Autologous Bone Marrow into Peripheral Artery, Open Approach |
| 30250G1 | Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Open Approach |
| 30250X0 | Transfusion of Autologous Cord Blood Stem Cells into Peripheral Artery, Open Approach |
| 30250X1 | Transfusion of Nonautologous Cord Blood Stem Cells into Peripheral Artery, Open Approach |
| 30250Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach |
| 30250Y1 | Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Open Approach |

Table 12.10: Organ Transplant During Current Hospitalization

| ICD-10-PCS Code | Code Description |
|-----------------|--|
| 30253G0 | Transfusion of Autologous Bone Marrow into Peripheral Artery, Percutaneous Approach |
| 30253G1 | Transfusion of Nonautologous Bone Marrow into Peripheral Artery, Percutaneous Approach |
| 30253Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach |
| 30253Y1 | Transfusion of Nonautologous Hematopoietic Stem Cells into Peripheral Artery, Percutaneous Approach |
| 30260G0 | Transfusion of Autologous Bone Marrow into Central Artery, Open Approach |
| 30260G1 | Transfusion of Nonautologous Bone Marrow into Central Artery, Open Approach |
| 30260X0 | Transfusion of Autologous Cord Blood Stem Cells into Central Artery, Open Approach |
| 30260X1 | Transfusion of Nonautologous Cord Blood Stem Cells into Central Artery, Open Approach |
| 30260Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Open Approach |
| 30260Y1 | Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Open Approach |
| 30263G0 | Transfusion of Autologous Bone Marrow into Central Artery, Percutaneous Approach |
| 30263G1 | Transfusion of Nonautologous Bone Marrow into Central Artery, Percutaneous Approach |
| 30263Y0 | Transfusion of Autologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach |
| 30263Y1 | Transfusion of Nonautologous Hematopoietic Stem Cells into Central Artery, Percutaneous Approach |
| 3E030U0 | Introduction of Autologous Pancreatic Islet Cells into Peripheral Vein, Open Approach |
| 3E030U1 | Introduction of Nonautologous Pancreatic Islet Cells into Peripheral Vein, Open Approach |
| 3E0J7U0 | Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening |
| 3E0J7U1 | Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening |
| 3E0J8U0 | Introduction of Autologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic |
| 3E0J8U1 | Introduction of Nonautologous Pancreatic Islet Cells into Biliary and Pancreatic Tract, Via Natural or Artificial Opening Endoscopic |

Table 13.1: Alcohol Dependence

| ICD-10-CM Code | Code Description |
|----------------|--|
| F10121 | Alcohol abuse with intoxication delirium |
| F10221 | Alcohol dependence with intoxication delirium |
| F10231 | Alcohol dependence with withdrawal delirium |
| F10921 | Alcohol use, unspecified with intoxication delirium |
| F1026 | Alcohol dependence with alcohol-induced persisting amnesic disorder |
| F1096 | Alcohol use, unspecified with alcohol-induced persisting amnesic disorder |
| F1097 | Alcohol use, unspecified with alcohol-induced persisting dementia |
| F1027 | Alcohol dependence with alcohol-induced persisting dementia |
| F10151 | Alcohol abuse with alcohol-induced psychotic disorder with hallucinations |
| F10251 | Alcohol dependence with alcohol-induced psychotic disorder with hallucinations |
| F10951 | Alcohol use, unspecified with alcohol-induced psychotic disorder with hallucinations |
| F10920 | Alcohol use, unspecified with intoxication, uncomplicated |
| F10929 | Alcohol use, unspecified with intoxication, unspecified |
| F10150 | Alcohol abuse with alcohol-induced psychotic disorder with delusions |
| F10250 | Alcohol dependence with alcohol-induced psychotic disorder with delusions |
| F10950 | Alcohol use, unspecified with alcohol-induced psychotic disorder with delusions |
| F10230 | Alcohol dependence with withdrawal, uncomplicated |
| F10232 | Alcohol dependence with withdrawal with perceptual disturbance |
| F10239 | Alcohol dependence with withdrawal, unspecified |
| F10182 | Alcohol abuse with alcohol-induced sleep disorder |
| F10282 | Alcohol dependence with alcohol-induced sleep disorder |
| F10982 | Alcohol use, unspecified with alcohol-induced sleep disorder |
| F1014 | Alcohol abuse with alcohol-induced mood disorder |
| F10159 | Alcohol abuse with alcohol-induced psychotic disorder, unspecified |
| F10180 | Alcohol abuse with alcohol-induced anxiety disorder |
| F10181 | Alcohol abuse with alcohol-induced sexual dysfunction |
| F10188 | Alcohol abuse with other alcohol-induced disorder |
| F1024 | Alcohol dependence with alcohol-induced mood disorder |
| F10259 | Alcohol dependence with alcohol-induced psychotic disorder, unspecified |
| F10280 | Alcohol dependence with alcohol-induced anxiety disorder |
| F10281 | Alcohol dependence with alcohol-induced sexual dysfunction |
| F10288 | Alcohol dependence with other alcohol-induced disorder |
| F10959 | Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified |
| F10980 | Alcohol use, unspecified with alcohol-induced anxiety disorder |

Table 13.1: Alcohol Dependence

| ICD-10-CM Code | Code Description |
|----------------|--|
| F10981 | Alcohol use, unspecified with alcohol-induced sexual dysfunction |
| F10988 | Alcohol use, unspecified with other alcohol-induced disorder |
| F1019 | Alcohol abuse with unspecified alcohol-induced disorder |
| F1029 | Alcohol dependence with unspecified alcohol-induced disorder |
| F1094 | Alcohol use, unspecified with alcohol-induced mood disorder |
| F1099 | Alcohol use, unspecified with unspecified alcohol-induced disorder |
| F10220 | Alcohol dependence with intoxication, uncomplicated |
| F10229 | Alcohol dependence with intoxication, unspecified |
| F1020 | Alcohol dependence, uncomplicated |
| F1010 | Alcohol abuse, uncomplicated |
| F10120 | Alcohol abuse with intoxication, uncomplicated |
| F10129 | Alcohol abuse with intoxication, unspecified |
| T510X1A | Toxic effect of ethanol, accidental (unintentional), initial encounter |
| T510X2A | Toxic effect of ethanol, intentional self-harm, initial encounter |
| T510X3A | Toxic effect of ethanol, assault, initial encounter |
| T510X4A | Toxic effect of ethanol, undetermined, initial encounter |
| T5191XA | Toxic effect of unspecified alcohol, accidental (unintentional), initial encounter |
| T5192XA | Toxic effect of unspecified alcohol, intentional self-harm, initial encounter |
| T5193XA | Toxic effect of unspecified alcohol, assault, initial encounter |
| T5194XA | Toxic effect of unspecified alcohol, undetermined, initial encounter |

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Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|---|
| F1110 | Opioid abuse, uncomplicated |
| F11120 | Opioid abuse with intoxication, uncomplicated |
| F11121 | Opioid abuse with intoxication delirium |
| F11122 | Opioid abuse with intoxication with perceptual disturbance |
| F11129 | Opioid abuse with intoxication, unspecified |
| F1114 | Opioid abuse with opioid-induced mood disorder |
| F11150 | Opioid abuse with opioid-induced psychotic disorder with delusions |
| F11151 | Opioid abuse with opioid-induced psychotic disorder with hallucinations |
| F11159 | Opioid abuse with opioid-induced psychotic disorder, unspecified |
| F11181 | Opioid abuse with opioid-induced sexual dysfunction |
| F11182 | Opioid abuse with opioid-induced sleep disorder |
| F11188 | Opioid abuse with other opioid-induced disorder |
| F1119 | Opioid abuse with unspecified opioid-induced disorder |
| F1120 | Opioid dependence, uncomplicated |
| F11220 | Opioid dependence with intoxication, uncomplicated |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F11221 | Opioid dependence with intoxication delirium |
| F11222 | Opioid dependence with intoxication with perceptual disturbance |
| F11229 | Opioid dependence with intoxication, unspecified |
| F1123 | Opioid dependence with withdrawal |
| F1124 | Opioid dependence with opioid-induced mood disorder |
| F11250 | Opioid dependence with opioid-induced psychotic disorder with delusions |
| F11251 | Opioid dependence with opioid-induced psychotic disorder with hallucinations |
| F11259 | Opioid dependence with opioid-induced psychotic disorder, unspecified |
| F11281 | Opioid dependence with opioid-induced sexual dysfunction |
| F11282 | Opioid dependence with opioid-induced sleep disorder |
| F11288 | Opioid dependence with other opioid-induced disorder |
| F1129 | Opioid dependence with unspecified opioid-induced disorder |
| F1190 | Opioid use, unspecified, uncomplicated |
| F11921 | Opioid use, unspecified with intoxication delirium |
| F11922 | Opioid use, unspecified with intoxication with perceptual disturbance |
| F1193 | Opioid use, unspecified with withdrawal |
| F1194 | Opioid use, unspecified with opioid-induced mood disorder |
| F11950 | Opioid use, unspecified with opioid-induced psychotic disorder with delusions |
| F11951 | Opioid use, unspecified with opioid-induced psychotic disorder with hallucinations |
| F11959 | Opioid use, unspecified with opioid-induced psychotic disorder, unspecified |
| F11981 | Opioid use, unspecified with opioid-induced sexual dysfunction |
| F11982 | Opioid use, unspecified with opioid-induced sleep disorder |
| F11988 | Opioid use, unspecified with other opioid-induced disorder |
| F1199 | Opioid use, unspecified with unspecified opioid-induced disorder |
| F1210 | Cannabis abuse, uncomplicated |
| F12120 | Cannabis abuse with intoxication, uncomplicated |
| F12121 | Cannabis abuse with intoxication delirium |
| F12122 | Cannabis abuse with intoxication with perceptual disturbance |
| F12129 | Cannabis abuse with intoxication, unspecified |
| F12150 | Cannabis abuse with psychotic disorder with delusions |
| F12151 | Cannabis abuse with psychotic disorder with hallucinations |
| F12159 | Cannabis abuse with psychotic disorder, unspecified |
| F12180 | Cannabis abuse with cannabis-induced anxiety disorder |
| F12188 | Cannabis abuse with other cannabis-induced disorder |
| F1219 | Cannabis abuse with unspecified cannabis-induced disorder |
| F1220 | Cannabis dependence, uncomplicated |
| F12220 | Cannabis dependence with intoxication, uncomplicated |
| F12221 | Cannabis dependence with intoxication delirium |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|---|
| F12222 | Cannabis dependence with intoxication with perceptual disturbance |
| F12229 | Cannabis dependence with intoxication, unspecified |
| F1223 | Cannabis dependence with withdrawal |
| F12250 | Cannabis dependence with psychotic disorder with delusions |
| F12251 | Cannabis dependence with psychotic disorder with hallucinations |
| F12259 | Cannabis dependence with psychotic disorder, unspecified |
| F12280 | Cannabis dependence with cannabis-induced anxiety disorder |
| F12288 | Cannabis dependence with other cannabis-induced disorder |
| F1229 | Cannabis dependence with unspecified cannabis-induced disorder |
| F1290 | Cannabis use, unspecified, uncomplicated |
| F12921 | Cannabis use, unspecified with intoxication delirium |
| F12922 | Cannabis use, unspecified with intoxication with perceptual disturbance |
| F1293 | Cannabis use, unspecified with withdrawal |
| F12950 | Cannabis use, unspecified with psychotic disorder with delusions |
| F12951 | Cannabis use, unspecified with psychotic disorder with hallucinations |
| F12959 | Cannabis use, unspecified with psychotic disorder, unspecified |
| F12980 | Cannabis use, unspecified with anxiety disorder |
| F12988 | Cannabis use, unspecified with other cannabis-induced disorder |
| F1299 | Cannabis use, unspecified with unspecified cannabis-induced disorder |
| F1310 | Sedative, hypnotic or anxiolytic abuse, uncomplicated |
| F13120 | Sedative, hypnotic or anxiolytic abuse with intoxication, uncomplicated |
| F13121 | Sedative, hypnotic or anxiolytic abuse with intoxication delirium |
| F13129 | Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified |
| F1314 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13150 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13151 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13159 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F13180 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced anxiety disorder |
| F13181 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13182 | Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13188 | Sedative, hypnotic or anxiolytic abuse with other sedative, hypnotic or anxiolytic-induced disorder |
| F1319 | Sedative, hypnotic or anxiolytic abuse with unspecified sedative, hypnotic or anxiolytic-induced disorder |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F1320 | Sedative, hypnotic or anxiolytic dependence, uncomplicated |
| F13220 | Sedative, hypnotic or anxiolytic dependence with intoxication, uncomplicated |
| F13221 | Sedative, hypnotic or anxiolytic dependence with intoxication delirium |
| F13229 | Sedative, hypnotic or anxiolytic dependence with intoxication, unspecified |
| F13230 | Sedative, hypnotic or anxiolytic dependence with withdrawal, uncomplicated |
| F13231 | Sedative, hypnotic or anxiolytic dependence with withdrawal delirium |
| F13232 | Sedative, hypnotic or anxiolytic dependence with withdrawal with perceptual disturbance |
| F13239 | Sedative, hypnotic or anxiolytic dependence with withdrawal, unspecified |
| F1324 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13250 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13251 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13259 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F1326 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting amnesic disorder |
| F1327 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced persisting dementia |
| F13280 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced anxiety disorder |
| F13281 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13282 | Sedative, hypnotic or anxiolytic dependence with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13288 | Sedative, hypnotic or anxiolytic dependence with other sedative, hypnotic or anxiolytic-induced disorder |
| F1329 | Sedative, hypnotic or anxiolytic dependence with unspecified sedative, hypnotic or anxiolytic-induced disorder |
| F1390 | Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated |
| F13921 | Sedative, hypnotic or anxiolytic use, unspecified with intoxication delirium |
| F13930 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, uncomplicated |
| F13931 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal delirium |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F13932 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal with perceptual disturbances |
| F13939 | Sedative, hypnotic or anxiolytic use, unspecified with withdrawal, unspecified |
| F1394 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood disorder |
| F13950 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with delusions |
| F13951 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder with hallucinations |
| F13959 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced psychotic disorder, unspecified |
| F1396 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting amnesic disorder |
| F1397 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced persisting dementia |
| F13980 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced anxiety disorder |
| F13981 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sexual dysfunction |
| F13982 | Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced sleep disorder |
| F13988 | Sedative, hypnotic or anxiolytic use, unspecified with other sedative, hypnotic or anxiolytic-induced disorder |
| F1399 | Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic-induced disorder |
| F1410 | Cocaine abuse, uncomplicated |
| F14120 | Cocaine abuse with intoxication, uncomplicated |
| F14121 | Cocaine abuse with intoxication with delirium |
| F14122 | Cocaine abuse with intoxication with perceptual disturbance |
| F14129 | Cocaine abuse with intoxication, unspecified |
| F1414 | Cocaine abuse with cocaine-induced mood disorder |
| F14150 | Cocaine abuse with cocaine-induced psychotic disorder with delusions |
| F14151 | Cocaine abuse with cocaine-induced psychotic disorder with hallucinations |
| F14159 | Cocaine abuse with cocaine-induced psychotic disorder, unspecified |
| F14180 | Cocaine abuse with cocaine-induced anxiety disorder |
| F14181 | Cocaine abuse with cocaine-induced sexual dysfunction |
| F14182 | Cocaine abuse with cocaine-induced sleep disorder |
| F14188 | Cocaine abuse with other cocaine-induced disorder |
| F1419 | Cocaine abuse with unspecified cocaine-induced disorder |
| F1420 | Cocaine dependence, uncomplicated |
| F14220 | Cocaine dependence with intoxication, uncomplicated |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F14221 | Cocaine dependence with intoxication delirium |
| F14222 | Cocaine dependence with intoxication with perceptual disturbance |
| F14229 | Cocaine dependence with intoxication, unspecified |
| F1423 | Cocaine dependence with withdrawal |
| F1424 | Cocaine dependence with cocaine-induced mood disorder |
| F14250 | Cocaine dependence with cocaine-induced psychotic disorder with delusions |
| F14251 | Cocaine dependence with cocaine-induced psychotic disorder with hallucinations |
| F14259 | Cocaine dependence with cocaine-induced psychotic disorder, unspecified |
| F14280 | Cocaine dependence with cocaine-induced anxiety disorder |
| F14281 | Cocaine dependence with cocaine-induced sexual dysfunction |
| F14282 | Cocaine dependence with cocaine-induced sleep disorder |
| F14288 | Cocaine dependence with other cocaine-induced disorder |
| F1429 | Cocaine dependence with unspecified cocaine-induced disorder |
| F1490 | Cocaine use, unspecified, uncomplicated |
| F14921 | Cocaine use, unspecified with intoxication delirium |
| F14922 | Cocaine use, unspecified with intoxication with perceptual disturbance |
| F1494 | Cocaine use, unspecified with cocaine-induced mood disorder |
| F14950 | Cocaine use, unspecified with cocaine-induced psychotic disorder with delusions |
| F14951 | Cocaine use, unspecified with cocaine-induced psychotic disorder with hallucinations |
| F14959 | Cocaine use, unspecified with cocaine-induced psychotic disorder, unspecified |
| F14980 | Cocaine use, unspecified with cocaine-induced anxiety disorder |
| F14981 | Cocaine use, unspecified with cocaine-induced sexual dysfunction |
| F14982 | Cocaine use, unspecified with cocaine-induced sleep disorder |
| F14988 | Cocaine use, unspecified with other cocaine-induced disorder |
| F1499 | Cocaine use, unspecified with unspecified cocaine-induced disorder |
| F1510 | Other stimulant abuse, uncomplicated |
| F15120 | Other stimulant abuse with intoxication, uncomplicated |
| F15121 | Other stimulant abuse with intoxication delirium |
| F15122 | Other stimulant abuse with intoxication with perceptual disturbance |
| F15129 | Other stimulant abuse with intoxication, unspecified |
| F1514 | Other stimulant abuse with stimulant-induced mood disorder |
| F15150 | Other stimulant abuse with stimulant-induced psychotic disorder with delusions |
| F15151 | Other stimulant abuse with stimulant-induced psychotic disorder with hallucinations |
| F15159 | Other stimulant abuse with stimulant-induced psychotic disorder, unspecified |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F15180 | Other stimulant abuse with stimulant-induced anxiety disorder |
| F15181 | Other stimulant abuse with stimulant-induced sexual dysfunction |
| F15182 | Other stimulant abuse with stimulant-induced sleep disorder |
| F15188 | Other stimulant abuse with other stimulant-induced disorder |
| F1519 | Other stimulant abuse with unspecified stimulant-induced disorder |
| F1520 | Other stimulant dependence, uncomplicated |
| F15220 | Other stimulant dependence with intoxication, uncomplicated |
| F15221 | Other stimulant dependence with intoxication delirium |
| F15222 | Other stimulant dependence with intoxication with perceptual disturbance |
| F15229 | Other stimulant dependence with intoxication, unspecified |
| F1523 | Other stimulant dependence with withdrawal |
| F1524 | Other stimulant dependence with stimulant-induced mood disorder |
| F15250 | Other stimulant dependence with stimulant-induced psychotic disorder with delusions |
| F15251 | Other stimulant dependence with stimulant-induced psychotic disorder with hallucinations |
| F15259 | Other stimulant dependence with stimulant-induced psychotic disorder, unspecified |
| F15280 | Other stimulant dependence with stimulant-induced anxiety disorder |
| F15281 | Other stimulant dependence with stimulant-induced sexual dysfunction |
| F15282 | Other stimulant dependence with stimulant-induced sleep disorder |
| F15288 | Other stimulant dependence with other stimulant-induced disorder |
| F1529 | Other stimulant dependence with unspecified stimulant-induced disorder |
| F1590 | Other stimulant use, unspecified, uncomplicated |
| F15921 | Other stimulant use, unspecified with intoxication delirium |
| F15922 | Other stimulant use, unspecified with intoxication with perceptual disturbance |
| F1593 | Other stimulant use, unspecified with withdrawal |
| F1594 | Other stimulant use, unspecified with stimulant-induced mood disorder |
| F15950 | Other stimulant use, unspecified with stimulant-induced psychotic disorder with delusions |
| F15951 | Other stimulant use, unspecified with stimulant-induced psychotic disorder with hallucinations |
| F15959 | Other stimulant use, unspecified with stimulant-induced psychotic disorder, unspecified |
| F15980 | Other stimulant use, unspecified with stimulant-induced anxiety disorder |
| F15981 | Other stimulant use, unspecified with stimulant-induced sexual dysfunction |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F15982 | Other stimulant use, unspecified with stimulant-induced sleep disorder |
| F15988 | Other stimulant use, unspecified with other stimulant-induced disorder |
| F1599 | Other stimulant use, unspecified with unspecified stimulant-induced disorder |
| F1610 | Hallucinogen abuse, uncomplicated |
| F16120 | Hallucinogen abuse with intoxication, uncomplicated |
| F16121 | Hallucinogen abuse with intoxication with delirium |
| F16122 | Hallucinogen abuse with intoxication with perceptual disturbance |
| F16129 | Hallucinogen abuse with intoxication, unspecified |
| F1614 | Hallucinogen abuse with hallucinogen-induced mood disorder |
| F16150 | Hallucinogen abuse with hallucinogen-induced psychotic disorder with delusions |
| F16151 | Hallucinogen abuse with hallucinogen-induced psychotic disorder with hallucinations |
| F16159 | Hallucinogen abuse with hallucinogen-induced psychotic disorder, unspecified |
| F16180 | Hallucinogen abuse with hallucinogen-induced anxiety disorder |
| F16183 | Hallucinogen abuse with hallucinogen persisting perception disorder (flashbacks) |
| F16188 | Hallucinogen abuse with other hallucinogen-induced disorder |
| F1619 | Hallucinogen abuse with unspecified hallucinogen-induced disorder |
| F1620 | Hallucinogen dependence, uncomplicated |
| F16220 | Hallucinogen dependence with intoxication, uncomplicated |
| F16221 | Hallucinogen dependence with intoxication with delirium |
| F16229 | Hallucinogen dependence with intoxication, unspecified |
| F1624 | Hallucinogen dependence with hallucinogen-induced mood disorder |
| F16250 | Hallucinogen dependence with hallucinogen-induced psychotic disorder with delusions |
| F16251 | Hallucinogen dependence with hallucinogen-induced psychotic disorder with hallucinations |
| F16259 | Hallucinogen dependence with hallucinogen-induced psychotic disorder, unspecified |
| F16280 | Hallucinogen dependence with hallucinogen-induced anxiety disorder |
| F16283 | Hallucinogen dependence with hallucinogen persisting perception disorder (flashbacks) |
| F16288 | Hallucinogen dependence with other hallucinogen-induced disorder |
| F1629 | Hallucinogen dependence with unspecified hallucinogen-induced disorder |
| F1690 | Hallucinogen use, unspecified, uncomplicated |
| F16921 | Hallucinogen use, unspecified with intoxication with delirium |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F1694 | Hallucinogen use, unspecified with hallucinogen-induced mood disorder |
| F16950 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with delusions |
| F16951 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder with hallucinations |
| F16959 | Hallucinogen use, unspecified with hallucinogen-induced psychotic disorder, unspecified |
| F16980 | Hallucinogen use, unspecified with hallucinogen-induced anxiety disorder |
| F16983 | Hallucinogen use, unspecified with hallucinogen persisting perception disorder (flashbacks) |
| F16988 | Hallucinogen use, unspecified with other hallucinogen-induced disorder |
| F1699 | Hallucinogen use, unspecified with unspecified hallucinogen-induced disorder |
| F1810 | Inhalant abuse, uncomplicated |
| F18120 | Inhalant abuse with intoxication, uncomplicated |
| F18121 | Inhalant abuse with intoxication delirium |
| F1814 | Inhalant abuse with inhalant-induced mood disorder |
| F18150 | Inhalant abuse with inhalant-induced psychotic disorder with delusions |
| F18151 | Inhalant abuse with inhalant-induced psychotic disorder with hallucinations |
| F18159 | Inhalant abuse with inhalant-induced psychotic disorder, unspecified |
| F1817 | Inhalant abuse with inhalant-induced dementia |
| F18180 | Inhalant abuse with inhalant-induced anxiety disorder |
| F18188 | Inhalant abuse with other inhalant-induced disorder |
| F1819 | Inhalant abuse with unspecified inhalant-induced disorder |
| F1820 | Inhalant dependence, uncomplicated |
| F18220 | Inhalant dependence with intoxication, uncomplicated |
| F18221 | Inhalant dependence with intoxication delirium |
| F18229 | Inhalant dependence with intoxication, unspecified |
| F1824 | Inhalant dependence with inhalant-induced mood disorder |
| F18250 | Inhalant dependence with inhalant-induced psychotic disorder with delusions |
| F18251 | Inhalant dependence with inhalant-induced psychotic disorder with hallucinations |
| F18259 | Inhalant dependence with inhalant-induced psychotic disorder, unspecified |
| F1827 | Inhalant dependence with inhalant-induced dementia |
| F18280 | Inhalant dependence with inhalant-induced anxiety disorder |
| F18288 | Inhalant dependence with other inhalant-induced disorder |
| F1829 | Inhalant dependence with unspecified inhalant-induced disorder |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|---|
| F1890 | Inhalant use, unspecified, uncomplicated |
| F18921 | Inhalant use, unspecified with intoxication with delirium |
| F1894 | Inhalant use, unspecified with inhalant-induced mood disorder |
| F18950 | Inhalant use, unspecified with inhalant-induced psychotic disorder with delusions |
| F18951 | Inhalant use, unspecified with inhalant-induced psychotic disorder with hallucinations |
| F18959 | Inhalant use, unspecified with inhalant-induced psychotic disorder, unspecified |
| F1897 | Inhalant use, unspecified with inhalant-induced persisting dementia |
| F18980 | Inhalant use, unspecified with inhalant-induced anxiety disorder |
| F18988 | Inhalant use, unspecified with other inhalant-induced disorder |
| F1899 | Inhalant use, unspecified with unspecified inhalant-induced disorder |
| F1910 | Other psychoactive substance abuse, uncomplicated |
| F19120 | Other psychoactive substance abuse with intoxication, uncomplicated |
| F19121 | Other psychoactive substance abuse with intoxication delirium |
| F19122 | Other psychoactive substance abuse with intoxication with perceptual disturbances |
| F19129 | Other psychoactive substance abuse with intoxication, unspecified |
| F1914 | Other psychoactive substance abuse with psychoactive substance-induced mood disorder |
| F19150 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with delusions |
| F19151 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder with hallucinations |
| F19159 | Other psychoactive substance abuse with psychoactive substance-induced psychotic disorder, unspecified |
| F1916 | Other psychoactive substance abuse with psychoactive substance-induced persisting amnesic disorder |
| F1917 | Other psychoactive substance abuse with psychoactive substance-induced persisting dementia |
| F19180 | Other psychoactive substance abuse with psychoactive substance-induced anxiety disorder |
| F19181 | Other psychoactive substance abuse with psychoactive substance-induced sexual dysfunction |
| F19182 | Other psychoactive substance abuse with psychoactive substance-induced sleep disorder |
| F19188 | Other psychoactive substance abuse with other psychoactive substance-induced disorder |
| F1919 | Other psychoactive substance abuse with unspecified psychoactive substance-induced disorder |
| F1920 | Other psychoactive substance dependence, uncomplicated |
| F19220 | Other psychoactive substance dependence with intoxication, uncomplicated |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F19221 | Other psychoactive substance dependence with intoxication delirium |
| F19222 | Other psychoactive substance dependence with intoxication with perceptual disturbance |
| F19229 | Other psychoactive substance dependence with intoxication, unspecified |
| F19230 | Other psychoactive substance dependence with withdrawal, uncomplicated |
| F19231 | Other psychoactive substance dependence with withdrawal delirium |
| F19232 | Other psychoactive substance dependence with withdrawal with perceptual disturbance |
| F19239 | Other psychoactive substance dependence with withdrawal, unspecified |
| F1924 | Other psychoactive substance dependence with psychoactive substance-induced mood disorder |
| F19250 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with delusions |
| F19251 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder with hallucinations |
| F19259 | Other psychoactive substance dependence with psychoactive substance-induced psychotic disorder, unspecified |
| F1926 | Other psychoactive substance dependence with psychoactive substance-induced persisting amnesic disorder |
| F1927 | Other psychoactive substance dependence with psychoactive substance-induced persisting dementia |
| F19280 | Other psychoactive substance dependence with psychoactive substance-induced anxiety disorder |
| F19281 | Other psychoactive substance dependence with psychoactive substance-induced sexual dysfunction |
| F19282 | Other psychoactive substance dependence with psychoactive substance-induced sleep disorder |
| F19288 | Other psychoactive substance dependence with other psychoactive substance-induced disorder |
| F1929 | Other psychoactive substance dependence with unspecified psychoactive substance-induced disorder |
| F1990 | Other psychoactive substance use, unspecified, uncomplicated |
| F19921 | Other psychoactive substance use, unspecified with intoxication with delirium |
| F19922 | Other psychoactive substance use, unspecified with intoxication with perceptual disturbance |
| F19930 | Other psychoactive substance use, unspecified with withdrawal, uncomplicated |
| F19931 | Other psychoactive substance use, unspecified with withdrawal delirium |

Table 13.2: Drug Dependence

| ICD-10 Code | Description |
|-------------|--|
| F19932 | Other psychoactive substance use, unspecified with withdrawal with perceptual disturbance |
| F19939 | Other psychoactive substance use, unspecified with withdrawal, unspecified |
| F1994 | Other psychoactive substance use, unspecified with psychoactive substance-induced mood disorder |
| F19950 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with delusions |
| F19951 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder with hallucinations |
| F19959 | Other psychoactive substance use, unspecified with psychoactive substance-induced psychotic disorder, unspecified |
| F1996 | Other psychoactive substance use, unspecified with psychoactive substance-induced persisting amnesic disorder |
| F1997 | Other psychoactive substance use, unspecified with psychoactive substance-induced persisting dementia |
| F19980 | Other psychoactive substance use, unspecified with psychoactive substance-induced anxiety disorder |
| F19981 | Other psychoactive substance use, unspecified with psychoactive substance-induced sexual dysfunction |
| F19982 | Other psychoactive substance use, unspecified with psychoactive substance-induced sleep disorder |
| F19988 | Other psychoactive substance use, unspecified with other psychoactive substance-induced disorder |
| F1999 | Other psychoactive substance use, unspecified with unspecified psychoactive substance-induced disorder |
| O99320 | Drug use complicating pregnancy, unspecified trimester |
| O99321 | Drug use complicating pregnancy, first trimester |
| O99322 | Drug use complicating pregnancy, second trimester |
| O99323 | Drug use complicating pregnancy, third trimester |
| O99324 | Drug use complicating childbirth |
| O99325 | Drug use complicating the puerperium |

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Table 13.3: Alcohol and Drug Treatment Procedures

| ICD-10-PCS Code | Code Description |
|-----------------|---|
| HZ30ZZZ | Individual Counseling for Substance Abuse Treatment, Cognitive |
| HZ31ZZZ | Individual Counseling for Substance Abuse Treatment, Behavioral |
| HZ32ZZZ | Individual Counseling for Substance Abuse Treatment, Cognitive-Behavioral |
| HZ33ZZZ | Individual Counseling for Substance Abuse Treatment, 12-Step |
| HZ34ZZZ | Individual Counseling for Substance Abuse Treatment, Interpersonal |
| HZ35ZZZ | Individual Counseling for Substance Abuse Treatment, Vocational |

Table 13.3: Alcohol and Drug Treatment Procedures

| ICD-10-PCS Code | Code Description |
|-----------------|--|
| HZ36ZZZ | Individual Counseling for Substance Abuse Treatment, Psychoeducation |
| HZ37ZZZ | Individual Counseling for Substance Abuse Treatment, Motivational Enhancement |
| HZ38ZZZ | Individual Counseling for Substance Abuse Treatment, Confrontational |
| HZ39ZZZ | Individual Counseling for Substance Abuse Treatment, Continuing Care |
| HZ3BZZZ | Individual Counseling for Substance Abuse Treatment, Spiritual |
| HZ40ZZZ | Group Counseling for Substance Abuse Treatment, Cognitive |
| HZ41ZZZ | Group Counseling for Substance Abuse Treatment, Behavioral |
| HZ42ZZZ | Group Counseling for Substance Abuse Treatment, Cognitive-Behavioral |
| HZ43ZZZ | Group Counseling for Substance Abuse Treatment, 12-Step |
| HZ44ZZZ | Group Counseling for Substance Abuse Treatment, Interpersonal |
| HZ45ZZZ | Group Counseling for Substance Abuse Treatment, Vocational |
| HZ46ZZZ | Group Counseling for Substance Abuse Treatment, Psychoeducation |
| HZ47ZZZ | Group Counseling for Substance Abuse Treatment, Motivational Enhancement |
| HZ48ZZZ | Group Counseling for Substance Abuse Treatment, Confrontational |
| HZ49ZZZ | Group Counseling for Substance Abuse Treatment, Continuing Care |
| HZ4BZZZ | Group Counseling for Substance Abuse Treatment, Spiritual |
| HZ50ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Cognitive |
| HZ51ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Behavioral |
| HZ52ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Cognitive-Behavioral |
| HZ53ZZZ | Individual Psychotherapy for Substance Abuse Treatment, 12-Step |
| HZ54ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Interpersonal |
| HZ55ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Interactive |
| HZ56ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Psychoeducation |
| HZ57ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Motivational Enhancement |
| HZ58ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Confrontational |
| HZ59ZZZ | Individual Psychotherapy for Substance Abuse Treatment, Supportive |
| HZ5BZZZ | Individual Psychotherapy for Substance Abuse Treatment, Psychoanalysis |
| HZ5CZZZ | Individual Psychotherapy for Substance Abuse Treatment, Psychodynamic |
| HZ5DZZZ | Individual Psychotherapy for Substance Abuse Treatment, Psychophysiological |
| HZ63ZZZ | Family Counseling for Substance Abuse Treatment |
| HZ81ZZZ | Medication Management for Substance Abuse Treatment, Methadone Maintenance |

Table 13.3: Alcohol and Drug Treatment Procedures

| ICD-10-PCS Code | Code Description |
|-----------------|--|
| HZ82ZZZ | Medication Management for Substance Abuse Treatment, Levo-alpha-acetyl-methadol (LAAM) |
| HZ83ZZZ | Medication Management for Substance Abuse Treatment, Antabuse |
| HZ84ZZZ | Medication Management for Substance Abuse Treatment, Naltrexone |
| HZ85ZZZ | Medication Management for Substance Abuse Treatment, Naloxone |
| HZ86ZZZ | Medication Management for Substance Abuse Treatment, Clonidine |
| HZ87ZZZ | Medication Management for Substance Abuse Treatment, Bupropion |
| HZ88ZZZ | Medication Management for Substance Abuse Treatment, Psychiatric Medication |
| HZ89ZZZ | Medication Management for Substance Abuse Treatment, Other Replacement Medication |
| HZ91ZZZ | Pharmacotherapy for Substance Abuse Treatment, Methadone Maintenance |
| HZ92ZZZ | Pharmacotherapy for Substance Abuse Treatment, Levo-alpha-acetyl-methadol (LAAM) |
| HZ93ZZZ | Pharmacotherapy for Substance Abuse Treatment, Antabuse |
| HZ94ZZZ | Pharmacotherapy for Substance Abuse Treatment, Naltrexone |
| HZ95ZZZ | Pharmacotherapy for Substance Abuse Treatment, Naloxone |
| HZ96ZZZ | Pharmacotherapy for Substance Abuse Treatment, Clonidine |
| HZ97ZZZ | Pharmacotherapy for Substance Abuse Treatment, Bupropion |
| HZ98ZZZ | Pharmacotherapy for Substance Abuse Treatment, Psychiatric Medication |
| HZ99ZZZ | Pharmacotherapy for Substance Abuse Treatment, Other Replacement Medication |
| HZ2ZZZZ | Detoxification Services for Substance Abuse Treatment |

Appendix C

Medication Tables

Note:

The medication tables are not meant to be inclusive lists of all available therapeutic agents. Medication tables are reviewed and updated as indicated with each manual revision. Changes in medication availability due to changes in manufacturing and distribution may not be immediately reflected in the medication tables. Discrepancies must be reported. See the Resource Section of this manual for additional contact information.

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Table 5.0: Antibiotic Monotherapy, Sepsis

| Antibiotic Selection Options (includes trade name or generic name) | Generic Name Crosswalk |
|---|-------------------------------|
| Avelox | Moxifloxacin |
| Avycaz | Ceftazidime/avibactam |
| Ceftriaxone | Ceftriaxone |
| Claforan | Cefotaxime |
| Doribax | Doripenem |
| Fortaz | Ceftazidime |
| Invanz | Ertapenem |
| Levaquin | Levofloxacin |
| Maxipime | Cefepime |
| Merrem | Meropenem |
| Primaxin | Imipenem/Cilastatin |
| Teflaro | Ceftaroline fosamil |
| Unasyn | Ampicillin/sulbactam |
| Zerbaxa | Ceftolozane/tazobactam |
| Zosyn | Piperacillin/tazobactam |

Last Updated: Version 5.5

Table 5.1: Antibiotic Generic/Trade Name Crosswalk, Sepsis

| Antibiotic Selection Options (includes trade name or generic name) | Generic Name Crosswalk |
|---|-------------------------------|
| Aminoglycosides | |
| Amikacin | Amikacin |
| Gentamicin | Gentamicin |
| Kanamycin | Kanamycin |
| Tobramycin | Tobramycin |
| Aztreonam | |
| Azactam | Aztreonam |
| Cephalosporins (1st and 2nd Generation) | |
| Ancef | Cefazolin |
| Cefotan | Cefotetan |
| Cefuroxime | Cefuroxime |
| Mefoxin | Cefoxitin |
| Ciprofloxacin | |
| Ciprofloxacin | Ciprofloxacin |
| Clindamycin IV | |
| Cleocin | Clindamycin |
| Daptomycin | |
| Cubicin | Daptomycin |

Table 5.1: Antibiotic Generic/Trade Name Crosswalk, Sepsis

| Antibiotic Selection Options (includes trade name or generic name) | Generic Name Crosswalk |
|---|------------------------|
| Glycopeptides | |
| Targocid | Teicoplanin |
| Vancocin | Vancomycin |
| Vibativ | Telavancin |
| Linezolid | |
| Zyvox | Linezolid |
| Macrolides | |
| Erythocin | Erythromycin |
| Sumamed | Azithromycin |
| Xithrone | Azithromycin |
| Zithromax | Azithromycin |
| Penicillins | |
| Ampicillin | Ampicillin |
| Nafcillin | Nafcillin |
| Oxacillin | Oxacillin |
| Penicillin G | Penicillin G |

Last Updated: Version 5.6

Table 5.2: Vasopressors for Septic Shock

| Generic Name | Brand Name |
|----------------|---------------------------|
| Norepinephrine | Levophed |
| Epinephrine | Adrenalin |
| Phenylephrine | Neosynephrine Vazculep |
| Dopamine | Dopamine |
| Vasopressin | Vasopressin |
| Angiotensin II | Giapreza |

Last Updated: Version 5.3

Table 5.3: Anticoagulants, Sepsis

| Generic Name | Brand Name |
|----------------------|------------|
| Heparin | Heparin |
| Edoxaban | Savaysa |
| Desirudin | Iprivask |
| Dabigatran etexilate | Pradaxa |
| Rivaroxaban | Xarelto |
| Apixaban | Eliquis |
| Argatroban | Argatroban |
| Bivalirudin | Angiomax |
| Fondaparinux | Arixtra |
| Warfarin | Coumadin |

Table 9.1: FDA-Approved Tobacco Cessation Medications

| Medication Name |
|---|
| Bupropion |
| Chantix |
| Commit Lozenge |
| Habitrol Patch |
| Nicoderm CQ |
| Nicorelief |
| Nicorelief gum |
| Nicorelief lozenge |
| Nicorette DS (double strength) gum |
| Nicorette gum |
| Nicorette lozenge |
| Nicotine gum |
| Nicotine inhaler |
| Nicotine nasal spray |
| Nicotine Polacrilex |
| Nicotine Polacrilex gum |
| Nicotine Polacrilex lozenge |
| Nicotine Step 1 |
| Nicotine Step 2 |
| Nicotine Step 3 |
| Nicotine TD |
| Nicotine Transdermal System |
| Nicotrol inhaler |
| Nicotrol NS |
| Nicotrol TD |
| NTS (nicotine transdermal system, step 2 and 3) |
| Varenicline |
| Varenicline tabs |
| Wellbutrin |
| Zyban |

Table 9.2: FDA-Approved Medications for Alcohol and Drug Dependence

| Medication Name |
|------------------------|
| Acamprosate |
| Antabuse |
| Buprenorphine |
| Campral |
| Disulfiram |
| Methadone |
| Naltrexone |
| Revia oral |
| Suboxone |
| Vivitrol injection |

Appendix D Glossary of Terms

Accuracy (of data) - The extent to which data are free of identifiable errors.

Administrative/Billing Data (data source) - Administrative data are patient-identifiable data used for administrative, regulatory, and payment (financial) purposes. Administrative data generally reflects the content of discharge abstracts (for example, demographic information on patients such as age, sex, zip code; information about the episode of care such as length of stay, and ICD-10 diagnosis and procedure codes). Namely, the Uniform Bill of the Health Care Financing Administration (UB-04) provides specifications for the abstraction of administrative/billing data.

Agency for Healthcare Research and Quality (AHRQ) - The Agency for Healthcare Research and Quality (AHRQ) is the health services research arm of the U.S. Department of Health and Human Services (HHS), complementing the biomedical research mission of its sister agency, the National Institutes of Health. AHRQ is a home to research centers that specialize in major areas of health care research such as quality improvement and patient safety, outcomes and effectiveness of care, clinical practice and technology assessment, and health care organization and delivery systems.

Aggregate (hospital data) - Aggregate data elements derived for a specific hospital from the results of each measures algorithm over a given time period (e.g., monthly, quarterly). These data are transmitted to The Joint Commission by ORYX[®] Vendors.

Aggregate Risk-Adjusted Data Elements - Aggregate data elements derived from episode of care (EOC) records that result from the application of risk adjustment models by ORYX[®] Vendors for transmission to The Joint Commission.

Algorithm - An ordered sequence of data element retrieval and aggregation through which numerator and denominator events or continuous variable values are identified by a measure. The algorithms are depicted using flowcharting symbols.

Allowable Value - A list of acceptable responses for a data element.

ANSI X12 - The American National Standards Institute's standard for transmitting data electronically, or electronic data interchange (EDI).

Binary Outcome - Events or conditions that occur in one or two possible states often labeled 0 or 1. Such data are frequently encountered in medical research. Common examples include dead or alive, and improved or not improved.

Calculation Model - A description of the steps or statistical calculations (computations) used to derive the numerator and denominator or continuous variable values required for a measure. Measure Information Forms in this manual will include either an algorithm or calculation model.

Caregiver - The patient's family or any other person who will be responsible for care of the patient after discharge.

Central Tendency - A property of the distribution of a variable, usually measured by statistics such as the mean, median, and mode.

Chemotherapy - For purposes of the IMM measure sets, chemotherapy is defined as antineoplastic agents used to treat cancer. Types include targeted agents, alkylating agents, antimetabolites, plant alkaloids and terpenoids, topoisomerase inhibitors, antitumor antibiotics, monoclonal antibodies, and biologics and related agents. Hormonal therapies are not included.

Clinical Measures - Measures designed to evaluate the processes or outcomes of care associated with the delivery of clinical services; allow for intra- and interorganizational comparisons to be used to continuously improve patient health outcomes; may focus on the appropriateness of clinical decision making and implementation of these decisions; must be condition specific, procedure specific, or address important functions of patient care (e.g., medication use, infection control, patient assessment, etc.).

CMS Informational Measures - Measure and technical specifications published for interested parties for informational purposes only. Measures identified with an informational status are not currently used by CMS for the Hospital Inpatient Quality Reporting Program "pay-for-reporting" program or public reporting on the Hospital Compare website. The measures are not programmed for collection through the Clinical Abstraction Reporting Tool (CART) or the CMS Clinical Warehouse.

CMS Suspended Measures - Measures and technical specifications for the Hospital Inpatient Quality Reporting program, identified by CMS as suspended for data collection. The measures maintain their NQF endorsement during the suspended period, allowing CMS to reinstitute the measure if the need arises. Submission of suspended measures is not required for the Hospital Inpatient Quality Reporting Program and is not part of the payment update. Hospitals may elect to continue to report the suspended measures on a voluntary basis. If submitted, the measures will be publicly reported on Hospital Compare. The measures are programmed for collection through the Hospital Reporting Clinical Data Collection Tool and may be submitted to the CMS Clinical Warehouse. Note: Although these measures are suspended by the CMS, these measures may still be required by the Joint Commission.

CMS Test Measures - Measures and technical specifications developed for optional collection and submission of data to CMS to assist in determining the feasibility of reliably ascertaining data from medical records and the acceptability of these quality measures to practicing clinicians. Measures identified with test status are not currently used by CMS for the Hospital Inpatient Quality Reporting Program "pay-for-reporting" program or public reporting on the Hospital Compare website. The measures are

programmed for collection through the Clinical Abstraction Reporting Tool (CART) and submission to the CMS Clinical Warehouse.

CMS Voluntary Measures - Measures and technical specifications developed for optional collection and submission of data to CMS. Submission of voluntary measures is not required for the Hospital Inpatient Quality Reporting Program and is not part of the payment update. The measures are programmed for collection through the Hospital Reporting Clinical Data Collection Tool and may be submitted to the CMS Clinical Warehouse. Voluntary measures may or may not be NQF endorsed at the time of implementation. Voluntary measures are used by CMS to assess the measures feasibility of data collection or to obtain data later used to obtain NQF endorsement.

Comparison Group - The group of health care organizations to which an individual health care organization is compared. (ORYX® Vendors transmit aggregated comparison group data for non-core measures. The Joint Commission will aggregate health care organization-level data to create the comparison group for each core measure.)

Confounding Factors - Intervening variables that distort the true relationship between/among the variables of interest. They are related to the outcome of interest, but extraneous to the study question and are non-randomly distributed among the groups being compared. They can hide a true correlation or give the appearance of a correlation when none actually exists.

Continuous Variable - An aggregate data measure in which the value of each measurement can fall anywhere along a continuous scale (e.g., the time [in minutes] from hospital arrival to administration of thrombolysis).

Continuous Variable Data Elements - Those data elements required to construct the measure as stated in the section labeled “Continuous Variable Statement.”

Critical Access Hospital (CAH) - A facility that meets the following criteria may be designated by CMS as a CAH:

- Is located in a State that has established with CMS a Medicare rural hospital flexibility program; and
- Has been designated by the State as a CAH; and
- Is currently participating in Medicare as a rural public, non-profit or for-profit hospital; or was a participating hospital that ceased operation during the 10-year period from November 29, 1989 to November 29, 1999; or is a health clinic or health center that was downsized from a hospital; and
- Is located in a rural area or is treated as rural; and
- Is located more than a 35-mile drive from any other hospital or CAH (in mountainous terrain or in areas with only secondary roads available, the mileage criterion is 15 miles); and
- Maintains no more than 25 inpatient beds; and
- Maintains an annual average length of stay of 96 hours per patient for acute inpatient care; and

- Complies with all CAH Conditions of Participation, including the requirements to make available 24-hour emergency care services 7 days per week.
- A CAH may also be granted “swing-bed” approval to provide post-hospital Skilled Nursing Facility-level care in its inpatient beds. In the case of hospice care, a hospice may contract with a CAH to provide the Medicare hospice hospital benefit. Reimbursement from Medicare is made to the hospice. The CAH may dedicate beds to the hospice, but the beds must be counted toward the 25-bed maximum. However, the hospice patient is not included in the calculation of the 96-hour annual average length of stay. The hospice patient can be admitted to the CAH for any care involved in their treatment plan or for respite care. The CAH negotiates reimbursement through an agreement with the hospice. In addition to the 25 inpatient CAH beds, a CAH may also operate a psychiatric and/or a rehabilitation distinct part unit of up to 10 beds each. These units must comply with the Hospital Conditions of Participation.

Data Collection - The act or process of capturing raw or primary data from a single or number of sources. Also called “data gathering.”

Data Collection Effort - The availability and accessibility of the required data elements, the relative effort required, and associated cost of abstracting or collecting the data.

Data Element - A discrete piece of data, such as patient birthdate or principal diagnosis. See also *denominator data elements*, *numerator data elements*, and *continuous variable data elements*.

Data Entry - The process by which data are transcribed or transferred into an electronic format.

Data Quality - The accuracy and completeness of measure data on performance in the context of the analytic purposes for which they will be used.

Data Transmission - The process by which data are electronically sent from one organization to another. For example, a hospital sending patient-level data to its selected ORYX® Vendor, and the vendor sending measure-level data to The Joint Commission or patient-level data to the CMS Clinical Warehouse.

Denominator - The lower part of a fraction used to calculate a rate, proportion, or ratio. Also the population for a rate-based measure.

Denominator Data Elements - Those data elements required to construct the denominator.

Disaster Medical Assistance Team (DMAT) - Provides emergency medical assistance following a catastrophic disaster or other major emergency.

Discrete Variable - See *rate-based measure*.

Electronic Data Interchange (EDI) - An instance of data being sent electronically between parties, normally according to predefined industry standards.

Emergency Department (ED) - A portion of the hospital where emergency diagnosis and treatment of illness or injury is provided.

Episode of Care (EOC) - An Episode of Care (EOC) is defined as the health care services given during a certain period of time, usually during a hospital stay (e.g., from the day of arrival or admission to the day of discharge).

Excluded Populations - Detailed information describing the populations that should not be included in the indicator. For example, specific age groups, ICD-10 procedure or diagnostic codes, or certain time periods could be excluded from the general population drawn upon by the indicator.

Extranet - A private network using the Internet protocol to securely share business information or operations with vendors, customers, and/or other businesses. "The Joint Commission Connect" is the name given to the Joint Commission's extranet site.

Fluid Challenge - A diagnostic intervention whereby a small amount of fluid is given rapidly over a short period of time while monitoring cardiovascular readings. It is done to assess whether additional fluids will be beneficial or detrimental to the patient's condition.

Format - Specifies the character length of a specific data element; the type of information the data element contains: numeric, decimal, number, date, time, character, or alphanumeric; and the frequency with which the data element occurs.

General Data Elements - Data elements that must be collected by hospitals for each patient record. These data are patient demographic data, hospital identifiers, and patient identifiers.

Global - Global is an umbrella term for all measure sets that share the same Initial Patient Population definition.

Health Care Organization (HCO) - The business entity which is participating in an ORYX® Vendor (e.g., health care organization level data describes information about the business entity).

Health Care Organization (HCO) Level Data - Aggregation of patient level data to summarize the performance of an individual hospital on a performance measure. This data is transmitted to The Joint Commission by the hospital's ORYX® Vendor.

Hospital - According to the American Hospital Association, hospitals are licensed institutions with at least six beds whose primary function is to provide diagnostic and therapeutic patient services for medical conditions by an organized physician staff, and have continuous nursing services under the supervision of registered nurses.

Hospital Inpatient Quality Reporting Program - The Hospital Inpatient Quality Reporting Program initiative is intended to empower consumers with quality of care information to make more informed decisions about their health care, while encouraging hospitals and clinicians to improve the quality of inpatient care provided to all patients.

The hospital quality of care information gathered through the Hospital Inpatient Quality Reporting Program initiative is available to consumers on the Hospital Compare website.

Hospitalist - A physician whose main practice provides care for hospitalized patients.

ICD-10 Codes - The 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization. It contains codes for diseases, signs and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases and procedures.

Immunization (IMM) - The process by which a person becomes protected against a disease through vaccination or inoculation. For the purposes of this measure set, the population is defined as hospitalized inpatients screened for pneumococcal and seasonal influenza immunization status.

Initial Patient Populations - Detailed information describing the population(s) that the indicator intends to measure. Details could include such information as specific age groups, diagnoses, ICD-10 diagnostic and procedure codes, CPT codes, revenue codes, enrollment periods, insurance and health plan groups, etc.

Inpatient Mortality - Any patient death occurring while admitted as an inpatient in the hospital.

Inpatient Prospective Payment System (IPPS) Rule - A prospective payment system (PPS) under Medicare for hospital acute inpatient services. Hospitals contract with Medicare to furnish acute inpatient care and are reimbursed through pre-determined payment on a “per discharge” or “per case” basis for Medicare beneficiaries with inpatient stays.

Invalid Data - Values for data elements that are required for calculating and/or risk adjusting a core measure that fall outside of the acceptable range of values defined for that data element. Refer to the Missing and Invalid Data section for further information.

“The Joint Commission Connect” - The name given to the Joint Commission’s extranet site, a secured online connection to The Joint Commission.

Mean - A measure of central tendency for a continuous variable measure. The mean is the sum of the values divided by the number of observations.

Measure Data Elements - Data elements used by one specific measure or several measures in two or more measure sets, such as *Clinical Trial*.

Measure Information Form - Tool to provide specific clinical and technical information on a measure. The information contained includes: measure set, performance measure name, description, rationale, type of measure, improvement noted as, numerator/denominator/continuous variable statements, included populations, excluded

populations, data elements, risk adjustment, data collection approach, data accuracy, measure analysis suggestions, sampling, data reported as, and selected references.

Measure of Performance - See *performance measure*.

Measure-Specific Data Elements - Data elements used by one specific measure or several measures in one specific measure set, such as *Infection Prior to Anesthesia* in the SCIP measures.

Median - The value in a group of ranked observations that divides the data into two equal parts.

Medical Record (Data Source) - Data obtained from the records or documentation maintained on a patient in any health care setting (for example, hospital, home care, long term care, practitioner office). Includes automated and paper medical record systems.

Military Time - A 24 hour period from midnight to midnight using a 4-digit number of which the first two digits indicate the hour and the last two digits indicate the minute.

Missing Data - No values present for one or more data elements that are required for calculating and/or risk adjusting a national hospital inpatient quality measure. Refer to the Missing and Invalid Data section for further information.

Mode - The most frequent occurring response for that data element.

National Hospital Inpatient Quality Measure - A standardized performance measure that meets the Centers for Medicare & Medicaid Services and Joint Commission evaluation criteria, has precisely defined specifications, can be uniformly embedded in extant systems, has standardized data collection protocols to permit uniform implementation by health care organizations and permit comparisons of health care organization performance over time through the establishment of a national comparative data base.

National Hospital Inpatient Quality Measure Set - A unique grouping of performance measures carefully selected to provide, when viewed together, a robust picture of the care provided in a given area (e.g., cardiovascular care).

Non-Core Measure - A performance measure defined by the ORYX® Vendor that has undergone review against Joint Commission established measure criteria and has been accepted for use in the ORYX® initiative.

Numerator - The upper portion of a fraction used to calculate a rate, proportion, or ratio.

Numerator Data Elements - Those data elements necessary or required to construct the numerator.

Observed Rate - The observed rate is the measure rate that is based on a hospital's aggregated data for the reporting period. This is calculated as the number of measure

numerator cases for the reporting period divided by the number of denominator cases. Observed rates are used to measure hospital performances.

ORYX® Vendor - An entity consisting of an automated database(s) that facilitates performance improvement in health care organizations through the collection and dissemination of process and/or outcome measures of performance. ORYX® Vendors must be able to generate internal comparisons of organization performance over time, and external comparisons of performance among participating organizations at comparable times.

Outpatient Prospective Payment System (OPPS) Rule - A prospective payment system (PPS) under Medicare for hospital outpatient services, certain Part B services furnished to hospital inpatients that have no Part A coverage, and partial hospitalization services furnished by community mental health centers. All services paid under the PPS are classified into groups called Ambulatory Payment Classifications or APCs. A payment rate is established for each APC. Depending on the services provided, hospitals may be paid for more than one APC for an encounter.

Parenteral - Not through the alimentary canal but rather by injection through some other route, such as subcutaneous, intramuscular, intraorbital, intracapsular, intraspinal, intrasternal, intravenous, etc.

Passive Leg Raise - A test performed to assess whether patients will respond favorably to additional fluid administration. With the patient in a semi-reclining position, the legs are raised and cardiac functions monitored.

Patient Level Data - Collection of data elements that depict the health care services provided to an individual (patient). Patient level data are aggregated to generate hospital level data and comparison group data.

Patient Survey (Data Source) - Survey data are exclusively obtained from patients and/or their family members/significant others.

Percentile - A value on a scale of 100 that indicates the percentage of a distribution that is equal to or below it.

Performance Measure - A quantitative tool (for example, rate, ratio, index, percentage) that provides an indication of an organization's performance in relation to a specified process or outcome. Refer to the *Process Measure* and the *Outcome Measure* in Appendix E.

Performance Measurement System's Extranet Track (PET) - A secured electronic information and message center available to the Joint Commission's ORYX® Vendors. Access to the Internet and a browser are necessary to connect to PET. Access to PET is available by clicking on the "The Joint Commission Connect" link button on the Joint Commission's home page <http://manual.jointcommission.org/>.

Predicted Value - The statistically expected response or outcome for a patient after the risk adjustment model has been applied and the patient's unique set of risk factors have been taken into account.

Process - An interrelated series of events, activities, actions, mechanisms, or steps that transform inputs into outputs.

Proportion Measure - A measure which shows the number of occurrences over the entire group within which the occurrence should take place (e.g., AMI patients who received aspirin within 24 hours before or after hospital arrival over all AMI patients).

Randomization - A technique for selecting or assigning cases such that each case has an equal probability of being selected or assigned. It is done to stimulate chance distribution, reduce the effects of confounding factors, and produce unbiased statistical data.

Range - A measure of the spread of a data set. The difference between the smallest and largest observation.

Rate-based (Measure) - An aggregate data measure in which the value of each measurement is expressed as a proportion or as a ratio. In a proportion, the numerator is expressed as a subset of the denominator (for example, AMI patients who received aspirin within 24 hours before or after hospital arrival over all AMI patients). In a ratio, the numerator and denominator measure different phenomena (for example, the number of patients with central lines who develop infections divided by the number of central line days).

Ratio - A relationship between two counted sets of data, which may have a value of zero or greater. In a ratio, the numerator is not necessarily a subset of the denominator (e.g., pints of blood transfused to number of patients discharged).

Reliability - The ability of the indicator to accurately and consistently identify the events it was designed to identify across multiple health care settings.

Reporting Period - The defined time period which describes the patient's end-of-service.

Risk Adjusted Measures - Measures that are risk adjusted using statistical modeling or stratification methods.

Risk Adjusted Rate - A rate that takes into account differences in case mix to allow for more valid comparisons between groups.

Risk Adjustment - A statistical process for reducing, removing, or clarifying the influences of confounding factors that differ among comparison groups (for example, logistic regression, stratification).

Risk Adjustment Model - The statistical algorithm that specifies the numerical values and the sequence of calculations used to risk adjust (e.g., reduce or remove the influence of confounding factors) performance measures.

Risk Factor - A factor that produces or influences a result. In statistics, an independent variable used to identify membership of qualitatively different groups.

Risk Factor Value - A specific value assigned to a risk factor for a given episode of care (EOC) record.

Risk Model - The statistical algorithm that specifies the numerical values and the sequence of calculations used to risk adjust (e.g., reduce or remove the influence of confounding factors) performance measures.

Sampling Frequency - If a hospital chooses to sample, they may sample data on either a monthly or quarterly basis. Refer to the “Sample Size Requirements” discussion in the Population and Sampling Specifications section for further information.

Sampling Method - Describes the process used to select a sample. Sampling approaches for national hospital inpatient quality measures are simple random sampling and systematic sampling. Refer to the “Sampling Approaches” discussion in the Population and Sampling Specifications section for further information.

Sample Size - The number of individuals or particular patients included in a study. Usually chosen so that the study has a particular statistical power of detecting an effect of a particular size. Refer to the “Sample Size Requirements” discussion in the Population and Sampling Specifications for further information. For measure set specific “Sample Size Requirements” refer to the Measure Information section.

Score - A rating, usually expressed as a number, and based on the degree to which certain qualities or attributes are present (e.g., Glasgow coma, ASA scores).

Sepsis - The presence of pathogenic organisms or their toxins in the blood and tissues or poisoned condition resulting from the presence of pathogens or their toxins as in septicemia. With more than 258,000 lives being lost per year, sepsis ranks as the third leading cause of death in the U.S. (after heart disease and cancer).

Septic Shock - Systemic inflammatory response syndrome (SIRS) secondary to a documented infection. This response is a state of acute circulatory failure characterized by persistent arterial hypotension despite adequate fluid resuscitation or by tissue hypoperfusion (manifested by a lactate concentration > 4 mg/dL) unexplained by other causes.

Severity - The degree of biomedical risk; or mortality of medical treatment.

Simple Random Sample - A process in which a sample of data is selected from the total population in such a way that every case has the same chance of being selected and that the sample size is met. Refer to the “Sampling Approaches” discussion in the Population and Sampling Specifications section for further information.

Standard Deviation - A measure of variability that indicates the dispersion, spread, or variation in a distribution.

Strata - See stratified measure.

Stratification - A form of risk adjustment which involves classifying data into strata based on one or more characteristics, variables, or other categories.

Stratification Based Approach for Risk Adjustment - The process of dividing or classifying subgroups known as strata in order to facilitate more valid comparisons. For example, a measure's outcome may be divided into type of surgery-specific categories or strata.

Stratified Measure - A performance measure that is classified into a number of strata to assist in analysis and interpretation. The overall or un-stratified measure evaluates all of the strata together. The stratified measure or each stratum consists of a subset of the overall measure.

Stratum - See stratified measure.

Subset Measure(s) - A subset measure contains overlapping sets of patients. For example, the patients in the TOB-2a measure are a subset of those in the TOB-2 measure, i.e., the two measures have overlapping populations.

Substance Use (SUB) - For the purposes of the Substance Use measure set (SUB) substance use includes unhealthy alcohol use and drug abuse or dependence including opioids, sedative/hypnotics, cocaine, cannabis, amphetamines, and hallucinogens.

Systematic Random Sampling - A process in which the starting case is selected randomly and the next cases are selected according to a fixed interval that is based upon the number of cases in the population. For example, the starting case is the second patient that arrives at the hospital. This patient and every subsequent fifth patient becomes part of the random sample until the sample size is reached. Refer to the "Sampling Approaches" discussion in the Population and Sampling Specifications section for further information.

Tobacco Use (TOB) - For the purposes of the Tobacco Treatment measure set (TOB), tobacco use includes cigarettes, pipe, cigars and smokeless tobacco products.

Transmission Schedule - The schedule of dates on which data are expected to be transmitted to The Joint Commission and the CMS Clinical Warehouse.

Unable to Determine (UTD) - Each data element that is applicable per the algorithm for each of the measures within a measure set must be "touched" by the abstractor. While there is an expectation that all data elements are collected, it is recognized that in certain situations information may not be available (e.g., dates, times, codes, etc.). If, after due diligence, the abstractor determines that a value is not documented or is not able to determine the answer value, the abstractor must select "Unable to Determine (UTD)" as the answer.

Vaccine - A vaccine is a suspension of an attenuated (weakened) or killed microorganism, such as bacteria or virus, administered for the prevention, amelioration, or treatment of infectious diseases.

Validation - The process by which the integrity and correctness of data are established. Validation processes can occur immediately after a data item is collected or after a complete set of data are collected. The Centers for Medicare & Medicaid Services (CMS) chart level validation will validate the data at several levels. There are consistency and internal edit checks to assure the integrity of the submitted data; there are external edit checks to verify expectations about the volume of the data received, and there will be chart level audits to assure the reliability of the submitted data. Information on these procedures is available on <http://www.qualitynet.org>.

Validity - Ability to identify opportunities for improvement in the quality of care; demonstration that the indicator use results in improvements in outcomes and/or quality of care.

Variance - Equal to the square of the standard deviation.

Venous Thromboembolism (VTE) - A term that includes deep vein thrombosis and/or pulmonary embolism.

Verification - The process used to ensure consistent implementation of core measure algorithms specified in this manual across disparate ORYX® Vendors.

Selected References:

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- *Disease-Specific Care Certification Manual*, 2nd Edition. Joint Commission on Accreditation of Healthcare Organizations, Oakbrook Terrace, IL. 2005.
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- *Lexikon Second Edition*, Oakbrook Terrace, IL: Joint Commission on Accreditation of Healthcare Organizations, 1998.
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- *Mosby's Dictionary of Medicine, Nursing & Health Professions*, 7th Edition. Mosby Elsevier, St. Louis, MO. 2006.
- *ORYX® Technical Implementation Guide*, The Joint Commission, Oakbrook Terrace, Illinois, current.
- *2008 Comprehensive Accreditation Manual for Hospitals*; The Joint Commission, Oakbrook Terrace, Illinois, 2007.
- *Taber's Cyclopedic Medical Dictionary*. F.A. Davis Company, Philadelphia, PA. 1997.

Appendix E

Overview of Measure Information Form and Flowchart Formats

Measure Information Form Introduction

Measure Set

The specific national hospital quality inpatient measure set to which an individual measure belongs (e.g., **Sepsis**).

Set Measure ID

A unique alpha-numeric identifier assigned to a measure. Information associated with a measure is identified by this unique alpha-numeric number.

Performance Measure Name

A brief title that uniquely identifies the measure.

Description

A brief explanation of the measure's focus, such as the activity or the area on which the measure centers attention (e.g., **median time from admit decision time to time of departure from the emergency department for admitted patients**).

Rationale

The reason for performing a specified process to improve the quality of care outcome. This may include specific literature references, evidence based information, expert consensus, etc.

Type of Measure

Indicates whether the measure is used to examine a process or an outcome over time.

- **Process:** A measure used to assess a goal directed, interrelated series of actions, events, mechanisms, or steps, such as measure of performance that describes what is done to, for, or by patients, as in performance of a procedure.
- **Outcome:** A measure that indicates the result of performance (or non-performance) of a function(s) or process(es).

Improvement Noted As

Describes how improvement would be indicated by the measure.

- An increase in the rate/score/number of occurrences (e.g., sepsis).
- A decrease in the rate/score/number of occurrences (e.g., median time from admit decision to time of departure from the emergency room for admitted patients).
- Either an increase or a decrease in the rate/score/number of occurrences, depending upon the context of the measure (e.g., utilization).

Numerator Statement

Represents the portion of the denominator that satisfies the conditions of the performance measure.

Note: If the measure is reported as a rate (proportion or ratio), the Numerator and Denominator Statement are completed. If a performance measure does not have both a numerator and a denominator, then a Continuous Variable Statement is completed.

Included Population in Numerator: Specific information describing the population(s) comprising the numerator, not contained in the numerator statement, or not applicable.

Excluded Population in Numerator: Specific information describing the population(s) that should not be included in the numerator, or none.

Data Elements: Those data elements necessary or required to determine (or establish) the numerator.

Denominator Statement

Represents the population evaluated by the performance measure.

Note: If measure is reported as a rate (proportion or ratio), the Numerator and Denominator Statement are completed. If a performance measure does not have both a numerator and a denominator, then a Continuous Variable Statement is completed.

Included Population in Denominator: Specific information describing the population(s) comprising the denominator, not contained in the denominator statement or not applicable.

Excluded Population in Denominator: Specific information describing the population(s) that should not be included in the denominator, or none.

Data Elements: Those data elements required to determine (or establish) the denominator.

Continuous Variable Statement

Describes an aggregate data measure in which the value of each measurement can fall anywhere along a continuous scale.

Note: If measure is reported as a central tendency, Continuous Variable Statement is completed. This item is only completed when the performance measure does not have numerator and denominator statements.

Included Population in Continuous Variable: Specific information describing the population(s) comprising the performance measure, not contained in the continuous variable statement or not applicable.

Excluded Population in Continuous Variable: Specific information describing the population(s) that should not be included in the performance measure or none.

Data Elements: Those data elements required to determine (or establish) the measure for a continuous variable.

Risk Adjustment

Indicates whether a measure is subject to the statistical process for reducing, removing, or clarifying the influences of confounding factors to allow more useful comparisons.

Data Collection Approach

Recommended timing for when data should be collected for a measure. Data collection approaches include retrospective, concurrent, prospective or Medicare Claims data collection.

- **Retrospective** data collection involves collecting data for events that have already occurred.
- **Concurrent** data collection is the process of gathering data on how a process works or is working while a patient is in active treatment.
- **Prospective** data collection is data collection in anticipation of an event or occurrence.
- **Medicare Claims** data collection is use of data that is administratively derived from CMS claims and does not require any abstraction.

Model Validation

Model validation is the process of verifying that all documents in a model are valid with respect to the model's definition documents.

Data Accuracy

Recommendations to reduce identifiable data errors, to the extent possible.

Measure Analysis Suggestions

Recommendations to assist in the process of interpreting data and drawing valid conclusions.

Sampling

Indicates whether or not a measure can be sampled. Sampling is a process of selecting a representative part of the population in order to estimate the hospital's performance, without collecting data for its entire population.

Data Reported As

Indicates how data will be reported for a measure.

- Aggregate rate generated from count data reported as a ***proportion*** (e.g., rate-based measures which report summary data generated from the number of **sepsis patients who received the appropriate three- and six-hour care and treatment over all patients age 18 and over with a diagnosis of severe sepsis, or septic shock**).

- Aggregate rate generated from count data reported as a **ratio** (e.g., bloodstream infection per 1,000 line days).
- Aggregate measures of **central tendency** (e.g., continuous variables which report means and medians such as median time to **ED departure**).
- Claims data reported as condition-specific, hospital-specific, or risk-standardized (e.g., 30-day readmission rates).

Calculation Model

A description of the steps or statistical calculations (computations) used to derive the numerator and denominator or continuous variable values required for a measure. Measure Information Forms in this manual will include either an algorithm or calculation model.

Selected References

Specific literature references that are used to support the importance of the performance measure.

Algorithm Introduction

Each measure set's initial patient population and associated measures are described by a unique algorithm. An algorithm is a predefined set of rules that help to break down complex processes into simple, repetitive steps.

Initial Patient Population algorithms evaluate and identify which episode of care (EOC) records are in the measure set's population and are eligible to be sampled.

Measure algorithms serve two purposes. First, they evaluate and identify which episode of care (EOC) records contain missing and/or invalid data that will prohibit the ability to properly evaluate the measure. Second, they determine if:

- For rate-based measures, the patient's EOC record belongs in the measure population of interest described by the denominator, and if the patient experienced the event described in the numerator.
- For continuous variable measures, the patient's EOC record belongs in the patient population described in the measure's statement and, if so, to define and calculate the measurement value.

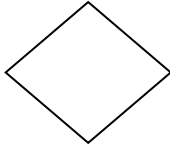
This section contains some standard flow-charting conventions used to develop each algorithm:

- Flow lines are used to guide the reader to different parts of the algorithm, with arrows denoting the direction of movement. Generally, movement is from the top to the bottom of the chart.
- Symbols used in each algorithm are described later in this section under Flowchart Symbols.
- Temporary variables within the algorithm are noted in the variable key at the top of each page.

Flowchart Symbols



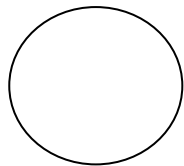
Start/Stop denotes the beginning or end of an algorithm.



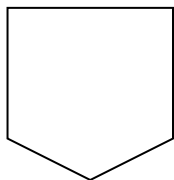
Diamonds represent “If...Then” decision points for logic tests and comparisons. Two or three flow lines exit the decision point to reflect alternative actions based upon an evaluation of the condition(s) stated around the decision point.



Rectangles or process boxes show when computation or manipulation of the data are required, such as a calculation or summarization.

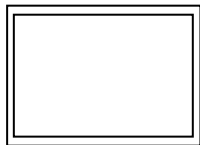


Circle or “On-page” connectors, labeled with a letter, show a link to sections of the algorithm which are continued on the same page.

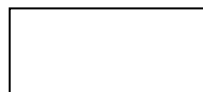


Five-sided or “Off-page” connectors, labeled with a letter, show a link to sections of the algorithm which are continued on different pages.

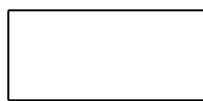
Note: Both circular, On-page, and five-sided, Off-page connectors containing the letters B, D, E, X or Y lead to measure Outcome Boxes.



Outcome Boxes represent the result of data passed through the algorithm. Connectors extending from outcome boxes lead to the end of the algorithm, or to risk adjustment procedures, where applicable. This symbol is also used to identify the strata within a stratified measure.



Symbol to represent comments that should be taken into account when programming flowchart.



This symbol is placed alongside the Process box to which they are applicable. Comments are used to expand upon information contained within the process box, such as how to properly calculate age. Comments are never the sole location where processing logic is provided.



Start/Return denotes the beginning and end of a sub-routine. Algorithms that use this symbol are called from another algorithm and the data processing flow returns to the calling algorithm when the ‘Return’ is encountered.

See the Initial Patient Population Algorithms and Transmission Data Processing Flows for an example of the usage of this symbol.

Measure Outcomes (CMS Only)

Measure Outcomes are analogous to the Joint Commission Only data element Measure Category Assignment. Measure Outcomes are calculated measure results for each episode of care (EOC) that is processed through a measure algorithm.

The following are the possible Measure Outcomes:

B Not in Measure Population

For rate-based and continuous variable measures: EOC record is not a member of a measure's population and is excluded from the denominator.

D In Measure Population (Used for Reporting):

For rate-based measures: EOC record is a member of the measure's population and the intent of the measure was not met. Note: For measures for which better quality is associated with a lower score or numerator, i.e., PC-01, a measure outcome of "D" means that the appropriate care was provided, and the intent of the measure was met. For aggregate data, the EOC record will be included in the measure denominator only.

For continuous variable measures: EOC record is a member of the measure's population and has sufficient, accurate, and valid data to compute the measurement.

E In Numerator Population:

For rate-based measures: EOC record is a member of the measure's population and the intent of the measure was met. Note: For measures for which better quality is associated with a lower score or numerator, i.e., PC-01, a measure outcome of "E" means that the appropriate care was not provided and the intent of the measure was not met. For aggregate data, the EOC record will be included in both the measure numerator and denominator.

For continuous variable measures: Does not apply.

X Data Are Missing

For rate-based and continuous variable measures: Data are missing that is required to calculate the measure. The record will be rejected when transmitted.

Y Unable to Determine (UTD) Allowable Value Does Not Allow Calculation of the Measure

For rate-based measures: Does not apply.

For continuous variable measures: EOC record is a member of the measure's population however, contains a Date, Time or Numeric data element with a value of 'UTD.'

For Allowable Values associated with the Joint Commission only data element Measure Category Assignment, refer to the Alphabetical Data Dictionary in this Manual.

Appendix F Inpatient Measure Name Crosswalk

Comparison Table - Current Specifications Manual Measure Name and Measure Name Published in Federal Register for Hospital Inpatient Quality Reporting Program

| Measure | Measure Name In Hospital Inpatient Specifications Manual 01/01/2019 discharges | Measure Name in Federal Register published August 2018 for FY2021 payment determination |
|-------------|--|--|
| SEP-1 | Early Management Bundle, Severe Sepsis/Septic Shock | Severe Sepsis and Septic Shock: Management Bundle (Composite Measure) |
| MORT-30-STR | Stroke 30-day Mortality Rate | Hospital 30-Day, All-Cause, Risk Standardized Mortality Rate Following Acute Ischemic Stroke |
| PSI 4 | Death among Surgical Inpatients with Serious Treatable Complications | Death Rate among Surgical Inpatients with Serious Treatable Complications |

Appendix G Resources

The following are available resources to those using the Centers for Medicare & Medicaid Services and The Joint Commission Specification Manual for National Hospital Inpatient Quality Measures.

Abstraction, Measure, or eMeasure Questions

For questions you may go to <https://www.qualitynet.org> then select “Hospitals-Inpatient” under “Questions & Answers” to submit your questions. Questions & Answers is an online questions and answers database that allows for the submission and retrieval of questions and answers based on the measure set and keyword criterion.

Substance Use and Tobacco Treatment Measure Sets

If you have questions regarding the Substance Use and Tobacco Treatment Measure Sets that are collected for The Joint Commission only, please submit them to <http://manual.jointcommission.org/>.

CMS Abstraction & Reporting Tool (CART)

For technical assistance with CART, please contact the *QualityNet* help desk at qnetsupport@hcqis.org, or call 1-866-288-8912.

CMS Hospital Inpatient Quality Reporting Program

For information on measures that are required for CMS Hospital IQR Program and/or used for Public Reporting on Hospital Compare, refer to the Hospital IQR Measures and/or the Acute Care Hospital Quality Reporting Program Measures documents, for the appropriate fiscal year, at <https://www.qualitynet.org/>. Please go to the *QualityNet* web site and select “Measures” under “Hospital Inpatient Quality Reporting Program” located under Hospitals-Inpatient; or refer to the Final IPPS Rule at <http://www.cms.gov/AcuteInpatientPPS/>.

Information regarding the Hospital IQR Program electronic Clinical Quality Measures (eCQMs) reporting is available on *QualityNet* at <https://www.qualitynet.org/>. From the *QualityNet* web site select “Electronic Clinical Quality Measures (eCQMs) Reporting” under “Hospital Inpatient Quality Reporting Program” located under Hospitals-Inpatient.

Healthcare Organizations

If you are an accredited healthcare organization with questions about National Quality Measures, ORYX® requirements, etc., please contact Accreditation Operations at <http://manual.jointcommission.org/>.

Medication Questions

If you have questions regarding medications, please go to the *QualityNet* web site <https://www.qualitynet.org> and select “Hospitals-Inpatient” under “Questions & Answers” to submit your questions. Questions & Answers is an online questions and answers database that allows for the submission and retrieval of questions and answers based on the measure set and keyword criterion.

If you have questions regarding medications applicable to measure sets that are collected for The Joint Commission only, please submit them to <http://manual.jointcommission.org/>.

National Uniform Billing Committee (NUBC)

For further information regarding the UB-04 and NUBC related data elements, please refer to the NUBC manual, “Official UB-04 Data Specifications Manual® Copyright American Hospital Association” or website at <http://www.nubc.org/index.html>.

ORYX® Vendors

If you are an ORYX Vendor with questions about National Quality Inpatient Measures, please contact The Joint Commission’s Division of Quality Measurement and Research at <http://manual.jointcommission.org/>.

Appendix H Miscellaneous Tables

Last Updated: Version 5.6

Index

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|---------------|---------------------------------|--------------|
| Table 2.1 | VTE Prophylaxis Inclusion Table | Appendix H-2 |
| Table 2.7 | Anticoagulation Therapy Table | Appendix H-4 |

Table 2.1: VTE Prophylaxis Inclusion Table

| VTE Prophylaxis | Inclusion/Synonyms |
|---|---|
| Coumadin/ Warfarin | Coumadin Jantoven Warfarin Warfarin Sodium |
| Graduated Compression Stockings (GCS) - Knee or thigh high | Anti-Embolism stockings Anti-thrombosis stockings Elastic support hose Graduated compression elastic stockings Surgical hose White hose Thrombosis stockings |
| Factor Xa Inhibitor | Arixtra Fondaparinux sodium |
| Oral Factor Xa Inhibitor | Apixaban ¹ Betrixaban ⁴ BEVYXXA ⁴ Edoxaban ³ Eliquis ¹ Rivaroxaban ² Savaysa ³ Xarelto ² |
| Low Dose Unfractionated Heparin (LDUH) - Include only Heparin given by the subcutaneous (SQ, Subcu, SC, SubQ) route | HEP Heparin Heparin Na Heparin Sod Heparin Sodium Heparin Sodium Inj. Heparin Sodium Inj. Pork Heparin Subcu/SQ/SC/SubQ |
| Low Molecular Weight Heparin (LMWH) | Dalteparin Enoxaparin Fragmin Innohep Lovenox Tinzaparin |

Table 2.1: VTE Prophylaxis Inclusion Table

| VTE Prophylaxis | Inclusion/Synonyms |
|--|---|
| Intermittent Pneumatic Compression Device (IPC) | AE pumps (anti-embolic pumps)-calf/thigh DVT boots-calf/thigh EPC cuffs/ stockings-External pneumatic compression-calf/thigh Intermittent pneumatic compression stockings Intermittent compression device (ICD) Leg pumps Pneumatic intermittent impulse compression device Rapid inflation asymmetrical compression (RIAC) devices Sequential compression device Sequential pneumatic hose Thrombus pumps-calf/thigh |
| Venous Foot Pump (VFP) | AE pumps-foot only Foot pump Plantar venous plexus pump-foot only SC boots-foot only SCD boots-foot only Venous foot pump |

Note: This table is not meant to be an inclusive list of all available prophylaxis; rather it represents current information available at the time of publication.

¹ The U.S. Food and Drug Administration (FDA) has approved Eliquis (apixaban) to reduce the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation or to reduce the risk of blood clots, deep vein thrombosis (DVT) and pulmonary embolism (PE) following knee or hip replacement surgery only. It is additionally approved for treatment of DVT and PE and for the reduction in the risk of recurrent DVT and PE following initial therapy.

² The U.S. Food and Drug Administration has approved Xarelto (rivaroxaban) to reduce the risk of blood clots, deep vein thrombosis (DVT) and pulmonary embolism (PE) following knee or hip replacement surgery only. It is additionally approved: to reduce the risk of stroke in patients with non-valvular atrial fibrillation; for treatment of DVT or PE; to reduce the risk of recurrent DVT and PE following initial treatment.

³ The FDA approved edoxaban (Savaysa) to reduce the risk of stroke and dangerous blood clots (systemic embolism) in patients with atrial fibrillation that is not caused by a heart valve problem. Savaysa has been approved to treat deep vein thrombosis (DVT) and pulmonary embolism (PE) in patients who have already been treated with anti-clotting drug administered by injection or infusion (parenterally), for five to ten days.

⁴ The U.S. Food and Drug Administration (FDA) has approved betrixaban (BEVYXXA) for the prophylaxis of venous thromboembolism (VTE) in adult patients hospitalized for an acute medical illness who are at risk for thromboembolic complications due to moderate or severe restricted mobility and other risk factors for VTE.

Table 2.7: Anticoagulation Therapy Table

| Anticoagulation Therapy – All Inclusive | Inclusion/Synonyms |
|--|---|
| Direct Thrombin Inhibitors | Acova Angiomax Angiox Argatroban Bivalirudin Dabigatran Dabigatran etexilate Lepirudin Pradaxa Recombinant Hirudin Refludan |
| Glycoprotein IIb/IIIa Inhibitors | Abciximab Aggrastat Eptifibatide Integrilin ReoPro Tirofiban |

Appendix P Preview Section

The preview section is intended to provide an overview of future updates. The information provided in this section **is not** to be programmed or submitted. Placement in this appendix does not assume that the information listed will be implemented in a future manual.

NOTE: There are currently no upcoming updates or proposed measures to preview in this section.

National Hospital Inpatient Quality Reporting Measures Specifications Manual Release Notes

For Manual Version: 5.6

Completed: November 28, 2018

Guidelines for Using Release Notes

The Release Notes provides modifications to the *Specifications Manual for National Hospital Inpatient Quality Measures*, Version 5.6. The information in this document is to be used as a reference and is not intended to be used to program abstraction tools. Please refer to the *Specifications Manual for National Hospital Inpatient Quality Measures* for the complete and current technical specifications and abstraction information.

The notes are organized to follow the order of the Table of Contents. The **implementation date is 07/01/2019**, unless otherwise specified. The headings are described below:

- **Impacts** - used to identify the impacted measures and portion(s) of the Manual Section, e.g., Alphabetical Data Dictionary, Measure Information Form (MIF) and Flowchart (Algorithm).
- **Description of Changes** - used to identify the section within the document where the change occurs, e.g., Definition, Data Collection Question, Allowable Values, and Denominator Statement - Data Elements.
- **Rationale** - provided for the change being made.

Data elements that cross multiple measures and contain the same changes will be consolidated.

NOTE: In addition to being called out specifically in the Release Notes document, additions are **yellow highlighted** in the corresponding documents. The changes in the Hospital Inpatient Population and Clinical Data XML File Layouts have yellow highlighted cells with actual changes noted in **bold font**.

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Note: click on any section title in the Release Notes to return to Table of Contents page.

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The content below is organized to follow the Table of Contents in the specifications manual.

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Introduction *(no updates)*

Using the Specifications Manual for National Hospital Inpatient Quality Measures *(no updates)*

SECTION 1 – Data Dictionary

Introduction to Data Dictionary *(no updates)*

Alphabetical Data Dictionary

Impacts:

Administrative Contraindication to Care, Septic Shock

Rationale: The *Administrative Contraindication to Care, Septic Shock* data element is being updated with new guidance.

Description of Changes:

Notes for Abstraction

Change third bullet point to:

- A more general documentation of refusal of care (e.g. central line, PICC, IO access) or documentation of patient non-compliance with care (e.g., pulling out IV) that would result in the following not being administered within the specified time frame is acceptable.
 - Blood Draws
 - IV or IO fluid administration
 - Vasopressors

Impacts:

Administrative Contraindication to Care, Severe Sepsis

Rationale: The *Administrative Contraindication to Care, Severe Sepsis* data element is being updated with new guidance.

Description of Changes:

Notes for Abstraction

Change third bullet point to:

- A more general documentation of refusal of care (e.g. central line, PICC, IO access) or documentation of patient non-compliance with care (e.g., pulling out IV) that would result in the following not being administered within the specified time frame is acceptable.
 - Blood Draws
 - IV or IO fluid administration
 - Vasopressors

Impacts:

Broad Spectrum or Other Antibiotic Administration Selection

Rationale: The *Broad Spectrum or Other Antibiotic Administration Selection* data element is being updated with new guidance.

Description of Changes:

Notes for Abstraction

Change under fifth bullet point, “Examples” to:

Example:

Change first sub-bullet point under sixth bullet point to:

There is physician/APN/PA documentation within 24 hours prior to the antibiotic start time identifying the presence of *C. difficile*. Documentation that *C. difficile* is suspected or likely is acceptable.

Impacts:

Directive for Comfort Care or Palliative Care, Septic Shock

Rationale: The *Directive for Comfort Care, Septic Shock* data element is being updated with new guidance to further specify that only inclusion terms documented in specific context are acceptable.

Description of Changes:

Notes for Abstraction

Change second bullet point to:

- Only the earliest physician/APN/PA documentation of an inclusion term documented in the following contexts suffices:
 - Comfort measures only recommendation
 - Order for consultation or evaluation by a hospice care service
 - Patient or patient representative request for comfort measures only
 - Plan for comfort measures only
 - Referral to hospice care service

Impacts:

Directive for Comfort Care or Palliative Care, Severe Sepsis

Rationale: The *Directive for Comfort Care, Septic Shock* data element is being updated with new guidance to further specify that only inclusion terms documented in specific context are acceptable.

Description of Changes:

Notes for Abstraction

Change second bullet point to:

- Only the earliest physician/APN/PA documentation of an inclusion term documented in the following contexts suffices:
 - Comfort measures only recommendation
 - Order for consultation or evaluation by a hospice care service
 - Patient or patient representative request for comfort measures only
 - Plan for comfort measures only
 - Referral to hospice care service

Impacts:*Discharge Disposition*

Rationale: The data element is being updated to provide abstraction guidance regarding documentation related to patient discharge to rehabilitation facilities for chemical and alcohol dependency.

Description of Changes:Inclusion Guidelines for Abstraction

Under Other Health Care Facility (Value 5):

Change fifth bullet point to:

- Rehabilitation Facility including, but not limited to: Inpatient Rehabilitation Facility/Hospital, Rehabilitation Unit of a Hospital, Chemical Dependency/Alcohol Rehabilitation Facility

Impacts:*Initial Hypotension*

Rationale: The *Initial Hypotension* data element is being updated with clarifying guidance.

Description of Changes:Notes for Abstraction

Change fourth bullet point to:

- Hypotensive BPs obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used**.

Change seventh bullet point to:

- Documentation of a term that represents or is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

Example:

Hypotension (Systolic blood pressure <90 mmHg).

Impacts:*Persistent Hypotension*

Rationale: The *Persistent Hypotension* data element is being updated with clarifying guidance.

Description of Changes:Notes for Abstraction

Change third bullet point to:

- Hypotensive BPs obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used**.

Add new sixth bullet point:

- If one or more blood pressures were documented within the time frame and persistent hypotension is unable to be determined but a vasopressor was administered, select Value "1."

Change eighth bullet point to:

- Documentation of a term that represents or is defined by an SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when documented as normal for

the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

Example:

Hypotension (Systolic blood pressure <90 mmHg).

Remove:

- Acceptable crystalloid fluids are identified in the *Crystalloid Fluid Administration* data element.
- If the end time of the target ordered volume of crystalloid fluids cannot be determined, select Value “3.”
- If crystalloid fluids were administered but at a volume less than the target ordered volume, choose Value “4.”

Impacts:

Reason for No Administration of VTE Prophylaxis

Rationale: The data element is being updated to provide additional guidance for the abstractor.

Description of Changes:

Notes for Abstraction

Change under second bullet point, third sub-bullet point to:

- For patients receiving anticoagulant therapy, including continuous IV heparin infusion, between arrival and the day before the VTE diagnostic test order date, select “Yes.”
Disregard IV heparin administered to flush/maintain patency of a line or dialysis equipment and IV heparin administered during an interventional procedure, e.g., cardiac cath.

Remove fourth bullet point:

- If the *VTE Diagnostic Test* was performed the day of or the day after arrival, select “Yes.”

Impacts:

Referral for Addictions Treatment

Rationale: The data element is being updated to provide abstraction guidance regarding documentation related to patient referrals and appointments for addictions treatment.

Description of Changes:

Notes for Abstraction

Change to:

- If a patient is referred to an addictions treatment provider that does not schedule appointments and the patient was given a specific date and time to present for addictions treatment, select Value “1.”
- If the patient does not have a residence in the USA, Value “4” must be selected.
- A referral to Alcoholics Anonymous (AA) or similar mutual support groups does not meet the intent of the measure. Select Value “5.”
- Select Value “5” if:
 - it cannot be determined that a referral for addictions treatment was made or;
 - it is unclear that the absence of the referral was due to a patient refusal or because the referral was not offered.

Impacts:*Referral for Outpatient Tobacco Cessation Counseling*

Rationale: The data element is being updated to provide abstraction guidance regarding documentation related to patient referrals and appointments for addictions treatment.

Description of Changes:Notes for Abstraction**Change to:**

- If a referral is made to a Quitline, defined as a telephone counseling in which at least some of the contact is initiated by the Quitline counselor to deliver tobacco use interventions, select Value “1.” If the patient directly calls the Quitline during the hospitalization, documentation must reflect that staff was present during the call to verify that an appointment was set.
- If a patient is referred to an outpatient tobacco cessation counseling provider that does not schedule appointments and the patient was given a specific date and time to present for counseling, select Value “1”.
- If the patient is provided with contact information for e-health or internet smoking cessation programs which tailor program content to the tobacco user’s needs (by collecting information from the tobacco user and using algorithms to tailor feedback or recommendations, permitting the user to select from various features including extensive information on quitting, tobacco dependence, and related topics) select Value “2.” Note that if Value “2” is selected, the case will not pass the measure. Value “2” can be used as part of an internal performance improvement activity in order to determine if any type of referral was made rather than no referral.
- If a referral for outpatient tobacco cessation counseling was offered during the hospitalization and the patient refused, select Value “3.” It does not need to be offered again at discharge.
- If the patient does not have a residence in the USA, Value “4” must be selected.
- If the patient is provided with self-help materials that are not tailored to the patient’s needs and do not provide a structured program, select Value “5.”
- Select Value “5” if:
 - it cannot be determined that a referral for outpatient cessation counseling was made or;
 - it is unclear that the absence of the referral was due to a patient refusal or because the referral was not offered.
- If the patient refused practical counseling (*Tobacco Use Treatment Practical Counseling*) during the hospitalization, a referral for outpatient tobacco cessation counseling must still be offered at the time of discharge. Select Value “5” if a referral for outpatient counseling was not offered at the time of discharge.

Impacts:*Severe Sepsis Present*

Rationale: The *Severe Sepsis Present* data element is being updated with new guidance.

Description of Changes:Notes for Abstraction**Change** under second bullet point, eighth bullet point under “C” to:

- INR >1.5 or aPTT >60 sec

- If the suggested data source shows the patient was given an anticoagulant medication in Appendix C Table 5.3, an elevated INR or aPTT level should not be used as organ dysfunction. Physician/APN/PA documentation is not required. If only the following is given, the elevated INR or aPTT level should be used:
 - Heparin flushes

Change fourth bullet point to:

- Documentation of a term that represents or is defined by a SIRS criteria or sign of organ dysfunction is acceptable in place of an abnormal value when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

Examples include but are not limited to:

- Tachypnea (Respiration >20 per minutes)
- Tachycardia, RVR (Heart rate >90)
- Leukopenia (White blood cell count <4,000)
- Leukocytosis (White blood cell count >12,000)
- Thrombocytopenia (Platelet count <100,000)
- Hypotension (Systolic blood pressure <90 mmHg)

Change seventh bullet point to:

- SIRS criteria or a sign of organ dysfunction obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used.**

Impacts:

Septic Shock Present

Rationale: The *Septic Shock Present* data element is being updated with clarifying guidance.

Description of Changes:

Notes for Abstraction

Change “a” under third bullet point to:

- a. Severe Sepsis Present

AND

Persistent Hypotension evidenced by:

- In the hour after the conclusion of the target ordered volume of *Crystalloid Fluid Administration*, two consecutive documented hypotensive blood pressure readings.

Change fourth and fifth bullet point to:

- For evaluation of blood pressure parameters to establish whether or not hypotension persists after crystalloid fluid administration, begin abstracting at the time that crystalloid fluid administration concludes (refer to the *Persistent Hypotension* data element); abstract for the time period that follows for the next hour only.
- Hypotensive BPs obtained within the operating room (OR), interventional radiology, during active delivery, or procedural/conscious sedation **should not be used.**

Change ninth bullet point to:

- Documentation of a term that represents or is defined by a SBP <90 mmHg or MAP <65 mmHg is acceptable in place of an abnormal value when documented as normal for the patient, due to a chronic condition, due to a medication, or due to an acute condition that has a non-infectious source/process.

Impacts:

VTE Confirmed

Rationale: The data element is being updated to provide additional guidance for the abstractor.

Description of Changes:Inclusion Guidelines for Abstraction

Add new bullet point:

- Infrarenal IVC

Exclusion Guidelines for Abstraction

Add new bullet points:

- Amniotic fluid embolism / emboli
- Cement embolism / emboli

Impacts:

VTE Diagnostic Test

Rationale: The data element is being updated to provide additional guidance for the abstractor.

Description of Changes:Inclusion Guidelines for Abstraction

Change second bullet point to:

- Venous Ultrasound of lower extremities

Add new bullet point:

- CT pulmonary angiogram (CTPA) / CTPA Scan / CT pulmonary embolism (CTPE)

Impacts:

VTE Present at Admission

Rationale: The data element is being updated to provide additional guidance for the abstractor.

Description of Changes:Notes for Abstraction

Change to:

- The time frame for this data element includes any documentation dated from hospital arrival to the day after admission. **It is not necessary to review documentation outside of this timeframe to answer this data element.**
- Documentation of suspicion or a diagnosis of a pulmonary embolism (PE) or venous thromboembolism (VTE) in a confirmed location is acceptable. **Only accept terms identified in the list of inclusions.**

NOTE: It is not necessary for a *VTE Diagnostic Test* to be linked with the physician/APN/PA documented diagnosis of PE or VTE.

Acceptable Examples:

- A patient arrived on 10/1/20xx with shortness of breath. On 10/2/20XX, there is physician documentation that a PE is suspected, select "Yes."
- Results of a venous Doppler performed the day after admission are positive for VTE in the common femoral vein, select "Yes."

- Results of a Doppler are positive for an acute nonocclusive LLE thrombus on the day after admission, select “Yes.”
- Day of admission physician includes PE on the problem list, select “Yes.”
- Patient admitted with a diagnosis of left popliteal deep vein thrombus, select “Yes.”
- Patient arrived on 01/05/20XX with documentation from an outside transferring hospital indicating vascular ultrasound was performed on 01/02/20XX and positive for VTE, select “Yes.”
- Physician documents in H&P on day of admission, “DVT right lower extremity”, select “Yes.”

Unacceptable Examples:

- H&P on day of admission notes that the patient has an occlusion of the subclavian vein. Subclavian vein is not a defined location, select “No.”
- A patient arrives to the hospital emergency department with C/O severe headache. Differential diagnosis on the day of arrival includes cerebral venous thrombosis (CVT) versus SAH, select “No.”
- Physician admitting note documents DVT prophylaxis under the treatment plan, select “No.”
- Patient admitted with a diagnosis of left upper extremity deep vein thrombus, select “No.”
- Patient has a CT chest with IV contrast on the day of arrival to R/O PE and test results are negative and received by 2359 the day after admission, select “No.”
- An order for a VTE diagnostic test is acceptable **ONLY** if it is explicitly documented that VTE/PE is the reason for the test. **Only accept terms identified in the list of inclusions.** If an acceptable test is ordered for a PE or VTE indication and results are documented as **negative** by 2359 the day after admission, then suspicion of PE or VTE has been ruled out. Select “No.”

Acceptable Examples:

- A patient presents to the hospital emergency department with a chief complaint of pain and swelling in the right calf. A vascular ultrasound of the lower extremities is ordered to R/O DVT, select “Yes.” **UNLESS** results are negative and received by 2359 the day after admission.
- Bilateral venous Doppler of the lower extremities is ordered on the day after admission for redness and swelling left calf, select “Yes.”
- A patient arrives on 06/01/20XX. Admitting diagnosis is fever. On 06/02/20XX patient admitted and physician documents “if cough continues may require evaluation for PE.” On 06/03/20XX, CTA chest is ordered and positive for PE. Select “Yes.”

Unacceptable Examples:

- Physician orders a bilateral lower extremity arterial duplex on the day after admission. Arterial duplex is not an acceptable test. Select “No” for *VTE Present on Admission*.
- Patient presents to the emergency room with complaints of pain all over after sustaining a fall. ED MD orders multiple tests including a CT of the chest with IV contrast. ED MD documents fall as the reason for the test. No mention of PE/VTE, select “No.”

- A patient is admitted after a motor vehicle accident. On arrival, a CT of the abd/pelvis with IV contrast was done to R/O internal injuries. No mention of PE/VTE, select “No.”
- Bilateral venous Doppler of the lower extremities is ordered on the day of arrival for redness and swelling left calf. Results returned the same day document no acute VTE in left common femoral vein or popliteal vein, select “No.”
- Patients who are under treatment and receiving anticoagulation therapy for PE/VTE at the time of hospital arrival, select “Yes.”
 - Examples:**
 - Patient admitted 04/30/20XX. Physician documents on 04/30/20XX that Coumadin was started on 04/20/20XX for a recently diagnosed PE, select “Yes.”
 - Patient presents with a documented diagnosis of PE on the day of arrival. Coumadin placed on hold to evaluate for GI bleed, select “Yes.”
- Patients on anticoagulation therapy for another condition (e.g., atrial fibrillation, mitral valve replacement) at the time of hospital arrival, select “Yes.”
 - Examples:**
 - Patient with a history of stroke and taking dabigatran as a home medication prior to arrival, select “YES.”
 - H&P documents chronic VTE. Taking Coumadin, select “Yes.”
 - EXCEPTION:**

Patient on apixaban prior to arrival for a history of atrial fibrillation. Apixaban discontinued on arrival for surgery the day after admission, select “No.”
- For patients with only a past history of VTE documented, select “No.”
 - Example:**
 - Problem list includes PE 199X, select “No.”
- If the patient was admitted and had surgery on day of or day after hospital admission or ICU admission and there was no documentation of diagnosed/suspected VTE prior to surgery, the VTE is not considered present on admission. Select “No.”
- Disregard diagnostic procedures performed, e.g., cardiac catheterization, endoscopy, ERCP.

Inclusion Guidelines for Abstraction *VTE Confirmed*

Add new bullet point:

- Infrarenal IVC

Inclusion Guidelines for Abstraction *VTE Diagnostic Test*

Change second bullet point to:

- Venous Ultrasound of lower extremities

Add new bullet point:

- CT pulmonary angiogram (CTPA) / CTPA Scan / CT pulmonary embolism (CTPE)

SECTION 2 – Measurement Information

Subsection 2.1 – Severe Sepsis and Septic Shock (SEP) *(no updates)*

Subsection 2.2 – Venous Thromboembolism (VTE)

Impacts:

VTE Data Element List

Rationale: The VTE Data Element List is being updated to remove data elements not collected by The Joint Commission, the current measure steward.

Description of Changes:

Remove rows in their entirety:

First Name

Last Name

Patient Identifier

Physician 1

Physician 2

Postal Code

Impacts:

Sample Size Requirements

Quarterly Sampling

Rationale: This document is being updated to remove the references to CMS.

Description of Changes:

Remove from first paragraph and under Quarterly Sampling section:
the CMS Clinical Warehouse or

Subsection 2.4 – Global Initial Patient Population (ED, IMM, TOB, SUB) *(no updates)*

Subsection 2.5 – Emergency Department (ED)

Impacts:

ED-1: Algorithm

Rationale: This document is being updated to align with fiscal year (FY) 2019 Inpatient Prospective Payment System (IPPS) final rule and the removal of ED-1 from the Hospital IQR Program.

Description of Changes:

Remove the following notes and decision box:

For Overall Measure (ED-1a) For The Joint Commission Only off of the Case Will Be Rejected decision point

Stop here for CMS. CONTINUE for The Joint Commission decision point

Note: X is for The Joint Commission Only

Subsection 2.6 - Prevention**2.6.1 - Immunization (IMM)****Impacts:**

IMM Data Element List

Rationale: The IMM Data Element List is being updated to remove data elements not collected by The Joint Commission, the current measure steward.

Description of Changes:

Remove rows in their entirety:

First Name

Last Name

Patient Identifier

Physician 1

Physician 2

Postal Code

2.6.2 - Substance Use (SUB) (no updates)**2.6.3 - Tobacco Treatment (TOB) (no updates)****SECTION 3 – Missing and Invalid Data (no updates)****SECTION 4 – Population and Sampling Specifications (no updates)****SECTION 9 – Data Transmission****Transmission Overview (no updates)****Transmission Alphabetical Data Dictionary (no updates)****Hospital Clinical Data XML File Layout****Impacts:**

Data Elements Info

Rationale: Updates are being made to align with the specifications manual alphabetical data dictionary.

Description of Changes:

Change Retired or Deleted Data Elements Effective 07/01/2019 Discharges section to:
No elements retired or deleted.

Hospital Initial Patient Population Data XML File Layout (no updates)**SECTION 10 – CMS Outcome/Inpatient Web-Based Measures****Subsection 10.1 – CMS Outcome Measures (no updates)****Subsection 10.2 – Inpatient Web-Based Measures (no updates)**

APPENDICES**Appendix A – ICD-10 Code Tables (Word and Excel) *(no updates)*****Appendix C – Medication Tables (Word and Excel)****Impacts:**

Table 5.2: Vasopressors for Septic Shock

Rationale: Table 5.2 is being updated to include Giapreza (angiotensin II), an injection recently approved by the U.S. Food and Drug Administration to increase blood pressure in adults with septic or other distributive shock.

Description of Changes:

Add row under Generic Name and corresponding Brand Name columns:

“Angiotensin II” to left column

“Giapreza” to right column

Appendix D – Glossary of Terms *(no updates)***Appendix E – Overview of Measure Information Form and Flowchart Formats *(no updates)*****Appendix F – Measure Name Crosswalk *(no updates)*****Appendix G – Resources *(no updates)*****Appendix H – Miscellaneous Tables****Impacts:**

Table 2.6

Rationale: Table 2.6 is being removed as it is no longer utilized for any of the measure sets.

Description of Changes:

Remove in its entirety:

Table 2.6: Qualifiers and Modifiers Table

Appendix P – Preview Section *(no updates)*