Get with the Guidelines® - Stroke PMT®

Abstraction Guidelines Updated August 2022

Print Coding Instructions

Legend

Yellow Highlighted Text = Updated since last version of document

^ = The Joint Commission Data Element

^^ = Get with the Guidelines® (GWTG)® Stroke data element

The Joint Commission (TJC) PSC/Core Measure definition for the element listed (definition from the TJC manual)

The Joint Commission (TJC) Comprehensive Stroke (CSTK) definition for the element listed

The Joint Commission (TJC) Acute Stroke Ready (ASR) definition for the element listed

Coverdell field definition

Green Highlighted Text = TJC updates from the Specifications Manual for National Hospital Inpatient Quality Measures since last version of document

S Suggested Sources for Abstraction

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Entry Criteria

Patients with a final/discharge diagnosis of stroke or transient ischemic attack can be included into the GWTG-Stroke® Registry. This includes cases with a

- Cerebral Infarction
- Intracerebral Hemorrhage (non-traumatic)
- Ischemic Stroke
- Stroke
- Subarachnoid Hemorrhage (non-traumatic)
- Transient Ischemic Attack (TIA)

Following is a list of the ICD-10-CM codes commonly used to describe these diagnoses.

ICD-10-CM (for discharges on or after October 1, 2015)

Code	Short Description
I60.00 - I60.9	Non-traumatic subarachnoid hemorrhage
I61.0 - I61.9	Non-traumatic intracerebral hemorrhage
I63.00 - I63.9	Cerebral Infarction (occlusion and stenosis of cerebral and precerebral arteries, resulting in cerebral infarction)
G45.0 - G45.2	TIA and related syndromes*
G45.8 - G45.9	TIA and related syndromes*
O99.411 - O99.43	Diseases of the circulatory system complicating pregnancy, childbirth and puerperium

Additional Entry Criteria: Unique to GWTG® - Stroke

Code	Short Description
G97.31 - G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a procedure
G97.51 - G97.52	Post-procedural hemorrhage and hematoma of a nervous system organ or structure following a procedure
I97.810 - I97.821	Intraoperative and postoperative cerebrovascular infarction

Note for Stroke Core Measure and/or TJC users: Verify that the patients being entered GWTG comply with patient population requirements (as outlined by TJC stroke core measure set) by checking **tables 8.1 and 8.2** in the most current specifications manual of The Joint Commission.

TJC Measure Specifications Manuals

TJC Table Number 8.1: Ischemic Stroke, Version 2022B1

TJC Table Number 8.2: Hemorrhagic Stroke, Version 2022B1

Note for Coverdell users: Based upon the recommendations of PCNSAR clinical consultants, PCNAST does not require hospitals to include patients who are observation patients in the registry.

Included:

- Patients initially admitted to the hospital for one of the diagnoses even if they later transfer or expire.
- Patients directly admitted to nursing units within the hospital without first being seen in the Emergency Department (ED). This includes patients with acute ischemic stroke who receive treatment at another hospital and are transferred to your hospital.
- Patients who refuse treatment or who have Do Not Resuscitate orders.

- Patients evaluated and treated in the ED with the intention of being admitted, even if they expire, leave against medical advice, or are subsequently transferred to another acute care hospital prior to being admitted to the hospital (this would include patients that receive IV tPA at your hospital and are then transferred for further management ("drip and ship patients").

Optional:

- Patients who have an in-hospital stroke. Please note in-hospital strokes are excluded from all Achievement Measures, but are included in the GWTG Inpatient stroke measures.
- Patients who present with stroke-like symptoms but who do not end up being diagnosed with a stroke or TIA (stroke mimics).
- Patients evaluated, treated, and discharged from the ED (with no inpatient admission) to home or another location that is not an acute care hospital.
- Patients discharged from observation status with no inpatient admission.
- Patients admitted for the sole purpose of the performance of elective carotid endarterectomy or any revascularization. This type of patient would typically be excluded from GWTG-Stroke. Only enter this type of patient if needed to comply with TJC (or other) sampling plan or data entry requirements.

Exclude:

- Patients < 18 years of age.

Summary of Changes

ADDITIONAL ENTRY CRITERIA & CASE ASCERTAINMENT INFORMATION:
Select the links below to access information about the specific program(s).

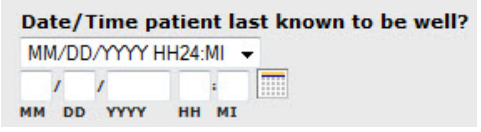
Arkansas Additional Data Elements
Los Angeles County EMS Additional Data Elements
Massachusetts Primary Stroke Service Licensure Registry (PSS)
Mission: Lifeline Stroke in North Dakota
New Jersey Acute Stroke Registry (NJASR)
New York State Additional Data Elements
Ohio Special Initiatives Tab - Coverdell Stroke Program
Paul Coverdell National Acute Stroke Registry (PCNASR)
The Joint Commission Primary Stroke Certification

General notation:

- ND = Not Documented. Select ND when there is no documentation in the medical record to explain why a treatment or intervention is not performed.
- NC = None-Contraindicated. Select NC when a reason for non-treatment was documented in the medical record (e.g. not indicated, contraindicated, patient/family refused).
- UTD = Unable to determine.
- TJC = The Joint Commission
- PSC = Primary Stroke Center
- IV alteplase (or IV rt-PA) = Intravenous Tissue Plasminogen Activator
- PMT = Patient Management Tool

Abstraction Guidelines:

- Do not enter any personal health information/protected health information (PHI) in any free text "Comments" fields or Optional Fields 1-10, 11, & 12.
- Make use of the $ Suggested Sources for Abstraction as a guide to help find medical documentation for each data element. **Only** abstract data which is clearly documented in the medical records. When in doubt, consult with your local Stroke champion or Stroke team leader for clarification.
- When there is a discrepancy in documentation status or a patient's specific variable, refer to the source of medical higher authority relevant to that variable.
- **Date Precisions**: Date and Time fields have an additional "Precision" drop-down right above the MM/DD/YYYY HH:MI blanks. The Precision is used to indicate how much of the Date and Time data is known and can be abstracted. For most of the Stroke Date and Time fields, there are three Precision levels.
    - The default level is "MM/DD/YYYY HH:MI". This is used if the entire Date and Time information is available. Time should be entered in 24hr/Military format.



    - If the Time is ND, select a Precision of "MM/DD/YYYY". The "HH:MI" blanks will become grayed-out.

    - If the Date is ND, select a Precision of "Unknown". The whole "MM/DD/YYYY HH:MI" field will become grayed-out.

Summary of Changes

Suggested Sources:

Pre-hospital Data may include: EMS Patient Care records (also known as transport sheets, trip sheets, or trip records).

Admission Data may include:

- Admission sheet
- Physician documentation (including Admitting physician notes, consultation notes, ED physician notes, Physician's hospital admission, transfer, or ED discharge notes, progress notes)
- ED documentation (including ED nurse notes, ED order sets or pathway documentation, ED physician notes, ED record, ED triage sheet, Registration form, ED vital signs graphical record)
- Inpatient documentation (including physician notes, history and physical, medication documentation, nurse progress notes, nursing admission assessment note, physical or occupational therapy consultation or progress notes, speech pathology consultation or progress notes, diet or nutrition services consultation or progress notes)

Hospitalization Data may include:

- Physician documentation (including Acute physician or nursing notes, Acute Stroke Pathway documentation, Consultation progress notes, Diagnostic report, Physician progress notes, Progress notes)
- Inpatient documentation (including physician notes, history and physical, medication documentation, nurse progress notes, nursing admission assessment note, physical or occupational therapy consultation or progress notes, speech pathology consultation or progress notes, diet or nutrition services consultation or progress notes)
- Medication Results (including Medication order sheets, Medication ordering system in the computer)
- Orders (including Physician order sheets, Printed or Electronic order sheets, rt-PA Protocol Sheets)
- Lab Results
- Social services notes

Discharge Data may include:

- Care plans
- Clinical logs
- Clinician encounter sheets
- Consultant reports
- Discharge face sheet
- Discharge form
- Discharge instruction sheet
- Discharge orders
- Discharge summary
- Flow sheets
- Multidisciplinary progress notes
- Nursing discharge notes
- Physician summary
- Referral notes
- Teaching sheets
- Transfer note
- Transfer record
- Physical or occupational therapy consultation or progress notes
- Diet or nutrition services consultation or progress notes

Patient Identifier (Patient ID)

Required Field

Definition: Unique number assigned to a patient by the site (your hospital) for an admission. Only an identifier that contains no personal health information (PHI) is to be entered.

Data Collection Question: What is the patient identifier associated with the patient you would like to enter in the PMT?

Format:

- Alpha-numeric field
- Up to 20 characters max

Allowable values:

- Customized for each site
- Once created, number is case-sensitive

Notes for Abstraction:

- If a patient has not been entered in the tool, please following the mapping rules provided by your site to create a unique number for the patient.
- When creating a new Patient ID, do not use date of birth, social security numbers, and/or other identifiers associated directly with the patient. Recommendation is to create a random number in PMT that corresponds to a specific patient on your end.
- If patient information has previously been entered in the PMT, access the "Patients"Â tab and locate the patient. Then, under the Patient Management Tool column, select "next admission" to create a new admission for the same patient.

Sources for Data:

- Site Coordinator for instructions for mapping between internal hospital tool and the Patient Management tool.

Admin Tab

REQUIRED: Final clinical diagnosis related to stroke

This field is used to define patient populations in the Get With The Guidelines® Stroke Measures and is the stroke or TIA diagnosis documented by a physician following and evaluation of the patient. The *Final clinical diagnosis related to stroke* (stroke or TIA diagnosis) may be a principal or secondary diagnosis assigned at discharge. The options for this element are:

- Ischemic stroke
- Transient ischemic attack
- Subarachnoid hemorrhage
- Intracerebral hemorrhage
- Stroke not otherwise specified
- No stroke related diagnosis
- Elective Carotid Intervention only

Refer to Entry Criteria for a list of the diagnosis codes used to describe these diagnoses.

Notes for Abstraction:

- For most cases the *Final Clinical diagnosis related to stroke* will be equivalent to the principal diagnosis code. However, for some cases such as in-patient or in-hospital stroke or TIA the principal diagnosis code and the *Final diagnosis related to stroke* will differ. The Final diagnosis related to stroke can be the principal or secondary diagnosis assigned at discharge. Refer to the definition of principal diagnosis below for additional information.
- For patients whose **symptoms resolve upon arrival to ED, but then return later during the hospitalization** (symptoms > 24hrs or infarction on brain imaging while an inpatient) select **'ischemic stroke'**. For the element *Patient location when stroke symptoms discovered* select 'stroke occurred after hospital arrival (in ED/Obs/inpatient)'.
- For patients who arrive with symptoms of stroke and have **complete resolution after IV alteplase** select '**ischemic stroke'**. These cases are sometimes referred to as "aborted stroke".
- For patients admitted with ischemic stroke who are **treated with IV alteplase or other medications and develop the complication of intracerebral hemorrhage** select **'ischemic stroke'**. If a patient is transferred to your hospital for management of a hemorrhagic complication after treatment with IV alteplase for an ischemic stroke at the referring hospital select 'ischemic stroke' as this is the stroke diagnosis that initially lead to the patient's hospitalization.
- For patients **admitted for non-stroke related illness, but who experience a stroke after admission** select the **stroke diagnosis documented by the physician**. These in-patient/in-hospital stroke cases are optional for the Get With the Guidelines registry; they are included in the Get With the Guidelines Inpatient Stroke measures, but excluded from Get With the Guidelines Achievement measures. For the element *Patient location when stroke symptoms discovered* select 'stroke occurred after hospital arrival (in ED/Obs/inpatient)'.
- Patients who **present with neurological symptoms**, but after work-up are determined not to have suffered from a stroke or TIA, are not required to be entered into the PMT. Select 'no stroke related diagnosis' when:
  - The patient presents with stroke mimic or a stroke-like clinical picture and IV alteplase is initiated, but the final clinical diagnosis is later determined not to be stroke related. You can report the stroke mimic or stroke-line diagnosis (e.g., migraine, seizure) in the subsequent data element "If No Stroke Related Diagnosis". This allows hospitals to track outcomes of the relatively small number of patients who appeared to be having a stroke and were treated with IV alteplase, but later turned out to have a stroke mimic.
  - The patient presents with stroke mimic or a stroke-like clinical presentation and a 'stroke code' is activated and/or the patient is followed by the stroke service until the stroke diagnosis is ruled out. Also complete the subsequent data element "If No Stroke Related Diagnosis".
- Patients who are found to have **incidentally discovered infarcts** (silent, subclinical, or prior CNS infarction) are not required to be entered into the tool.

- For patients who are documented as having **"CVA" or "Stroke"** in their medical record, without any additional documentation regarding the stroke type and who have no evidence of hemorrhage on initial brain imaging select **'ischemic stroke'.**
- For patients whom there is evidence of **both ischemic injury and brain hemorrhage** on initial imaging select "**stroke not otherwise specified**."
- Patients who present with symptoms that are not recognized as having been caused by stroke while in the initial phase of their hospital care, but are determined ultimately to have had a stroke or TIA select the stroke or TIA diagnosis documented by the physician.
- Select "Elective Carotid Intervention only" for patients with documentation that demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting). This option has been added for sites that are entering patients admitted for the performance of an elective carotid intervention because the patient falls into their TJC/CM sampling plan. If this diagnosis is selected, only those data elements required by TJC for this patient population will be required to save the form as complete. Do not select this option for patients that present with an acute stroke event.

Example: Patient 060a was admitted with pneumonia. On hospital day 2 patient developed right sided weakness and was diagnosed with an ischemic stroke. *Final clinical diagnosis related to stroke* = "Ischemic Stroke."

 *Admission Data*, *Hospitalization Data*

Summary of Changes

OPTIONAL: If No Stroke Related Diagnosis

If "Final clinical diagnosis related to stroke" is "No Stroke Related Diagnosis", select the final non-stroke related diagnosis. This is the final diagnosis defined in the Uniform Hospital Discharge Data Set (UHDDS) as "that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care." and not the suspected diagnosis at the time of admission. Select the patient's diagnosis based on the clinical information found in the medical record. If uncertain, consult ICD-9-CM diagnosis code.

- Migraine: Includes physician documentation that the neurological symptoms mimicking stroke were caused by migraine (migraine headache, classic or common migraine, migraine with or without aura, status migrainosus) that could include discharges with an ICD-9-CM diagnosis code of 346.0-346.93.
- Seizure: Includes physician documentation that the neurological symptoms mimicking stroke were caused by seizure or convulsion that could include discharges with an ICD-9-CM diagnosis code of 345: Epilepsy, 780.3: Convulsions, 780.33: Post traumatic seizures, 780.39: Other convulsions.
- Delirium: Includes physician documentation that the neurological symptoms mimicking stroke were caused by delirium attributed to any cause (e.g. alcohol or sedative drug withdrawal, drug abuse, electrolyte or other body chemical disturbances, infections etc.)
- Electrolyte or metabolic imbalance: Includes physician documentation that the neurological symptoms mimicking stroke were caused by hyponatremia, hypercalcemia, hypothyroidism or other electrolyte or metabolic disturbance.
- Functional disorder: Includes physician documentation that neurological symptoms were the result of a conversion or functional disorder that could include discharges with an ICD-9-CM diagnosis code of 300.11: Conversion Disorder. Functional Disorder and conversion disorder are terms that may be used interchangeably. A conversion disorder is a condition in which patients present with neurological symptoms such as numbness, blindness, or paralysis without a neurological cause.
- Other: Final clinical diagnosis is determined not to be stroke related, but the specific diagnosis is something other than those provided. This could include ICD-9 codes such as 780.4; Dizziness and giddiness, 784.3; Aphasia; 784.5; Other speech disturbance; 784.51; Dysarthria, 787.2; Dysphagia780.97; Altered mental status 386.1 and 386.10: Peripheral vertigo (this list is not all inclusive).
- Uncertain: Final clinical diagnosis is determined not to be stroke related but the cause of the patient's symptoms is not confirmed or unknown at the time of discharge.

Notes for abstraction:

- This data element can be used to capture the final diagnosis for those patients in whom stroke was initially suspected but after complete clinical work-up were determined not to have had a stroke. You can choose to enter patients with no stroke related diagnosis if:
  - The patient presents with stroke mimic or a stroke-like clinical picture and IV tPA is initiated, but after neuroimaging studies and further work-up the final clinical diagnosis is later determined not to be stroke related.
  - The patient presents with stroke mimic or a stroke-like clinical presentation and a stroke code is activated and/or the patient is followed by the stroke service until the stroke diagnosis is ruled out.
- This assignment of diagnosis should be done independently of the ICD-9-CM code assigned. However, the diagnosis selected here should ideally be equivalent to the final ICD-9-CM code. In circumstances when another ICD-9-CM code has been chosen and there is a discrepancy, please consult your local Stroke Champion or Stroke Team lead and/or the hospital administrator responsible for assigning ICD-9 codes.
- These patients will be excluded from all Get With The Guidelines measures

Summary of Changes

REQUIRED: Was an etiology documented in the patient medical records as the most likely cause of ischemic stroke?

Yes: There is clear documentation by a physician, nurse practitioner or physician's assistant in the patient medical record indicating that apotential underlying cause(s) of ischemic stroke was identified. This option should be selected when there is evidence in the medical record that the stroke etiology was investigated, even if no cause was identified despite the investigation or if multiple potential causes were identified.

Remember that there can never be absolute certainty about etiology, since it is always an assumption about the likelihood of an association between the cause (ischemic stroke risk factor) and effect (ischemic stroke).

No: The documentation by a physician, nurse practitioner or physician's assistant in the patient medical record does not address the potential cause of the ischemic stroke. Select **No** if sufficient diagnostic tests were **not** performed to identify a potential cause. If multiple etiologies

are listed on admission but no synthesis of the results of the workup is provided, then no presumptive etiology is available. You would check **No** in this case.

Diagnostic statements such as CVA, stroke, cerebral embolism, MCA stroke do not describe a cause of potential cause. If diagnostic evaluation to investigate a cause(s) was not performed then select No.

Ischemic Stroke Etiology: If there is one cause identified as the most likely etiology, select that one choice. You should only select a specific etiology (e.g., Cardioembolic) if the medical record indicates that the treating provider believed this to be a possible mechanism. If the etiology is uncertain between two or more possible causes, select **Cryptogenic Stroke** and **Multiple potential etiologies identified**. Do not include etiologies that were identified initially as possibilities which were not later confirmed. If you are uncertain as to which etiology to select, check with your stroke physician champion.

1: Large-artery atherosclerosis: Significant stenosis or occlusion (>50%) due to atherosclerosis of any of the following major artery segments was identified: common or internal carotid artery (ICA); proximal middle (MCA), anterior or posterior cerebral artery (ACA or PCA); vertebral or basilar artery. This option also includes atherosclerosis of the aortic arch and its great vessel origins: the brachiocephalic and subclavian arteries.

2: Cardioembolism: A cardiac condition was identified as a high risk source of cerebral embolism. Possible heart conditions include atrial fibrillation/flutter, mitral valve stenosis, prosthetic or bioprosthetic heart valve, left ventricular assist device, acute or recent myocardial infarction with mural thrombus, endocarditis and cardiac tumors.

3: Small-vessel disease: Disease of small intracerebral arterial vessels was identified as cause of ischemic stroke. Imaging reveals an acute small vessel territory infarct <1.5 cm in the appropriate location (e.g. subcortical or brain stem lacunar infarction) or a classic clinical lacunar syndrome is present and imaging excludes non-lacunar etiology.

4: Stroke of other determined etiology: Select this option when an uncommon causes of ischemic stroke has been identified, including but not limited to, arterial dissection, vasculitis, hypercoagulable disorders, sickle cell anemia, migraine-associated, mitochondrial disorders (e.g., MELAS), or genetic causes of stroke. Also select **Dissection** or **Hypercoagulability** as the cause when appropriate. Select **Other** if another cause of the stroke has been identified (e.g., vasculopathy).

- **Dissection:** Select this option when arterial dissection was identified as the cause of the stroke.
- **Hypercoagulability:** Select this option when a hypercoagulable disorder was identified as the cause of stroke.
- **Other:** Select this option when another cause which is neither dissection nor hypercoagulabiity is identified as the cause of stroke.

5: Cryptogenic stroke: A potential cause of stroke was not identified following thorough diagnostic evaluation: This includes a diagnosis of *undetermined cause* following diagnostic evaluation. Select this option only if testing to determine stroke etiology has been performed and does not confirm a likely cause or when multiple potential etiologies are identified. For most strokes, this includes cardiac ultrasound, extracranial arterial vessel imaging (carotid artery ultrasound, CTA or MRA). Patients with an *undetermined cause of stroke (cryptogenic stroke)* often have one or more risk factors of uncertain significance such as patent foramen ovale (PFO), heart failure with preserved ejection fraction, mitral annulus calcification, atrial or ventricular arrhythmias other than atrial fibrillation or flutter. The role of these risk factors in the cause of stroke is uncertain. Also select one of the below options to report additional information regarding the cause or potential causes:

- **Multiple potential etiologies identified:** Select this option when following diagnostic evaluation, a single etiology is uncertain between two or more possible causes.
- **Stroke of undetermined etiology:** Select this option when a potential etiology was not identified or documented following diagnostic evaluation.
- **Unspecified:** Select this option when there is no documentation of the results of the diagnostic evaluation.

Examples:

- Final diagnosis is "ischemic stroke"; atrial fibrillation documented in medical history section of medical record, but there is no documentation of a diagnostic workup or underlying cause of the ischemic stroke. Because there is no documentation stating atrial fibrillation or other condition as underlying cause and no diagnostic workup, select **No** for *Was an etiology documented in the patient medical record as the most likely cause of stroke?*
- Final diagnosis "ischemic stroke presumably due to atrial fibrillation"; cardiac ultrasound and cardiac monitoring tests performed. In this example diagnostic tests were performed and atrial fibrillation was stated as the most likely underlying cause for stroke. Select **Yes** for *Was an etiology documented in the patient medical record as the most likely cause of stroke?* and **Cardioembolism** as the stroke etiology.
- Final diagnosis is "ischemic stroke"; carotid ultrasound shows ICA occlusion (approx. 60% occlusion). Because there is no documentation stating ICA occlusion as the underlying cause of the stroke, select **No** for *Was an etiology documented in the patient medical record as the most likely cause of stroke?*
- Final diagnosis is "ischemic stroke, cause unknown"; no diagnostic test performed. Select **Yes** for *Was an etiology documented in the patient medical record as the most likely cause of stroke?* Select **Cryptogenic Stroke** and **Stroke of undetermined etiology** for the stroke etiology.
- Final diagnosis is "ischemic stroke" and work up reveals both carotid occlusion and atrial fibrillation as potential causes. Select **Cryptogenic Stroke** and **Multiple potential etiologies identified**.

Summary of Changes

REQUIRED: When is the earliest documentation of comfort measures only?

Indicate if there is any evidence that the patient's care was restricted to "Comfort Measures Only".

- Day 0 or 1
- Day 2 or after
- Timing unclear
- Not Documented/UTD

Physician/advanced practice nurse/physician assistant (physician/APN/PA) documentation of comfort measures only. Commonly referred to as "comfort care" in the medical community and "comfort care" by the general public. Comfort care includes attention to the psychological and spiritual needs of the patient and support for the dying patient and the patient's family. Comfort Measures Only are not equivalent to the following: Do Not

Resuscitate (DNR), living will, no code, no heroic measure, or a physician order to withhold emergency resuscitative measures such as Do Not Resuscitate.

- **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).
- **Day 2 or after:** The earliest day the physician/APN/PA documented comfort mesures was two or more days after arrival day (Day +2).
- **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.
- **Not documented/UTD:** There is no physician/APN/PA documentation of comfort measures only, or unable to determine from medical record information.

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
- Determine the earliest day the physician/APN/PA DOCUMENTED comfort measures only in the ONLY ACCEPTABLE SOURCES. Do not factor in when comfort measures only was actually instituted
- Examples
  - "Discussed comfort care with family on arrival" noted in day 2 progress note - Select "Day 2 of After."
  - POLST order for comfort care dated prior to arrival - Select "Day 0 or 1."
- If any of the inclusions are documented in the ONLY ACCEPTABLE SOURCES, select "1," "2," or "3" accordingly, unless otherwise specified in this data element.
- Consider comfort measures only documentation in the discharge summary as documentation on the last day of the hospitalization, regardless of when the summary is dictated.
- Documentation of an Inclusion term in the following situations should be disregarded. Continue to review the remainder of the ONLY ACCEPTABLE SOURCES for acceptable Inclusion terms. If the ONLY documentation found is an Inclusion term in the following situations, select “not documented/UTD”:
  - Documentation that is dated prior to arrival or documentation which refers to the pre-arrival time period (e.g., comfort measures only order in previous hospitalization record, "Pt. on hospice at home" in MD ED note).
  - **EXCEPTION:** State-authorized portable orders (SAPOs). SAPOs are specialized forms, Out-of-Hospital DNR (OOH DNR) or Do Not Attempt Resuscitation (DNAR) orders, 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)
    Pre-printed order forms signed by the physician/APN/PA:

    Disregard an Inclusion term in a statement that is not part of the order or that is not clearly selected (on a form that offers options to select from).

    Examples:
    Inclusion term used only in the title of the form (e.g., "DNR-Comfort Care" form, option "Comfort Care" is not checked)

    Inclusion term used only in the pre-printed instruction for completing the form (e.g. "Copy of form to hospice", "Instructions" section of the form further defines the option "Comfort Care")

    If there is a specific option for “Comfort Measures Only” (or other Inclusion term) that is **unchecked**, then disregard documentation on that form, regardless of whether that Inclusion term might be used in a different option that is checked.
    Example: POLST form - The "Limited Additional Interventions" option checked is described as "In addition to care described in Comfort Measures Only, use medical treatment, antibiotics, ..."
- Inclusion term clearly described as negative.
  Examples:
  - "No comfort care"
  - "Not a hospice candidate"
  - "Not appropriate for hospice care"
  - "I offered hospice care consult to discuss end of life issues. Family did not show any interest."
  - "Patient declines hospice care at this time but I feel this will be an important plan of care when his condition deteriorates further"
  - "Comfort care would also be reasonable - defer decision for now"
- Comfort measures made conditional upon whether or not the patient arrests. Examples:
  - DNRCCA" (Do Not Resuscitate - Comfort Care Arrest)
  - Comfort Care Protocol will be implemented in the event of a cardiac arrest or a respiratory 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 documentation of an Inclusion term clearly described as negative in one source and an Inclusion term NOT described as negative in another source, that second source would still count for comfort measures only.

  Examples:
  On Day 0 the physician documents “The patient is not a hospice candidate.” On Day 3, the physician orders a hospice consult. Select “2”.

On Day 1 the physician documents the patient is comfort measures only. On Day 2 the physician documents “The patient is refusing CMO.” Select “1”.

- For inpatient strokes, assess earliest documentation of comfort measures only from date/time of discovery of stroke symptoms. If comfort measures was instituted prior to the date/time of discovery of stroke symptoms, select "Day 1 or 2".
- Example: Patient 070 arrived to the hospital on 4/1/2012 and was admitted the same day for acute MI. On 4/3/2012 the nurse finds the patient unable to speak and unable to move his right side. The stroke team is consulted and it is determine that the patient had an ischemic stroke. The neurologist orders a consultation for hospice care services on 4/4/2012. Select "Day 1 or 2" as the day of discovery of stroke symptoms (4/3/2012) is day 1 for inpatient strokes.

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY IN THE FOLLOWING ONLY ACCEPTABLE SOURCES:

Discharge Summary

DNR/MOLST/POLST forms

Emergency department record

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

Exclusion Guidelines for Abstraction: None

REQUIRED: Arrival Date/Time (Date & time of arrival to this Hospital)

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

The **earliest** documented month, day, and year, and time the patient arrived at the hospital.

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20XX)
- 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 (Date/Time):

- If the date/time of arrival is unable to be determined from medical record documentation, select "UTD."
- For times that include “seconds”, remove the seconds and record the time as is.
  - Example: 15:00:35 would be recorded as 15:00
- The medical record must be abstracted as documented (taken at "face value"). When the date/time 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 Date:
  - 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."
- Examples Time:
  - 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 date as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for *Arrival Date/Time* allows the case to be accepted into the warehouse.
- Review the Only Acceptable Sources to determine the earliest date/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 in 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.
  - 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 date.time 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.
  - 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.

- In determining if there is documentation which suggests the patient was not in the hospital on a given date, sources outside of the Only Acceptable Sources list can be referenced. However, do not use dates described as hospital arrival on these sources for Arrival Date/Time.
    - Examples:
        - 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. EMS record shows patient was enroute at 05-08-20xx 0100. Enter 05-08-20xx for Arrival Date.
        - ED ECG timed as 1742. ED Greet Time 2125. ED Triage Time 2130. EMS record shows patient was enroute at 2100. Enter 2125 for Arrival Time.
        - ED face sheet noted arrival date/time as 02-27-20xx 2300. The first vitals are recorded at 02-28-20xx 0020. There is no documentation to support that the patient was not in the hospital on 02-27-200xx 2300. Enter 02-27-20xx for Arrival Date.
        - ED face sheet noted arrival time as 1000. The first vitals are recorded at 1120. There is no documentation to support that the patient was not in the hospital at 1000. Enter 1000 for Arrival Time.
        - 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. Enter 03-23-20xx 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.
- 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 caths, endoscopies, and surgical procedures. Procedure notes do not include ECG and x-ray reports.
- The arrival date/time may differ from the admission date/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 date/time the patient arrived at the ED or on the floor for acute inpatient care as the arrival date/time.
- **Observation status:**
    - If the patient was admitted to observation from an outpatient setting of the hospital, use the date/time the patient arrived at the ED or on the floor for observation care as the arrival date/time.
    - If the patient was admitted to observation from the ED of the hospital, use the date/time the patient arrived at the ED as the arrival date/time.
- **Direct Admits:**
    - If the patient is a “Direct Admit” to the cath lab, use the earliest date/time the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date/time.
    - For “Direct Admits” to acute inpatient or observation, use the earliest date/time the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival date/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 date/time at the first facility.
- CSTK Measures only EXCEPTION: Use the arrival date/time at the comprehensive stroke center.
- For inpatient strokes, enter the actual hospital arrival date/time and not the date/time of symptom discovery (*Note this is not from the definition from Specifications Manual for National Hospital Inpatient Quality Measures*).

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

Summary of Changes

REQUIRED: Admit Date

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

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

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20xx)

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.
- For inpatient strokes, enter the actual hospital admit date and not the date of stroke symptom discovery. Note this is not from the definition from Specifications Manual for National Hospital Inpatient Quality Measures.

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

Summary of Changes

OPTIONAL: Not Admitted?

Was patient evaluated in the ED for acute Stroke or TIA and never admitted as an inpatient to your hospital?

- Yes, not admitted: Patient was evaluated in the Emergency Department (ED), found to have a diagnosis of Ischemic Stroke, Subarachnoid Hemorrhage, Intracerebral Hemorrhage, or Transient Ischemic Attack, and was never admitted to your hospital as an inpatient. Include here patients that are transferred from the ED to another acute care hospital, those that are discharged directly from the ED to home or other location, those that leave against medical advice (AMA) from the ED, those that die in the ED, and those that are discharged from observation status without ever being admitted as an inpatient.
- No, patient admitted as inpatient: Patient was admitted to your hospital.

Note: Patients with a response option of "Yes, not admitted" will only be included in the following Achievement and Quality measures: alteplase measures, door to needle measures, dysphagia screen, CT measures, and NIHSS reported.

Reason Not Admitted
Required field only when patient is <u>not</u> admitted to your hospital

Definition: If patient was not admitted, indicate the primary reason why the patient was not admitted to your hospital.

Data Collection Question: Why was the patient not admitted to your hospital for this episode of care?

Format: Dropdown menu. Single -select.

Allowable values:

- Transferred from your ED to another acute care hospital
- Discharged directly from ED to home or other location that is not an acute care hospital
- Left from ED AMA
- Died in ED
- Discharged from observation status without an inpatient admission

- Other

Notes for Abstraction:

- **Transferred from your ED to another acute care hospital:** Patient was evaluated in the ED and subsequently transferred to another acute care hospital.
    - This field will enable 2 fields for the referring hospital to indicate where the patient is being transferred and the reason for transfering the patient from your hospital
    - Additionally, if **Reason Not Admitted = "Transferred from your ED to another acute care hospital"** is selected, the field will auto-populate the field, For patients discharged on or after 04/01/2011: What is the patient's discharge disposition on the day of discharge? = 4 Acute Care Facilities.
- **Discharged directly from ED to home or other location that is not an acute care hospital:** Patient was evaluated in the ED and discharged directly from the ED to home or other location not defined elsewhere in this list. Excludes patients who were transferred to another acute care hospital, patients that leave from the ED against medical advice (AMA), and patients discharged from the ED who qualify as observation status.
- **Left from ED AMA:** Patient was evaluated in the ED and left directly from the ED against medical advice (AMA).
- **Died in ED:** Patient died after being evaluated in the ED.
- **Discharged from observation status without an inpatient admission:** Patient was evaluated in the ED and discharged from observation status without a qualifying inpatient admission.
    - Only select "Discharge from observation status without an inpatient admission"Â if the patient was discharged from the hospital as an observation stay (and was never admitted as an inpatient stay), regardless of the physical location or billing status of the patient during their treatment. Typically, these patients are found in the ED/observation treatment unit, holding units, or in observation status beds in the inpatient area.
    - Observation status should be determined based upon the patientÃ¢€™s hospital stay and the intent of the medical team, and not based upon billing status or physical location of the patient. For example, if the medical team documents that the patient should be admitted as an inpatient, but the claim is later denied as inpatient stay (and is instead reimbursed at observation level) you would still enter this patient as an inpatient as the intent of the medical team was for this patient to be admitted as an inpatient stay. In this case, select "No, admitted to inpatient" for the previous "Not Admitted?" data element.
- **Other:** Patient was not admitted as an inpatient but discharge disposition from the ED is not defined elsewhere in this list.

Note: For patients with an ED discharge disposition of transferred from your ED to another acute care hospital, discharged directly from ED to home or other location that is not an acute care hospital, left from ED AMA, died in ED, or other, all post-admission fields in the following sections will be disabled:

- Discharge treatment
- Other lifestyle interventions
- Stroke education
- Stroke rehabilitation
- Discharge checklist.

These fields will remain open for patients that are discharged from observation status without an inpatient admission, however not all of these fields will be required for this subset of patients.

Sources for Data:

- Admission Data
- Transfer Data
- ER notes
- Discharge Summary

Select reason(s) for why patient transferred:

Appears for all users - <u>only complete this field if you are the referring hospital</u> and transferring the patient to another hospital.

Note: Required in patients who have "Not Admitted = Yes" and "Reason not admitted" = "Transferred from your ED to another acute care hospital"

Definition: The reason associated with the acute stroke patient transferred from the referring hospital emergency department (ED) to a different hospital (e.g. Primary Stroke Center, Comprehensive Stroke Center). Intent of the element is to determine the transfer rates and reason for transfer and how it may affect patient outcomes.

Data Collection Question: What was the reason for transferring the patient from your hospital to a different hospital? Check all applicable fields.

Format: Multi-select field

Allowable Values:
- Evaluation for IV tPA up to 4.5 hours
- Post Management of IV tPA (e.g. drip and ship)
- Evaluation for endovascular thrombectomy
- Advanced stroke care (e.g., Neurocritical care, surgical or other time critical therapy)
- Other non-stroke advanced care
- Patient/family request
- Not documented

Notes for Abstraction:

- **Evaluation for IV tPA up to 4.5 hours:** Select this option when patient transferred to another hospital within 4.5 hours of time last known well and patient has not receive IV tPA.
- **Post Management of IV tPA (e.g. drip and ship):** Patient received IV tPA at the current hospital (referring hospital_ and is being transferred to a higher-level facility (e.g. PSC, CSC) for acute therapy.
- **Evaluatio for endovascular thrombectomy:** Patient is being evaluated for EVT.
- **Advanced stroke care (e.g., Neurocritical care, surgical or other time critical therapy):** Reasons may include the folllowing: severe deficits, large-volume infarcts with the potential for significant cerebral edema, significant comorbidities, blood pressure that is difficult to control, or prior intravenous and intra-arterial recanalization interventions.
- **Patient/family request:** Transfer of patient per family/patient request. Includes administrative reason, such as insurance coverage/no coverage
- **Other advanced care (not stroke related):** Management of an emergent condition that is not stroke related (e.g. trauma).
- **Not documented:** Reason for transferring is not documented in the patient's medical record and/or reason for transfer is unknown.

Collected for: GWTG® measures

Definition: The date associated with the time that the patient was transferred from the referring hospital emergency department (ED). This is the time the patient left the ED.

Data Collection Question:
What is the date and time associated with patient discharged from the referring hospital ED to the transferring hospital?

Format:

Length: 15 MM-DD-YYYY :HH-MM (with or without color & includes dashes) or Unknown

Type: Date and Time

Occurs: 1

Allowable Values:

Date

MM = Month (01-12)

DD = Day (0-31)

YYYY = Year (2012-Current Year)

UTD = Unknown

Time

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unknown

- Time must be recorded in military time format. Except for 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 First Radiographic Image 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 First Radiographic Image Date.

Example:

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

Notes for Abstraction:

- This should be the same as the discharge date/time field on the Admin tab (same tab)

- The discharge date/time is the time the ambulance left the hospital with the patient.

Summary of Changes

REQUIRED: Discharge Date and Time (Date and Time of discharge from hospital)

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

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

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 discharge date is correct.
- If the abstractor determines through chart review that the claim 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 claim discharge date.

- The discharge date is the day that the patient is discharged from your institution's acute care unit OR the date of the patient's expiration OR the date of the patient's discharge OR date patient left against medical advice (AMA) OR date of transfer to, a rehabilitating, skilled nursing, or hospice unit in your institution OR transfer to an acute in-patient unit outside of your own institution, even if that hospital is affiliated with your own OR expired.
- If the patient is never admitted to your facility (i.e. you answered the data element of “Not Admitted” as “Yes, Not Admitted” enter the date of discharge from the ED or observation unit.”

Sources of Data:

- UB-04, Field Number 6
- Discharge Summary
- Face Sheet
- Nursing Discharge Notes
- Physician Notes

Summary of Changes

CONDITIONALLY REQUIRED: Documented reason for delay in transfer to referral facility?

Note: Element enabled and required if patient is "yes, not admitted" AND "reason for not admitted = transfer to another acute care hospital" AND Reason for transfer = Evaluation for IV alteplase up to 4.5 hours OR Post Management of IV alteplase (e.g. Drip and Ship) OR Evaluation for Endovascular Thrombectomy AND discharge date time - arrival date/time is >90 minutes.

Definition: A reason for delay of transfer from your facility to the referral facility is documented in the medical record.

Allowable Values:

- Yes = There is a reason for delay in transfer documented in the medical record.
- No = There is no documentation in the medical record specific to a delay in transfer of the patient to a referral facility.

Notes for Abstraction:

- Reason for delay in transfer must be documented in the medical record by a physician/ANP/PA.

Summary of Changes

Specific reason for delay documented in transfer patient (check all that apply):

Definition: Indicate the reason(s) documented for delay in transfer from your facility to the referral facility.

Allowable Values:

- Social/religious
- Initial refusal
- Care team unable to determine eligibility
- Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation)
- Investigational or experimental protocol for reperfusion
- Delay in stroke diagnosis *
- In-hospital time delay *
- Equipment-related delay *
- Need for additional imaging*
- Catheter lab not available*
- Other *

*Does not exclude patient from measure population

Notes for Abstraction:

- Reason for delay in transfer must be documented in the medical record by a physician/ANP/PA.
- **Social/Religious** means that the patient and/or family refused treatment due to their cultural or religious beliefs. As patients do have the right to change their treatment decisions, this choice should be selected if there is documentation that treatment with IV alteplase was initially refused due to any social or religious reason. Example: Patient wishes to consult clergy prior to deciding whether or not he wishes to receive treatment. Clergy takes 30 minutes to arrive. After speaking with clergy, the patient decides to proceed with treatment with IV alteplase. Treatment is provided once the patient consents (now 75 minutes after arrival).
- **Initial refusal** should be selected if there is documentation that the patient and/or family initially refused treatment with IV rt-PA for any reason other than a social/religious reason.
    - For patients that cannot participate in shared decision making or provide consent, select **"Initial Refusal"** if there is documentation that there was a delay in transfer due to reasonable attempts to contact a proxy decision maker to obtain consent.
- **"Care-team unable to determine eligibility"** means that the diagnosis of stroke was made but that eligibility for thrombolytic therapy or transfer could not be established or verified by the clinician. Examples may include:
    - The time of onset could not be clearly established at the time of patient assessment in the ED or time of Last Known Well is unknown
    - Timing of a recent procedure or surgery could not be definitively established.
    - A lack of an accurate history or concern about the presence of a preexisting medical condition raises concern about eligibility for IV thrombolytic therapy.
    - Patients who have experienced multiple episodes of transient neurologic function, or TIAs, which have fully resolved clinically, but imaging or other features of the history make it uncertain as to when the stroke actually started.

Summary of Changes

REQUIRED: For patients discharged on or after 04/01/2011: What was the patient's discharge disposition on the day of discharge?

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

Data Element Name: Discharge Disposition

Collected For: ACHF, ASR-IP-3, CSTK-02, CSTK-10, HBIPS-5, PC-04, PC-05, STK-10, STK-2, STK-3, STK-6, STK-8

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

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, use the latest documentation. If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract.

  Example:

    - Nursing discharge note documentation reflects that the patient is being discharged to "XYZ" Hospital. The Social Service notes from the day before discharge further clarify that the patient will be transferred to the rehab unit of "XYZ" Hospital, select value "5"
- 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
• Any DMAT documentation 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 Service
• 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 Immediate 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 Inpatient Rehabilitation Facility/Hospital or Rehabilitation Unit of a Hospital
• Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed
• Transitional Care Unit (TCU)
• Veterans Home

Exclusion Guidelines for Abstraction:
None

Summary of Changes

REQUIRED if discharged to Other Healthcare Facility: If Other Health Care Facility

If Other Health Care Facility is selected for Discharge Disposition, select the specific facility to which the patient was discharged.

- **Skilled Nursing Facility (SNF)**: Patient was discharged or transferred to a skilled nursing facility (SNF) previously captured as Discharge Status (03) Dsch/Trans to skilled nursing facility (SNF) and (61) Dsch/Trans to hospital-based Medicare approved swing bed. This would include patients discharged to:
  - skilled nursing facility (SNF),
  - SNF rehabilitation unit (a unit within the SNF),
  - Sub-Acute Care,
  - Transitional Care Unit (TCU),
  - Swing Bed (patients discharged/ transferred to a SNF level of care within the hospital's approved swing bed arrangement), or
  - Skilled nursing facility with hospice referral only (has not accepted hospice care by a hospice organization).
- **Inpatient Rehabilitation Facility (IRF):** Patient was discharged or transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital previously captured as Discharge Status (62) Dsch/Trans to an inpatient rehabilitation facility (IRF).
- **Long Term Care Hospital (LTCH):** Patient was discharged or transferred to a Medicare certified long term care hospital (LTCH or LTACH) or a nursing facility certified under Medicaid but not certified under Medicare previously captured as Discharge Status (63) Dsch/Trans to Medicare certified long term care hosp and (64) Disch/Trans to a nursing facility certified under Medicaid but not certified under Medicare. LTCH Usage Note: For hospitals that meet the Medicare criteria for LTCH certification. A Long-term care hospital or long-term care facilities provide acute inpatient care with an average length of stay greater than 25 days.
- **Intermediate Care facility (ICF):** Patient was discharged or transferred to an intermediate care facility (ICF) previously captured as Discharge Status (04) Dsch/Trans to a facility that provides custodial or supportive care. This would include patients discharged to:
  - ECF (Extended Care Facility),
  - ICF (Intermediate Care Facility),
  - Nursing Home,
  - Nursing facility for non-skilled/custodial/residential level of care,
  - Veteran's Administration Nursing Facility,
  - Nursing facility with neither Medicare nor Medicaid certification
  - Nursing facility with hospice referral only (has not accepted hospice care by a hospice organization).
- **Other:** The patient was discharged or transferred to a Psychiatric Hospital or Psychiatric Unit of a Hospital previously capture as Discharge Status (65) Dsch/Trans to a psychiatric hospital or psychiatric distinct part unit of a hospital or other healthcare facility not defined in above options.

Summary of Changes

Clinical codes

REQUIRED FOR TJC, COVERDELL & COMPREHENSIVE (for discharges on or before 9/30/2015): ICD-9-CM Principal Diagnosis Code

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

The ICD-9-CM diagnosis code that is primarily responsible for the admission of the patient to the hospital for care during this hospitalization.

Allowable Values:
Any valid diagnosis code as per the ICD-9-CM master code table (ICD-9-CM Full and Abbreviated Code Titles): http://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/codes.html

Notes for Abstraction:

The principal diagnosis is defined in the Uniform Hospital Discharge Data Set (UHDDS) as "that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care."

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction: None

Exclusion Guidelines for Abstraction: None

Summary of Changes

REQUIRED FOR TJC, COVERDELL & COMPREHENSIVE (for discharges on or after 10/1/2015): ICD-10-CM Principal Diagnosis Code

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

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

Allowable Values:
Any valid diagnosis code as per the 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or before 9/30/2015): ICD-9-CM Other Diagnosis Codes

The other or secondary ICD-9-CM codes associated with the diagnosis for this hospitalization.

Allowable Values:
Any valid diagnosis code as per the ICD-9-CM master code table (ICD-9-CM Full and Abbreviated Code Titles):
http://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/codes.html

Notes for Abstraction:
None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction: None

Exclusion Guidelines for Abstraction: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or after 10/1/2015): ICD-10-CM Other Diagnosis Codes

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

Allowable Values:
Any valid diagnosis code as per the 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for admissions on or before 9/30/2015): ICD-9-CM Principal Procedure Code

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.

Allowable Values:
Any valid procedure code as per the ICD-9-CM master code table (ICD-9-CM Full and Abbreviated Code Titles):
http://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/codes.html

Notes for Abstraction:
None

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction: None

Exclusion Guidelines for Abstraction: None

Summary of Changes

REQUIRED FOR TJC & COMPREHENSIVE: ICD-10-PCS Principal Procedure Code

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.

Allowable Values:
Any valid procedure code as per the 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

Summary of Changes

No ICD-10-PCS Procedure Code Documented

Check this box if there is no ICD-10-PCS Code documented in the medical record.

Notes for Abstraction:

- Only check this box if there is no ICD-10-PCS Code documented in the medical record for this episode of care.
- If there is no ICD-10-PCS Code documented related to thrombolytics or endovascular therapy, but there is an ICD-10-PCS Code for another procedure (either stroke related or non-stroke related), then this box should not be checked.

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or before 9/30/2015): ICD-9-CM Principal Procedure Date

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

- 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-9-CM Principal Procedure Date* was 02- 42- 20XX . No other documentation in the medical record provides a valid date. Since the *ICD-9-CM 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-9-CM Principal Procedure Date* was 03-12- 20XX . Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-9-CM 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 Joint Commission's Data Warehouse. Use of "UTD" for *ICD-9-CM 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or after 10/1/2015): ICD-10-PCS Principal Procedure Date

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

- 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- 12- 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 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or before 9/30/2015): ICD-9-CM Principal Procedure Time

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: ICD-9-CM Principal Procedure Time

Collected For: CSTK-01, CSTK-03

Definition: The time (military time) when the principal procedure was performed

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

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

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.
- The ICD-9-CM Principal Procedure Time is the time associated with the start of the principle procedure performed during the hospitalization. If a patient enters the operating room or interventional suite, but the principal procedure is canceled before it is initiated and the principal procedure performed at a later time, the ICD-9-CM Principal Procedure Time is the start time when the procedure was actually performed.
- If the start time when the principal procedure was performed 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 principal procedure start time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the start time of the ICD-9-CM Principal Procedure was 3300. No other documentation in the medical record provides a valid time. Since the start time of the ICD-9-CM Principal Procedure is outside of the range listed 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 Joint Commission's Data Warehouse. Use of "UTD" for ICD-9-CM Principal Procedure Time allows the case to be accepted into the warehouse.
- If the principal procedure start time is obviously incorrect (in error) but it is a valid time and the correct time can be supported with other documentation in the medical record, the correct time may be entered. If supporting documentation of the correct time cannot be found, the medical record must be taken at face value.
  Examples:
  - The principal procedure start time is documented as 10:00 but other documentation in the medical record supports the correct time as 22:00. Enter the correct time of 22:00 as the ICD-9-CM Principal Procedure Time.
  - The principal procedure end time of 11:58 is documented but the principal procedure start time is documented as 11:57. If no other documentation can be found to support another principal procedure start time, then it must be abstracted as 11:57 because the time is not considered invalid or outside the parameter of care.

Suggested Data Sources:

- Consultation notes
- Face sheet
- Progress notes
- Diagnostic test reports
- Operating room notes
- Procedure notes
- Administrative record
- Anesthesia record
- Circulator record
- Intraoperative record
- Procedure record

Guidelines for Abstraction

Inclusion:

Note: The procedure record is the priority data source.

1. Locate an inclusion term on the procedure record. If an inclusion term associated with a time is found on the procedure record, use that time. Use the earliest time associated with an inclusion term that represents the ICD-9-CM Principal Procedure Time.
2. If an inclusion term associated with a time is not on the procedure record, other suggested data sources may be used in no particular order to locate an inclusion term. Use the earliest time associated with an inclusion term that represents the ICD-9-CM Principal Procedure Time.
3. If no inclusion terms are found on any sources, beginning with the procedure record as the priority source, look for alternative terms associated with the procedure start time. If none are found, other forms can be used in no particular order. Use the earliest time that represents the ICD-9-CM Principal Procedure Time.
   - Procedure start

- Procedure begin
- Procedure initiated

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or after 10/1/2015): ICD-10-PCS Principal Procedure Time

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: ICD-10-PCS Principal Procedure Time

Collected For: CSTK-01, CSTK-03

Definition: The time (military time) when the principal procedure was performed

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

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

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.
- The ICD-10-PCS Principal Procedure Time is the time associated with the start of the principle procedure performed during the hospitalization. If a patient enters the operating room or interventional suite, but the principal procedure is canceled before it is initiated and the principal procedure performed at a later time, the ICD-10-PCS Principal Procedure Time is the start time when the procedure was actually performed.
- If the start time when the principal procedure was performed 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 principal procedure start time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the start time of the ICD-10-PCS Principal Procedure was 3300. No other documentation in the medical record provides a valid time. Since the start time of the ICD-10-PCS Principal Procedure is outside of the range listed 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 Joint Commission's Data Warehouse. Use of "UTD" for ICD-10-PCS Principal Procedure Time allows the case to be accepted into the warehouse.
- If the principal procedure start time is obviously incorrect (in error) but it is a valid time and the correct time can be supported with other documentation in the medical record, the correct time may be entered. If supporting documentation of the correct time cannot be found, the medical record must be taken at face value.
  Examples:
  - The principal procedure start time is documented as 10:00 but other documentation in the medical record supports the correct time as 22:00. Enter the correct time of 22:00 as the ICD-10-PCS Principal Procedure Time.
  - The principal procedure end time of 11:58 is documented but the principal procedure start time is documented as 11:57. If no other documentation can be found to support another principal procedure start time, then it must be abstracted as 11:57 because the time is not considered invalid or outside the parameter of care.
- For bedside procedures, e.g. external ventricular drain (EVD) placement, the time documented on the bedside flow sheet / nursing note should be used if earlier than other times documented on a procedure record or in other sources.

Suggested Data Sources:

- Consultation notes
- Face sheet
- Progress notes
- Diagnostic test reports
- Operating room notes
- Procedure notes
- Administrative record
- Anesthesia record
- Circulator record
- Intraoperative record
- Procedure record
- Bedside flow sheet
- ICU notes
- Nursing notes
- Nursing flow sheet
- Operative notes

Guidelines for Abstraction

Inclusion:

Note: The procedure record is the priority data source.

1. Locate an inclusion term in a suggested data source in no particular order. Use the earliest time associated with an inclusion term that represents the ICD-10-PCS Other Procedure Time(s).
2. If no inclusion terms are found on any suggested data source, look for alternative terms associated with the procedure start time. If none are found, other sources can be used in no particular order. Use the earliest time that represents the ICD-10-PCS Other Procedure Time(s).
    - Procedure start
    - Procedure begin
    - Procedure initiated

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or before 9/30/2015): ICD-9-CM Other Procedure Codes

The other or secondary ICD-9-CM codes identifying all significant procedures other than the principal procedure.

Allowable Values:
Any valid procedure code as per the ICD-9-CM master code table (ICD-9-CM Full and Abbreviated Code Titles):
http://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/codes.html

Suggested Data Sources:

- Discharge summary
- Face sheet
- UB-04

Inclusion Guidelines for Abstraction: For inclusion in the algorithms listed above, refer to Appendix A, for ICD-9-CM Code Tables (AMI, HF, Prev).

Exclusion Guidelines for Abstraction: None

Summary of Changes

REQUIRED FOR TJC & COMPREHENSIVE: ICD-10-PCS Other Procedure Codes

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

Allowable Values:
Any valid procedure code as per the 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or before 9/30/2015): ICD-9-CM Other Procedure Dates

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

- 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-9-CM Other Procedure Dates* was 02- 42- 20 XX . No other documentation in the medical record provides a valid date. Since the *ICD-9-CM 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 02-12-20 XX and documentation indicates the *ICD-9-CM Other Procedure Dates* was 03-12-20 XX . Other documentation in the medical record supports the date of death as being accurate. Since the *ICD-9-CM 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 Joint Commission's Data Warehouse. Use of "UTD" for *ICD-9-CM 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE ONLY (for discharges on or after 10/1/2015): ICD-10-PCS Other Procedure Dates

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

- 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- 20 XX . 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 02-12-20 XX and documentation indicates the *ICD-10-PCS Other Procedure Dates* was 03-12-20 XX . 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 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

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or before 9/30/2015): ICD-9-CM Other Procedure Times

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: ICD-9-CM Other Procedure Times

Collected For: CSTK-01, CSTK-03

Definition: The time (military time) when the associated procedure(s) was (were) performed.

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

Format

Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 24

Allowable Values:

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

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.
- The ICD-9-CM Other Procedure Times are the time(s) associated with the start of procedures performed after the principal procedure. If a patient enters the operating room or interventional suite, but the procedure is canceled before it is initiated and the procedure performed at a later time, the ICD-9-CM Other Procedure Times are the start time(s) when the procedure(s) were actually performed.
- If the procedure start time 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 procedure start time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the procedure start time was 3300. No other documentation in the medical record provides a valid time. Since the procedure start 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".
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for ICD-9-CM Other Procedure Times allows the case to be accepted into the warehouse.
- If the procedure start time is obviously incorrect (in error) but it is a valid time and the correct time can be supported with other documentation in the medical record, the correct time may be entered. If supporting documentation of the correct time cannot be found, the medical record must be taken at face value.
  Examples:
  - The procedure start time is documented as 10:00 but other documentation in the medical record supports the correct time as 22:00. Enter the correct time of 22:00 as the ICD-9-CM Other Procedure Time(s).
  - The procedure end time of 11:58 is documented but the procedure start time is documented as 11:57. If no other documentation can be found to support another procedure start time, then it must be abstracted as 11:57 because the time is not considered invalid or outside the parameter of care.

Suggested Data Sources:

- Consultation notes
- Face sheet
- Progress notes
- Diagnostic test reports
- Operating room notes
- Procedure notes
- Administrative record
- Anesthesia record
- Circulator record
- Intraoperative record
- Procedure record

Guidelines for Abstraction

Inclusion:

Note: The procedure record is the priority data source.

1. Locate an inclusion term on the procedure record. If an inclusion term associated with a time is found on the procedure record, use that time. Use the earliest time associated with an inclusion term that represents the ICD-9-CM Other Procedure Time(s).
2. If an inclusion term associated with a time is not on the procedure record, other suggested data sources may be used in no particular order to locate an inclusion term. Use the earliest time associated with an inclusion term that represents the ICD-9-CM Other Procedure Time(s).
3. If no inclusion terms are found on any sources, beginning with the procedure record as the priority source, look for alternative terms associated with the procedure start time. If none are found, other forms can be used in no particular order. Use the earliest time that represents the ICD-9-CM Other Procedure Time(s).
   - Procedure start
   - Procedure begin

- Procedure initiated

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or after 10/1/2015): ICD-10-PCS Other Procedure Times

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: ICD-10-PCS Other Procedure Times

Collected For: CSTK-01, CSTK-03

Definition: The time (military time) when the associated procedure(s) was (were) performed.

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

Format

Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 24

Allowable Values:

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

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.
- The ICD-10-PCS Other Procedure Times are the time(s) associated with the start of procedures performed after the principal procedure. If a patient enters the operating room or interventional suite, but the procedure is canceled before it is initiated and the procedure performed at a later time, the ICD-10-PCS Other Procedure Times are the start time(s) when the procedure(s) were actually performed.
- If the procedure start time 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 procedure start time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the procedure start time was 3300. No other documentation in the medical record provides a valid time. Since the procedure start 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".
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for ICD-10-PCS Other Procedure Times allows the case to be accepted into the warehouse.
- If the procedure start time is obviously incorrect (in error) but it is a valid time and the correct time can be supported with other documentation in the medical record, the correct time may be entered. If supporting documentation of the correct time cannot be found, the medical record must be taken at face value.
  Examples:
  - The procedure start time is documented as 10:00 but other documentation in the medical record supports the correct time as 22:00. Enter the correct time of 22:00 as the ICD-10-PCS Other Procedure Time(s).
  - The procedure end time of 11:58 is documented but the procedure start time is documented as 11:57. If no other documentation can be found to support another procedure start time, then it must be abstracted as 11:57 because the time is not considered invalid or outside the parameter of care.
- For bedside procedures, e.g. external ventricular drain (EVD) placement, the time documented on the bedside flow sheet / nursing note should be used if earlier than other times documented on a procedure record or in other sources.

Suggested Data Sources:

- Consultation notes
- Face sheet
- Progress notes
- Diagnostic test reports
- Operating room notes
- Procedure notes
- Administrative record
- Anesthesia record
- Circulator record
- Intraoperative record
- Procedure record
- Bedside flow sheet
- ICU notes
- Nursing notes
- Nursing flow sheet
- Operative notes

Guidelines for Abstraction

Inclusion:

Note: The procedure record is the priority data source.

1. Locate an inclusion term in a suggested data source in no particular order. Use the earliest time associated with an inclusion term that represents the ICD-10-PCS Other Procedure Time(s).
2. If no inclusion terms are found on any suggested data source, look for alternative terms associated with the procedure start time. If none are found, other sources can be used in no particular order. Use the earliest time that represents the ICD-10-PCS Other Procedure Time(s).
    - Procedure start
    - Procedure begin
    - Procedure initiated

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or before 9/30/2015): What was the ICD-9-CM diagnosis code selected as the admitting diagnosis for this patient?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Admitting Diagnosis

Collected For: CSTK-04

Definition: The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established at the time of the patients admission to the hospital.

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

Format

Length: 6 (with or without decimal point)
Type: Alphanumeric
Occurs: 1

Allowable Values: Any valid diagnosis code as per the ICD-10-CM master code table (Code Descriptions in Tabular Order): https://www.cms.gov/Medicare/Coding/ICD10/index.html

Notes for Abstraction:

- The admitting diagnosis is defined as the initial working diagnosis documented by the patients admitting or attending physician who determined that inpatient care was necessary.

Suggested Data Sources:

- Face sheet
- Admission form
- Code List
- Problem list

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE (for discharges on or after 10/1/2015): What was the ICD-10-CM diagnosis code selected as the admitting diagnosis for this patient?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Admitting Diagnosis

Collected For: CSTK-04

Definition: The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established at the time of the patients admission to the hospital.

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

Format

Length: 3-7 (without decimal point or dot; upper or lower case)
Type: Character
Occurs: 1

Allowable Values: Any valid ICD-10-CM diagnosis code

Notes for Abstraction:

- The admitting diagnosis is defined as the initial working diagnosis documented by the patients admitting or attending physician who determined that inpatient care was necessary.

Suggested Data Sources:

- Face sheet
- Admission form
- Code List
- Problem list

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

Discharge Diagnoses

REQUIRED FOR STROKE, COVERDELL, MaRISS: ICD-9-CM discharge diagnosis related to stroke

Enter the diagnosis code that describes the stroke or TIA-related condition for this episode of care. The code entered here will describe the *Final clinical diagnosis related to stroke* selected on the Admin Tab of the PMT.

If the patient was treated for a stroke or TIA condition, but no code has been assigned contact your hospital's coding department regarding code assignment.

Summary of Changes

REQUIRED FOR STROKE, COVERDELL, MaRISS: No Stroke or TIA related ICD-9 code present

Check this box if none of the Principal or Secondary ICD-9 codes are related to stroke or TIA. If the ICD-9 codes do not match the clinical hospital diagnosis related to stroke, then review the case with your Stroke Champion or administrator responsible for assigning ICD-9 codes.

Summary of Changes

OPTIONAL FOR COVERDELL ONLY: ICD-10-CM discharge diagnosis related to stroke

Enter the diagnosis code that describes the stroke or TIA-related condition for this episode of care. The code entered here will describe the *Final clinical diagnosis related to stroke* selected on the Admin Tab of the PMT.

If the patient was treated for a stroke or TIA condition, but no code has been assigned contact your hospital's coding department regarding code assignment.

Summary of Changes

OPTIONAL FOR COVERDELL ONLY: No Stroke or TIA related ICD-10-CM code present

Check this box if none of the Principal or Secondary ICD-10-CM codes are related to stroke or TIA. If the ICD-10-CM codes do not match the clinical hospital diagnosis related to stroke, then review the case with your Stroke Champion or administrator responsible for assigning ICD-10-CM codes.

Summary of Changes

Admission Tab:

Arrival and Admission Information

- ***Specify the referring hospital name***
- ***Referring hospital arrival date/time***
- ***Select reason(s) for why patient transferred:***
- ***Was the patient an ED patient at the facility?***
- ***Was the patient a direct admission to the hospital?***
- ***Where patient first received care at your hospital***
- ***Advanced notification by EMS or Mobile Stroke Unit?***
- ***Initial Admitting Service***
- ***In which settings were care delivered? Select all that apply.***
- ***If the patient was not cared for in a dedicated stroke unit, was a formal inpatient consultation from a stroke expert obtained?***
- ***Physician/Provider NPI***

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. STK, VTE)?

Required for TJC, GWTG- Stroke, And COVERDELL users (used as a standard exclusion in measures)

Collected For: CSTK-04, CSTK-06, STK

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. STK, VTE).

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. STK, VTE)
- 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.STK, VTE), 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. STK, VTE) .** 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.

STK: Only capture patients enrolled in clinical trials studying patients with stroke. Only acceptable data sources: Signed consent form for clinical trial

Suggested Data Sources:

Only acceptable data sources: Signed consent form for clinical trial

Inclusion Guidelines for Abstraction: None

Summary of Changes

REQUIRED for TJC, COMPREHENSIVE & COVERDELL: Was this patient admitted for the sole purpose of performance of elective carotid intervention?

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

Documentation demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting).

- Yes (There is documentation that this admission was solely for the performance of elective carotid intervention.)

- No (There is no documentation that this admission was solely for the performance of elective carotid intervention, OR unable to determine from medical record documentation.)

Notes for Abstraction

- When documentation clearly indicates that the carotid intervention is elective (e.g., admitting orders to obtain informed consent for a carotid procedure; pre-operative testing completed prior to admission; surgical orders for carotid endarterectomy dated prior to arrival; physician office visit documentation prior to arrival stating, “CEA with Dr. X planned in the near future”), select “Yes.”
- Patients who are sent to the hospital by their physician and admitted for performance of a carotid intervention, select “Yes.”
- Patients admitted to the hospital for purposes of performance of a carotid intervention and the intervention cancelled/postponed during the hospital stay, select “Yes.”
- Patients who request admission to the hospital for performance of a carotid intervention, select “Yes.”
- Patients transferred to the hospital for purposes of surgical evaluation for performance of a carotid intervention, select “Yes.”
- When the patient is directly admitted to the hospital post-procedure following an elective carotid intervention performed as an outpatient, select “Yes.”
  Example:
  Patient scheduled for elective carotid endarterectomy right side on 05/17/20xx at 08:30. Patient checks into outpatient surgery at 06:13 and proceeds to the O.R., then to PACU. Patient status is changed to inpatient at 11:35 on 05/17/20xx. Patient discharged home on 05/18/20xx.
- **EXCEPTION**:
  Patients with documentation of an elective carotid intervention performed and discharged from the outpatient setting prior to hospital admission for stroke.
  Example:
  Pt. scheduled for outpatient placement of an elective right carotid stent on 05/17/20xx. Patient discharged home on 05/17/20xx following the procedure. Patient arrives in the ED two days later with complaints of syncope and left-sided numbness, and is admitted to the hospital on 05/19/20xx.
- Patients who are symptomatic and come to the ED for treatment of stroke signs and symptoms and then admitted to the hospital are not considered elective admissions, even if a carotid intervention was performed after admission, select “No.”
- When documentation of the procedure is not linked with “elective,” select “No.”

Suggested Data Sources: PHYSICIAN/APN/PA DOCUMENTATION ONLY

- History and physical
- OR report
- Physician orders
- Progress notes

Guidelines for Abstraction:

Inclusion	Exclusion
Patients with ICD-10-PCS procedure codes on Table 8.3 Carotid Intervention Procedures, if medical record documentation states that the patient was admitted for the elective performance of the procedure. Refer to Appendix A, Table 8.3 Carotid Intervention Procedures for examples of acceptable ICD-9-CM procedure codes. Elective o Anticipated o Asymptomatic o Evaluation o Non-emergent o Planned o Pre-admission o Pre-arranged o Pre-planned o Pre-scheduled o Previously arranged o Prophylactic o Scheduled o Work-up	Patients with ICD-10-PCS procedure codes on Table 8.3 Carotid Intervention Procedures, if medical record documentation indicates that the patient is also being treated for an acute stroke during this hospitalization. Refer to Appendix A, Table 8.3 Carotid Intervention Procedures.

Summary of Changes

REQUIRED: Patient location when stroke symptoms discovered (Where was the patient when stroke was detected or when symptoms were discovered?)

Indicate the type of facility or setting from which the patient came from when stroke like symptoms were discovered.

- Not in a healthcare setting
- Another acute care facility
- Chronic healthcare facility
- Outpatient healthcare setting
- Stroke occurred after hospital arrival (in ED/Obs/inpatient)
- ND or Cannot be determined

Notes for Abstraction

- If the patient was a resident of a nursing home, but was out with family for the day and suffered a stroke and the family/EMS brought the patient to your hospital, choose "Not in a healthcare setting".
- If the patient was at home, at work, or even a visitor in your hospital and had stroke symptoms, then choose "Not in a healthcare setting".
- If the patient was transferred to your hospital from another hospital's ED or inpatient unit but was outside of a healthcare facility when the stroke occurred, choose "Not in a healthcare setting".
- If the patient was a resident of a nursing home and the stroke occurred at the NH, choose "Chronic healthcare facility".
- A chronic care facility would include nursing home, long-term care facility, inpatient rehab facility, psychiatric hospital, and transitional care unit. This is in alignment with the designation of this type of facility as Value 5-Other Healthcare Facility for the Discharge Disposition data element.
- If the patient was a resident of an assisted living facility, and the stroke occurred at the assisted living facility, choose "Not in a healthcare setting." This is in alignment with the designation of an assisted living facility as Value 1- Home for the Discharge Disposition data element.
- If the patient is at a clinic or physician office visit, or at your hospital but receiving outpatient procedure or service that did not require the patient to be admitted as an inpatient, select "Outpatient healthcare setting".
- If the patient was already admitted as an inpatient in your hospital when stroke symptoms were first discovered choose "Stroke occurred after hospital arrival (in ED/Obs/inpatient)".
- If the patient was already within your hospital ED, radiology suite, or observation unit and experienced a new onset of stroke symptoms, then choose "Stroke occurred after hospital arrival (in ED/Obs/inpatient)".
- Only those hospitals that are interested in collecting information regarding inpatient stroke care should enter these patients. Patients who have transient symptoms that are present on arrival to the ED but resolve, and then later return during the hospitalization and meet criteria for ischemic stroke should all be entered as inpatient strokes.

Pre-hospital Data, Admission Data

Summary of Changes

REQIRED: How patient arrived at your hospital

Definition: Recording the method of transfer (private vehicle, ground or air ambulance), distance traveled, and duration of transfer is useful for determining patient and system costs. For this element, indicate the type of transport used to bring the patient to your facility.

Data Collection Question: How did the patient get to your hospital for treatment of their stroke?

Allowable Values:

- EMS from home/scene
- Mobile Stroke Unit
- Private transportation/taxi/other from home/scene
- Transfer from other hospital/free-standing ED
- ND or unknown

Notes for Abstraction:

- Select "EMS from home/scene" whenever the patient was brought to your hospital from home/scene by EMS, whether by ground EMS or Air EMS. Private ambulance transport would be included in this EMS category.
- If a patient is transported by EMS from an Urgent Care Facility, or private physician office, choose "EMS from home/scene."
- If a patient is transferred to your facility via Mobile Stroke Unit, select "Mobile Stroke Unit". NOTE: Mobile Stroke Units are NOT currently common in the US. In the rare instance your region has a Mobile Stroke Unit and the patient arrives via that unit, you may select this option. A Mobile Stroke Unit is a transport unit capable of diagnosing and treating acute strokes in the field. It contains highly specialized staff, imaging capabilities (CT scanner), mobile lab and the ability to administer IV alteplase.
- If a patient is transferred from another hospital or satellite/free-standing ED, choose "Transfer from other hospital/free-standing ED".
- If the patient arrived via a mobile stroke unit, select "Mobile Stroke Unit."
- 'Private transportation/taxi/other from home or scene includes cab, bus, car, walk-in, Uber/Lyft etc.
- If the medical record or the EMS run sheet does not specify how patient arrived at your hospital, select "ND or Unknown."

Data Sources:
- Pre-hospital Data
- Admission Data

Referring hospital discharge date/time

Optional field
This field is enabled when *How patient arrived at your hospital* = *Transfer from other hospital*

Definition: Tracking transfers between facilities is important for understanding the flow of patients, cost structure, and eventual outcomes. Time of

transfer, destination facility, and time of arrival should be recorded for all such cases. For this element, record the date and time the patient left the facility of the referring hospital.

Data Collection Question: What was the date/time patient was discharged from the referring hospital to your hospital?

Format:

Length: 15 MM-DD-YYYY :HH-MM (with or without colon & includes dashes) or Unkonwn

Type: Date and Time

Occurs: 1

Allowable Values:

Date

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (2012-Current Year)

UTD = Unknown

Time

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unknown

- Time must be recorded in military time format. Except for 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:

- Complete this information only if you are the hospital that received the patient.
- Enter the date and time the patient was discharged from the referring center.
- If the discharge date/time for the referring hospital is not in the patient's transfer notes/medical record, select the "Hospital Not Documented" checkbox.

Suggested Data Source:

- Consultation notes
- Emergency department record
- Transfer notes
- History and physical

Specify the referring hospital name

Optional field Note: This field is enabled when How patient arrived at your hospital = Transfer from other hospital

Definition: Specify the name of the referring hospital that transferred the patient to your hospital.

Data Collection Question: What was the name of the hospital that transferred the patient to your hospital?

Format: Single-select

Allowable Values: varies - list but be customized by user. Please refer to **Notes for Abstraction** below for guidance in the populating field.
Allowable Values:

- Dropdown list with hospital names based on American Hospital Association (AHA) List
- Hospital not on the List
- Hospital not documented

Notes for Abstraction:

- Select from the **dropdown menu**, the hospital the patient was transferred to during this episode of care.

For this field to display the list of hospitals, you must pre-populate which hospitals to display for your sit e from the American Hospital Association ID lookup tool. Follow the steps below to populate the list of hospitals for your site:

1. Select the **My Account Tab** on the far right of the screen
2. Select **Manage Code List**
3. Select the **AHA ID List** hyperlink
4. Select **New Code** hyperlink
5. A lookup table displays the follow the following columns: **Hospital Name, AHA ID, City, State, or Zip Code.**
    1. To view the list of hospitals, you must enter data for any of the two fields (hospital name, address, ID, city, state, or zip code).
    2. Results displayed are dependent on the search criteria.
    3. Please note, the AHA ID list is updated weekly. However, it will be updated in the PMT every quarter.
6. Select the hospital(s) from the lookup tool and then select the **Save Selection button** to add the hospital to your dropdown list.
   Repeat steps 5 - 6 until you have the list of hospitals most frequently transferred/received patients.

- **Hospital not on the List:** Select this option if the hospital name is not displayed in the current AHA ID lookup tool.

- **Hospital not documented:** Select this option if the hospital the patient was transferred does not appear in the medical record or is unknown.

Suggested Data Source:

- Consultation notes
- Emergency department record
- Transfer notes
- History and physical

Referring hospital arrival date/time

Optional field Note: This field is enabled when How patient arrived at your hospital = Transfer from other hospital **Definition:** The date and time the patient first arrived at the referring hospital (1st hospital). This date/time may be obtained by the receiving hospital (2nd hospital) by either reviewing the EMS run sheet or from the referring hospital. **Data Collection Question:** What is the date/time patient arrived at the referring hospital (1st hospital) for this episode of care? **Format:**

Length: 15 MM-DD-YYYY :HH-MM (with or without colon & includes dashes) or Unkonwn

Type: Date and Time

Occurs: 1

Allowable Values:

Date

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (2012-Current Year)

UTD = Unknown

Time

HH = Hour (00-23)

MM = Minutes (00-59)

UTD = Unknown

- Time must be recorded in military time format. Except for 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:

- Enter the date and time the patient arrived at your hospital
- If the arrival date/time for the patient arrived to your hospital is not in the patient's transfer notes/medical records, select "Unknown."

Suggested Data Source

- EMS Run Sheet
- Emergency department record
- Transfer notes

Select reason(s) for why patient transferred:

Appears for all users - only complete this field if you are the referring hospital and transferring the patient to another hospital. Note: Required in patients who have "Not Admitted = Yes" and "Reason not admitted" = "Transferred from your ED to another acute care hospital"

Definition: The reason associated with the acute stroke patient transferred from the referring hospital emergency department (ED) to a different hospital (e.g. Primary Stroke Center, Comprehensive Stroke Center). Intent of the element is to determine the transfer rates and reason for transfer and how it may affect patient outcomes.

Question: What was the reason for transferring the patient to your hospital? Check all applicable fields.

Format: Multi-select field

Allowable Values:

- Evaluation for IV tPA up to 4.5 ours
- Management post IV tPA (e.g. drip and ship)
- Evaluation for endovascular thrombectomy
- Advanced stroke care (e.g., Neurocritical care, surgical or other time critical therapy)
- Other non-stroke advanced care
- Patient/family request
- Not documented

Notes for Abstraction:

- **Evaluation for IV tPA up to 4.5 hours:** Select this option when patient transferred to another hospital within 4.5 hours of time last known well and patient has not received IV tPA.
- **Post Management of IV tPA (e.g. drip and ship):** Patient received IV tPA at the current hospital (referring hospital) and is being transferred to a higher-level facility (e.g. PSC, CSC) for acute therapy.
- **Evaluation for endovascular thrombectomy:** Patient is being evaluated for EVT.
- **Advanced stroke care (e.g., Neurocritical care, surgical or other time critical therapy):** Reasons may include the following: severe deficits, large-volume infarcts with the potential for significant cerebral edema, significant comorbidities, blood pressure that is difficult to control, or prior to intravenous and intra-arterial recanalization interventions.
- **Patient/family request:** Transfer of patient per family/patient request. Includes administrative reason, such as insurance coverage/no coverage, lack of bed capacity.
- **Other advanced care (not stroke related):** Management of an emergent condition that is not stroke related (e.g. trauma).
- **Not documented:** Reason for transferring is not documented in the patient's medical record and/or reason for transfer is unknown.

Summary of Changes

Was the patient an ED patient at the facility?

REQUIRED FOR TJC, COMPREHENSIVE & ASR

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

Collected For: ASR-IP-1, CSTK-01, CSTK-03, CSTK-04

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: (Abstraction Guidelines for ED Measures Only)

- 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

Guidelines for Abstraction:

Inclusion: **None**
Exclusion:

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

Was the patient a direct admission to the hospital?

Collected For: CSTK-01, CSTK-03

Definition: Patient transferred from another acute care facility and taken to the operating room or interventional suite prior to hospital admission, or admitted directly to intensive care or other unit of the hospital.

Suggested Data Collection Question: Was the patient a direct admission to the hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:
Y (Yes) There is documentation the patient was a direct admission to the hospital.

N (No) There is no documentation the patient was a direct admission to the hosptial, OR unable to determine from medical record documentation.

Notes for Abstraction:

- For patients taken directly to the operating room or interventional suite and admitted to a hospital bed post-procedure, select "YES".
- For patients admitted directly to intensive care or another hospital unit, select "YES".
- For patients who arrive at the hospital emergency department, select "NO".

Suggested Data Sources:

- Face sheet
- Progress notes
- Nursing flow sheet
- Physician orders
- Operating room record
- Procedure reports
- Transfer note

Summary of Changes

Initial Admitting Service

Collected For: GWTG,ICH
Definition: Documentation of the initial admitting service.
Question: What was the initial admitting service?
Format: Single Select
Allowable Values:

- Neurology
- Neurosurgery
- Neurocritical Care
- Medicine
- Surgery
- Other: _____

Notes for Abstraction:

- Select the initial service in which the patient was admitted under.
- If other is selected, please specify the service.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

In which settings were care delivered? Select all that apply.

Collected For: GWTG,ICH
Definition: Documentation of all settings in which care was delivered.
Question: In which settings were care delivered?
Format: Multi-Select
Allowable Values:

- Neuro/ Neurosurgery ICU
- Other ICU
- Stroke Unit (Non-ICU)
- General Care Floor
- Observation
- Other: _____

Notes for Abstraction:

- Select all settings in which care was delivered.
- If other is selected, please specify the setting.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

If the patient was not cared for in a dedicated stroke unit, was a formal inpatient consultation from a stroke expert obtained?

Collected For: GWTG,ICH
Definition: Documentation that a stroke expert was consulted in the event that a patient was not cared for in a dedicated stroke unit.
Question: If the patient was not cared for in a dedicated stroke unit, was a formal inpatient consultation from a stroke expert obtained?
Format: Single Select
Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- If General Care Floor, Observation or Other non-stroke settings were selected for the delivery of care and there is documentation of a stroke consult, select Yes.
- Consultation from a stroke expert may include:
  - Telestroke
  - Neurology Consult
  - Neurosurgery Consult
  - Vascular Neurology Consult
  - Neuroradiology Consult

Suggested Data Sources:
- Pre-Hospital Data
- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

REQUIRED: Advanced notification by EMS or Mobile Stroke Unit?

Definition: EMS personnel should provide prehospital notification to the receiving hospital that a suspected stroke patient is en route so that the appropriate hospital resources may be mobilized before patient arrival. For this element, record if EMS personnel or personnel in a Mobile Stroke Unit notified the receiving hospital prior to the arrival of possible stroke patient.

Allowable Values:
- Yes
- No/ND
- N/A

Notes for Abstraction:
- Yes: EMS notified the receiving hospital prior to arrival
- To select **Yes**there must be explicit documentation that advanced notification by EMS included that the patient was a suspected stroke.
- The following language is sufficient to identify patients with suspected stroke; any use of the word "stroke" or any documentation of signs & symptoms consistent with stroke is acceptable:
- N/A: the patient did not arrive via EMS
  - Sudden numbness or weakness of face, arm or leg - especially on one side of the body.
  - Sudden confusion/altered mental status, trouble speaking or understanding.
  - Sudden trouble seeing in one or both eyes.
  - Sudden trouble walking dizziness/vertigo, loss of balance or coordination.
  - Sudden severe headache with no known cause.
  - Positive stroke screen
- **No/ND:** EMS either did not pre-notify the receiving hospital or there is no documentation regarding EMS pre-notification.
- **N/A:** the patient did not arrive via EMS or Mobile Stroke Unit

Example: Patient 010a was picked up by the EMTs at 0810. On their departure to the hospital at 0820, they call the ED to inform them they are bringing in a potential stroke patient. They arrive at the ED at 0830. The hospital was therefore pre-notified that a potential stroke patient was arriving.

Suggested Data Sources:

Pre-hospital Data
Admission Data

Summary of Changes

Admission Data

Summary of Changes

OPTIONAL: Physician/Provider NPI (Physician/Service) (custom field per site)

Use this field to capture a physician name or identifier in order to track physicians' involvement.

National Provider ID (NPI) is assigned by CMS to all physicians. You do not need to know NPIs for your physicians, but rather, when adding or editing physicians in your Physician/Provider NPI list, a lookup tool will let you search by name, and assign the correct NPI for you. For more information on adding a physician to the dropdown list, contact your administrator or the Quintiles RWLPR Technical Support.

Physician/Provider NPI is an optional field for each institution and can be assigned based on the Continuous Quality Improvement (CQI) needs of the institution.

Summary of Changes

Telestroke

Note: To enable the telestroke elements to appear for your site, you must first update the site settings. Follow the steps below to enable or disable the telestroke elements.

1. On the Community Page, select Stroke Site Characteristics.
2. System displays the Organization Information Page. Scroll to the bottom of the page.
3. Navigate to the last section, Settings.
4. Indicate if at the site-level your hospital is primarily a provider or recipient of telestroke consultation.
    a. Select Provider of telestroke consultation if you are a referral center that provides telestroke services and happen to cover some of your own ED shift with your telestroke providers.
    b. Select Recipient of telestroke consultation if your hospital primarily receives telestroke consultation for your patients and tend to transfer patients somewhere else.

One enabled, you will be able to view the Telestroke fields in the PMT.

REQUIRED FOR COVERDELL ONLY: TeleStroke Consultation Performed

Collected For: GWTG

Definition: Telemedicine (telestroke) is an integrated audio and/ or visual remote assessment. Ability to provide expertise virtually to diagnose, monitor, and/ or treat patients (e.g. recommend therapies) with 24/7 coverage in a variety of settings. Some consultations may begin with audio only and add video only when patient examination is needed to address the consultation question. Review of lab data or neuroimaging is often involved, whether or not video is deployed.

Question: Was telestroke consultation performed at your hospital for this episode of care?

Format: Single Select

Allowable Values:

- Yes, the patient received telestroke consultation from my hospital staff when the patient was located at another hospital.
- Yes, the patient received telestroke consultation from someone other than my staff when the patient was located at another hospital.
- Yes, the patient received telestroke consultation from a remotely located expert when the patient was located at my hospital.
- No telestroke consult performed
- Not documented

Notes for Abstraction:

- Yes, the patient received telestroke consultation from my hospital staff when the patient was located at another hospital (**for use by hub**).
- Yes, the patient received telestroke consultation from someone other than my staff when the patient was located at another hospital (**for use by hub**).
- Yes, the patient received telestroke consultation from a remotely located expert when the patient was located at my hospital (**for use by hub or spoke**). A CSC might select this if the CSC stroke team neurologist takes call from home at nights and uses telestroke to assess patients who are located in the CSC ED or inpatient floors. This has been increasingly implemented during the COVID crisis or at centers where the stroke expert lives far from the hospital.
- No telestroke consult performed for this episode of care.
- No telestroke consult performed for this episode of care.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

If yes - Telestroke Delivery Method

Collected For: GWTG

Definition: Earlier access to stroke expertise is associated with faster alteplase initiation, which is strongly associated with improved outcomes. Additionally, studies indicate patients treated without neurologist on-site have achieved similar outcomes as those with on-site neurologist. For this element, indicate the delivery method(s) used to obtain stroke expertise for the patient to assist with decision-making.

Question: If telestroke consult as performed, select all applicable delivery methods:

Format: Multi-Select

Allowable Values:

- Interactive Video
- Teleradiology
- Telephone Call
- ND

Notes for Abstraction:

- Most telestroke networks have the option of conducting consultations via phone, real-time audio/video, or both, with the method of consult depending on patient factors (e.g., intra- venous alteplase eligibility) or technology availability (network or camera failures). Therefore, select all applicable options used for this admission.
- **Interactive Video:** Defined as the ability to provide two-way real-time audiovisual conferencing and share images. Allows clinicians to perform consults as if they were present in the room.
- Teleradiology: Defined as the ability to obtain radiographic images at one location and transmit them to another for diagnostic and consultative purposes. Used by stroke specialists to read non-enhanced CT scans of the brain to determine intravenous alteplase eligibility.
- **Telephone Call**: Telephone consultations with a stroke specialist as part of as ancillary, adjunctive, supplemental, or back-up modality.
- If there is no documentation of which modality used or cannot be determined from the medical record, select "ND" for not documented.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

If yes - Type of Telestroke Provider

Collected For: GWTG

Definition: Documentation of the type of telestroke provider.

Question: What was the type of Telestroke provider?

Format: Single Select

Allowable Values:

- Hospital Based (In-State)
- Hospital Based (Out of State)
- Private Provider (Independent)

Notes for Abstraction:

- Select a Hospital Based provider (in or out of state) if the telestroke consultant is based at another hospital
- Select Private Provider if the telestroke consultant is based out of or contacted through a private company.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Who provided Telestroke service?

Collected For: GWTG

Definition: Documentation of who provided the telestroke service - this can be identified as a specific physician, group of physicians, hospital, or private company.

Question: Who provided Telestroke service?

Format: Drop Down - Site Created List

Allowable Values:

- Drop Down - Site Created List

Notes for Abstraction:

- Providers will appear in the drop-down list based on the list created by each site with their unique telestroke providers

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Did the Telestroke consult recommend transfer?

Collected For: GWTG

Definition: Documentation of whether or not the Telestroke consultant recommended the patient be transferred for a higher level of care.

Question: Did the Telestroke consultant recommend transfer?

Format: Single Select

Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- Select Yes if there is documentation that the telestroke consultation resulted in a recommendation for transfer.
- Select No if there is the telestroke consultation did not result in a recommendation for transfer.
- Select ND if there is no documentation whether or not the consultation resulted in a recommendation for transfer.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Patient Transfer Status after Telestroke Consult

Collected For: GWTG

Definition: Documentation of the level of the destination facility the patient was transferred to following the telestroke consult. Stroke centers are defined as certified as TJC or Equivalent designation.

Question: What was the patient?#8364;™s transfer status after Telestroke consult (TJC or Equivalent)?

Format: Single Select

Allowable Values:

- Not Transferred
- Transferred to PSC
- Transferred to TSC
- Transferred to CSC
- Transferred to Unknown

Notes for Abstraction:

- Select the type of facility that best represents the level of care the patient was transferred to based on the recommendation of the telestroke consultant
- Facility types can be The Joint Commission certified or equivalent
- If documentation is unclear, select Transferred to Unknown

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Destination Facility

Collected For: GWTG

Definition: Documentation of a description of the facility the patient is transferred to following telestroke consult.

Question: Which option best describes the destination facility for the transferred patient?

Format: Single Select

Allowable Values:

- Hospital where the telestroke consultant primarily practices
- Hospital unrelated to the telestroke consultant and outside of my health system
- Hospital unrelated to the telestroke consultant but within my health system
- Unable to determine from medical record

Notes for Abstraction:

- Select the option that best describes the facility the patient was transferred to following telestroke consult.
- Hospitals are considered to be within your health system if they are owned or operated by the same entity as your hospital, or have a shared facility system name

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Did Telestroke consultation result in thrombolytic administration at the referring site?

Collected For: GWTG

Definition: Documentation that the telestroke consultation resulted in thrombolytic administration.

Question: Did Telestroke consultation result in thrombolytic administration at the referring site?

Format: Single Select

Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- Select Yes if documentation is clear that the telestroke consult directly resulted in the administration of thrombolytic therapy.
- Do not select Yes if the decision to administer thrombolytic therapy and the infusion was started prior to teleconsultation

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Telestroke Time Tracker

Date/ Time of First Telestroke Consultation Request

Formerly Labeled: If Yes, Telestroke Date/ Time

Collected For: GWTG

Definition: The date and time the telestroke consult was requested.

Question: If telestroke consult was performed, enter date and time of the request of a consultation with the telestroke provider:

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2012 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)
  - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- Time must be recorded in military time format. Except for Midnight and Noon
  - If the time is in the AM, conversion is not required
  - If the time is in the PM, add 12 to the clock time hour
- If multiple modalities used, indicate the initial contact time with the consulting stroke specialist for the earliest modality used.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Date/ Time Telestroke Response

Collected For: GWTG

Definition: The earliest recorded date and time the telestroke consultant responded.

Question: If telestroke consult performed, enter date and time of the telestroke provider's response

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2012 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)
  - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- Time must be recorded in military time format. Except for Midnight and Noon
  - If the time is in the AM, conversion is not required
  - If the time is in the PM, add 12 to the clock time hour
- If multiple modalities used, indicate the initial contact time with the consulting stroke specialist for the earliest modality used.

Suggested Data Sources:

- Progress Notes

- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Date/ Time Start of Telestroke Video Session

Collected For: GWTG

Definition: The date and time the telestroke video session began

Question: If telestroke consult performed, enter date and time of the start of the telestroke video session

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2012 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)
  - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- Time must be recorded in military time format. Except for Midnight and Noon
  - If the time is in the AM, conversion is not required
  - If the time is in the PM, add 12 to the clock time hour
- If multiple modalities used, indicate the initial contact time with the consulting stroke specialist via video. This is the start of the actual video session with both parties present, and not the time by phone call or other means, or the time at which the teleconsultant initiated the software for video.

Suggested Data Sources:

- Progress Notes
- Admission Report
- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Date/ Time Decision to Administer Thrombolytic (By Telestroke)

Collected For: GWTG

Definition: The date and time the telestroke consultant recommended thrombolytic therapy for the patient

Question: If telestroke consult performed, enter date and time of the decision to administer thrombolytics.

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2012 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)
  - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- Time must be recorded in military time format. Except for Midnight and Noon
  - If the time is in the AM, conversion is not required
  - If the time is in the PM, add 12 to the clock time hour
- If multiple modalities used, indicate the initial contact time with the consulting stroke specialist for the earliest modality used.

Suggested Data Sources:

- Progress Notes
- Admission Report

- Transfer Sheet
- Telestroke Records or Reports

Additional Notes / Guidelines for Abstraction: N/A

Telestroke Additional Comments

Collected For: GWTG

Definition: General comments or notes related to the telestroke consultation.

Question: Enter any additional comments or notes related to telestroke.

Format: Text Field

Allowable Values:

- 200-character text

Notes for Abstraction: N/A

Suggested Data Sources: N/A

Additional Notes / Guidelines for Abstraction: N/A

Demographics Tab

REQUIRED: Sex

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

The patient's documented sex on arrival at the hospital.

Data Collection Question: What is the patient's sex?

Allowable Values:

- Male
- Female
- 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

Additional Notes/ Guidelines for Abstraction: N/A

REQUIRED: Patient Gender Identity

Collected For: GWTG

Definition: The gender identity, self-identified by the patient. This may or may not match sex assigned at birth.

Data Collection Question: What is the patient's self-identified gender?

Format: Single Select

Allowable Values:

- Male
- Female
- Female-to-Male (FTM)/ Transgender Male/ Trans Male
- Male-to-Female (MTF)/ Transgender Female/ Trans Female
- Genderqueer, neither exclusively male nor female
- Additional gender category or other: _____
- Did not disclose

Notes for Abstraction:

- Select "Female-to-Male (FTM)/Transgender Male/Trans Man" if the patient was assigned the female sex at birth but currently identifies on the male spectrum. (Also known as a transgender man)
- Select "Male-to-Female (MTF)/Transgender Female/Trans Woman" if the patient was assigned the male sex at birth but identifies on the female spectrum. (Also known as a transgender woman).
- Select "Genderqueer, neither exclusively male nor female" if the patient's sex identity and/or gender expression falls outside the binary categories of male or female. Patient may define their sex as falling somewhere in between male and female, or they may define it as wholly different from these terms.
- Select "Additional gender category or other. _____" if the patient self-identifies with any other gender that is not listed above, then specify in the blank section provided.
- Select "Additional gender category or other. _____" if the patient self-identifies with any other gender that is not listed above, then specify in the blank section provided.
- **References:**
  - CDC Terminology: Derived from APA's Definitions Related to Sexual Orientation and Gender Diversity and WHO's Gender, Equity and Human Rights – https://www.cdc.gov/healthyyouth/terminology/sexual-and-gender-identity-terms.htm
  - ONC (HealthIT.gov): Includes LOINC and SNOMED Codes – Representing Sexual Orientation and Gender Identity – https://www.healthit.gov/isa/section/sex-birth-sexual-orientation-and-gender-identity
  - US Dept. Of Health & Human Services/CDC – Sexual Orientation Survey: A Quality Assessment – https://www.cdc.gov/nchs/data/series/sr_02/sr02_169.pdf

Suggested Data Sources:

- Admission Data
- Care Plans
- Transfer Notes
- Face sheet
- History and Physical
- Emergency Department Records

Additional Notes/ Guidelines for Abstraction:N/A

REQUIRED: Patient Indentified Sexual Orientation

Collected For: GWTG

Definition: The self-reported sexual orientation of the patient. Also defined as the gender(s) to which a person is physically attracted.

Data Collection Question: What is the patient's self-identified sexual orientation?

Format: Single Select

Allowable Values:

- Straight
- Lesbian or gay
- Bisexual
- Queer, pansexual, and/or questioning
- Something else; please specify: _____
- Don't know
- Declined to answer

Notes for Abstraction:

- Straight or heterosexual – Select this option if the patient reports an orientation of sexual attraction to members of the opposite sex.
- Lesbian or gay – Select this option if the patient reports an orientation of sexual attraction to members of the same sex.
- Bisexual – Select this option if the patient reports an orientation of sexual attraction to both males and females, or where the sexual attraction is not exclusive to people of one particular gender.
- Queer, pansexual, and/or questioning – Select this option if the patient reports any of these options:

- Pansexual – Refers to a person who is sexually and/or romantically attracted to persons of any gender identity and/or biological sex. Pansexual people may also refer to themselves as gender-blind.
- Queer – Refers to a person whose attractions and/or romantic relationships are not heterosexual or whose gender identities are not the same as those assigned at birth.
- Questioning – This term describes someone who is questioning their sexual orientation or gender identity

References:

- CDC Terminology: Derived from APA's Definitions Related to Sexual Orientation and Gender Diversity and WHO's Gender, Equity and Human Rights – https://www.cdc.gov/healthyyouth/terminology/sexual-and-gender-identity-terms.htm
- ONC (HealthIT.gov): Includes LOINC and SNOMED Codes – Representing Sexual Orientation and Gender Identity – https://www.healthit.gov/isa/section/sex-birth-sexual-orientation-and-gender-identity
- US Dept. Of Health & Human Services/CDC – Sexual Orientation Survey: A Quality Assessment - https://www.cdc.gov/nchs/data/series/sr_02/sr02_169.pdf

Suggested Data Sources:

- Admission Data
- Care Plans
- Transfer Notes
- Face sheet
- History and Physical
- Emergency Department Records

Additional Notes/ Guidelines for Abstraction:N/A

REQUIRED: Date of Birth

Collected For: All records

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

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.
- For Get With The Guidelines, if entering a “Not Admitted” patient, patient’s age is calculated by Arrival Date minus Birthdate.

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: 1

MM = Month (0-12)

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

$ *Admission Data,* UB-04, (previously UB-92)

REQUIRED: Age

Note: Once the date and time of admission are entered, the system will calculate the patient's age.

Definition: Indicate the patient's age (in years) by calculating the following: Admission Date minus Birthdate.

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

Allowable Values: Numerical Value

Notes for Abstraction:

- If the abstractor determines through medical record review that the UB-92/UB-04 day is incorrect, she/he should correct and override the downloaded value.
- If the abstractor is unable to determine the correct birth date through medical record review, she/he should default to the UB-92/UB-04 date of birth.

Suggested Data Sources:

- Emergency department record
- UB-04, Field Location: 14

Admission Data, UB-92/UB-04, Field Location: 14.

OPTIONAL: Homeless

Definition: Indicate if the patient is homeless.

Allowable Values:

- Checkbox - Select or leave blank

Notes for Abstraction:

- Select the field to indicate if the user has no home or current place of residence
- If the Boolean field (checkbox) is selected, then the field zip code will be disabled for the user.

Suggested Data Sources:

- Patient
- Patient Care Report (ePCR or PCR)

OPTIONAL: Zip Code (Postal Code)

Record the postal code of the patient's residence. For the United States zip codes the hyphen is implied.

Notes for Abstraction:

- If the patient is determined to not have a permanent residence, then the patient is considered homeless and Homeless should be checked.
- If the patient resides in another country, the zip or postal code from that country should be entered as a string of alpha-numeric characters. E.G. the zip code for a patient who lives in Bras d'Or, Canada should have their zip code entered as "B1Y3X9" with no spaces.
- If the postal code of the patient is unable to be determined from medical record documentation, enter the provider's postal code.
- For Stroke CM users, this field will auto-populate Zip Code on the Core Measure Tab.
  - For submission to The Joint Commission, if the patient is not a resident of the United States, use "NONUS." Thus, if you have entered a Canadian postal code in the GWTG field which pre-populates on the Core Measures tab you must overwrite the value in this field on the Core Measures tab with "NONUS."

Administrative Data:UB-04, Field Location: 09 (line 2d); Medical Record: Face sheet

Payment Source

Indicate the health insurance payer status for this patient.

- Medicare Title 18
- Medicaid Title 19
- Medicare - Private/HMO/PPO/Other
- Medicaid - Private/HMO/PPO/Other
- Private/HMO/PPO/Other
- VA/CHAMPVA/Tricare
- Self Pay/No Insurance
- Other/Not Documented/UTD

Notes for Abstraction:

- **Medicare Title 18** - Traditional Fee for Service Medicare parts A, B and D
- **Medicaid Title 19** - State Medicaid or Joint State/Federal Program. This program provides health insurance to individuals who have low income, including persons who are blind or disabled.
- **Medicare - Private/HMO/PPO/Other** - Medicare Advantage Part C Programs
- **Medicaid - Private/HMO/PPO/Other** - Medicaid Advantage Programs
- **Private/HMO/PPO/Other** - Commercial insurance (Not Medicare/ Medicaid) typically tied to employer-based plans
- If checking "Self Pay/No Insurance" or "Not Documented", then no other selections should be checked.
- Patients may have a combination of "Medicare Title 18," "Medicaid Title 19," "Medicare - Private/ HMO/ PPO/ Other," "Medicaid - Private/HMO/PPO/Other," "Private/ HMO/ PPO/ Other" and "VA/CHAMPVA/ Tricare."

- Socioeconomic Demographics - States may use alternative names for Medicaid within their respective states. Be mindful of your states name for medicaid (e.g., MassHealth)

Suggested Data Sources:

- Admission Data
- Face Sheet
- UB-04

Additional Notes/ Guidelines for Abstraction: N/A

Race and Ethnicity

Hispanic Ethnicity

Collected For*: GWTG, STK, CSTK ASR*

Definition*: Documentation that the patient is of Hispanic, Latino, or Spanish ethnicity*

Question*: Is the patient of Hispanic, Latino or Spanish ethnicity?*

Format*: Single Select*

Allowable Values

- *Yes - Patient is of Hispanic, Latino or Spanish ethnicity*
- *No/ UTD - Patient is not of Hispanic, Latino, or Spanish ethnicity 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*

Additional Notes / Inclusion Guidelines for Abstraction:

- *Inclusion: 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, Columbian, Dominican, Ecuadorian, Guatemalan, H, Hispanic, Latin American, Latino/ Latina, Mexican American, Salvadorian, Spaniard, Spanish, White-Hispanic

OPTIONAL: If yes, specify Hispanic Ethnicity

If the patient is of Hispanic ethnicity or Latino, select the specific sub-category (or sub-categories) identified by the patient.

- *Mexican, Mexican American, Chicano/a*
- *Puerto Rican*
- *Cuban*
- *Another Hispanic, Latino, or Spanish Origin: The patient identified as some other Hispanic, Latino or Spanish origin not provided in the options above.*

Notes for Abstraction: *If the patient did not identify a subcategory, leave this field blank*

S *Admission Data*

Summary of Changes

REQUIRED: Race

Select the patient's self-assessed race/ethnicity, or if not available, the physician or institution's assessment. Assumptions should not be made based on physical characteristics. This data allows for analysis of race-related patterns of care. If patient is multi-racial, select each race they designate. Select all that apply from the list provided. Hold down the "Ctrl" key on the keyboard to select multiple options or to deselect an option. Select all that apply from the list provided.

- ***Note for TJC/CM Users****: If multiple options are selected for Race on the Hospitalization tab, then the Core Measures tab data element of "Race" will not auto-populate. Please complete the Core Measures tab data element of "Race" in accordance with the Specifications Manual for National Hospital Inpatient Quality Measures which states: If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race.*

If the patient is Asian or Native Hawaiian/Pacific Islander, select the specific sub-category (or sub-categories) of race if known. Selection of a race sub-category is optional.

Options include:

- *American Indian/Alaska Native - A person having origins in any of the original peoples of North and South American (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, India, China, Philippines, Japan, Korea, Vietnam, or Other including, but not limited to Cambodia, Malaysia, Hmong, and Thailand. If Asian, select the specific sub-category (or sub-categories). Select all that apply from the list provided.*
    - *Asian Indian*
    - *Chinese*
    - *Filipino*
    - *Japanese*
    - *Korean*
    - *Vietnamese*
    - *Other Asian: The patient identified as some other Asian sub-category not provided in the options above or did not identify a sub-category.*
- *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”.*
- *Native Hawaiian/Pacific Islander - A person having origins in any of the other original peoples of Hawaii, Guam or Mariana Islands, Samoa, or other Pacific Islands. If Native Hawaiian/Pacific Islander, select the specific sub-category (or sub-categories). Select all that apply from the list provided.*
    - *Native Hawaiian*
    - *Guamanian or Chamorro*
    - *Samoan*
    - *Other Pacific Islander: The patient identified as some other Native Hawaiian/Pacific Islander subcategory not provided in the options above or did not identify a subcategory.*
- *White – Patients race is White or a person having origins in in any of the original peoples of Europe, Middle East or North Africa (e.g., Caucasian, Iranian, White)*
- *UTD (Unable to determine) –Unable to determine the patient’s race or not stated (e.g., not documented, conflicting documentation or patient unwilling to provide). The data element Hispanic Ethnicity is required in addition to this Race data element.*

Notes for Abstraction:

- *The data element, Hispanic Ethnicity, is required in addition to this data element.*
- *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.*
- *If the Asian or Native Hawaiian/Pacific Islander patient does not identify a subcategory, leave the sub-category blank.*

Admission Data

Medical History

- ***Previously known medical history of***
- ***Ambulatory status prior to the current event?***
- ***Pre-stroke Modified Rankin Score***

REQUIRED: Previously known medical hx (history) of: (Check all that apply)

Collected For: All Records

Definition: Select these elements if the conditions are known to exist prior to admission for the acute (index) event.

Question: Identify from the following list what the patient's past medical history includes:

Format: Multi-Select

Allowable Values:

- None
- Atrial Fib/Flutter
- CAD/prior MI
- Carotid Stenosis
- Current Pregnancy (or 6 weeks post-partum)
- Dementia
- Depression
- Diabetes Mellitus
- Drugs/Alcohol Abuse
- DVT/PE
- Dyslipidemia
- E-Cigarette Use (Vaping)
- Familial hypercholesterolemia

- Family History of Stroke
- HF
- HRT (Hormone Replacement Therapy)
- Hypertension
- Hx of Emerging Infectious Disease
- Migraine
- Obesity/Overweight
- Previous Stroke
- Previous TIA
- PVD
- Prosthetic Heart Valve
- Renal insufficiency - chronic (Serum Creatinine > 2.0)
- Sickle Cell
- Sleep Apnea
- Smoker

Notes for Abstraction:

- Do not include elements that were newly diagnosed during hospitalization and were not previously part of medical history. Therefore, in a case of a patient with newly-diagnosed carotid stenosis, do not select carotid stenosis in the medical history even if it is clear that the stenosis existed prior to the hospitalization.
- **Atrial Fib/Flutter**: The patient has ANY prior history of atrial fibrillation OR atrial flutter (i.e., remote, paroxysmal or persistent.) Do not record a history of Atrial Fib/Flutter if the episode was transient AND entirely reversible due to thyrotoxicosis or within 8 weeks of CABG (these are the only two circumstances in which you would not record a history of Atrial fib/flutter). Any patient with a history of Atrial Fib/Flutter who has undergone a procedure for atrial fib/flutter such as pacemaker placement or ablation or who is under medical therapy for rhythm control is still considered as having a history of Atrial Fib/Flutter and you should select afib/flutter under medical history. Example: Documented history of ablation procedure, select Atrial Fib/Flutter here.
- **CAD/prior MI**: Select CAD/Prior MI if there is a history of coronary artery disease, or a physician diagnosed MI or EKG evidence of an old MI prior to this event.
- **Carotid Stenosis**: Stenosis may be documented either (1) in words in the record as "moderate" or greater than or equal to 50%, (2) previous duplex ultrasound or MR/CT/conventional angiography methods recorded as "moderate" or greater than or equal to 50%, (3) history of carotid endarterectomy or stenting.
- **Dementia**: Select Dementia if there is history of dementia documented in the medical record.
- **Depression**: Patient has a history of treated depression or is currently taking antidepressant medications for treatment of depression.
- **Diabetes Mellitus (DM)**: Select if there is a history of physician diagnosed, Diabetes Mellitus (type I or II), regardless of duration of disease or use of treatment including the use of diet, need for antidiabetic agents, oral hypoglycemic agents or insulin, or a fasting blood sugar. Do not include diabetes based on a patient's statement of or based on a single value of elevated blood sugar in the chart. In order to select this element, there must be a confirmed diagnosis of diabetes mellitus. Diabetes is a CHD risk equivalent and associated with worse outcomes.
    - Diabetes Type:
        - Type I Diabetes - A chronic condition characterized by minimal or absent production of insulin by the pancreas.
        - Type II Diabetes - A type of diabetes mellitus that is characterized by insulin resistance or desensitization and increased blood glucose levels. This is a chronic disease that can develop gradually over the life of a patient and can be linked to both environmental factors and heredity.
        - ND - Select ND when there is a documented history of Diabetes Mellitus but the type is not documented.
    - Diabetes Duration: Indicate the estimated duration of diabetes diagnosis (Type I or II), if documented. If not documented, select unknown. If duration is documented as an estimated range (ie: 4 to 5 years) then select the longer duration (ie. 5-<10 years).
- **Drugs/Alcohol Abuse**: History of drug and/or alcohol abuse.
- DVT/PE: Documented history of DVT (Deep Vein Thrombosis) or PE (Pulmonary Embolism). Deep vein thrombosis (DVT) is a clot in a deep vein, unusually in the leg. DVT sometimes affects the arm or other veins. Pulmonary embolism (PE), which occurs when a DVT clot breaks free from a vein wall, travels to the lungs and then blocks some or all of the blood supply.
- **Dyslipidemia**: Documented history of Dyslipidemia, if high cholesterol, hyperlipidemia or hypercholesterolemia is present based on physician diagnosis, treatment with a lipid lowering agent, total cholesterol greater than 200, LDL greater than 100, HDL less than 40, or elevated triglycerides greater than 200. Patients on lipid lowering therapy are included in this category even if their LDL levels are in range. See Adult Treatment Protocol (ATP) III Clinical Guidelines for further clarification and methods of calculating goal based on Framingham risk data (www.nhlbi.nih.gov).
- **E-Cigarette Use (Vaping):** Use of electronic nicotine delivery system or electronic cigarettes (e-cigarettes), which are battery-operated devices that heat a liquid containing nicotine, propylene glycol, and/or vegetable glycerin and flavorant chemicals to generate an aerosol that the user inhales, or heat-not-burn tobacco products, which are tobacco products that heat to a lower temperature than required for combustion.
    - *Reference: Dehmer GJ, Badhwar V, Bermudez EA, Cleveland JC Jr, Cohen MG, D'Agostino RS, Ferguson TB Jr, Hendel RC, Isler ML, Jacobs JP, Jneid H, Katz AS, Maddox TM, Shahian DM. 2020 AHA/ACC key data elements and definitions for coronary revascularization: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (Writing Committee to Develop Clinical Data Standards for Coronary Revascularization). Circ Cardiovasc Qual Outcomes. 2020;13:e000059. doi: 10.1161/HCQ.0000000000000059*
- **Familial hypercholesterolemia**: Documented history of Familial hypercholesterolemia (FH).
- **Family History of Stroke**: Includes stroke diagnosis in any first degree relative (father, mother, siblings).
- **Heart Failure**: Documented history of Heart Failure, includes CHF
- **HRT (Hormone Replacement Therapy)**: Therapy consisting of estrogen or a combination of estrogen and progestin designed to replace the loss of these hormones in menopause or from oophorectomy. May be also documented as: hormone therapy (HT), estrogen therapy (ET), estrogen replacement therapy (ERT), menopause hormone therapy (MHT).

- **Hypertension**: Hypertension (HTN) is present if the patient has a history of high blood pressure whether or not the patient is on prescribed medications, current use of antihypertensive pharmacological therapy or history of HTN diagnosed and treated with medication, diet, and/or exercise. Do not base this decision solely on blood pressure recordings taken in the ED or in the first few days of admission after stroke, since many normotensive patients will have elevated BP after stroke.
- **Hx of Emerging Infectious Disease**: Select Hx of Emerging Infectious Disease when the patient is known to have any of the following in their medical history. This does NOT include a current infection:
  - SARS-COV-1 (Severe Acute Respiratory Syndrome-associated coronavirus)
  - SARS-COV-2 (COVID-19) (Severe Acute Respiratory Syndrome-associated coronavirus)
  - MERS (Middle East Respiratory Syndrome)
  - Other Infectious Respiratory Pathogen
- **Migraine**: A documented history of migraine headache or of any recurrent or incapacitating headache.
- **Obesity/Overweight**: History of obesity/overweight or a BMI of 25 or higher.
- **Previous Stroke**: Refers to a history of stroke. If receiving a patient in transfer (i.e. your facility receives drip and ship patients) and there is no history of stroke prior to the acute event for which the patient is being hospitalized, do not select previous stroke.
- **Previous TIA**: Refers to a history of transient ischemic attack. If receiving a patient in transfer and there is no history of TIA prior to the acute event for which the patient is being hospitalized, do not select previous TIA.
- **Pregnancy**: Includes women who are currently pregnant, or within six weeks post-partum
- **PVD**: Peripheral Vascular Disease, refers to a history of peripheral vascular disease of the arteries of the extremities, especially conditions that interfere with adequate blood flow to the extremities and occurring prior to this acute event. **Example**: peripheral arterial occlusion, abdominal aortic aneurysm.
- **Renal insufficiency – chronic (SCr>2.0):** Select if there is a history of physician diagnosed renal insufficiency or chronic failure or if the serum creatinine is greater than 2.0mg/dl.
- **Sickle Cell**: Documented history of Sickle Cell. Include Sickle cell disease or sickle cell trait, or sickle cell anemia
- **Sleep Apnea**: Patient has a history of sleep apnea, obstructive sleep apnea (OSA), or central sleep apnea (CSA).
- **Smoker**: Smoking history - patient has smoked at least one cigarette within the past year.

When not to select Smoker:

* In some cases smoking history documentation in one medical record source may further clarify the patient's smoking history documented in another medical record source.
Examples:

- Progress note states “history of smoking” and the nursing admission assessment notes “quit 2 years ago” – Do not select Smoker.
- Discharge summary states smoker without specifying the type of tobacco and the ED record specifies the type of tobacco as cigar – Do not select Smoker.

* In cases where at least one source has specific documentation that the patient has not smoked anytime during the year prior to hospital arrival - Do not select Smoker.
Examples:

- “Current smoker” per H&P, but consultation note states patient “quit 2 years ago” – Do not select Smoker.
- “ + tobacco use” per ED note, “Smoker – Yes” per nursing admission note, but H&P states, “Quit smoking in 2002” – Do not select Smoker.
- Progress note states “Still smokes occasionally” but nursing admission assessment has “No” circled next to “Tobacco use within past year” – Do not select Smoker.

* 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 smoking status is indeterminable.

* If there is a history of smoking and documentation indicates the patient quit, but the timeframe in which the patient quit is not clear, Do not select Smoker.
Examples:

- Nursing admission assessment documents patient as “ex- smoker” or “former smoker,” or simply notes pt. “quit smoking” - Do not select Smoker.
- “History of tobacco abuse” per H&P, and consultation note states “nonsmoker” - Do not select Smoker (not a case of conflicting information)

* Further Examples for not selecting Smoker:

- Chewing tobacco use only
- Cigar smoking only
- Cigarette smoking within one year prior to arrival or any of the other inclusion terms described using one of the following qualifiers: cannot exclude, cannot rule out, may have, may have had, may indicate, possible, suggestive of, suspect or suspicious
- Illegal drug use only (e.g., marijuana)
- Oral tobacco use only
- Pipe smoking only
- Remote smoker (smoked in the past, but greater than one year ago)

* E-cigarettes and vapors are not considered smoking. Please select smoker = No if these are the only products being used by the patient.

When to select Smoker:

* In cases where conflicting information about the patient's smoking history is documented and there is no specific documentation that the patient has not smoked during the year prior to hospital arrival, select Smoker.
Examples:

- "Current smoker" per H&P, but ED note states "Non-smoker" – select Smoker.
- "Cigarette Smoking: Yes, 1-2 cigarettes a day" on nursing admission
- "Cigarette Smoking: Yes, 1-2 cigarettes a day" on nursing admission note, but "Smoking – Quit" on H&P – select Smoker.
- "Recent smoker" in H&P, but progress note states "Smokes – No" – select Smoker.

* If there is documentation of current smoking or tobacco use, or a history of smoking or tobacco use, and the type of product is not specified, assume this refers to cigarette smoking.

* If there is a history of smoking and documentation that the patient quit "several months ago," infer the patient smoked within one year prior to arrival, and select Smoker.

* Further Examples for selecting Smoker:

- + smoker, type of product not identified
- + tobacco use, type of product not identified
- History of cigarette use without mention of a time frame, if no indication that patient quit
- History of smoking (type of product not identified), without mention of a time frame, if no indication that patient quit
- History of smoking and documentation that the patient quit "several months ago"
- History of smoking within one year prior to arrival, type of product not identified
- History of tobacco use (type of product not identified), without mention of a time frame, if no indication that patient quit
- History of tobacco use within one year
- Indication that patient quit
- History of smoking and documentation that the patient quit "several months ago"
- History of smoking within one year prior to arrival, type of product not identified
- History of tobacco use (type of product not identified), without mention of a time frame, if no indication that patient quit
- History of tobacco use within one year prior to arrival, type of product not identified
- Recent smoker

Suggested Data Sources:

- Admission Data

GWTG® – Stroke, HF, CAD Guidelines for Abstraction to determine when to select Medical History = Smoker

Inclusion	Exclusion
Cigarette smoker, type of product not identified	Use of only chewing tobacco
Tobacco user, type of product not identified	Use of only cigar or pipe smoking
History of smoking and documentation that the patient quit &several months ago" or "recent smoker"	Use of only oral tobacco
History of smoking or use of tobacco within one year prior to arrival, type of product not identified	Use of only illegal drugs use (e.g., marijuana)
History of cigarette use without mention of time frame, if no indication that patient quit	Remote Smoker (previous use was greater than one year)

Summary of Changes

REQUIRED FOR COVERDELL ONLY: Ambulatory status prior to the current event? (What was patient's ambulatory status prior to the current event?)

Indicate the patient's ambulatory status prior to the current event.

- Able to ambulate independently (no help from another person) w/ or w/o device
- With assistance (from person)
- Unable to ambulate
- ND

For patients who are in a healthcare environment prior to admission:

- Able to ambulate independently (no help from another person) w/ or w/o device: Patient ambulating without assistance (no help from another person) with or without a device. This means patient is able to ambulate without help from another person. The use of a device, such as a cane, still meets this definition. Patient ambulating to and from the bathroom unassisted. Even though actual ambulation is not documented in the medical record, privileges to walk to and from the bathroom and evidence of the patient getting out of bed unassisted are considered to meet the definition of ambulation.
- With assistance (from person): Patient ambulating with assistance of another person.
- Unable to ambulate : Patient is on bedrest. Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile).

- ND: If it is unable to determine from documentation.

For patients not in a healthcare setting prior to admission:

- Able to ambulate independently (no help from another person) w/ or w/o device: Patient ambulating without assistance (no help from another person) with or without a device. This means patient is able to ambulate without help from another person. The use of a device, such as a cane, still meets this definition. Patient ambulating around the house unassisted, even if they need assistance to walk outside.
- With assistance (from person): Patient ambulating with assistance of another person.
- Unable to ambulate: Patient is bedridden or currently on bedrest recovering from an injury or illness. Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile)
- ND: If it is unable to determine from documentation.

Examples:

- Patient 055a walks around the home but rides a motorized scooter when outdoors. Select "Able to ambulate independently (no help from another person) w/ or w/o device".
- Patient 055b has severe arthritis and is sedentary throughout most of the day, they require a full person assistance to transfer from bed to chair. Select "Unable to ambulate."

$ *Admission Data, especially Physical or Occupational therapy consultation or progress notes*

Summary of Changes

Pre-stroke Modified Rankin Score

Collected For: CSTK

Definition: The pre-stroke Modified Rankin Score (mRS) is a score used to assess the patient's pre-stroke or baseline level of function. Scores reflect the patient's ability to perform activities of daily living prior to the hospitalization for the acute ischemic stroke event.

Score	Description
0	The patient had no residual symptoms
1	The patient had no significant disability; able to carry out all activities
2	The patient has slight disability; unable to carry out all pre-stroke activities but able to look after self without daily help
3	The patient has moderate disability; requiring some external help but able to walk without the assistance of another individual
4	The patient has moderately severe disability; unable to walk or attend to bodily functions without assistance of another individual
5	The patient has severe disability; bedridden, incontinent, requires continuous care

Question: What is the patient's pre-Stroke Modified Rankin Score (mRS)?

Format: Drop Down

Allowable Values:

- 1 - A pre-stroke mRS of 0, 1, or 2 was documented in the medical record, **OR** physician/APN/PA documentation that the patient was able to look after self without daily help prior to this acute stroke episode.
- 2 - A pre-stroke mRS of 3, 4, or 5 was documented in the medical record, **OR** physician/ APN/ PA documentation that the patient could NOT look after self without daily help prior to this acute stroke episode.
- 3 - A pre-stroke mRS was not documented, **OR** unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- A pre-stroke mRS value (i.e., 0, 1, 2, 3, 4, or 5) may be documented by the physician/APN/PA, nurse (RN), medical assistant, or any individual trained to perform the mRS.
- If more than one pre-stroke mRS value is documented, select the highest value.
- If a score range is documented, e.g. 2-3, select the higher value.
- Pre-stroke mRS values may be documented any time during the hospital stay or within 30 days prior to hospital arrival. EXCEPTION:
  - A discharge mRS cannot be used as a baseline pre-stroke mRS score. Score documentation must clearly reflect the patient's functional status prior to arrival at the hospital for management of the acute ischemic stroke event.
- If an acutal pre-stroke mRS value is not documented in the medical record, physician/APN/PA documentation only may be used to document the patient's pre-stroke functional status. EXAMPLES:
  - "Patient independent and living alone prior to stroke onset. No past history of TIA or stroke", select allowable value "1".
  - "Mrs. X lives with her daughter and has some memory deficit requiring assistance with meals and dressing. Ambulates without help", select allowable value "2".
- If there is conflicting documentation of baseline pre-stroke functional status in the medical record, select the highest score value.
- If there is an actual pre-stroke mRS value documented in the medical record, then that score should be used for abstraction over other physician/APN/PA documentation.
- If no pre-stroke mRS is documented or unable to determine, select allowable value "3".

Suggested Data Sources:

- Consultation Notes
- Emergency Department Record
- History and Physical
- Progress Notes
- Discharge Summary
- Admission Note
- Outpatient Record

Additional Notes / Guidelines for Abstraction Inclusion:

- Excluded Data Sources:
  - Any documentation dated/ timed after discharge

Exclusion:

- None

Summary of Changes

Diagnosis and Evaluation

OPTIONAL: Symptom Duration if diagnosis of Transient Ischemic Attack (<24 hours)

Document symptom duration if diagnosis of Transient Ischemic Attack (< 24 hours)

- Less than 10 minutes
- 10 – 59 minutes
- ≥ 60 minutes
- ND

Estimate the time of symptom duration for patients with transient neurological symptoms that are felt to be due to cerebral ischemia. When a range of time duration is provided in the record, choose the upper most limit. For example, if it states, “symptoms lasted between 5-20 mins”, then select "10 - 59 minutes" since 20 minutes would fall into the “10-59 min” range.

Example: Patient 070a experiences weakness of the face, arm and leg, and has difficulty speaking (dysarthria) lasting for less than 5 minutes. Select "Less than 10 minutes"

$ *Admission Data*

Summary of Changes

REQUIRED FOR COVERDELL ONLY: Had stroke symptoms resolved at time of presentation?

Indicate if symptoms already resolved upon hospital arrival.

- Yes
- No
- ND

Notes for Abstraction:

- For inpatient stroke, select "No" since time of presentation (for stroke) = time of symptom discovery.

$ *Admission Data*

Summary of Changes

REQUIRED: Initial NIH Stroke scale

Was NIH Stroke Scale (NIHSS) performed as part of initial evaluation?

- Yes: An NIH Stroke Scale was performed as part of the initial evaluation or neurology consultation.
- No/ND: An NIH Stroke Scale was not performed or was performed but the total score is not available.

Notes for Abstraction:

- You should be looking for the first NIHSS calculated or documented based on the first arrival notes or in the first neurology consultation note, whichever comes first. Patients with acute ischemic stroke treated with intravenous alteplase or with an acute endovascular procedure at your facility should be included as a “Yes” response only if the NIHSS is performed before the start of these treatments. If the first NIH Stroke Scale score was calculated or documented only after treatment with intravenous tPA or acute endovascular procedure at your facility, 48 hours after arrival in those patients that do not receive thrombolytic treatment, or not performed at all, then select "No/ND."
- If comprehensive neurological findings are outlined in first arrival notes or in the first neurology consultation note that enables you to abstract the complete NIHSS, answer "Yes" to this data element and enter the findings into the sub questions under the “Total Score”.
- If another stroke scale was performed instead, including the Modified NIH Stroke Scale, answer “No/ND”.
- For patients that receive thrombolytic therapy at an outside hospital prior to transfer to your facility, answer this data element based off of the first NIHSS performed at your own hospital. For patients received in transfer that undergo additional treatment such as IA catheter based reperfusion or mechanical recanalization at your facility, answer “Yes” only in those patients in whom an NIHSS is performed prior to this treatment. For patients received in transfer that do not undergo additional treatment, answer “Yes” only if the first NIHSS was performed at your facility within 48 hours of arrival.
- The initial NIH Stroke Scale may be documented by a member of the "stroke team" (including the physician/APN/PA or nurse (RN)). It is highly recommended that the NIHSS be performed by a certified examiner.
- For inpatient stroke, you should be looking for the first NIHSS calculated or documented in the first neurology consultation note, or medical encounter note, after discovery of stroke symptoms in the hospital. Patients with an inpatient acute ischemic stroke treated with intravenous alteplase, or with an acute endovascular procedure, should be included as a “Yes” response only if the NIHSS is performed before the start of these treatments. If the patient arrives to the hospital with transient symptoms that resolve, and an NIHSS was performed at that time, but later in the hospital stay the patient has new onset stroke symptoms and meets criteria to be entered as an inpatient stroke, a new NIHSS should be performed and the results of the NIHSS performed after discovery of new onset of stroke symptoms should be used. If a new NIHSS is not performed after new symptom discovery, select "No/ND". Do not use the results of the NIHSS done prior to new symptom discovery.
- **Example**: Patient 072 presents to the ED with complaints of dizziness, fatigue, and slurred speech which resolve prior to admission. NIHSS was documented as 1. The following day, the patient has new onset slurred speech and right leg weakness. NIHSS is performed immediately after stroke symptom discovery and is documented as a 6. Enter this patient as an inpatient stroke and select "Yes" for "Initial NIH Stroke scale" and enter 6 for "Total Score".

$ *Admission Data*

Summary of Changes

OPTIONAL: If Yes (NIHSS)

If NIHSS score present in eCRF (PMT) what method was used to obtain the NIHSS score recorded.

- Actual: NIHSS score was documented in the record as the result of the scale being performed
- Estimated from the record: NIHSS score was reconstructed retrospectively based on neurological exam findings
- ND: The method of NIHSS score calculation was not documented

$ *Admission Data*

Summary of Changes

REQUIRED: Total Score

If Initial NIH stroke scale was performed, what is the first NIH Stroke Scale total score recorded by hospital personnel. Click on (Show/Hide) to display the sub-questions from the NIH Stroke Scale. The total will be computed automatically from these sub-questions. Completing the NIHSS sub-questions is optional.

Notes for Abstraction:

- Enter the total score of the first NIHSS performed prior to treatment with thrombolytic therapy or acute endovascular procedure at your hospital within 48 hours of hospital arrival for those patients that did not undergo treatment with thrombolytics or an acute endovascular procedure.
- The initial NIH Stroke Scale may be documented by a member of the "stroke team" (including the physician/APN/PA or nurse (RN)). It is highly recommended that the NIHSS be performed by a certified examiner.

$ *Admission Data*

Summary of Changes

Initial NIHSS <6

Collected For: CSTK

Definition: Documentation that the initial National Institutes of Health Stroke Scale (NIHSS) score after hospital arrival was less than 6.

Question: Was the initial NIHSS score after hospital arrival less than 6?

Format: Single Select

Allowable Values:

- Y (Yes) The initial NIHSS score after hospital arrival was less than 6.
- N (No) The initial NIHSS score after hospital arrival was 6 or greater, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- Select the first total NIHSS score (i.e., sum of the category scores) documented after hospital arrival.
- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- Disregard components scored when the total NIHSS score is not documented or left blank. Do not infer a total NIHSS score from documented category scores.

Suggested Data Sources/b>:

- Consultation notes
- Emergency department record
- History and physical
- Nursing flow sheet
- Nursing admission assessment
- Progress notes
- Admitting note

Additional Notes / Guidelines for Abstraction:

- Inclusion: None
- Exclusion:
  - Modified NIHSS scores
  - Estimated NIHSS scores
  - Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the first NIHSS score obtained prior to or after hospital arrival?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial NIHSS Score at Hospital Arrival

Collected For: CSTK-05, CSTK-08

Definition: Documentation of the first NIHSS score obtained prior to or after hospital arrival. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Suggested Data Collection Question: What is the first NIHSS score obtained prior to or after hospital arrival?

Format

Length: 3 (0 to 42)
Type: Alphanumeric
Occurs:1

Allowable Values:
Score = XX (0-42)
UTD = Unable to Determine

Notes for Abstraction:

- To determine the value for this data element, review the NIHSS scores obtained prior to and after hospital arrival.
- Select the earliest documented NIHSS score regardless of where it was done. Values obtained and documented by EMS, teleneurology, a transferring hospital, or your hospital are acceptable. The first documented NIHSS score should be used.

Suggested Data Sources:

- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Transfer sheet
- Admitting note
- Ambulance record

- Consultation form/note
- Nursing assessment
- EMS records

Excluded Data Sources:

- Discharge summary

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation that an initial NIHSS score was done at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial NIHSS Score Performed

Collected For: CSTK-01

Definition: Documentation of the first National Instititutes of Health Stroke Scale (NIHSS) score that was done at this hospital. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language. The NIHSS serves several purposes, but its main use in clinical medicine is during the assessment of whether or not the degree of disability caused by a given stroke merits treatment with alteplase. Score documentation may range from 0 to 42.

Suggested Data Collection Question: Is there documentation that an initial NIHSS score was done at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (YES) Initial NIHSS score was done at this hospital.

N (No) Initial NIHSS score was not done at this hospital, OR Unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- If a total NIHSS score (i.e., sum of the category scores) is documented, select 'YES'.
- Total scores obtained by teleneurology and documented in the medical record, select 'YES'.
- If components are scored but the total NIHSS score is not documented or left blank, select 'NO'. Do not infer a total NIHSS score from documented category scores.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the date and time that the NIHSS score was first performed at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial NIHSS Score Date/Time

Collected For: CSTK-01

Definition: The month, date, year, and time (military time) that the NIHSS score was first performed at this hospital. The NIH stroke scale measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language. The NIH stroke scale serves several purposes, but its main use in clinical medicine is during the assessment of whether or not the degree of disability caused by a given stroke merits treatment with alteplase.

Suggested Data Collection Question: What is the date and time that the NIHSS score was first performed at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date that the NIHSS score was first performed. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more initial NIHSS score dates (either different NIHSS assessments or corresponding with the sameassessment), enter the earliest date.
- If the initial NIHSS score 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial NIHSS date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the initial NIHSS 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial NIHSS Score Date allows the case to be accepted into the warehouse.
- Use the time for which the NIHSS score was first performed. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different initial NIHSS score times (either different NIHSS assessments or corresponding with the sameassessment), enter the earliest time.
- If the time of the first NIHSS score is a time prior to hospital arrival because the score was obtained by teleneurology or MD/APN/PA directly receiving the patient via life flight, use the Arrival Time for the score time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- Initial NIHSS Score Time refers to the time that the first NIHSS score was performed. If the time performed is mentioned in the body of a note, select the time performed rather than the time stamp on the note. If the only time documented with the score is the time stamp on the note, then select the time stamped. Examples:
  - Documentation indicates that the initial NIHSS score was done at 0920. Time stamp on the note is 1159. The abstractor should select 0920 for Initial NIHSS Score Time.
  - Documentation indicates that the NIHSS score done on arrival was 12. Patient arrived at your hospital 2100. Time stamp on the note is 2136. The abstractor should select 2100 for Initial NIHSS Score Time.
  - NIHSS score 12 [no time] documented. Time stamp on the note is 1513. The abstractor should select 1513 for Initial NIHSS Score Time.
- Do not use physician orders as they do not demonstrate the NIHSS score was done (in the ED this may be used if signed/initialed by a nurse).
- Times for scores done prior to arrival by a teleneurologist are acceptable if signed/initialed by a nurse.
- If the time of the first NIHSS score 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 time) **and** no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial NIHSS score time was 3300. No other documentation in the medical record provides a valid time. Since the initial NIHSS score 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial NIHSS Score Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

OPTIONAL: NIHSS Score Obtained from Transferring Facility

If the patient arrived to your hospital as a transfer from another hospital, enter the total NIHSS obtained from the transferring facility prior to patient transfer.

Notes for Abstraction:

- If more than one NIHSS is performed at the transferring facility, enter the first score recorded.
- If NIHSS from transferring facility is not available, leave blank.
- The NIHSS performed at the transferring hospital is not a substitute for performing the NIHSS at your hospital. It is expected that the NIHSS be performed by an appropriate clinician at your hospital and you must complete the data elements of “Initial NIH Stroke Scale” and “Total Score” based upon care provided at your hospital. The “NIHSS Score Obtained from Transferring Facility” does not qualify in the measure “NIHSS Reported” at your hospital.

Summary of Changes

REQUIRED: Initial Exam Findings

This data element is only required if Initial NIH Stroke Scale = No (meaning that an initial NIHSS was not performed or was performed but the total score is not available). If Initial NIH Stroke Scale = Yes then this data element (Initial Exam Findings) is Optional (and is not necessary to save the record as complete.)

Identify from the initial (first) neurological exam in the record which of the following findings were present at the time of hospital arrival or when the first complete exam was performed on the patient. Select all that apply:

- Weakness/Paresis: Includes any mention of weakness or paresis of an arm, leg, side of the face, or any part of the body. This includes documentation of terms such as hemiparesis, hemiplegia, quadriparesis, quadriplegia, paraparesis, or paraplegia, as well as flaccidity or drift of the limbs, facial droop, or evidence of impaired strength. This element does NOT include mention of clumsiness, ataxia, incoordination, gait trouble, fatigue or generalized weakness.
- Altered Level of Consciousness: Includes any mention of decreased alertness, sleepiness, drowsiness, stupor, coma, difficulty to arouse, need for painful stimulation to gain the patients attention, Documentation of a Glasgow Coma Score (GCS) that includes No eye opening. Eye opening to pain or Eye opening to verbal command would qualify.
- Aphasia/Language Disturbance: Includes loss of the ability to communicate or disturbances of language and communication. This can be documented as slurring of speech, dysarthria, difficulty with producing speech (including the terms non-fluent, Broca’s, Wernike’s, paraphasia, dysphasia, mutism), following commands, naming objects, repeating phrases, speaking fluently, or answering questions appropriately. Documentation of a Glasgow Coma Score (GCS) that includes No verbal response, Incomprehensible sounds or Inappropriate words would qualify.
- Other neurological signs/symptoms: Other neurological findings were documented in the record which do not fit the above specified categories.
- No neurological signs/symptoms: No neurological signs or symptoms were present on arrival or when the first neurological exam was performed. If you select this option, you should not check any other box.
- ND: There is no documentation of neurological signs and symptoms in the record because there was no neurological exam performed at any at any point in the hospital stay. If you select this option, you should not check any other box.

Notes for Abstraction:

- The initial exam findings should be determined based upon the **first** neurological exam performed on the patient whether performed on arrival, in the ED or later in the hospital stay and should be documented by a physician (including an ED physician or neurologist).
- If the patient’s neurological exam is limited due to loss of consciousness or other conditions select only those findings that have been assessed. Do not infer the presence of findings. Record only those findings found in the hospital record.
- Only select “ND” if there was no neurological exam performed during the hospital stay. Do NOT select "ND" based solely on whether an exam is documented in the ED notes. If an initial neurological exam was not performed in the ED, use the first documented exam during the hospital stay and record the findings of that exam. There is no time limit on when the exam should have been performed. Use the first exam, even if it occurs later in the hospital stay after ED admission.
- If the NIHSS or Glasgow Coma Scale is performed as a component of the initial (first) neurological exam, it is acceptable to use the individual components of the NIHSS or Glasgow Coma Scale, if documented in the medical record to assist in identifying the presence of the following signs or symptoms.
- Use only information obtained once the patient has arrived at the hospital (i.e. if the only documented GCS is from EMS records prior to patient arrival to your ED, you should not use this documentation).
- For inpatient stroke, use the first neurological exam performed after the date/time of discovery of stroke symptoms in the hospital. If the patient arrives to the hospital with transient symptoms that resolve and a neurological exam was performed but later in the hospital stay the patient has new onset stroke symptoms and meets criteria to be entered as

an inpatient stroke, a new neurological exam should be performed and the results from the new exam should be used to select initial exam findings.

Note: The presence of weakness, altered level of consciousness or aphasia/language disturbance has been shown to be correlated with worse patient outcomes.

Example: Patient 071 presents with visual loss, right body tingling, and ataxia documented on the admission notes. Weakness, altered level of consciousness, and aphasia are not present. Select "Other neurological signs/symptoms".

Patient 071B presents to the ED with complaints of dizziness, fatigue, and slurred speech. Symptoms resolve while in the ED. Patient is admitted and the following day the patient has new onset of slurred speech and right leg weakness and is diagnosed with an ischemic stroke. Enter this patient as an inpatient stroke and select "Aphasia/Language Disturbance" and "Weakness/Paresis".

Admission Data

Summary of Changes

OPTIONAL: Ambulatory status on admission

Indicate the patient's current ambulatory status in the context of their stroke/TIA symptoms. This should be based on the examination in the ER or within the first 24 hours of admission. For patients that are not permitted to ambulate, answer this data element based on what the patient would be capable of if allowed to ambulate.

- Able to ambulate independently (no help from another person) w/ or w/o device
- With assistance (from person)
- Unable to ambulate
- ND

Notes for Abstraction:

- Able to ambulate independently (no help from another person) w/ or w/o device: Patient ambulating without assistance (no help from another person) with or without a device. This means patient is able to ambulate without help from another person. The use of a device, such as a cane, still meets this definition.
- With assistance (from person): Patient ambulating with assistance of another person.
- Unable to ambulate: Patient is unable to ambulate safely.
- ND: If it is unable to determine from documentation.
- For inpatient strokes, enter the patients ambulatory status on arrival to the ED or within 24 hours of actual hospital admission.

Examples:

- Patient 100a is evaluated in the ER and is noted to require maximum 2 person assist to stand at the side of the bed and is noted to be unsafe to ambulate without assistance. Select "Unable to ambulate".
- Patient 100b is noted to have facial weakness and slurred speech, but is able to ambulate independently. Select "Able to ambulate independently".
- Patient 100c has mild right leg weakness and is unsteady standing independently but is able to walk safely with minimal support of his hand by the nurse. Select "With assistance from another person"
  Patient 100d is confined to bed rest post-procedure (i.e. femoral artery puncture). The patient is capable of independent ambulation but is not permitted to do so. Select “Able to ambulate independently (no help from another person) w/ or w/o device.”

Admission Data

Summary of Changes

OPTIONAL COMPREHENSIVE: First Glasgow Coma Scale (GCS)

The Glasgow Coma Scale (GCS) is used to measure severity of intracerebral hemorrhage. It has been shown to be a predictor of outcome from the bleed. The GCS should be collected on all patients who present with an intracerebral hemorrhage.

Notes for Abstraction:

- Record the first GCS documented. This can either be the one completed by EMS, or if not completed by EMS then the first one done in the hospital.
- Record GCS scores for eye, verbal, and motor response. The total score will automatically be generated. If patient has endotracheal tube in place at the time GCS measured, check "intubated" and leave the verbal score blank.
- If only a total score is documented, only fill in "Total GCS" score and leave the sub-components blank.
- If the patient has not suffered an intracerebral hemorrhage, this field will be disabled.

Example: A patient is admitted with a large intracerebral hemorrhage. His eyes open to painful stimuli (2 points), his best motor response is to localize pain to painful stimuli (5 points) and his best verbal response is no response (1 point). His Glasgow Coma Score is 8.

Pre-hospital Data, Emergency Department Data, Admission Data

Summary of Changes

REQUIRED FOR COMPREHENSIVE: ^Is there documentation any time during the hospital stay that the hemorrhage was non-aneurysmal or due to head trauma?

Required for TJC CSTK

Data Element Name:Non-aneurysmal

Collected For: CSTK-03

Definition: Patients with documentation of non-aneurysmal SAH or SAH related to head trauma any time during the hospital stay. Non-aneurysmal SAH refers to hemorrhage in the subarachnoid space that is not attributed to the ruptured of a cerebral aneurysm.

Data Collection Question: Is there documentation any time during the hospital stay that the hemorrhage was non-aneurysmal or due to head trauma?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (YES) There is documentation any time during the hospital stay that the hemorrhage was non-aneurysmal or due to head trauma.

N (No) There is no documentation any time during the hospital stay that the hemorrhage was non-aneurysmal or due to head trauma, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- The timeframe for documentation of this data element is any time during the hospital stay from hospital arrival to discharge.
- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- Terms must be documented by a physician/APN/PA only.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- >History and physical
- Progress notes
- Discharge Summary

Additional Notes

Guidelines for Abstraction

Inclusion:

- >Head trauma
- Non-aneurysmal
- >Not aneurysmal
- Trauma

Exclusion:

- Trauma other than head
- Trauma or traumatic injuries involving body parts other than the head

REQUIRED FOR COMPREHENSIVE: Was an initial ICH score done at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial ICH Score Performed

Collected For: CSTK-03

Definition: Documentation of the first ICH score that was done at this hospital. The ICH Score is a clinical grading scale composed of factors related to a basic neurological examination (GCS), a baseline patient characteristic (age), and initial neuroimaging (ICH volume, IVH, infratentorial/supratentorial origin). Score documentation may range from 0 to 6. The purpose of this grading scale is to provide a standard assessment tool that can be easily and rapidly determined at the time of ICH presentation by physicians without special training in stroke neurology and that will allow consistency in communication and treatment selection in clinical care and clinical research.

Component	Criteria	Points
GCS	3-4	2
	5-12	1
	13-15	0

ICH Volume (cc)	>/=30cc	1
	<30cc	0
Intraventricular Hemorrhage	Yes	1
	No	0
Infratentorial Origin	Yes	1
	No	0
Age	>/=80 years old	1
	<80 years old	0
Total ICH Score		0-6

Suggested Data Collection Question: Was an initial ICH score done at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (YES) Initial ICH score was done at this hospital.

N (No) Initial ICH score was not done at this hospital, OR Unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- The ICH score may be documented by the physician/APN/PA or nurse (RN).
- ICH score obtained by teleneurology and documented in the medical record, select 'YES'.
- If a total ICH score (i.e., sum of the component points) is documented, select 'YES'.
- f components are scored but the total ICH score is not documented or left blank, select 'NO'. Do not infer a total ICH score from documented component scores.
  Do not infer a total ICH score from documented component scores.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Admitting note

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Scoring methodologies other than the ICH Score

Note: To enable a response, abstractors may first need to answer 'No' for the question Was an initial Hunt and Hess scale done at this Hospital?

Summary of Changes

OPTIONAL COMPREHENSIVE: If yes, (ICH) Score

If an ICH score was performed, enter the first ICH Score total score as recorded by hospital personnel. Score documentation may range from 0 to 6.

Notes for Abstraction:

- Enter the total score of the first ICH score performed within 24 hours of hospital arrival and prior to the initiation of any invasive intracranial procedure.
- First ICH score can be recorded by a physician/APN/PA or nurse.

$ ***Emergency Department Data, Admission Data***

Summary of Changes

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the date and time that the ICH score was first performed at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial ICH Score Date/Time

Collected For: CSTK-03

Definition: The month, date, year, and time (military time) that the ICH score was first performed at this hospital. The ICH Score is a clinical grading scale composed of factors related to a basic neurological examination (GCS), a baseline patient characteristic (age), and initial neuroimaging (ICH volume, IVH, infratentorial/supratentorial origin). The purpose of this grading scale is to provide a standard assessment tool that can be easily and rapidly determined at the time of ICH presentation by physicians without special training in stroke neurology and that will allow consistency in communication and treatment selection in clinical care and clinical research.

Suggested Data Collection Question: What is the date and time that the ICH score was first performed at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date that the ICH score was first performed. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more initial ICH score dates (either different ICH assessments or corresponding with the same assessment), enter the earliest date.
- If the initial ICH score 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial ICH score date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the initial ICH score 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial ICH Score Date allows the case to be accepted into the warehouse.
- Use the time for which the ICH score was first performed. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different initial ICH score times (either different ICH assessments or corresponding with the same assessment), enter the earliest time.
- If the time of the first ICH score is a time prior to hospital arrival because the score was obtained by teleneurology or MD/APN/PA directly receiving the patient via life flight, use the Arrival Time for the score time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- Initial ICH Score Time refers to the time that the first ICH score was performed. If the time performed is mentioned in the body of a note, select the time performed rather than the time stamp on the note. If the only time documented with the score is the time stamp on the note, then select the time stamped. Examples:
  - Documentation indicates that the initial ICH score was done at 0920. Time stamp on the note is 1159. The abstractor should select 0920 for Initial ICH Score Time.
  - Documentation indicates that the ICH score done on arrival was 5. Patient arrived at your hospital 2100. Time stamp on the note is 2136. The abstractor should select 2100 for Initial ICH Score Time.
  - ICH score 5 [no time] documented. Time stamp on the note is 1513. The abstractor should select “1513 for Initial ICH Score Time.
- Do not use physician orders as they do not demonstrate the ICH score was done (in the ED this may be used if signed/initialed by a nurse).
- If the time of the first ICH score 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 time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial ICH score time was 3300. No other documentation in the medical record provides a valid time. Since the initial ICH score 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial ICH Score Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Admitting note

Guidelines for Abstraction

Inclusion: None

Exclusion: None

[Summary of Changes]

OPTIONAL COMPREHENSIVE: FUNC Score (ICH)

The FUNC (Functional outcome risk stratification) score assesses the patient for risk of functional impairment post-stroke. Enter a score of 0-11.

REQUIRED FOR COMPREHENSIVE: Was an initial Hunt and Hess scale done at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial Hunt and Hess Scale Performed

Collected For: CSTK-03

Definition: Documentation of the first Hunt and Hess scale that was done at this hospital. The Hunt and Hess scale is a grading system used to classify the severity of a subarachnoid hemorrhage based on the patient's clinical condition. The scale ranges from a score of 1 to 5. It is used as a predictor of prognosis/outcome with a higher grade correlating to a lower survival rate.

Grade - Description

1 (I) - Asymptomatic, mild headache, slight nuchal rigidity
2 (II) - Moderate to severe headache, nuchal rigidity, no neurologic deficit other than cranial nerve palsy
3 (III) - Drowsiness / confusion, mild focal neurologic deficit
4 (IV) - Stupor, moderate-severe hemiparesis
5 (V) - Coma, decerebrate posturing

Suggested Data Collection Question: Was an initial Hunt and Hess scale done at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (YES) Initial Hunt and Hess scale was done at this hospital.

N (No) Initial Hunt and Hess scale was not done at this hospital, OR Unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- The Hunt and Hess scale may be documented by the physician/APN/PA or nurse (RN).
- Hunt and Hess obtained by teleneurology and documented in the medical record, select 'YES'.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Admitting note

Guidelines for Abstraction

Inclusion:

- Hunt and Hess "1-5"
- Hunt and Hess Grade
- Hunt and Hess Scale
- Hunt & Hess "1-5"
- H/H "1-5"

- Hunt & Hess "1-5"/Fischer "X"
- SAH Grade "1-5"
- Grade "1-5" SAH

Exclusion: None

Summary of Changes

OPTIONAL COMPREHENSIVE: If yes, Hunt and Hess score

If the Hunt and Hess Scale was performed, what is the first score recorded by hospital personnel. Score documentation may range from 1 to 5.

Notes for Abstraction:

- Enter the total score of the first Hunt and Hess Scale performed within 6 hours of hospital arrival and prior to the initiation of any invasive intracranial procedure.
- First Hunt and Hess scale can be recorded by a physician/APN/PA or nurse.

1. Hunt WE, Hess RM. Surgical risk as related to time of intervention in the repair of intracranial aneurysms. J Neurosurg. 1968;28:14 –20..
2. Connolly ES, Jr., Rabinstein AA, Carhuapoma JR, Derdeyn CP, Dion J, Higashida RT, Hoh BL, Kirkness CJ, Naidech AM, Ogilvy CS, Patel AB, Thompson BG, Vespa P. Guidelines for the management of aneurysmal subarachnoid hemorrhage: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke. 2012;43:1711-1737.

Emergency Department Data, Admission Data

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the date and time that the Hunt and Hess Scale was first performed at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial Hunt and Hess Scale Date/Time

Collected For: CSTK-03

Definition: The month, date, year, and time (military time) that the Hunt and Hess scale was first performed at this hospital. The Hunt and Hess scale is a grading system used to classify the severity of a subarachnoid hemorrhage based on the patients clinical condition. It is used as a predictor of prognosis/outcome with a higher grade correlating to a lower survival rate.

Suggested Data Collection Question: What is the date and time that the Hunt and Hess scale was first performed at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date that the Hunt and Hess scale was first performed. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more initial Hunt and Hess scale dates (either different Hunt and Hess assessments or corresponding with the same assessment), enter the earliest date.
- If the initial Hunt and Hess scale 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial Hunt and Hess scale date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the initial Hunt and Hess scale 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial Hunt and Hess Scale Date allows the case to be accepted into the warehouse.

- Use the time for which the Hunt and Hess scale was first performed. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different initial Hunt and Hess scale times (either different Hunt and Hess assessments or corresponding with the same assessment), enter the earliest time.
- If the time of the first Hunt and Hess is a time prior to hospital arrival because the score was obtained by teleneurology or MD/APN/PA directly receiving the patient via life flight, use the Arrival Time for the score time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- Initial Hunt and Hess Scale Time refers to the time that the first Hunt and Hess Scale was performed. If the time performed is mentioned in the body of a note, select the time performed rather than the time stamp on the note. If the only time documented with the scale is the time stamp on the note, then select the time stamped. Examples:
  - Documentation indicates that the initial Hunt and Hess scale was done at 0920. Time stamp on the note is 1159. The abstractor should select 0920 for Initial Hunt and Hess Scale Time.
  - Documentation indicates that the Hunt and Hess done on arrival was III. Patient arrived at your hospital 2100. Time stamp on the note is 2136. The abstractor should select 2100 for Initial Hunt and Hess Scale Time.
  - Hunt & Hess 3 [no time] documented. Time stamp on the note is 1513. The abstractor should select 1513 for Initial Hunt and Hess Scale Time.
- Do not use physician orders as they do not demonstrate the Hunt and Hess scale was done (in the ED this may be used if signed/initialed by a nurse).
- If the time of the first Hunt and Hess scale 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 time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the initial Hunt and Hess scale time was 3300. No other documentation in the medical record provides a valid time. Since the initial Hunt and Hess scale 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Initial Hunt and Hess Scale Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Admitting note

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

OPTIONAL COMPREHENSIVE: WFNS SAH Grading Scale

The World Federation of Neurologic Surgeons grading scale is a scale for grading patients with a subarachnoid hemorrhage. Enter a value of 1-5.

Medications Prior to Admission

- ***Antiplatelet or Anticoagulant medications***
- ***Anticoagulation***
- ***Antihypertensive***
- ***Cholesterol-reducer***
- ***Anti-hyperglycemic medications***
- ***Antidepressant Medication***

Summary of Changes

Required: Antiplatelet or Anticoagulant Medication(s):

Is there documentation that the patient was on any antiplatelet or anticoagulant medication(s) prior to hospital arrival?

- Yes: There is documentation that the patient has taken any antiplatelet or anticoagulant medication(s) within the past week and prior to hospital arrival. See Table 4 & Table 5 for a list of antiplatelet and anticoagulant medications.
- No/ND: The patient has not been taking any antiplatelet or anticoagulant medication(s) within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.

Notes for Abstraction:

- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription, has not taken the medication in the past week or is otherwise noncompliant, answer “No/ND” to this data element.

Required: Antiplatelet Class: See Table 4 **for a list of antiplatelet medications**

Check the box if the patient was taking any antiplatelet medication(s) prior to arrival.

REQUIRED: Antiplatelet Medication (Specify):

If the patient was taking any antiplatelet medication(s) prior to arrival, select the specific medication.

- aspirin
- aspirin/dipyridamole (in separate formulations or as Aggrenox)
- clopidogrel (Plavix)
- prasugrel (Effient)
- ticagrelor (Brilinta)
- ticlopidine (Ticlid)
- Other Antiplatelet

REQUIRED: Anticoagulant Class: See Table 5 for a list of anticoagulant medications

Check the box if the patient was taking any anticoagulant medication(s) prior to arrival.

REQUIRED: Anticoagulant Medication (Specify):

- apixaban (Eliquis)
- argatroban
- dabigatran (Pradaxa)
- desirudin (Iprivask)
- edoxaban (Savaysa)
- fondaparinux (Arixtra)
- full does LMW heparin
- lepirudin (Refludan)
- rivaroxaban (Xarelto)
- Unfractionated heparin IV
- Wafarin (Coumadin)
- Other Anticoagulant

Admission Data, Hospitalization Data

Summary of Changes

REQUIRED FOR COVERDELL ONLY: Antihypertensive

Is there documentation that the patient was on any antihypertensive medication prior to hospital arrival?

- Yes: There is documentation that the patient has taken any antihypertensive medication within the past week and prior to hospital arrival
- No/ND: The patient has not taken any antihypertensive medications within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown

Notes for Abstraction:

- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription or is otherwise noncompliant, answer “No/ND” to this data element.
- See Table 1 for a list of antihypertensive medications

Admission Data, Hospitalization Data

Summary of Changes

REQUIRED: Cholesterol-Reducer

Is there documentation that patient was on a lipid-lowering medication prior to hospital arrival?

- Yes: There is documentation that the patient was on a lipid-lowering medication (cholesterol-reducing/controlling medication) prior to hospital arrival.
- No/ND: There is no documentation that the patient was on a lipid-lowering medication (cholesterol-reducing/controlling medication) prior to hospital arrival or unable to determine from medical record documentation.

Notes for Abstraction:

- Evidence in the medical record of a medication in the cholesterol-reducing class at a given dosage and frequency of administration is adequate to answer “Yes” to this data element. See Table 2 for a list of acceptable Lipid-Lowering (cholesterol-reducing) medications.
- If there is documentation that the patient was on a lipid-lowering medication at home but there is indication it was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost), select “Yes”.
- When conflicting information is documented in a medical record, select “Yes”.
- Refer to Table 2 for a comprehensive list of Lipid-Lowering (cholesterol-reducing) medications.

Example:

- Patient 120a is admitted to the in-patient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. Data entry will be to check "No/ND".
- Patient 120b says they are on a cholesterol pill, but cannot identify the drug name or dose. Date entry will be to check "Yes".

Admission Data, Hospitalization Data

Summary of Changes

Anti-Hyperglycemic Medications

Collected For: Target: Type 2 Diabetes

Definition: Documentation that the patient was on any anti-hyperglycemic medication prior to arrival.

Question: Is there documentation that the patient was on any anti-hyperglycemic medication prior to hospital arrival?

Format: Single Select

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any anti-hyperglycemic medication within the past week and prior to hospital arrival.
- No/ND: The patient has not taken any anti-hyperglycemic medications and/or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription or is otherwise noncompliant, answer "No" to this data element.
- Example: Patient 130a is admitted to the inpatient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and fursoemide. His metformin is held but all other medications are continued. Data abstractor would select "Yes."

Suggested Data Source:

- Admission Data
- Hospitalization Data

Additional Notes/ Guidelines for Abstraction: N/A

Summary of Changes

If yes (Anti-Hyperglycemic), select medications

Collected For: Target Type 2 Diabetes

Definition: Documentation of the type of anti-hyperglycemic medication the patient was on prior to hospital arrival.

Question:If yes, the patient was on any anti-hyperglycemic medication prior to arrival select the medication(s).

Format: Multi-Select

Allowable Values:

- DPP-4 Inhibitors
- GLP-1 Receptor Agonist
- Insulin
- Metformin
- SGLT2 Inhibitor
- Sulfonylurea
- Thiazolidinedione
- Other oral agents
- Other injectable/ subcutaneous agents

Notes for Abstraction:

- Select the class of anti-hyperglycemic medication(s) the patient is prescribed upon arrival to your hospital.
- Reference Table 7 for list of anti-hyperglycemic medications and classes.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes/ Guidelines for Abstraction: N/A

Summary of Changes

OPTIONAL: Antidepressant Medication

Definition: Depression is a mood disorder in which feelings of sadness, loss, anger, or frustration interfere with everyday life for an extended period. Is there documentation that the patient was on any antidepressant medication prior to hospital arrival?

Data Collection Question: Is there documentation that the patient was on any diabetic medication prior to hospital arrival?
Format: Single-select
Allowable Values:
- Yes
- No/ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any antidepressant medication within the past week and prior to hospital arrival.
- No/ND: The patient has not taken any antidepressant medications within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription or is otherwise noncompliant, answer "No/ND" to this data element.
- Antidepressant classes include tricyclic and tetracyclic antidepressants [TCAs; imipramine (Tofranil), amitriptyline (Elavil), nortriptyline (Pamelor), doxepin (Sinequan)]; selective serotonin reuptake inhibitors [SSRIs; Citalopram (Celexa), Escitalopram (Lexapro), Fluoxetine (Prozac), Paroxetine (Paxil, Pexeva) Sertraline (Zoloft)]; serotonin and norepinephrine reuptake inhibitors (SNRIs; Duloxetine (Cymbalta), Venlafaxine (Effexor XR), Desvenlafaxine (Pristiq)]; monoamine oxidase inhibitors [MAOIs Isocarboxazid (Marplan), Phenelzine (Nardil),Selegiline (Emsam),Tranylcypromine (Parnate)]; norepinephrine reuptake inhibitors [NRIs; Bupropion (Wellbutrin), Teniloxazine (Lucelan), Reboxetine (Edronax]; norepinephrine-dopamine reuptake inhibitors (NDRIs), serotonin receptor antagonists/agonists, and 2-adrenergic receptor antagonists.

Suggested Data Source:
- Emergency department record
- History and physical
- Admitting note

Vaccinations & Testing

COVID-19 Vaccination

Collected For: GWTG

Definition: Documentation whether or not the patient received a COVID-19 vaccination.

Question For: Did the patient receive a COVID-19 vaccination prior to or during hospitalization?

Format: Single Select

Allowable Values:

- COVID-19 vaccine was given during this hospitalization.
- COVID-19 vaccine was received prior to admission, not during this hospitalization.
- Documentation of patient's refusal of COVID-19 vaccine
- Allergy/ sensitivity to COVID-19 vaccine or if medically contraindicated
- Vaccine not available
- None of the above/ Not documented/ UTD.

Notes for Abstraction:

- Select the response that best fits the patient's vaccination status.
- If a patient received the vaccine as part of a COVID-19 vaccine trial, then select the appropriate option above (during hospitalization or Prior to hospitalization) and document "Yes" for the question below, "Is there documentation that this patient was included in a COVID-19 vaccine trial?".

Suggested Data Sources:

- Admission Data
- Discharge Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

COVID-19 Vaccination Date

Collected For: GWTG

Definition: Documentation of the date of the COVID-19 vaccination

Question For: What date was the COVID-19 vaccination administered?

Format: MM/DD/YYYY

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2012 - Current Year)
- Unknown

Notes for Abstraction:

- Only report the date the vaccine was given if it was administered during this hospitalization.
- Document the Date of the first dose of vaccine administration
- Select "Unknown" if the date is not documented.

Suggested Data Sources:

- Admission Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

COVID-19 Vaccine Manufacturer

Collected For: GWTG

Definition: Documentation of the manufacturer of the COVID-19 vaccine.

Question For: Who was the manufacturer of the COVID-19 vaccine?

Format: Single Select

Allowable Values:

- AstraZeneca
- Johnson & Johnson's / Janssen
- Moderna
- Novavax
- Pfizer
- Other
- Not Documented

Notes for Abstraction:

- N/A

Suggested Data Sources:

- Admission Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Did the patient receive both doses of vaccine? (if applicable)

Collected For: GWTG

Definition: Documentation that the patient received both doses of a two-dose COVID-19 vaccine.

Question For: Did the patient receive both doses of vaccine? (if applicable)

Format: Single Select

Allowable Values:

- Yes
- No
- Not Applicable

Notes for Abstraction:

- Select "No" if the patient has received only one dose of a two-dose COVID-19 vaccine.
- Select "Not applicable" if the COVID-19 vaccine the patient received only requires one dose (e.g., Johnson & Johnson's / Janssen).

Suggested Data Sources:

- Admission Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Is there documentation that this patient was included in a COVID-19 vaccine trial?

Collected For: GWTG

Definition: Documentation of if the patient was included in a COVID-19 vaccine trial.

Question For: Is there documentation that this patient was included in a COVID-19 vaccine trial?

Format: Single Select

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- N/A

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Influenza Vaccination

Collected For: GWTG

Definition: Documentation whether or not the patient received an influenza vaccination.

Question For: Did the patient receive an influenza vaccination prior to or during hospitalization?

Format: Single Select

Allowable Values:

- Influenza vaccine was given during this hospitalization during the current flu season.
- Influenza vaccine was received prior to admission during the current flu season, not during this hospitalization.
- Documentation of patient's refusal of influenza vaccine
- Allergy/ sensitivity to influenza vaccine or if medically contraindicated
- Vaccine not available
- None of the above/ Not documented/ UTD.

Notes for Abstraction:

- Select the response that best fits the patient's vaccination status.

Suggested Data Sources:

- Admission Data

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Hospitalization Tab:

Symptom Timeline

- ***Date/Time patient last known to be well?***
- ***Date/Time of discovery of stroke symptoms?***

- ***Time of Discovery same as Last Known Well***

REQUIRED: Date/Time patient last known to be well?

Required Field, Modification to response required for TJC/CM form group
TJC/CM User Note: Adjustments need to be made on the Core Measure tab for patients with transient symptoms that fully resolve and later return. **Per TJC, you should enter the earliest last known well for this type of patient (those that have transient symptoms that fully resolve and later return while in the ED).**Per STK-4 specifications, time last known well must be before the arrival time or the patient will be assigned to category 'X' for missing/invalid data.

To meet both GWTG and TJC definitions, for cases such as these, click into the Core Measure tab and change the auto populated response for the data element "What was the date and time at which the patient was last known to be well or at his or her baseline state of health?" to the earliest time recorded following the appropriate hierarchy.

Definition: The date and time at which the patient was last known to be without the signs and symptoms of the current stroke or at his or her prior baseline.

Format: Single-select
- MM = Month (01-12)
- DD = Day (01-31)
- HH = Hour (00-23)
- MM = Minutes (00-59)
- UTD = Unable to Determine

Allowable Values: Date and Time (military time) or UTD

Notes for Abstraction:

- The purpose of this data element is to identify the earliest possible time that stroke symptoms began. This is sometimes known as "Onset Time" although the use of this term has been confusing to many in the past. If a patient experiences the onset of their symptoms in the company of another individual who can verify that the patient was functioning normally up until the time of start of symptoms, then in this patient the time "last known well" is also the time of symptom discovery. In many cases, however, no one is present at the exact start of symptoms. In this situation, we need to document the time when symptoms were first discovered (time of symptom discovery) as well as the time that the patient was last known to be well or at their baseline (time last known well), and record both of these.
- The time last known well should be the time closest to the time of discovery for which we have clear evidence that the patient was at their previous baseline. Depending on the type of stroke symptoms, this might be established by a telephone or in person conversation. Family members, EMS personnel, and others, often mistakenly record the time of symptom discovery as the time the patient was last known well. It is imperative to distinguish these two times to avoid inappropriate use of IV alteplase (Intravenous Tissue Plasminogen Activator) in patients who are recently discovered to have symptoms but are many hours (>3 hrs) from their time of last being well.
- If a stroke "onset time" is listed in the medical record, without reference to the circumstances preceding its detection, then it should be assumed to be the time "last known well". Enter this time in the specified format.
- If there is a specific reference to the patient having been discovered with symptoms already present, then this "onset time" should be treated as a "time of symptom discovery" rather than a time of "last known well". If no time of "last known well" can be determined, then "Unknown" should be selected for time "last known well".
- When a time of discovery is documented, but the start of stroke symptoms is not witnessed and no time "last known well" is documented, then "Unknown" should be selected for time "last known well".
- When the start of stroke symptoms is clearly witnessed, then the time "last known well" is identical to the time of symptom discovery.
- If the time of "last known well" is documented as being a specific number of hours prior to arrival (e.g., 2 hours ago) rather than a calendar time, subtract that number from the time of hospital or ED arrival and enter that time as the time "last known well."
- If the time of "last known well" is noted to be a range of time prior to hospital or ED arrival (e.g., "2 - 3 hours ago"), assume the maximum time from the range (e.g., 3 hours), and subtract that number of hours from the time of arrival to compute the time "last known well".
- If there are multiple times of "last known well" documented, either because subsequent more accurate information became available or because of different levels of expertise in sorting out the actual time of "last known well", use the time recorded according to the following hierarchy:
    1. neurology
    2. admitting physician
    3. emergency department physician
    4. ED nursing notes
    5. EMS
- If multiple date/times of last know well are documented by the same provider, use the earliest date recorded by that provider.
- The purpose of 'last known well' is to conservatively identify/estimate time of symptom onset. Use "last known well" to identify when the patient was either last seen or last known to be well (well means at the patient's baseline or usual state of health). This may change with various observers. If the last known well time cannot be identified, then indicate that last known well time and/or date is not known.
- In certain selected cases, patients may have transient symptoms which resolve and are later followed by symptoms that do not resolve and result in admission to the hospital. If there is documentation of one or more symptomatic episodes of transient stroke symptoms **and** documentation of symptom resolution between episodes (e.g. patient returns to baseline), then enter the date/time of the most recent (last) episode here (even if it occurs after hospital arrival and prior to hospital admission). The following terms may be used as documentation that a patient has experienced transient symptoms and has subsequently returned to baseline:

        - "baseline"; "symptoms resolved/symptom free/no further symptoms"; "without further stroke symptoms"; "complete reversal of symptoms"; "NIHSS = 0"; "resolved TIA"; "deficit free/no deficits".
        - The following terms would constitute documentation of recurrence of stroke symptoms.
            - "symptoms returned;" "new onset of symptoms;" "recurrence of symptoms;" "increase NIHSS".
        - **Example**: Patient with right sided weakness at home on 08/31/2012 at 0800. Upon arrival to the hospital, physician documents that the patient is symptom free and documents an NIHSS of zero. Facial droop noted at 1030 while the patient is in the ED. Repeat NIHSS performed and documented as 3. Enter date/time of 08/31/2012 1030.
    - **TJC/CM User Note**: Adjustments need to be made on the Core Measure tab for patients with transient symptoms that fully resolve and later return. Per TJC, you should enter the earliest last known well for this type of patient (those that have transient symptoms that fully resolve and later return while in the ED). Per STK-4 specifications, time last known well must be before the arrival time or the patient will be assigned to category 'X' for missing/invalid data. In order to meet both GWTG and TJC definitions, for cases such as these, click into the Core Measure tab and change the auto populated response for the data element "What was the date and time at which the patient was last known to be well or at his or her baseline state of health?" to the earliest time recorded following the appropriate hierarchy.

Examples:

1. **Patient 140a arrived in ED via EMS on 12/10/20XX at 14:43 accompanied by her daughter. Her daughter states that patient was found at 2:00 pm "in her chair slumped over, I couldn't understand what she was saying and she was drooling from her mouth - and her face didn't look right." On further questioning by the neurologist, the daughter says her mother ate lunch at 12:30 pm and then went to sit in her chair where she was later found as noted above. Date and Time of last known well are known as 12/10/20XX 12:30, and Date and Time of discovery are known as 12/10/20XX 14:00.**
2. **Patient 140b arrived in the ED with his son on 11/10/20XX 8:09 am. His son states that he last saw his father last night at 8:30 pm. His father lives alone. His father woke up this morning about 6:30 am and noticed that his right arm was weak. It did not get better, so patient called his son at 7:00 am, who came over right away and was concerned that his father was having a stroke, but his father could walk and talk OK. Daughter arrives and states that she had talked to her father on the phone last night around 9:30 pm and that he didn't mention anything about a problem with his arm. Date and Time of last known well are known as 11/09/20XX 21:30, and Date and Time of discovery are known as 11/10/20XX 06:30.**
3. **Patient 140c was eating dinner with his wife tonight after they finished watching the nightly news on TV "when his arm began shaking and he couldn't hold onto his fork or his water glass or anything. He has never done this before." Their nightly news show is on from 6:00 to 6:30 pm. She called the ambulance right away. ED arrival date and time is 11/29/20XX 7:53 pm. Date and Time of last known well are known as 11/29/20XX 18:30, and date of discovery is known as 11/29/20XX with an unknown time. There is no reference to time of discovery in this scenario, so it remains unknown to the abstractor. Above the Date/Time field, select "MM/DD/YYYY" and just enter 11/29/20XX.**
4. **Patient 140d states she has been having numbness come and go in her left arm for the past week, but it always went away. Today the numbness started about 4 hours before she came to the ED and didn't go away so she decided to get it checked. She thinks her arm isn't completely numb, but it feels heavy, and she can't hold a pen tightly. ED arrival time is 5:15 pm on 09/09/20XX. Date and Time of last known well are known as 09/09/20XX 13:15, and Date and Time of discovery are known as 09/09/20XX 13:15.**
5. **Patient 140e was found on the floor beside the commode by the charge nurse at Starlight Nursing Home on her night rounds at 12:45 am on 12/01/20XX. He wasn't able to talk or move, but his left leg was shaking. He is normally quite alert and normally walks with his walker. Date and Time of last known well are known as 11/30/20XX 21:00, and Date and Time of discovery are known as 12/01/20XX 00:45.**
6. **A 58 y/o woman was last known normal at 7:00 pm and was found at 7:30 pm with right hemiparesis and aphasia. She is transferred to your hospital from another hospital having IV alteplase initiated on 06/10/20XX at 9:30 pm and arrived at your hospital at 10:15 pm. Date and Time of last known well are known as 06/10/20XX 19:00, and Date and Time of discovery are known as 06/10/20XX 19:30.**
7. **A 55 year old male had a brief episode of slurred speech at 6am on 5/10/20XX. The episode resolved quickly and he returned completely to normal. At Noon on that same day (5/10/20XX) he developed one sided weakness and slurred speech which persisted when he arrived to your hospital. Date and Time of last known well are known as 5/10/20XX 12:00.**

Admission Data, Hospitalization Data

[Summary of Changes]

REQUIRED: Date/Time of discovery of stroke symptoms? (When was the patient first discovered to have the current stroke symptoms?)

Indicate the date and time of discovery of patient's symptoms (i.e., when the patient was found with symptoms). This should be the earliest time that patient was known to have symptoms. This date and time should not vary. If the event was witnessed, then the last known well date and time and the discovery date and time will be identical. Record both, even if identical (checking the box for Time of Discovery same as Last Known Well will automatically set the discovery Date/Time with the same Date/Time as "last known well".)

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

See examples from Last Known Well

Admission Data, Hospitalization Data

[Summary of Changes]

OPTIONAL: Time of Discovery same as Last Known Well

When the onset of symptoms is clearly witnessed, then the time "last known well" is identical to the time of symptom discovery. If this is the case, check this box to automatically fill-in discovery Date/Time with the same Date/Time as "last known well".

Brain Imaging

OPTIONAL: Was brain or vascular imaging performed prior to transfer to your facility?

(Was brain or vascular imaging performed at an outside hospital prior to transfer to your facility as part of the initial evaluation?)

- Yes: Patient did receive brain or vascular imaging at an outside hospital prior to transfer to your facility as part of the acute evaluation.
- No/ND: Patient did not receive any brain or vascular imaging at an outside hospital prior to transfer to your facility.

Notes for Abstraction:

- This element is only available in the MER/CSTK form groups.
- The element is enabled in ischemic stroke patients who are transferred to your facility from an outside hospital.
- Select "Yes" if imaging was conducted by the outside hospital as part of the patient's acute evaluation for ischemic stroke.
- If you are unable to obtain any information indicating brain or vascular imaging from the hospital at which the patient received brain or vascular imaging prior to transfer, select "No/ND."
- If you are unable to determine that brain or vascular imaging was done from the outside hospital's documentation, but are not able to determine the specific type of imaging. Select "Yes" to "Did patient receive brain or vascular imaging prior to transfer to your hospital". You would then answer: "Image Type not documented" for the subsequent data element "If yes, which imaging tests were performed?"
- Note that the Federal Privacy Rule (HIPAA) does not restrict the communication of protected health information when performed for quality assurance purposes.

Admission Data, Hospitalization Data, especially Radiology notes

Summary of Changes

OPTIONAL: If yes, which imaging tests were performed?

(Indicate which imaging tests were performed at the outside hospital prior to transfer to your facility)

- CT
- CTA*
- CT Perfusion*
- MRI
- MRA*
- MR Perfusion*
- Image type not documented

Notes for Abstraction:

- This element is only available in the MER/CSTK form groups.
- The element is enabled in ischemic stroke patients who are transferrred to your facility from an outside hospital and who have "Yes" selected for "Was brain or vascular imaging performed prior to transfer to your facility?".
- If you are unable to determine the specific type of imaging completed at the outside hospital, but know imaging was done. Select "Yes" to "Did patient receive brain or vascular imaging prior to transfer to your hospital". You would then answer: "Image Type not documented" for the subsequent data element "If yes, which imaging tests were performed?"
- Below are definitions of the different imaging modalities:
  - CT: Non-contrast computed tomography
  - CTA: Computed tomogrpahy Angiography*
  - CT Perfusion: Computed tomography perfusion*
  - MRI: Magnetic Resonance Imaging
  - MRA: Magnetric Resonance Angiography*
  - MR Perfusion: Magnetric Resonance with Perfusion*
  - Image type not documented

Admission Data, Hospitalization Data, especially Radiology notes

Summary of Changes

OPTIONAL: Date/time 1st vessel or perfusion imaging initiated prior to transfer?

(The date and time that additional imaging was performed at the outside hospital, prior to transfer to diagnose large vessel occlusion (LVO)).

- Date: MM/DD/YYYY
- Time: HH:MM 24-hour clock (military time)
- Unknown
- Record the date and time that additional imaging was performed at the outside hospital, prior to transfer, to diagnose large vessel occlusion (LVO).
- This is the date and time for advanced imaging ONLY. *This date/time element will only enable if the imaging tests performed at the outside hospital include CTA, CT Perfusion, MRA or MR Perfusion.
- If you cannot find the date and time the advanced imaging was performed prior to transfer, select "Unknown" from the date/time drop down.

Admission Data, Hospitalization Data, especially CT study and Radiology notes

Summary of Changes

REQUIRED: Brain imaging at your hospital for this episode of care?

(Was brain imaging performed at your hospital after arrival as part of the initial evaluation for this episode of care or this event?)

- Yes: Patient did receive brain imaging at your hospital/facility for this event
  - If yes, indicate the type of brain imaging completed (select all that apply)
  - CT
  - MRI
- No/ND: Patient did not receive any brain imaging at your hospital/facility or did not receive imaging at an outside hospital prior to transfer
- NC: Patient had outside brain imaging prior to transfer from another hospital, and results for that imaging are recorded in the record

Notes for Abstraction:

- This data element is looking to capture information around the initial brain image for this event (regardless if it is done at your facility or not). If a second brain image is completed at your hospital, after an initial imaging has been completed at an outside hospital, you would still select NC here and would record the findings of the initial brain image that was performed at the outside facility under Interpretation of first brain image after symptom onset, done at any facility.
- For inpatient stroke, use the first brain image performed after discovery of stroke symptoms in the hospital. If patient had brain imaging performed in the hospital prior to stroke symptom onset, use the brain imaging performed after discovery of stroke symptoms in the hospital.
  - If the patient arrives to the hospital with transient symptoms that resolve and brain imaging is completed, but later in the hospital stay the patient has new onset stroke symptoms and meets criteria to be entered as an inpatient stroke, new brain imaging should be performed. If new brain imaging is not performed, select "No/ND." Do NOT use brain imaging performed for the prior resolved event.

Example: Patient 150a presented to the ED with a brief episode of slurred speech. The patient had a CT and lab tests completed. Symptoms completely resolved while in the ED and the patient was discharged from the ED with complete recovery of neurological symptoms. The patient returned to the ED 3 hours later and no repeat CT or lab tests were completed, but the previous CT and labs are used to determine course of treatment. Select NC for Brain Imaging Completed at this hospital.

Admission Data, Hospitalization Data, especially Radiology notes

Summary of Changes

REQUIRED: Date/Time Brain Imaging Initiated

Enter date and time of the initial non-contrast CT/MRI of the head performed at your institution from the DICOM header information. This is the date and time printed on the hard copy of the film or available when reviewing the image digitally. For CT studies, use the date-time stamp on the non-contrast CT, not from CT-angiography or CT-perfusion studies, if they were done. Record only CT/MRI date/time if the first study was performed at your hospital. Please note, use the time indicated on the radiology report only if it clearly indicates the time of study initiation or completion (time of initiation preferred) and NOT time of scheduling, dictation or reporting.

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Admission Data, Hospitalization Data, especially CT study and Radiology notes

Summary of Changes

REQUIRED FOR COVERDELL ONLY: Interpretation of First Brain Image after Symptom Onset (done at any facility):

Hemorrhage includes any intracranial hemorrhagic stroke. It is important that only new hemorrhages thought to be responsible for the current acute event should be used if checking hemorrhage. Do not mark hemorrhage for old

hemorrhages found on imaging, which are not responsible for the current event.

- Acute Hemorrhage
- No Acute Hemorrhage
- Not available

Admission Data, Hospitalization Data, especially Radiology notes

REQUIRED and REQUIRED FOR COVERDELL: Was Acute Vascular or reperfusion imaging (CTA, MRA, DSA) performed at your hospital?
Required field for TJC or CSTK or users that have the "Advanced Stroke Care Tab" enabled

Record if additional imaging was performed in the acute evaluation for the purpose of diagnosing large vessel occlusion (LVO) for the patient. Intent of the element is to determine if detection of large-vessel occlusion by means of noninvasive intracranial vascular imaging was performed prior to initiating clinical decisions for treatment. Most large strokes are caused by occlusion in ≥ 1 large vessel.

Data Collection Question: Was vascular imaging (e.g. CTA, MRA, DSA) performed for diagnosing large vessel occlusion(s) prior to initiating treatment for acute ischemic stroke?

Format: Single-select

Allowable Values:

- **Yes**
- **No**

Notes for Abstraction:
- Select **Yes** if patient had noninvasive intracranial vascular imaging performed for diagnosing large vessel occlusion(s) prior to initiating treatment for acute ischemic stroke.
- Select **No** if there was no advanced imaging assessed at your hospital for diagnosing large vessel occlusion(s) prior to initiating treatment for the patient.
- Select **No** if no documentation in the patient's medical record or unknown.

Suggested Data Source:
- Radiology Reports/Notes
- CT Study
- Diagnostic test reports

CONDITIONALLY REQUIRED: If yes, type of imaging (select all that apply):

Below are response options for the advanced imaging modalities:

- CTA: Computed tomography Angiography*
- CT Perfusion: Computed tomography perfusion
- MRI: Magnetic Resonance Imaging
- >MRA: Magnetic Resonance Angiography
- MR Perfusion: Magnetic Resonance with Perfusion
- DSA (catheter angiography)
- Image type not documented

Admission Data, Hospitalization Data, especially CT study and Radiology notes

Summary of Changes

CONDITIONALLY REQUIRED: Date/Time 1st vessel or perfusion imaging initiated at your hospital

(The date and time that additional imaging was performed at your hospital as part of the acute evaluation for the purpose of diagnosing large vessel occlusion (LVO))

- Date: MM/DD/YYYY
- Time: HH:MM 24-hour clock (military time)
- Unknown
- Record the date and time that additional imaging was performed as part of the acute evaluation for the purpose of diagnosing large vessel occlusion (LVO).
- This is the date and time for advanced imaging ONLY.
- If you cannot find the date and time the advanced imaging was performed in the medical record documentation, select "Unknown" from the date/time drop down.

Admission Data, Hospitalization Data, especially CT study and Radiology notes

Summary of Changes

Useful Background Information form 2013 AHA/ASA Guidelines:

CT Angiography
Helical CT angiography (CTA) provides a means to rapidly and noninvasively evaluate the intracranial and extracranial vasculature in acute, subacute, and chronic stroke settings and thus to provide potentially important information about the presence of vessel occlusions or stenoses. The accuracy of CTA for evaluation of large-vessel intracranial stenoses and occlusions is very high and in some cases its overall accuracy approaches or exceeds that of digital subtraction angiography (DSA).
The sensitivity and specificity of CTA for the detection of intracranial occlusions ranges between 92% and 100% and between 82% and 100%, respectively, with a positive predictive value of 91% to 100%.
Because CTA provides a static image of vascular anatomy, it is inferior to DSA for the demonstration of flow rates and direction.

MR Angiography
Intracranial MR angiography (MRA) is performed in combination with brain MRI in the setting of acute stroke to guide therapeutic decision making. There are several different MRA techniques that are used for imaging intracranial vessels.
They include 2-dimensional time of flight (TOF), 3-dimensional TOF, multiple overlapping thin-slab acquisition, and contrast-enhanced MRA.
Intracranial MRA with nonenhanced TOF techniques has a sensitivity ranging from 60% to 85% for stenoses and from 80% to 90% for occlusions compared with CTA or DSA.
Typically, TOF MRA is useful in identifying acute proximal large-vessel occlusions but cannot reliably identify distal or branch occlusions.

Digital Subtraction Angiography
DSA remains the "gold standard" for the detection of many types of cerebrovascular lesions and diseases. For most types of cerebrovascular disease, the resolution, sensitivity, and specificity of DSA equal or exceed those of the noninvasive techniques, including for arterial stenoses.
However, if noninvasive imaging provides firm diagnostic findings, cerebral angiography may not be required.
DSA is an invasive test and most likely will not be the initial imaging modality for emergency intracerebral evaluation of large-vessel occlusion in stroke because of the time necessary to perform the examination; a CTA or MRA can be performed in an additional 2 to 4 minutes during initial stroke evaluation (in a multimodal evaluation in process) and can obviate the need for catheter angiography.

Source: Jauch EC, Saver JL, Adams HP Jr, Bruno A, Connors JJ, Demaerschalk BM, Khatri P, McMullan PW Jr, Qureshi AI, Rosenfield K, Scott PA, Summers DR, Wang DZ, Wintermark M, Yonas H; on behalf of the American Heart Association Stroke Council, Council on Cardiovascular Nursing, Council on Peripheral Vascular Disease, and Council on Clinical Cardiology. Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke. 2013; 44:870–947.

CONDITIONALLY REQUIRED: Was a target lesion (large vessel occlusion) visualized?

Required field for CSTK or MER users that have the "Advanced Stroke Care Tab" enabled.
Optional for GWTG-Stroke sites.

Definition: Record if a proximal large vessel occlusion (LVO) was identified upon reviewing the advanced brain imaging (e.g. CTA, MRA, DSA). Intent of the question is to determine if patient had a large vessel intracranial occlusion in the imaging.

Additional Information: 2015 Endovascular Guidelines: For patients who otherwise meet criteria for endovascular treatment, a noninvasive intracranial vascular study is recommended during the initial imaging evaluation of the acute stroke patient, but should not delay IV alteplase if indicated.

Data Collection Question: Was there a presence of a large vessel occlusion upon reviewing the vascular imaging (e.g. CTA)?

Format: Single-Select

Allowable Values:
- **Yes:** There was presence of large vessel occlusions identified (or visualized) upon reviewing the vascular imaging.
- **No/ND:** There were no large vessel occlusions identified (or visualized) upon reviewing the vascular imaging **OR** No documentation in the medical record that indicates presence of large vessel occlusion for vascular imaging completed for this episode of care.

Notes for Abstraction:
- An occlusion is complete or near complete blockage of the artery.
- A "target lesion" is referring to a proximal large vessel occlusion.
- A large-vessel occlusion typically causes severe stroke and independently predicts poor neurological outcome, and is a stronger predictor of "neurological deterioration." Thus, detection of large-vessel occlusion by means of noninvasive intracranial vascular imaging greatly improves the ability to make appropriate clinical decisions.

Suggested Data Source:
- Consultation notes
- Radiology Notes
- CT Study

CONDITIONALLY REQUIRED: If yes, select site of occlusion:

Required field for CSTK or MER users that have the "Advanced Stroke Care Tab" enabled and CSTK Users, Unique to GWTG

Optional for GWTG-Stroke sites.

Note:The response option for this question may be different for TJC element (Site of Primary Vessel Occlusion).

Definition: If the results of vascular imaging indicated presence of large vessel occlusion(s), record all the sites where the large vessel occlusions were visualized. Please note that most large strokes are caused by occlusion in ≥ 1 large vessel.

Data Collection Question: For patients who had a vascular imaging study (e.g., CTA, MRA) completed and the results indicated a presence of a large vessel occlusion, where are the specific locations for the large vessel occlusion(s)?

Format: Multi-Select field.

Allowable Values:

- Internal Carotid Artery (ICA)
  - Intracranial ICA
  - Cervical ICA
  - Other/UTD
- Middle Cerebral Artery (MCA)
  - M1 Segment
  - M2 Segment
  - Other/UTD
- Basilar Artery
- Vertebral Artery
- Other cerebral artery branch

Notes for Abstraction:

- Select all areas where a large vessel occlusion was visualized in the vascular imaging study..
- If you select the parent response options (ICA or MCA), then you are required to select one of the options underneath (intracranial ICA, cervical ICA, M1, M2, or Other/UTD).
- Select **Other/UTD** when not able to determine which vessel segment or artery not listed (e.g., M3, M4, etc.).
- Select **Other cerebral artery branch** when the artery is not in the current list (e.g., ACA, PCA, etc.).

Suggested Data Source:

- Diagnostic test records
- Brain imaging reports
- Radiology reports

Additional Time Tracker

- ***Date/Time Stroke Team Activated***
- ***Date/Time Stroke Team Arrive***
- ***Date/Time of ED Physician Assessment***
- ***Date/Time Neurosurgical Services Consulted***
- ***Date/Time Brain Imaging Ordered***
- ***Date/Time Brain Imaging Interpreted***
- ***Date/Time IV alteplase Ordered***
- ***Date/Time Lab Tests Ordered***
- ***Date/Time Lab Tests Completed***
- ***Date/Time ECG Ordered***
- ***Date/Time ECG Completed***
- ***Date/Time Chest X-ray Ordered***
- ***Date/Time Chest X-ray Completed***

General notation for this section:

- Only respond to the data elements in this section for acute stroke or TIA patients that present initially to your facility. This section is not applicable to stroke patients received in transfer from an outside facility.
- For all elements, response options are in MM/DD/YYYY HH24:MI format. You may enter a precision of date and time, date alone, or unknown. A *set all active Date/Time fields* check box is present at the top of the section. When checked, it will auto-populate all dates within the Additional Time Tracker section with the patient's arrival date. Please be certain that if this box is checked, and a patient receives treatment on a date that is later than the arrival date (e.g. patient arrives on 10/10/20XX at 23:45 and IV alteplase is ordered on 10/11/20XX at 00:20) that you go in and correct the auto-set date.

OPTIONAL: Date/Time Stroke Team Activated

Enter the earliest documented date and time that the Stroke Team was activated.

- Date: MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- The stroke team is a designated group of practitioners with knowledge and expertise in the diagnosis and treatment of cerebrovascular disease. It may consist of, but is not limited to physicians, mid-level providers, nurses, and trainees.
- May be referred to as Acute Stroke Team (AST) activation, Stroke Code Team activation, Code Stroke, Stroke Alert, etc.
- Acute stroke teams can be activated or notified in a variety of ways including by telephone or pager system. A best practice would include a single call activation system. Visit the Target: Stroke webpage to access stroke clinical resources and best practices.
- Select "NA" if the Stroke Team was not activated at your hospital.

OPTIONAL: Date/Time Stroke Team Arrived

Enter the earliest documented date and time that the Stroke Team arrived.

- Date: MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- Arrival may be classified as the time that evaluation and management by the stroke team first began. This may be in-person at the bedside, by telephone, or by telemedicine (as per protocol).
- A telephone call acknowledging that the stroke team has been consulted does not qualify as evaluation and management by the stroke team.
- Select "NA" if the patient was not evaluated by members of the stroke team.

Examples:

- Patient presents to the ED on 02/25/20XX at 09:55am and is seen by the triage nurse and then by the ED resident, who is NOT part of the acute stroke team. The resident makes the decision to activate a stroke alert. The stroke team is paged, and the stroke nurse calls back at 10:05am to acknowledge that the team is coming to the ED. The stroke team nurse arrives in the ED at 10:10am and the Neurologist arrives at 10:12am. The date time/time of stroke team arrival should be documented as 8/31/20XX 10:10.
- Patient arrives in the ED on 08/10/20XX at 11:05am. The ED physician evaluates the patient at 11:10am and calls the neurologist at home at 11:15am to discuss the case and receive recommendations. The date/time stroke team arrival should be documented as 08/10/20XX 11:15.

OPTIONAL: Date/Time of ED Physician Assessment

Enter the earliest documented date and time that an emergency department physician performs an assessment for a suspected stroke patient at your hospital.

- Date: MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

OPTIONAL: Date/Time Neurosurgical Services Consulted

Enter the earliest documented date and time that neurosurgical services were consulted at your hospital.

- Date: MM/DD/YYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- Neurosurgical services could include: physicians, mid-level providers, or trainees.
- Includes consults with neurosurgical personnel at outside facilities (e.g. facilities with neurosurgical services).
- Select "NA" if neurosurgical services were not consulted.

OPTIONAL: Date/Time Brain Imaging Ordered

Enter the earliest documented date and time that the initial/first brain image was ordered at your hospital.

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- CT or MRI qualifies as brain imaging
- Enter CT or MRI date/time only if the first study was performed at your hospital. If a patient had outside brain imaging prior to transfer from another hospital, select "NA."
- Brain image order time may be obtained from, but is not limited to, computerized or manual order entry systems, emergency department notes, or radiology logs. A specific order time must be documented–mention of the need for imaging without an order date/time is not sufficient.

OPTIONAL: Date/Time Brain Imaging Interpreted

Enter the earliest documented date and time at which the initial/first imaging results were made available to the treating team.

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- CT or MRI qualifies as brain imaging
- Enter CT or MRI interpretation date/time only if the first study was performed at your hospital. If a patient had outside brain imaging prior to transfer from another hospital, leave this element blank.
- Results must be interpreted by a physician such as a radiologist, neurologist, or others with experience and expertise in interpreting CT and/or MRI.
- Interpretation of the brain image does not have to be done on site. It can be performed off site by teleradiology.
- If a patient had outside brain imaging prior to transfer from another hospital, select "NA."

Example: Patient presents to the ED on 02/25/20XX at 09:55am. CT scan is initiated at 10:00am. At 10:10am the treating neurologist documents that the CT scan is consistent with acute stroke and does not preclude treatment with IV alteplase. At 10:40am an official radiology interpretation confirms these findings and the radiologist documents that the treating neurologist was notified. Enter 02/25/20XX 10:10 as the date/time brain imaging interpreted.

OPTIONAL: Date/Time IV alteplase Ordered

Enter the earliest documented date and time that IV thrombolytic therapy was ordered at your hospital.

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- Thrombolytic therapy for stroke includes:
  - Activase
  - Alteplase
  - IV alteplase
  - Recombinant alteplase Tissue plasminogen activator
- If IV thrombolytic therapy was administered at another hospital and patient was subsequently transferred to your hospital, leave this data element blank.
- Select "NA" if the patient did not receive IV thrombolytic therapy.
- IV alteplase order time may be obtained from, but it not limited to, computerized or manual order entry systems, emergency department notes, or pharmacy logs.

OPTIONAL: Date/Time Lab Tests Ordered

Enter the earliest documented date and time that initial lab tests were ordered at your hospital.

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- Lab tests include a complete blood cell count with platelet count, coagulation studies (PT, INR), and blood chemistries.
- Select "NA" if the patient did not receive initial lab tests at your facility or if lab tests were performed but they did not include a complete blood cell count, coagulation studies, and blood chemistries

OPTIONAL: Date/Time Lab Tests Completed

Enter the earliest documented date and time that initial lab tests were completed at your hospital.

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- Lab tests include a complete blood cell count with platelet count, coagulation studies (PT, INR), and blood chemistries.

OPTIONAL: Date/Time ECG Ordered

Enter the earliest documented date and time that the initial ECG was ordered at your facility. If a patient did not receive an initial ECG at your facility, select "NA."

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

OPTIONAL: Date/Time ECG Completed

Enter the earliest documented date and time that the initial ECG was completed at your facility. If a patient did not receive an initial ECG at your facility, select "NA."

- Date: DD/MM/YYYY

- Time: HH:MM
- 24-hour clock (military time)

OPTIONAL: Date/Time Chest X-ray Ordered

Enter the earliest documented date and time that the initial Chest X-ray was ordered at your facility. If a patient did not receive an initial Chest X-ray at your facility, select "NA."

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

OPTIONAL: Date/Time Chest X-ray Completed

Enter the earliest documented date and time that the initial Chest X-ray was completed at your facility. If a patient did not receive an initial Chest X-ray at your facility, select "NA."

- Date: DD/MM/YYYY
- Time: HH:MM
- 24-hour clock (military time)

IV Thrombolytic Therapy

IV Thrombolytic Initiated at this Hospital

Collected For: GWTG

Definition: Intravenous (IV) thrombolytic was initiated as this hospital.

Question: Is there documentation that IV thrombolytic was initiated at this hospital?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes: IV thrombolytic initiated at this hospital.
- No: IV thrombolytic was not initiated at this hospital (even if there are documented contraindications or warnings to IV alteplase) OR unable to determine from medical record documentation.
- When a "hang time" or "infusion time" for IV thrombolytic is documented in the medical record, select "Yes".
- If IV thrombolytic therapy was administered at another hospital and patient was subsequently transferred to this hospital, select "No".
- If the patient was transferred to this hospital with IV thrombolytic infusing, select "No".
- Thrombolytic Therapy for stroke includes:
  - Activase
  - Alteplase
  - IV alteplase
  - Recombinant alteplase Tissue plasminogen activator
  - Tenecteplase
  - TNK
  - TNKase

- If a patient begins treatment with IV thrombolytic, but does not get the full dose due to a medical reason like an elevated INR or a newly discovered history element, select "Yes".
- If patient received IV thrombolytic in the ED in your hospital and was then transferred from your ED (without hospital admission) to another acute care hospital, select "Yes" here and select "Yes, not admitted" for "Not Admitted?" This will allow you to capture the "drip and ship patient and disable non-relevant questions. See instructions for "Not Admitted?"
- In the case that thrombolytic is contraindicated, and the patient does not receive IV thrombolytic at this hospital, select "No" for IV alteplase initiated at this hospital and select "Yes" for Documented Contraindications or Warnings for not initiating IV thrombolytic in either the 0-3 hour or 3-4.5 hour treatment window. Please note the previous use of the NC choice has been replaced by separate Yes/No questions for documented contraindications and warnings.
- It is essential that documented contraindications or warnings for non-treatment be selected when applicable for both the 0-3 and the 3-4.5 hour windows since the actual contraindications and warnings may differ between the two windows.
- Do not include thrombolytic therapy for indications other than ischemic stroke. That is, do not include intra-cerebral venous infusion for cerebral venous thrombosis, intraventricular infusion for intraventricular hemorrhage, intraparenchymal infusion for percutaneous aspiration of intracerebral hematoma, myocardial infarction, PE, or peripheral clot.
- Currently, alteplase is the only FDA-approved IV thrombolytic.
- Note: IV alteplase is not FDA approved for use in the 3-4.5 hour window, but there is a Class 1A level guideline from the AHA regarding this treatment. There is a Quality report available to assist tracking performance on this measure.
- Expansion of the Time Window for Treatment of Acute Ischemic Stroke With Intravenous Tissue Plasminogen Activator: http://stroke.ahajournals.org/cgi/reprint/STROKEAHA.109.192535
    - Jauch EC, Saver JL, Adams HP, Bruno A, Connors JJ, Demaerschalk BM, et al. AHA/ASA Guideline: Guidelines for the early management of patients with acute ischemic stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke. 2013;STR.0b013e318284056apublished online before print January 31 2013, doi:10.1161/STR.0b013e318284056a

Suggested Data Sources:

- Emergency Room Records
- Medication Records
- Progress Notes
- IV Flow Sheets

Additional Notes / Guidelines for Abstraction:

- Inclusion:
    - Only Acceptable Thrombolytic Therapy for Stroke
        - Activase
        - Alteplase
        - IV tPA
        - Recombinant tPA Tissue Plasminogen Activator
        - tPA Tissue Plasminogen Activator
    - Reasonable Alternative to Alteplase:
        - Tenecteplase
        - TNK
        - TNKase
- Exclusion:
    - Intra-arterial (IA) tPA
    - Thrombolytic administration to flush, open, or maintain patency of a central link, e.g. PICC line.
    - Thrombolytic agents other than alteplase or tenecteplase

Summary of Changes

REQUIRED: Date/Time IV alteplase initiated (at this hospital or ED)

If IV alteplase was initiated at this hospital or ED, record the date and time that IV alteplase was initiated (time of bolus administration). If there are discrepancies in the documentation of bolus administration, the nursing documentation on the medication administration sheets or hospital approved electronic system should be treated as the most reliable source, followed by the stroke physician's documented time or ED note. If multiple dates/times are documented by the same individual, use the earliest date recorded by that person.

Please note, this time of treatment is used to control skip logic related to contraindications, warnings, etc related to non-treatment, so it is critical to enter the correct date/time here. If the data elements are not appearing as expected, please check that the date/time is abstracted accurately.

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

Notes for Abstraction:

- This data element applies only to patients for whom IV thrombolytic therapy was initiated at this hospital. Do not abstract this data element if IV thrombolytic therapy was initiated at another hospital and patient was subsequently transferred to this hospital.
- IV alteplase is the only FDA-approved IV thrombolytic therapy.

Example: For Patient 170a, the nursing documentation indicates that a bolus of IV alteplase occurred at 1300 and that there was a 10 minute delay in finding an infusion pump, so infusion started at 1310. Record the Date and Time of IV alteplase Initiated as 1300.

S ***Emergency department record, IV flow sheets, Medication administration record, Nursing flow sheets, Progress notes***

Thrombolytic Used

Collected For: GWTG

Definition: Documentation of the type of thrombolytic used.

Question: Which thrombolytic was used at this hospital?

Format: Single Select, Text Field, Check Box

Allowable Values:

- Alteplase (Class Evidence)
  - Total Dose (mg): Text Field
  - Alteplase Dose ND
- Tenecteplase (Class 2b Evidence)
  - Total Dose (mg): Text Field
  - Tenecteplase Dose ND

Notes for Abstraction:

- Select the thrombolytic (Alteplase or Tenecteplase) that was administered to the patient at your hospital.
- Once thrombolytic is selected, enter the total dose ordered, in milligrams, as it is recorded in the medical record.
  - For alteplase, total dose includes bolus and infusion
  - For Tenecteplase, total dose is the bolus
- If the dose is not documented in the medical record, then select "Dose ND".
- This data element applies only to patients for whom IV thrombolytic therapy was initiated at this hospital. Do not abstract this data element if IV thrombolytic therapy was initiated at another hospital and patient was subsequently transferred to this hospital.

Suggested Data Sources:

- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

Reason for Selecting Tenecteplaste Instead of Alteplase

Collected For: GWTG

Definition: Documentation of the reason Tenecteplase was used instead of Alteplase

Question: What was the reason for selecting Tenecteplase instead of alteplase?

Format: Single Select

Allowable Values:

- Large Vessel Occlusion (LVO) with potential thrombectomy
- Mild Stroke
- Other: _____

Notes for Abstraction:

- Thrombectomy or Endovascular Therapy (EVT) is an advanced neurological procedure for removal of a cerebral occlusion using a mechanical device, also known as a clot retrieval device or stent retriever, and/or aspiration technique.
- Large Vessel Occlusion (LVO) with potential thrombectomy should be documented by a physician/APN/PA or pharmacist as the reason why Tenecteplase was chosen instead of alteplase.
- If tenecteplase was administered prior to potential mechanical thrombectomy, then select "Large Vessel Occlusion (LVO) with potential thrombectomy".
- Documentation can include:
  - Suspicious for left MCA - CT head negative for ICH - will transfer for potential LVO thrombectomy.
  - CTA abnormal, right MCA proximal M2 superior occlusion - transfer with possible neuro-intervention.
  - CT positive for LVO-transfer recommended because of the need for vascular surgical intervention.
  - Patient being transferred for potential intravascular clot removal.
  - Transfer to interventional suite.
  - Patient will be transferred for further management of stroke-like symptoms with possible acute large vessel occlusion.
  - Unacceptable example (select "No"):
  - Although the patient is being transferred to a higher level of care due to complete occlusion, it is mostly likely that thrombectomy will not be performed.
- Stroke severity (mild stroke) should be documented by a physician/APN/PA or pharmacist as the reason why Tenecteplase was chosen instead of alteplase.
  - If the physician documents "Tenecteplaste used due to low NIHSS" then this would appropriately be categorized as mild stroke.
- Select "Other" if the reason for choosing Tenecteplase instead of alteplase is a reason other than "Large Vessel Occlusion (LVO) with potential thrombectomy" and "Mild Stroke", or is not documented in the medical record.
- When selecting "Other" type in the specific reason for choosing Tenecteplase if available in the medical record.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

If IV Thrombolytic administered beyond 4.5 hours, was imaging used to identify eligibility?

Collected For: GWTG

Definition: Documentation that imaging was used to determine thrombolytic eligibility

Question: If IV Thrombolytic was administered beyond 4.5 hours, was imaging used to identify the patient's eligibility?

Format: Single Select

Allowable Values:

- Yes, Diffusion-FLAIR mismatch
- Yes, Core-Perfusion Mismatch
- None
- Other: _____

Notes for Abstraction:

- Diffusion flair mismatch is documented in the record or the presents of a diffusion hyperintensity without a corresponding flair hyperintensity on brain MRI.
- Mismatch between the perfusion and the core may be visualized on CT perfusion or MRI perfusion studies. This mismatch may also be termed "penumbra".

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

REQUIRED FOR COMPREHENSIVE: Date/Time IV alteplase initiated

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IV Thrombolytic Initiation Date/Time

Collected For: CSTK-05

Definition: The month, date, year, and time (military time) that IV thrombolytic therapy was initiated to a patient with ischemic stroke at this hospital. IV thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Suggested Data Collection Question: What is the date and time that IV thrombolytic therapy was initiated for this patient at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date at which initiation of the IV thrombolytic was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different IV thrombolytic initiation dates (either different IV thrombolytic episodes or corresponding with the same episode), enter the earliest date.
- If the date IV thrombolytic therapy was initiated 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the IV thrombolytic initiation date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the IV thrombolytic initiation 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for IV Thrombolytic Initiation Date allows the case to be accepted into the warehouse
- Use the time at which initiation of the IV thrombolytic was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different IV thrombolytic initiation times (either different IV thrombolytic episodes or

corresponding with the same episode), enter the earliest time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- The use of hang time or infusion time is acceptable as IV thrombolytic initiation time when other documentation cannot be found.
- IV thrombolytic initiation time refers to the time the thrombolytic bolus/infusion was started.
- Do not use physician orders as they do not demonstrate initiation of the IV thrombolytic (in the ED this may be used if signed/initialed by a nurse).
- If the time of IV thrombolytic initiation 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 time) **and** no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the IV thrombolytic initiation time was 3300. No other documentation in the medical record provides a valid time. Since the IV thrombolytic initiation 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for IV Thrombolytic Initiation Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- IV flow sheets
- Medication administration record

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

REQUIRED: Documented Contraindications or Warnings for not initiating IV thrombolytic in the 0-3hr treatment window?

- Yes: There is a documented contraindication or warning for not initiating IV alteplase in the 0 - 3 hour treatment window.
- No: There are no specific reasons documented in the medical record why IV alteplase was not administered or a hospital-related factor or other reason was present which may or may not be documented but was apparent to the abstractor. This (hospital-related factor or other reason) is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

  It is not expected that in routine situations the physician will explicitly identify which contraindications or warnings were relevant to the 0-3 or 3-4.5 hour window. Most likely, this will only be documented when different reasons were relevant to the decision for the two time windows.

  See examples under Documented Reasons in the medical record for no IV alteplase started at your hospital.

Notes for Abstraction:

- In order to select “Yes,” reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA **and** mentioned in the context of IV thrombolytics **and** fall on the Exclusion Criteria (contraindications) and/or Relative Exclusion Criteria (warnings).
- Patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital may be documented by a nurse.
- If the reason documented for non-treatment with IV thrombolytics does not fall into one of the response options on the *Exclusion Criteria(0-3hr)* or *Relative Exclusion Criteria(0-3hr)* lists below, select “No” here.
- Documentation of the initiation of IV or IA thrombolytic at a transferring hospital is a stand-alone reason and sufficient to meet the intent of this data element. No further documentation of it as the reason for not initiating IV alteplase at this hospital is needed in order to select “Yes” here.
- If documentation indicates a National Institute of Health Stroke Scale (NIHSS) score of zero, select “Yes” to *Documented Contraindications or Warnings for not initiating IV thrombolytic* and choose Relative Exclusion Criteria “Stroke severity too mild” under *Warnings* . Score documentation must refer to the timeframe for thrombolytic therapy.
- For additional clarity, see examples under **Documented Reasons in the medical record for no IV alteplase started at your hospital.**
- ***Specifications Manual for National Hospital Inpatient Quality Measures*** note for TJC/CM users: The data element of **documented reasons for not initiating IV thrombolytic** on the Core Measures tab allows for inclusion of alternate reasons documented by physician/APN/PA or pharmacist beyond those listed on the *Exclusions Criteria and Relative Exclusion Criteria* lists below as long as the reasons are mentioned in the context of IV thrombolytics. If there is documentation in the medical record of an alternate reason for not initiating IV thrombolytic (e.g. a reason that is not on the *Exclusion Criteria* and/or *Relative Exclusion Criteria* lists below) **and** that reason is linked to IV thrombolytics you may need to adjust the auto-populated response on the Core Measures tab. To do so, just click into that tab to view the exact definition from the *Specifications Manual for National Hospital Inpatient Quality Measures* and adjust your response if appropriate.

Examples:

- Ischemic stroke patient has a history of seizures and is taking an anti-convulsants. The family states that the patient had twitching of his arm before he became aphasic. The doctor documents the possibility of seizure with residual neurological symptoms as the reason for non-treatment with IV alteplase. Select “Yes” for *Documented Contraindications or Warnings for not initiating IV thrombolytic in the 0-3hr treatment window.* Also select Exclusion Criteria "Seizure at onset" *(0-3hr treatment window).*
- Patient with history of metastatic breast cancer and a life expectancy of nine months presents with an ischemic stroke one hour after last known well. Documentation never mentions IV thrombolytic therapy. Select “No” for *Documented Contraindications or Warnings for not initiating IV thrombolytic in the 0-3hr treatment window?.* The reason for non-treatment was never documented in the context of IV thrombolytics in this case. As the abstractor may have inferred that the reason for non-treatment was due to the patient’s co-morbid condition

and limited life expectancy, you may select “Other” under *Hospital-Related or Other Factors (0-3hr treatment window)* and specify the reason for non-treatment there.
- Patient presents with a headache that has persisted for 1 hour and 45 minutes. The patient is seen by an ED physician who believes that the patient has a migraine. The patient is seen by a neurologist several hours later, and after further work-up, is determined to have an ischemic stroke. Medical record documentation by the neurologist states “patient was not a candidate for IV alteplase, as by the time he was diagnosed with an ischemic stroke, 8 hours had passed since he was last known to be well.” Select *Documented Contraindications or Warnings for not initiating IV thrombolytic in the 0-3hr treatment window = “No.”* Although there is documentation around thrombolytic therapy in the record, the reason for non-treatment does not fall on the *Exclusion Criteria* or *Relative Exclusion Criteria* lists. In this case, the abstractor should select *Hospital-Related or Other Factors (0-3hr treatment window)* = “Delay in Stroke Diagnosis.”

OPTIONAL: Documented Contraindications or Warnings for not initiating IV thrombolytic in the 3-4.5hr treatment window?

- Yes: There is a documented contraindication or warning for not initiating IV alteplase in the 3 - 4.5 hour treatment window.
- No: There are no specific reasons documented in the medical record why IV alteplase was not administered or if a hospital-related factor or other reason was present which may or may not be documented but was apparent to the abstractor. This (hospital-related factor or other reason) is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

  It is not expected that in routine situations the physician will explicitly identify which contraindications or warnings were relevant to the 0-3 or 3-4.5 hour window. Most likely, this will only be documented when different reasons were relevant to the decision for the two time windows.

Notes for Abstraction:

- In order to select “Yes,” reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA **and** mentioned in the context of IV thrombolytics **and** fall on the *Exclusion Criteria* and/or *Relative Exclusion Criteria* lists below.
- Patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital may be documented by a nurse.
- If the reason documented for non-treatment with IV thrombolytics does not fall into one of the response options on the *Exclusion Crtieria (3-4.5hr)* or *Relative Exclusion Criteria (3-4.5)* lists below, select “No” here.
- Documentation of the initiation of IV or IA thrombolytic at a transferring hospital is a stand-alone reason and sufficient to meet the intent of this data element. No further documentation of it as the reason for not initiating IV alteplase at this hospital is needed in order to select “Yes” here.
- If documentation indicates a National Institute of Health Stroke Scale (NIHSS) score of zero, select “Yes” to **Documented Contraindications or Warnings for not initiating IV thrombolytic** and choose “Stroke severity too mild” under *Relative Exclusion Criteria*. Score documentation must refer to the timeframe for thrombolytic therapy.
- For additional clarity, see examples under **Documented Reasons in the medical record for no IV alteplase started at your hospital.**

  Examples:

  - Ischemic stroke patient has a history of seizures and is taking an anti-convulsant. The family states that the patient had twitching of his arm before he became aphasic. The doctor documents the possibility of seizure with residual neurological symptoms as the reason for non-treatment with IV alteplase. Select “Yes” for *Documented Contraindications or Warnings for not initiating IV thrombolytic in the 3-4.5hr treatment window.* Also select Exclusion Criteria "Seizure at onset" (3-4.5hr treatment window).

Admission Data, Hospitalization Data

REQUIRED: Contraindications and/or Warnings (0-3 hr treatment window). Select all that apply.

OPTIONAL: Contraindications and/or Warnings (3-4.5 hr treatment window). Select all that apply.

Select the specific reason(s) documented in the medical record for not administering IV alteplase at this hospital.

The following lists include contraindications and warnings which have been taken from the clinical practice guidelines. The reasons provided herein are not intended to supersede physician judgment, but serve as a guideline to abstractors. As always, the physician must exercise due caution in providing treatment, given the risks and benefits to the individual patient and the available information at the time of treatment decision. For further guidance on what kind of patients should or should not be treated with IV alteplase, refer to "2018 Guidelines for the Early Management of Patients With Acute Ischemic Stroke: A Guideline for Healthcare Professional From the American Heart Association/American Stroke Association.” See Table 6 for a listing of Characteristics of Patients with Ischemic Stroke Who Could Be Treated With alteplase within the 0 - 3 hour time window, taken from the Guidelines.

Exclusion Criteria (contraindications) (0-3 hr and 3-4.5 hr treatment windows):

- Elevated blood pressure (systolic > 185 mm Hg or diastolic > 110 mm Hg) despite treatment
- Recent intracranial or spinal surgery or significant head trauma, or prior stroke in previous 3 months
- History of previous intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation, or aneurysm
- Active internal bleeding
- Acute bleeding diathesis (low platelet count, increased PTT, INR ≥ 1.7 or use of NOAC). This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours, resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet ocunt, and ECT; TT; or appropriate factor Xa activity assays)
- Symptoms suggest subarachnoid hemorrhage
- CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)
- Arterial puncture at noncompressible site in previous 7 days
- Blood glucose concentration <50 mg/dL (2.7 mmol/L)

Relative Exclusion Criteria (warnings) (0-3 hr and 3-4.5 hr treatment windows):

Recent experience suggests that under some circumstances- with careful consideration and weighting of risk to benefit- patients may receive fibrinolytic therapy despite 1 or more relative contraindications. Consider risk to benefit of IV alteplase administration carefully if any of these relative exclusion criteria are present:

- Care-team unable to determine eligibility
- IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival
- Life expectancy < 1 year or severe co-morbid illness or CMO on admission
- Pregnancy
- Patient/Family refusal
- Stroke severity too mild (non-disabling)
- Recent acute myocardial infarction (within previous 3 months)
- Seizure at onset with postictal residual neurological impairments
- Major surgery or serious trauma withinin previous 14 days
- Recent gastroinestinal or urinary tract hemorrhage (within previous 21 days)

Notes for Abstraction:

- Reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist with three exceptions: Patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital. These three exceptions may be documented by a nurse. Reason documentation must refer to the timeframe for thrombolytic therapy.
- Exclusions and/or relative exclusions (contraindications and/or warnings) must be mentioned in the context of IV thrombolytics. It is the intent that the abstractor will not make inference as to the reason for non-treatment based upon the presence of certain patient clinical characteristics and conditions in the record, but will only abstract reasons that are specifically documented in the medical record as the reason for not giving thrombolytic therapy. **If reasons are not mentioned in the context of IV thrombolytics, do not make inferences** (e.g., do not assume that IV thrombolytic was not initiated because of a bleeding disorder unless documentation explicitly states so.)
- Documentation of the initiation of IV or IA thrombolytic at a transferring hospital is a stand-alone reason and sufficient to meet the intent of this data element. No further documentation of it as the reason for not initiating IV alteplase at this hospital is needed.
- If documentation indicates a National Institute of Health Stroke Scale (NIHSS) score of zero, select “Yes” to **Documented Contraindications or Warnings for not initiating IV thrombolytic** and choose “Stroke severity too mild (non-disabling)” here . Score documentation must refer to the timeframe for thrombolytic therapy.
- It is not acceptable to use documentation from outside physician or nurse notes that played a factor in the decision-making process for not giving thrombolytic therapy. EXCEPTION: If your hospital uses telemedicine in assessing stroke patients, it is acceptable to select reasons specified by the teleneurologist when reasons are documented in the medical record. In these cases, it is acceptable for the documentation to be done by a nurse.
- It is permissible to abstract reasons for non-treatment from the medical record that are documented after the IV alteplase treatment decision has been made as long as the documentation is made prior to patient discharge (addendums cannot be made after discharge). Documented reason must refer to the timeframe for thrombolytic therapy. Suggested data sources: consultation notes, ED records, H&P, MAR, progress notes (exclusion: discharge summary).
- It is essential that documented reasons for non-treatment be selected for both the 0-3 and the 3-4.5 hour treatment windows when applicable since the reasons may differ between the two windows. Due to the dynamic nature of acute stroke symptoms and patient response to interventions (e.g. blood pressure control), patients who are not eligible for treatment in the first three hours may become eligible in the later window and should still be considered for treatment. Click here to reference the new guideline update from the American Heart Association/American Stroke Association regarding the Expansion of the Time Window for Treatment of Acute Ischemic Stroke With Intravenous Tissue Plasminogen Activator. (link is http://stroke.ahajournals.org/cgi/reprint/STROKEAHA.109.192535)
    - It is not expected that in routine situations the physician will explicitly identify which contraindication(s) and/or warning(s) were relevant to the 0-3 or 3-4.5 hour window. Most likely, this will only be documented when different reasons were relevant to the decision for the two time windows. If contraindication(s) and/or warning(s) for non-treatment are documented for the 0-3 hour treatment window, it is acceptable to assume the same reason(s) for non-treatment to be valid for the 3-4.5 hour window unless documentation in the medical record indicates the patients clinical condition changed. (e.g. If SBP > 185 or DBP > 110 mmHg, Stroke Severity too mild, Stroke Severity too severe, Rapid improvement, or Care Team Unable to determine eligibility are documented as the reason(s) for not administering IV alteplase in the 0-3 hour time window, and there is documentation of a change in clinical status within 4.5 hours in the medical record then you should not assume that the same reason for non-treatment remains in the extended time window. In these situations, there must be specific documentation around the reason for non-treatment in the 3-4.5 hour window.

Examples:

- *An ischemic stroke patient presents within 2 hours of Last Known Well with SBP of 220. Physician documents “no alteplase due to elevated Blood Pressure.” With treatment, the patient’s SBP is brought down to 150 at 3.5 hours after Last Known Well but there is no additional documentation in the medical record with regards to thrombolytic treatment. Select “Yes” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 0-3hr treatment window” and then choose “C1: SBP> 185 or DBP > 110 mmHg despite treatment.” Select “No” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 3-4.5hr treatment window.”*
- *An ischemic stroke patient presents within 2 hours of Last Known Well with an NIHSS of 29. Physician documents “no alteplase due to elevated NIHSS.” There's documentation in the medical record of an NIHSS=26 at 3.5 hours after Last Known Well and the physician documents that the patient is not a candidate for alteplase in the extended time window due to NIHSS>25. Select “No” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 0-3hr treatment window”. There is no stroke severity limit or NIHSS limit for treatment in the 0-3 hour window. Select “Yes” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 3-4.5hr treatment window” and then choose “AW4: Severe Stroke Severity NIHSS >25”*
- *An ischemic stroke patient presents with an unclear onset time. Physician documents “timing of stroke symptom onset is unclear therefore no alteplase at this time”. One hour later the patient’s daughter arrives and states that her father was well 3 hours prior and had no stroke symptoms. There is no further documentation in the medical record around alteplase. Select “Yes” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 0-3hr treatment window” and then choose Exclusion Criteria “Care team unable to determine eligibility” (0-3 hr treatment window). Select “No” to “Documented Contraindications or warnings for not initiating IV thrombolytic in the 3-4.5hr treatment window.*

The following should help abstractors in classifying reasons:

- If the patient is on anticoagulants (Warfarin, Coumadin) and this is documented as the reason for not administering IV thrombolytics, and the PT, PTT, or INR is elevated, select Exclusion Criteria “Acute bleeding diathesis. Use of anticoagulants without reference to INR is an Additional Exclusion Criteria for the 3-4.5 treatment window – “ Taking oral anticoagulants regardless of INR”.
- Conditions that increase the risk of bleeding or decrease the benefit of treatment to the individual patient must be explicitly listed in the medical record and documented as being the reason that thrombolytics were not used. Conditions may include: Acute pericarditis, SBE (spontaneous bacterial endocarditis), Hemostatic defects, Diabetic hemorrhagic retinopathy, Septic thrombophlebitis, occluded AV cannula, or patient is currently receiving oral anticoagulants (e.g., Warfarin, therapeutic dose of dabigatran (Pradaxa).
- Advanced age alone is no longer considered a sufficient reason for not providing alteplase in the 0-3 hour window. There is sufficient evidence from subgroup analysis of the randomized trials to conclude that beneficial effects of alteplase are seen in advanced age when patients are treated with 0-3 hours, and the Scientific Rationale for the Inclusion and Exclusion Criteria for Intravenous Alteplase in Acue Ischemic Stroke: A Statement for Healthcare Professionals from the American Heart Association/American Stroke Association recommends treatment of elderly ischemic stroke patients who meet other criteria, without restriction by age. There is no specific upper age limit on the use of IV alteplase. However, the prevalence of other exclusions or relative exclusions to treatment (e.g. other illnesses that reduce life expectancy to <1 year) may be higher in patients with very advanced age, reducing the number of elderly patients who may be eligible for alteplase treatment. For patients at 3-4.5 hours, age >80 remains a relative exclusion because such patients were not included in the randomized controlled trial.
- "Care-team unable to determine eligibility" means that the diagnosis of stroke was made but that eligibility for thrombolytic therapy could not be established or verified by the clinician. Examples may include:
    - The time of onset could not be clearly established at the time of patient assessment in the ED or time of Last Known Well is unknown
    - Timing of a recent procedure or surgery could not be definitively established.
    - A lack of an accurate history or concern about the presence of a preexisting medical condition raises concern about eligibility for IV thrombolytic therapy.
    - Patients who have experienced multiple episodes of transient neurologic function, or TIAs, which have fully resolved clinically, but imaging or other features of the history make it uncertain as to when the stroke actually started.
- Select "IV or IA alteplase given at outside hospital" when a patient was transferred from another hospital where IV alteplase was started, even if the infusion continues after the patient arrives at your facility. Explicit documentation stating that "further alteplase is not required" is not necessary. It would be acceptable for this to be documented by a nurse.
- Select "Life expectancy < 1 year or severe co-morbid illness or CMO on admission" if the patient has an order for Comfort Measures Only in the ED and this restriction of care preceded evaluation for IV alteplase. This option is also appropriate when patients are not treated due to coexisting terminal cancer, advanced dementia, severe cardiopulmonary disease or other conditions which severely limit quality of life or life expectancy. Limited life expectancy, severe co-morbid conditions, and CMO status all need to be explicitly documented as the reason for no IV **Do not make inferences.**
- If the physician documents that the patient declines IV alteplase in favor of catheter-based reperfusion or other investigational therapy, select "Pt./Family refused"
- Select "Stroke severity too mild (non-disabling) when there is minimal to no disability associated with the stroke symptoms (e.g. numbness, mild weakness, lack of gait impairment). Note that there is no lower limit to NIHSS score that prohibits the use of IV alteplase.
- If the physician documents "no IV alteplase due to low NIHSS or NIHSS = 3," then this would appropriately be categorized as stroke severity too mild.
- **If documentation indicates an NIHSS score of zero, then this may be considered the equivalent of documentation that the stroke was too mild, and an explicit statement linking this as the reason for non-treatment is not required.**
- Select "Severe Stroke NIHSS >25" when the physician notes document “alteplase was withheld due to the severity of the stroke symptoms". Note there is no upper limit in terms of NIHSS score that prohibits the use of IV alteplase and many centers would still treat a patient with an NIHSS score of 25. Severe stroke is not an exclusion or relative exclusion to treatment at 0-3 hours.
- For inpatient stroke, the 0-3 and 3-4.5 hour treatment window is calculated from Symptom Discovery Date/Time -Date/Time Last Known Well.

Examples:

- Patient 180a has a history of seizures and is taking anti-convulsant, and the family states that he had twitching of his arm before he became aphasic. The doctor documents the possibility of 'seizure with residual neurological symptoms' as the reason for non-treatment with IV alteplase. Select "Seizure at onset with postictal residual neurological symptoms" as Exclusion Criteria in both 0-3 and 3-4.5 hour treatment window**.** (Note, the abstractor should also select "No" for " IV alteplase initiated at this hospital" and "Yes" for "Documented Contraindications and Warnings for not initiating IV alteplase" for both 0-3 and 3-4.5 hour treatment windows.)
- Patient 180b is a 95 year old male who presents with aphasia and right-sided weakness. He is not treated with IV alteplase and the reason is documented as "increased risk of bleeding due to advanced age". Select "No" for "IV alteplase initiated at this hospital"; "No" for "Documented Contraindications and Warnings for not initiating IV alteplase" in the 0-3 hour window; "Yes" for "Documented Contraindications and Warnings for not initiating IV alteplase" in the 3-4.5 hour window; and select "Age>80" for Additional Relative Exclusion Criteria 3- 4.5 hour window.
- Patient 180b is a 95 year old male who presents with aphasia and right-sided weakness. He was last seen well 2 hours ago. He was referred from a long term care facility, where he was residing because of advanced dementia. He is not treated with IV alteplase and the reason is document as “Not given alteplase—too old”. Select "No" for "IV alteplase initiated at this hospital" ; "No" for "Documented Contraindications and Warnings for not initiating IV alteplase" in the 0-3 hour window; “Yes for "Documented Contraindications and Warnings for not initiating IV alteplase" in the 3-4.5 hour window; and Select "Age > 80" for Additional Relative Exclusion Criteria3-4.5 hour window. In this case the patient’s age (95) is a relative exclusion for initiating IV alteplase in the 3-4.5 hour window, but not in the 0-3 hour window. Therefore the abstractor must indicate "No" for "Documented Contraindications and Warnings for not initiating IV alteplase" in the 0-3 hour window. The abstractor might guess that treatment was not offered at 0-3 hours because of dementia, a severe co-morbid illness; however, inferences are not allowed. If the clinician had instead documented “No tPA—advanced dementia” then the abstractor could have documented “Yes” to “Documented Contraindications and Warnings for not initiating IV alteplase A" and selected “Life expectancy < 1 year or severe co-morbid illness or CMO on admission”.

- Patient 180c came into the ED within 120 minutes of time last known well. After a head CT, the ED physician recommended to the patient's wife that the patient receive IV-alteplase. The wife wanted to wait to discuss the issue with the daughter, who was driving to the hospital. The physician documented in the medical record the wife’s refusal of treatment pending discussion with her daughter. When the daughter finally arrived, the patient was outside the 180 min window, and so IV-tPA was initiated in the 3-4.5 hour treatment window. Select "Pt./Family refused" under Warnings in the 0-3 hr treatment window. Note the abstractor would also select "Yes" for "IV alteplase initiated at this hospital “and "Yes" for "Documented Contraindications and Warnings for not initiating IV alteplase in the 0-3 hour time window". Note because the patient received treatment in the 3-4.5 hour, Contraindications and Warnings in the 3-4.5 hour treatment window will be disabled on the online form).

- Patient 180d arrives at the ED at 1hr 50min after Last Known Well. The hospital acute stroke team is consulted and every effort is made to treat him within 3 hours of symptom onset, but the bolus is not started until 3hr 10min after Last Known Well. Because the patient did not receive IV alteplase within the first 3 hours and there is no contraindication and/or warning documented for non treatment in the 0-3 hour time window, do NOT select any contraindications or warnings in the 0-3 hour treatment window. Note the abstractor would also select “No” for “Documented contraindications or warnings in the 0-3 hour treatment window” and select the appropriate hospital-related factor that contributed to the delay if applicable. (Note because the patient received treatment in the 3-4.5 hour, Contraindications and Warnings in the 3-4.5 hour treatment window will be disabled on the online form).
- Patient 180e arrives within 2 hours from Last Known Well. His NIHSS is 2, due to mild dysarthria and mild drift. The physician documents no IV alteplase due to mild stroke. However, at 3hr 15min after Last Known Well, he suddenly worsens to an NIHSS of 10. At this point, the physician reviews the results of his IV alteplase evaluation and finds no contraindications or warnings, including the additional warnings for patients beyond the 3 hour window. IV alteplase is administered at 3hr 50min after Last Known Well. Select “Stroke severity too mild (non-disabling)” under Warnings for the 0-3 hour treatment window. Note that the abstractor would also select “Yes” for “Documented contraindications or warnings in the 0-3 hour time window” (Note because the patient received treatment Contraindications and Warning in the 3-4.5 hour treatment window will be disabled on the online form..
- Patient 180f is brought to the ED by his daughter who found him aphasic at home at 4pm. She had last seen him well at 8am that morning. The physician documents no IV alteplase due to greater than 4.5 hours since Last Known Well. While the patient is still in the ED, the son who lives at home arrives at 4:30pm and states that he saw his father well at 2:15pm. In light of this new information, the patient is rapidly evaluated and receives IV alteplase at 6pm, 3.75 hours after the new Last Known Well time of 2:15 pm. At the time of his initial evaluation, the care team was unable to determine if he was eligible due to the long interval from Last Known Well. Select "Care-team unable to determine eligibility" under Warnings for the 0-3 hour treatment window. . If there was no physician documentation describing this change in the time Last Known Well, do not infer that this was the cause of non-treatment in the 0-3 hour treatment window. Note the abstractor should also select “Yes” for “Documented contraindications or warnings for not initiating IV alteplase in the 0-3 hour treatment window”

S ***Admission Data, Hospitalization Data***

Summary of Changes

OPTIONAL: Additional Warnings 3-4.5 hrs. Select all that apply.

Select the specific reason(s) documented in the medical record for not administering IV alteplase at this hospital for patients considered for treatment with IV alteplase in the 3-4.5 hour treatment window.

- Age > 80
- History of both diabetes and prior ischemic stroke
- Taking an oral anticoagulan regardless of INR
- Severe stroke (NIHSS > 25)

Notes for Abstraction:

- Only select “Additional Warnings” if any of these reasons for no IV alteplase are explicitly documented in the context of the 3-4.5 hour treatment window. (i.e. the physician documented “no IV alteplase after 3 hours of symptom onset due to NIHSS= 27”, Select “NIHSS>25”.

Examples:

- Patient 181a arrives at 1 hour and 50 minutes after Last Known Well, with an NIH stroke scale of 10 and he takes warfarin for atrial fibrillation. His blood pressure is 190/105 and he requires several doses of labetalol to control his blood pressure. By the time it is under control, it is 3hrs 10min after Last Known Well. His INR is 1.3. He does not receive IV alteplase. The physician documents that he was not eligible for IV alteplase when he arrived due to uncontrolled blood pressure and that the use of warfarin made him ineligible for treatment beyond 3 hours. Select “SBP > 185 or DBP > 110 mmHg despite treatment” under “Contraindications 0-3 hr window”, select “Increased risk of bleeding due to comorbid conditions” under “Warnings 3-4.5 hr window” and select “Any anticoagulant use prior to admission (even if INR < 1.7)” under “Additional Warnings 3-4.5 hr window”.

OPTIONAL: Hospital-related or Other Factors (0-3 hr and 3-4.5 hr treatment windows). Select all that apply

Select the reason(s) for not administering IV alteplase that are present in the medical record which may or may not be documented but are apparent to the abstractor as reasons for non-treatment. This is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities. Selection of one or more of these reasons does NOT exclude patients from the denominator of the IV alteplase measures. Failure to complete the work up within the 3 hour treatment window or failure to diagnose ischemic stroke are not valid reasons to not give thrombolytic therapy.

0-3 hr treatment window:

- Delay in Patient Arrival
- Delay in Stroke diagnosis
- In-hospital Time Delay
- No IV access
- Rapid or Early Improvement
- Advanced Age
- Stroke to severe
- Other

3-4.5 hr treatment window:

- Delay in Patient Arrival
- Delay in Stroke diagnosis
- In-hospital Time Delay
- No IV access
- Rapid or Early Improvement
- Advanced Age

- Stroke to severe
- Other

Notes for Abstraction:

- If "Documented Contraindications or Warnings for not initiating IV thrombolytic?" is "No", "Hospital-Related or Other Factors" can be selected. This is the **ONLY** section where it may be acceptable to infer reasons for non-treatment and is provided to assist in quality improvement activities.
- If the diagnosis is unclear, select "Delay in Stroke diagnosis" under "Hospital-related or Other factors". Note: The abstractor should also select "No" for "Documented Contraindications or Warnings for not initiating IV thrombolytic?"
- If there is a delay in getting the CT done or read, or a delay in patient evaluation, then select "In-hospital Time Delay".
- If patients receive IA therapy in favor of IV alteplase and there is no evidence documented in the medical record that the patient/family was offered IV alteplase, then select "Other" under "Hospital related or Other Factors". Note the abstractor should also select "No" for "Documented Contraindications or Warnings for not initiating IV thrombolytic?"
- Do not select "Other" if you have already selected a Contraindication or Warning. The choices under "Hospital Related and Other Factor for non-treatment" including "Other" will NOT exclude patients from the denominator of the IV alteplase measures.
- Only use the "Other" field if there is no reason specified that can be accurately captured by the listed choices under Contraindications and Warnings. Be very certain that a reason does not logically fit into any of the listed categories before resorting to selecting "Other" and entering text in "Specify Other reason for non-treatment with IV thrombolytic". Review of the past data reveals that most of the reasons for not giving IV alteplase will fall into one of the above delineated categories.

Example:

- Patient 182a arrives at the ED at 1hr 50min after Last Known Well. The hospital acute stroke team is consulted and every effort is made to treat him within 3 hours of symptom onset, but the bolus is not started until 3hr 10min after Last Known Well. Upon chart review, the abstractor identified that the patient arrived to the hospital at 09:15 but the stroke team was not consulted until 09:45. Select "In-hospital Time Delay" under Hospital related or Other Factors for the 0-3 hour treatment window. Because the patient did not receive IV alteplase within the first 3 hours and there is no contraindication and/or warning documented for non-treatment in the 0-3 hour time window, DO NOT select any exclusion or relative exclusion criteria in the 0-3 hour treatment window.

OPTIONAL: Specify Other Reason for no- IV thrombolytic(0-3 and 3-4.5 hr treatment windows).

If "Other" is selected as the reason for non-treatment with IV thrombolytics under "Hospital Related or Other Factors", specify the reason in the text box

REQUIRED: (for patients that receive IV rt-PA beyond 60 minutes): If IV alteplase was initiated greater than 60 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:

- Yes: There is a documented eligibility or medical reason for not initiating IV alteplase within 60 minutes of hospital arrival.
- No: There are no specific documented eligibility or medical reasons in the medical record why alteplase was not administered within 60 minutes of hospital arrival, or, a hospital-related or other reason was present which may or may not be documented but was apparent to the abstractor. This is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

REQUIRED: (for patients that receive IV rt-PA beyond 45 minutes): If IV alteplase was initiated greater than 45 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:

- Yes: There is a documented eligibility or medical reason for not initiating IV alteplase within 45 minutes of hospital arrival.
- No: There are no specific documented eligibility or medical reasons in the medical record why alteplase was not administered within 45 minutes of hospital arrival, or, a hospital-related or other reason was present which may or may not be documented but was apparent to the abstractor. This is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

REQUIRED: (for patients that receive IV rt-PA beyond 30 minutes): If IV alteplase was initiated greater than 30 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay:

- Yes: There is a documented eligibility or medical reason for not initiating IV alteplase within 30 minutes of hospital arrival.
- No: There are no specific documented eligibility or medical reasons in the medical record why alteplase was not administered within 30 minutes of hospital arrival, or, a hospital-related or other reason was present which may or may not be documented but was apparent to the abstractor. This is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

Notes for Abstraction: (For 60, 45, and 30 minute reason for delay questions above)

- Reasons for delay in treatment with IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist.
- Eligibility and/or medical reasons for delay in treatment must be mentioned in the context of IV thrombolytics. It is the intent that the abstractor will not make inference as to the eligibility or medical reasons for delay in treatment based upon the presence of certain patient clinical characteristics and conditions in the record, but will only abstract reasons that are specifically documented in the medical record as the reason for the delay beyond 60 minutes.
- Example: If the physician documents that the patient has uncontrolled hypertension and because of this alteplase cannot be administered until the patient's blood pressure can be controlled with IV medications select the medical reason of "hypertension requiring aggressive control with IV medications." Do not select this option simply because elevated blood pressure was described in the medical record.
- If your hospital uses telemedicine in the assessment of stroke, and there is documentation in the medical record as to why the teleneurologist delayed treatment with IV alteplase, this is acceptable as documentation to select the eligibility and or medical reason(s) specified by the teleneurologist. In this case, it is acceptable for the documentation in your hospital's medical record to be done by a nurse.
- It is permissible to abstract reasons for non-treatment from the medical record that are entered after the IV alteplase treatment decision has occurred. This should be done only when the documentation is written by an appropriate provider who was involved in the IV alteplase decision, but was unable to document it at the time. This documentation needs to be made prior to patient discharge. For example the neurologist who was called by telephone puts a note in the medical record the next day which documents the reasons for delay.

Select the specific reason(s) documented in the medical record for the delay in administration of IV alteplase at this hospital.

Eligibility Reasons:

- Social/Religious
- Initial refusal
- Care-team unable to determine eligibility
- Specify eligibility reason: _____

Medical Reasons:

- Hypertension requiring aggressive control with IV medications
- Further diagnostic evaluation to confirm stroke for patients with hypoglycemia (blood glucose < 50), seizures, or major metabolic disorders
- Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation)
- Investigational or experimental protocol for thrombolysis
- Need for additional PPE for suspected/ confirmed infection disease
- Specify medical reason: _____

Notes for Abstraction:

The following should help abstractors in classifying reasons:

- Social/Religious means that the patient and/or family refused treatment due to their cultural or religious beliefs. As patients do have the right to change their treatment decisions, this choice should be selected if there is documentation that treatment with IV rt-PA was initially refused due to any social or religious reason. Example: Patient wishes to consult clergy prior to deciding whether or not he wishes to receive treatment. Clergy takes 30 minutes to arrive. After speaking with clergy, the patient decides to proceed with treatment with IV alteplase. Treatment is provided once the patient consents (now 75 minutes after arrival).
- Initial refusal should be selected if there is documentation that the patient and/or family initially refused treatment with IV rt-PA for any reason other than a social/religious reason.
- For patients that cannot participate in shared decision making or provide consent, select "Initial Refusal" if there is documentation that there was a delay in treatment with IV rt-PA due to reasonable attempts to contact a proxy decision maker to obtain consent.
- "Care-team unable to determine eligibility" means that the diagnosis of stroke was made but that eligibility for thrombolytic therapy could not be established or verified by the clinician. Examples may include:
    - The time of onset could not be clearly established at the time of initial patient assessment in the ED or time of Last Known Well is unknown
    - Timing of a recent procedure or surgery could not be definitively established.
    - A lack of an accurate history or concern about the presence of a preexisting medical condition raises concern about eligibility for IV thrombolytic therapy.
    - Patients who have experienced multiple episodes of transient neurologic dysfunction, or TIAs, which have fully resolved clinically, but imaging or other features of the history make it uncertain as to when the stroke actually started.
- Hypertension requiring aggressive control with IV medications: Select this option if there is documentation that treatment with intravenous IV rt-PA was delayed because aggressive measures (such as continuous infusion or the use of two or more intravenous antihypertensive agents) were first needed to reduce BP to a treatable range.
- Further diagnostic evaluation to confirm stroke for patients with hypoglycemia (blood glucose < 50), seizures, or major metabolic disorders that were potentially stroke mimics
- Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation)
- Investigational or experimental protocol for thrombolysis: Documentation indicates that administration of IV rt-PA was delayed due to an investigational or experimental thrombolytic protocol. If investigational or experimental protocol was used, there should be a signed IRB consent in the medical record.
- Need for additional PPE for suspected/ confirmed infectious disease: Select this option when there is documentation in the patient medical record that treatment was delayed so that health care providers could obtain additional Personal Protection Equipment (PPE) because the patient had a confirmed or suspected infection.

Additional Notes / Guidelines for Abstraction: N/A

If no documented eligibility or medical reason(s), Hospital Related or Other Reason(s):

If a hospital-related or other reason was present which may or may not be documented but was apparent to the abstractor select the appropriate reason. This is the only section where it may be proper to infer reasons for non-treatment and is provided to assist in quality improvement activities.

- Need for additional imaging
- Delay in stroke diagnosis
- In-hospital time delay
- Equipment-related delay (e.g. telemedicine equipment issue, CAT Scan/MRI availability, IV pump malfunction)
- Other: If Other is selected, specify other reason

Was other thrombolytic/reperfusion therapy administered?

- ***IV Thombolytic Administered at Outside Hospital or Mobile Stroke Unit***
- ***If yes, select thrombolytic administered at outside hospital or Mobile Stroke Unit***
- ***IA catheter-based treatment at this hospital?***
- ***IA alteplase or MER Initiation Date/Time***
- ***Is there documentation that the route of thrombolytic (alteplase) administration was intra-arterial (IA)?***
- ***Is there documentation that IA thrombolytic therapy was initiated at this hospital?***
- ***What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?***

- ***Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?***
- ***What is the date and time of the first pass of a clot retrieval device at this hospital?***
- ***If MER treatment at this hospital, type of treatment***
- ***What is the location of the clot in the cerebral circulation?***
- ***What cerebral artery is occluded?***
- ***Did the patient receive intravenous (IV) thrombolytic (alteplase) therapy at this hospital or a transferring hospital prior to receiving intra-arterial (IA) thrombolytic therapy or mechanical reperfusion therapy at this hospital?***
- ***IA catheter-based treatment at outside hospital?***
- ***Investigational or experimental protocol for thrombolysis***
- ***If yes, Specify***
- ***^^Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade***
- ***Is there a documented TICI reperfusion gradepost-treatment?***
- ***Surgical treatment for ICH at this hospital***
- ***If surgical treatment for ICH at this hospital, type***
- ***If ICH was evacuated, time from ictus to evacuation start was***

IV Thrombolytic at an outside hospital or Mobile Stroke Unit

Collected For: GWTG

Definition: Documentation of prior IV thrombolytic administered at an outside hospital prior to transfer or in a mobile stroke unit.

Question: Indicate if IV thrombolytic was initiated at an outside hospital.

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Select “Yes" when a patient was transferred from another hospital where IV thrombolytic was started, even if the infusion continues after the patient arrives at your facility.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

If yes, select thrombolytic administered at outside hospital or Mobile Stroke Unit

Collected For: GWTG

Definition: Documentation of the type of thrombolytic administered at outside hospital or Mobile Stroke Unit

Question: If yes, thrombolytic was administered at an outside hospital or Mobile Stroke Unit, which thrombolytic was administered?

Format: Single Select

Allowable Values:

- Alteplase
- Tenecteplase

Notes for Abstraction: N/A

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Additional Notes / Guidelines for Abstraction: N/A

Endovascular Therapy

- Is there documentation of a suspected LVO in the medical record?
- Is there documentation in the medical record that the patient is eligible for MER therapty or mechanical thrombectomy procedure?
- Catheter-based treatment at this hospital?
- IA alteplase or MER Initiation Date
- IA catheter-based treatment at outside hospital

REQUIRED FOR TJC: Is there documentation for a suspected LVO in the medical record?

> ***Element definition from Specifications Manual for Joint Commission National Quality Measures***

Collected for: STK-OP-1

TJC Name: ***Suspected Large Vessel Occlusion (LVO)***

Definition: Documentation in the medical record for a suspected large vessel cerebral artery occlusion. Large vessel occlusions include documentation of a cerebral occlusion in the Internal Carotid Artery (ICA), ICA terminus (T-lesion; T occlusion), Middle Cerebral Artery (MCA), M1 MCA, Vertebral Artery, or Basilar Artery.

Question: Is there documentation of a suspected LVO in the medical record?

Format:

Length - 1

Type - Alphanumeric

Occurs - 1

Allowable Values:

- **Yes** (There is documentation of a suspected LVO)
- **No** (There is no documentation of a suspected LVO, OR unable to determine from the medical record)

Notes for Abstraction:

- If there is **ANY** documentation of LVO prior to transfer to another hospital, select "Yes". The percentage or degree of occlusion or stenosis is not needed to select ?#8364;œYes?#8364;? for this data element, e.g., "the patient has a LVO and requires transfer."
  - Documentation of LVO alone without the location of a specific cerebral artery is sufficient to select "Yes".
  - Disregard qualifiers describing the degree of occlusion, e.g., minimal/mild/moderate/high.
- Documentation of suspected LVO, select "Yes".

  Acceptable examples (select "Yes"):

  - Possible LVO requiring further evaluation.
  - High probability of left side ELVO.
  - Worrisome for ICA LVO.
  - Suspicious for left MCA territory ischemic CVA.
- If an occlusion is documented in any of the following cerebral arteries, select "Yes": Internal Carotid Artery (ICA), ICA terminus (T-lesion; T occlusion), Middle Cerebral Artery (MCA), M1 MCA, M2 MCA, Vertebral Artery, or Basilar Artery.
  - A brain imaging report is not needed to select ?#8364;œYes?#8364;?, but may be used for abstraction. Findings / impression documented by a radiologist may be used for abstraction as well as other documentation available in the medical record.
  - The term LVO does not need to be linked with the cerebral artery.
- If there is documentation in one source that indicates the patient has a LVO, AND there is documentation in another source that indicates the patient is NOT LVO (e.g., neurology report states positive for LVO, but radiology report states negative for LVO), the source that indicates the patient has LVO would be used for this data element. Contradictory or conflicting documentation select "Yes".
- If after careful examination of circumstances, context, etc., documentation of LVO is still unclear, the case should be deemed "unable to determine" (select "No").

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports

Guidelines for Abstraction:

Inclusion:

- Evolving large vessel occlusion (ELVO)
- Hyperdensity or hyperdense sign in a defined location.
- Opacification
- Sylvian occlusion

Exclusion: None

Admission Data, Hospitalization Data

Summary of Changes

REQUIRED FOR TJC: Is there documentation in the medical record that the patient is eligible for MER therapy or mechanical thrombectomy procedure?

Element definition from Specifications Manual for Joint Commission National Quality Measures

Collected for: STK-OP-1

TJC Name: ***MER Eligibility***

Definition: Documentation in the medical record that the ischemic stroke patient is eligible for mechanical endovascular reperfusion (MER) therapy. MER therapy or mechanical thrombectomy is an advanced neurological procedure for removal of a cerebral occlusion using a mechanical device, also known as a clot retrieval device or stent retriever, and/or aspriation technique.

Question: Is there documentation in the medical record that the patient is eligible for MER therapy or a mechanical thrombectomy procedure?

Format:

Length - 1

Type - Alphanumeric

Occurs - 1

Allowable Values:

- **Yes** (There is documentation that the patient is eligible for MER therapy or a mechanical thrombectomy procedure.)
- **No** (There is no documentation that the patient is eligible for MER therapy or a mechanical thrombectomy procedure, OR unable to determine from the medical record documentation.)

Notes for Abstraction:

- Documentation by a physician/APN/PA that the patient is a candidate or eligible for MER therapy.
- Documentation by a physician/APN/PA that the patient is being transferred to a higher level stroke center for the purpose of having a mechcanical thrombectomy procedure or further evaluation for possible MER therapy.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports

Guidelines for Abstraction:

Included:

- Endovascluar Therapy (EVT)
- Mechanical Endovascular Reperfusion (MER) Therapy
- Mechanical Thrombectomy

Exclusion:

- **None**

Summary of Changes

REQUIRED FOR COVERDELL ONLY: IA catheter-based treatment at this hospital?

Indicate if IA catheter-based treatment for acute ischemic stroke was initiated at this hospital. IA catheter-based treatment therapy includes all uses of IA delivery of pharmacologic thrombolytic therapy, as well as mechanical devices such as "Clot retrieval devices" for acute ischemic stroke. Mechanical devices may be used alone or in conjunction with IA thrombolytic therapy. ***This field does not apply to endovascular treatments for other cerebrovascular conditions, such as stenting or angioplasty for subarachnoid hemorrhage induced vasospasm or elective carotid stenting for ischemic stroke prevention.***

- Yes
- No

Notes for Abstraction:

- If catheter-based treatment for planned therapeutic intervention is initiated, but there is no visualized occlusion, then select “No”.
- If IA thrombolytic therapy is given regionally (remote from clot due to an inability to access the clot), select “Yes.”
- This data element is looking to capture patients that receive IA catheter-based reperfusion for acute stroke events only, and not those that undergo carotid revascularization for secondary prevention.
    - Select “No” for patients that undergo treatment for secondary prevention.
    - Select “No” for patients that undergo purely diagnostic angio or elective stenting.

Inclusion Guidelines IA catheter-based treatment ***(see data element of: If IA catheter-based treatment at this hospital, type of treatment for additional clarity)*****:**

- IA Thrombolytic
- Retrievable stent
- Other mechanical clot retriever device (not retrievable stent)
- Clot suction device
- Intracranial angioplasty, with or without permanent (non-retrieved stent)
- Cervical carotid angioplasty, with or without stent
- Other

Exclusion Guidelines:

- Catheter-based reperfusion for secondary prevention
- Elective Stenting
- Diagnostic angio

Admission Data, Hospitalization Data

Summary of Changes

REQUIRED FOR COMPREHENSIVE AND COVERDELL: IA alteplase or MER Initiation Date/Time

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IA alteplase or MER Initiation Date and Time

Collected For: CSTK-05

Definition: The date and the time (military time) that IA thrombolytic (alteplase) therapy or mechanical endovascular reperfusion (MER) therapy was initiated to a patient with ischemic stroke at this hospital. IA thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus. Reperfusion therapies also include procedures utilizing mechanical thrombectomy devices with or without pharmacological thrombolysis.

Suggested Data Collection Question: What is the date and time that IA alteplase or MER was initiated at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD
5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- If the date IA alteplase or MER was initiated 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the MER initiation date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the MER initiation 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for IA alteplase or MER Initiation Date allows the case to be accepted into the warehouse.
- For times that include "seconds", remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- The medical record must be abstracted as documented (taken at face value). When the time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the MER initiation time was 3300. No other documentation in the medical record provides a valid time. Since the MER initiation 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".
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for IA alteplase or MER Initiation Time allows the case to be accepted into the warehouse.
- The earliest time should be used. If both IA alteplase and MER were initiated in the same procedure or different procedures, select the start time for the intervention that was done first.
  Example:
  "Patient entered the interventional suite at 1130. Anesthesia start time 1145. Groin puncture documented at 1151. IA infusion at

1205. Solataire deployed at 1229; second deployment 1243; Trevo deployed at 1310." Select 1205 for IA alteplase or MER Initiation Time.
- If the time of therapy initiation is unable to be determined from medical record documentation, select "UTD".

Suggested Data Sources:

- Consultation notes
- Progress notes
- Operative notes
- Diagnostic test reports
- Procedure notes

Guidelines for Abstraction

Inclusion: None

Exclusion: None

OPTIONALCatheter-based stroke treatment at outside hospital?

Definition: Indicate if IA catheter-based treatment was initiated at an outside hospital prior to transfer to your hospital?

Data Collection Question: Was IA catheter-based treatment for acute ischemic stroke was initiated at an outside hospital?

Format: Single-select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- This field does not apply to endovascular treatments for other cerebrovascular conditions, such as stenting or angioplasty for subarachnoid hemorrhage induced vasospasm or elective carotid stenting for ischemic stroke prevention.
- Select **Yes** If IA therapy is given regionally (remote from clot due to an inability to access the clot).
- Select **No** if catheter-based treatment for planned therapeutic intervention is initated, but there is no visualized occulusion.
- Select **No** for patients that undergo treatment for secondary prevention.
- Select **No** for patients that undergo purely diagnostic angio or elective stenting.
  Inclusion Guidelines IA catheter-based treatment type:
- IA Thrombolytic
- Retrievable stent
- Other mechanical clot retriever device (not retrievable stent)
- Clot suction device
- Intracranial angioplasty, with or without permanent (non-retrieved stent)
- Cervical carotid angioplasty, with or without stent
- Other
  Exclusion Guidelines:
- Catheter-based reperfusion for secondary prevention
- Elective Stenting
- Diagnostic angio

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IA Thrombolytic Initiation Date/Time

Collected For: CSTK-07

Definition: The date and the time (military time) that Intra-arterial (IA) thrombolytic therapy was initiated to a patient with ischemic stroke at this hospital. IA thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Suggested Data Collection Question: What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- If the date IA thrombolytic therapy was initiated 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) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the IA thrombolytic initiation date was 03-*42*-20xx. No other documentation in the medical record provides a valid date. Since the IA thrombolytic initiation 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".
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for IA Thrombolytic Initiation Date allows the case to be accepted into the warehouse.
- Use the time at which initiation of the IA thrombolytic was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different IA thrombolytic initiation times (either different IA thrombolytic episodes or corresponding with the same episode), enter the earliest time.
- For times that include "seconds", remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- IA thrombolytic initiation time refers to the start time of the thrombolytic bolus/infusion.
- If the time of IA thrombolytic initiation 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 time) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the IA thrombolytic initiation time was 3300. No other documentation in the medical record provides a valid time. Since the IA thrombolytic initiation 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".
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for IA Thrombolytic Initiation Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Operative notes
- Diagnostic test reports
- Procedure notes

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: First Pass of a Mechanical Reperfusion Device

Collected For: CSTK-07

Definition: First pass (i.e., deployment) of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital. A mechanical reperfusion device is also known as a clot retrieval device. Clot retrieval devices are designed to treat ischemic stroke by removal of the clot from the cerebral artery. Several brand names are used to identify clot retrieval devices which include, Merci, Penumbra, Trevo, and Solataire. For purposes of this data element, "pass" means mechanical deployment of a clot retrieval device.

Suggested Data Collection Question: Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?

Format

Length: 1

Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital.

N (No) There is no documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If the first pass of the mechanical reperfusion device at this hospital is unable to be determined from medical record documentation, select No.
- If a diagnostic test report conflicts with other sources documenting the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery, use the documentation found in the diagnostic test report.

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Operative notes
- Procedure notes

Guidelines for Abstraction

Inclusion:

- Deployment
- Pass
- Access
- Advance
- Aspiration
- Attempt
- Run

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE:

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: First Pass Date/Time

Collected For: CSTK-07

Definition: The date and the time of the first pass (i.e., mechanical deployment) of a clot retrieval device at this hospital.

Suggested Data Collection Question: What is the date and time of the first pass of a clot retrieval device at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- If the date of the first pass 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) and no other documentation is found that provides this information, the abstractor should select UTD
  Examples:
  - Documentation indicates the first pass date was 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the first pass 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 First Pass Date was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the First Pass Date 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 Joint Commissions Data Warehouse. Use of UTD for First Pass Date allows the case to be accepted into the warehouse.
- 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 First Pass Time 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 time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the first pass time was 3300. No other documentation in the medical record provides a valid time. Since the first pass 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for First Pass Time allows the case to be accepted into the warehouse.
- The earliest time should be used regardless of how many vessels were treated or which ones were successful vs. unsuccessful.

Suggested Data Sources:

- Consultation notes
- Operative notes
- Diagnostic test reports
- Procedure notes

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Anesthesia start time
- Groin puncture time
- Procedure start time

Summary of Changes

OPTIONAL COMPREHENSIVE: If MER treatment at this hospital, type of treatment

- Retrievable stent
- Other mechanical clot retriever device (not retrievable stent)
- Clot suction device
- Intracranial angioplasty, with or without permanent (non-retrieved stent)
- Cervical carotid angioplasty, with or without stent
- Other

Notes for Abstraction:

- Examples of a Retrievable stent would include (but are not limited to): Solitaire and Trevo
- Examples of an Other Mechanical Clot Retriever would include (but are not limited to): Merci Retrieval System
- Example of a Clot Suction Device would include (but is not limited to): Penumbra Stroke System

$ ***Admission Data, Hospitalization Data***

REQUIRED FOR COMPREHENSIVE: What is the location of the clot in the cerebral circulation?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Proximal or Distal Occlusion

Collected For: CSTK-08

Definition: Documentation in the medical record of the location of the clot in either the large arteries in the neck or base of the brain (proximal), or small arteries higher up in the brain (distal). Arterial occlusions arising more proximally are associated with poorer outcomes.

Suggested Data Collection Question: What is the location of the clot in the cerebral circulation?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

1 Proximal cerebral occlusion

2 Distal cerebral occlusion

3 Neither proximal or distal, OR unable to determine (UTD) from the medical record documentation

Notes for Abstraction:

- If the occlusion is documented in an artery listed as an inclusion term for "proximal", select ‘1’.
- If the occlusion is documented in an artery listed as an inclusion term for "distal", select ‘2’.
- If multiple occlusions, select "proximal" or "distal" for the primary vessel occlusion.
- If unable to determine, select ‘3’.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- Admitting notes
- Procedure reports

Guidelines for Abstraction:

Inclusion	Exclusion
PROXIMAL: • Internal Carotid Artery (ICA) • ICA terminus • Middle Cerebral Artery (MCA) • Middle Cerebral Artery (MCA) M1 segment • M1 • T-occlusion (T-lesion) • Vertebral Artery • Basilar Artery DISTAL: • Anterior Cerebral Artery (ACA) • Anterior Cerebral Artery (ACA) A1 segment • A1 • Anterior Cerebral Artery (ACA) A2 segment • A2 • Anterior Cerebral Artery (ACA) A3 segment • A3 • Middle Cerebral Artery (MCA) M2 segment • M2 • Middle Cerebral Artery (MCA) M3 segment • M3 • Middle Cerebral Artery (MCA) M4 segment • M4 • Posterior Cerebral Artery (PCA) • Posterior Cerebral Artery (PCA) P1 segment • P1 • Posterior Cerebral Artery (PCA) P2 segment • P2 • Posterior Cerebral Artery (PCA) P3 segment • P3	None

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What cerebral artery is occluded?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Site of Primary Vessel Occlusion

Collected For: CSTK-08

Definition: Documentation in the medical record of the clinical location of the primary occluded vessel.

Suggested Data Collection Question: What cerebral artery is occluded?

Format

Length: 2

Type: Alphanumeric
Occurs: 1

Allowable Values:

1 Anterior cerebral artery (ACA)

2 A1 ACA

3 Anterior communicating artery

4 Internal carotid artery (ICA)

5 ICA terminus (T-lesion; T-occlusion)

6 Middle cerebral artery (MCA)

7 M1 MCA

8 M2 MCA

9 M3/M4 MCA

10 Vertebral artery (VA)

11 Basilar artery (BA)

12 Posterior cerebral artery (PCA)

13 Other cerebral artery branch/segment

14 The clinical location of the primary occluded vessel was not documented, OR unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- Collect the documented clinical location of the primary occluded arterial segment treated with IA thrombolytic (alteplase) therapy and/or mechanical endovascular reperfusion therapy.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- Admitting notes
- Procedure reports

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

OPTIONAL: Investigational or experimental protocol for thrombolysis

Indicate whether or not medical records suggest that some kind of investigational thrombolytic protocol was used during provision of care. If investigational or experimental protocol was used there should be a signed IRB consent in the medical record.

- Yes
- No

Admission Data, Hospitalization Data

OPTIONAL: If yes, Specify

If some kind of investigational or experimental protocol for thrombolysis was used, please describe the nature of the experimental protocol in this text box.

^^Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

Collected For: GWTG EVT Measure Set

Definition: The Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade is used to measure cerebral reperfusion. Results with this scoring system range between zero and three: 0 (no perfusion); 1 (perfusion past the initial occlusion, but no distal branch filling); 2 (perfusion with incomplete or slow distal branch filling); and, 3 (full perfusion with filling of all distal branches). Reperfusion past the target arterial occlusion and into the distal arterial bed and terminal branches, in conjunction with recanalization of the target arterial occlusion, demonstrates flow restoration or revascularization.

Question: Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

Format: Single Select

Allowable Values:

- Grade 0
- Grade 1
- Grade 2a:
- Grade 2b
- Grade 3
- ND

Notes for Abstraction:

- Grade 0: No Perfusion. No antegrade flow beyond the point of occlusion.
- Grade 1: Penetration With Minimal Perfusion. The contrast material passes beyond the area of obstruction but fails to opacify the entire cerebral bed distal to the obstruction for the duration of the angiographic run.
- Grade 2a: Partial tissue reperfusion in < 50% of the occluded artery.
- Grade 2b: Partial reperfusion in ≥ 50% of the occluded artery territory.
- Grade 3: Essentially complete Perfusion. Antegrade flow into the bed distal to the obstruction occurs as promptly as into the obstruction and clearance of contrast material from the involved bed is as rapid as from an uninvolved other bed of the same vessel or the opposite cerebral artery.
- Select "Grade 2b" if documentation includes 2b, 2c, or a grade 2 with any modifier that indicates 50 -99 percent reperfusion.
- If a TICI reperfusion grade was not done post treatment or cannot be determined from medical record documentation, select “ND.”
- TICI grade must be documented by a Physician/APN/PA.
- **Rationale:** Endovascular therapy (EVT) is now the standard of care for treatment of acute ischemic stroke due to large-vessel occlusion (LVO). In 2015, the American Heart Association/American Stroke Association published a focused update to the 2013 Guidelines for the Early Management of Patients with Acute Ischemic Stroke regarding endovascular treatment (Powers WJ, et. al., 2015). Endovascular therapy with a stent retriever is recommended for eligible patients. To ensure benefit, reperfusion to TICI 2B/3 should be achieved as early as possible and within 6 hours of stroke onset. As with IV alteplase, reduced time from symptom onset to reperfusion with EVT is highly associated with better clinical outcomes.

Suggested Data Sources:

- Consultation Notes
- Diagnostic Test Reports
- Procedure Reports

Additional Notes / Guidelines for Abstraction:

- Sang Hyun Suh, Harry J. Cloft, Jennifer E. Fugate, Alejandro A. Rabinstein, David S. Liebeskind and David F. Kallmes *Stroke.* 2013;44:1166-1168.

REQUIRED FOR COMPREHENSIVE: Is there a documented TICI reperfusion gradepost-treatment?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade

Collected For: CSTK-08

Definition: Documentation that the Thrombolysis in Cerebral Infarction (TICI) reperfusion grade was 2B (i.e., partial perfusion greater than or equal to 50% of vascular distribution of occulded artery) or higher post-treatment. The TICI scale is a tool used to grade the degree of perfusion obtained following recanalization of an arterial occlusion. Recanalization of an arterial occlusion increases reperfusion into distal segments of the artery and restores blood flow to brain tissue. Scores may range from 0 (no perfusion) to 3 (full perfusion with filling of all distal branches).

Suggested Data Collection Question: Is there a documented TICI reperfusion gradepost-treatment?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

1 A TICI reperfusion grade greater than or equal to (≥) 2B was documented post-treatment.

2 A TICI reperfusion grade less than (<) 2B was documented post-treatment.

3 A TICI reperfusion grade was not done post-treatment, OR Unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- The TICI grade may be documented by the physician/APN/PA, or a nurse (RN), circulating nurse, or operating room technician designated to scribe during the procedure.
- When multiple TICIs are documented because more than one vessel or branches of an artery are occluded, select the TICI grade associated with the site of primary vessel occlusion.
- If unable to determine whether the TICI reflects reperfusion of the primary vessel, then select "UTD".

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- Admitting notes

Guidelines for Abstraction

Inclusion: None

Exclusion:

- TIBI
- TIMI
- Scoring methodologies other than TICI

Summary of Changes

OPTIONAL COMPREHENSIVE: Surgical treatment for ICH at this hospital?

Indicate if surgical treatment was initiated at this hospital for ICH.

- Yes
- No

Admission Data, Hospitalization Data

OPTIONAL COMPREHENSIVE: If Surgical treatment for ICH at this hospital, type

- External Ventricular Drain (EVD)
- Endoscopic evacuation
- Conventional craniotomy and evacuation of clot under direct vision
- Stereotactic evacuation
- Hemicraniotomy without clot evacuation
- Fibrinolytic infusion via catheter
- Other

Admission Data, Hospitalization Data

OPTIONAL COMPREHENSIVE: If ICH was evacuated, time from ictus to evacuation procedure start was:

Enter the time, in hours, between ictus and surgery. The start of surgery is defined as the time documented in the operative or procedure note.

Admission Data, Hospitalization Data

Additional Comments Related to Thrombolytics

Use this text box to enter any additional comments related to thrombolytic therapy

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Complications of Thrombolytic Therapy

- ***Complications of Reperfusion therapy (Thrombolytic or MER)***
- ***If bleeding complications occur in patient transferred after IV alteplase***
- ***What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?***
- ***What is the last NIHSS score documented prior to initiation of IA alteplase or MER at this hospital?***
- ***What is the highest NIHSS score documented within 36 hours following initiation of IV (alteplase) thrombolytic therapy?***
- ***What is the highest NIHSS score documented within 36 hours following IA alteplase or MER initiation?***
- ***Was there a positive finding on brain imaging of parenchymal hematoma, SAH, and/or IVH following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation?***
- ***Date/Time of positive brain image***

- ***Results of positive brain image***
- ***Is there documentation that a procoagulant reversal agent was initiated at this hospital?***
- ***Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?***
- ***Date/Time procoagulant initiated***
- ***Is there documentation that nimodipine was administered at this hospital?***
- ***Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering nimodipine treatment?***
- ***What is the date and time that nimodipine was first administered to this patient at this hospital?***
- ***Patient NPO throughout the entire hospital stay?***
- ***Was patient screened for dysphagia prior to any oral intake including water or medications?***
- ***If yes, Dysphagia screening results:***
- ***Treatment for Hospital-Acquired Pneumonia***
- ***VTE Interventions***
- ***What date was the VTE prophylaxis administered?***
- ***Is there physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission?***
- ***Is there physician/APN/PA documentation why Oral Factor Xa Inhibitor was administered for VTE prophylaxis?***
- ***Other Therapeutic Anticoagulation***
- ***Was DVT or PE documented?***
- ***Was antithrombotic therapy administered by the end of hospital day 2?***
- ***If yes***
- ***Was patient treated for a urinary tract infection (UTI) during this admission?***
- ***If patient was treated for a UTI, did the patient have a Foley catheter during this admission?***

REQUIRED: Complications of Reperfusion therapy (Thrombolytic or MER) (Check all that apply)

Indicate if there were any complications from the thrombolytic or MER therapy.

- Symptomatic intracranial hemorrhage <36 hours
- Life threatening, serious systemic hemorrhage <36 hours
- Other serious complications
- No serious complications
- UTD

Notes for Abstraction:

- Symptomatic brain hemorrhage is defined by a CT within 36 hours that shows intracranial hemorrhage AND physician's notes indicate clinical deterioration due to hemorrhage.
- Life threatening, serious systemic hemorrhage is defined by bleeding within 36 hours of thrombolytic therapy or MER and > 3 transfused units of blood within 7 days or discharge (whichever is earlier) AND physician note attributing bleeding problem as reason for transfusion
- Other serious complications are those that require additional medical interventions or prolonged length of stay. Serious complications include those that are unexpected or out of proportion to the patient's expected course and that are documented as complications of reperfusion therapy. For example, rapid development of malignant edema, angioedema, or recurrent stroke. If complications do not require additional medical interventions or prolong the length of stay, select "No serious complications".
- Select "UTD" if worsening stroke symptoms or in-hospital death without definitive evidence of a complication listed above (such as hemorrhage).

Example: Patient 190a received intravenous thrombolytics in the ED on 07/01/20XX. The following day the patient developed a sudden headache and decreased level of consciousness. A head CT was performed which showed a large intracerebral hemorrhage. Select "Symptomatic intracranial hemorrhage < 36 hours."

S ***Admission Data, Hospitalization Data, Radiology notes, Discharge Data***

Summary of Changes

REQUIRED: If bleeding complications occur in patient transferred after IV alteplase

Indicate if hemorrhagic complications of alteplase within 36 hours from the time of alteplase bolus, as defined above, occurred in a patient transferred to another healthcare facility after IV alteplase (Intravenous alteplase) administration.

- Symptomatic hemorrhage detected prior to patient transfer
- Symptomatic hemorrhage detected only after patient transfer
- Unable to determine
- N/A

Notes for Abstraction:

- If symptomatic brain or systemic hemorrhage was detected or strongly suspected prior to transfer, select "symptomatic hemorrhage detected prior to patient transfer". Select this option if the patient has hemodynamic instability suggesting systemic hemorrhage, or a deterioration in the neurologic exam suggesting intracerebral hemorrhage while still at the initial treating hospital, even if the testing which confirms the finding doesn't occur until after transfer.
- If symptomatic brain or systemic hemorrhage is not detected or strongly suspected prior to transfer, and occurs only after the patient has left the initial treating facility, select "symptomatic hemorrhage detected only after patient transfer".
- If it is not possible to obtain information from the hospital at which the patient received IV alteplase prior to transfer (if you are the receiving hospital), or to which you transferred the patient after starting IV alteplase (if you are the initial treating hospital), select "unable to determine". Note that the Federal Privacy Rule (HIPAA) does not restrict the communication of protected health information when performed for quality assurance purposes. To avoid interfering with an individual's access to quality health care or the efficient payment for such health care, the Privacy Rule permits a covered entity to use and disclose

protected health information, with certain limits and protections, for treatment, payment, and health care operations activities. [These health care operations activities include] conducting quality assessment and improvement activities, population based activities relating to improving health or reducing health care costs, and case management and care coordination; Reviewing the competence or qualifications of health care professionals, evaluating provider and health plan performance, training health care and non-health care professionals, accreditation, certification, licensing, or credentialing activities [from The Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104-191, enacted on August 21, 1996.]

- Also select "Unable to determine" in case of patient death without confirmed hemorrhage.
- If no tPA given, or if the patient is not transferred after IV-tPA (patient remains at your hospital), then this element is not applicable. Select N/A.

Examples:

- Patient 200a received intravenous tPA in the ED at TMC on 07/01/04 at 11:00 and was transferred to GMC at 13:00. The following day at GMC the patient developed a sudden headache and decreased level of consciousness. A head CT was performed which showed a large intracerebral hemorrhage. Select "symptomatic hemorrhage detected only after patient transfer". If the symptoms began in the ambulance after leaving TMC, you would still select "symptomatic hemorrhage detected only after patient transfer".
- Patient 200b received intravenous tPA in the ED at TMC on 07/01/04 at 11:00 and developed a sudden headache and decreased level of consciousness prior to transfer to GMC at 13:00. Upon arrival at GMC, a head CT was performed which showed a large intracerebral hemorrhage. Select "symptomatic hemorrhage detected prior to patient transfer".
- Patient 200c received intravenous tPA in the ED at TMC on 07/01/04 at 11:00 and was transferred to GMC at 13:00. Despite a request by the staff at TMC to the Stroke Center director at GMC, no further information can be obtained about the patient after transfer. Select "unable to determine"

S ***Admission Data, Hospitalization Data, Radiology notes, Discharge Data***

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: NIHSS Score Documented Closest to IV Thrombolytic Initiation

Collected For: CSTK-05

Definition: The NIHSS score documented closest to IV thrombolytic initiation is the last NIHSS score documented prior to IV thrombolytic initiation at this hospital. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Suggested Data Collection Question: What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?

Format

Length: 3
Type: Alphanumeric
Occurs:1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- Look for the last NIHSS score documented prior to IV thrombolytic initiation at this hospital.
  Examples:
  - "Initial NIHSS score 4 documented by the ED nurse at this hospital. "No other NIHSS scores were documented prior to IV alteplase initiation." Select '4'.
  - "Symptoms resolved by time of hospital arrival at 1200. Initial NIHSS score zero documented in ED. Symptoms returned at 1330, NIHSS score 2, and IV alteplase given at 1338." Select '2'.
  - "Patient transferred to this hospital. NIHSS score 10 done at transferring hospital. No NIHSS score documented at this hospital prior to IV alteplase." Select '10'.
  - "Nurse documented NIHSS score 8 via telemedicine prior to arrival at this hospital. IV alteplase initiated at 1712. NIHSS score 2 at 1800." Select '8'.
- For purposes of this data element, score documentation between 0 and 42 is acceptable. Only one score may be selected. Select the last NIHSS score documented prior to IV Thrombolytic Initiation Time at this hospital
- If only one NIHSS score is documented prior to IV thrombolytic initiation and no other score(s) are available for comparison, enter the value for that score.
- If no NIHSS score is documented prior to IV thrombolytic initiation, select UTD.
- If unable to determine the last NIHSS score documented prior to IV thrombolytic initiation, select UTD.

Suggested Data Sources:

- Consultation notes
- History and physical
- Nursing flow sheet
- Progress notes

- Transfer sheet
- Admitting note
- Ambulance record
- Emergency room records
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the last NIHSS score documented prior to initiation of IA alteplase or MER at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: NIHSS Score Documented Closest to IA alteplase or MER Initiation

Collected For: CSTK-05

Definition: The NIHSS score documented closest to IA thrombolytic (alteplase) therapy or mechanical endovascular reperfusion (MER) therapy initiation is the last NIHSS score documented prior to IA alteplase or MER initiation (i.e., the initiation time of the intervention performed first) at this hospital. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Suggested Data Collection Question: What is the last NIHSS score documented prior to initiation of IA alteplase or MER at this hospital?

Format

Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- Look for the last NIHSS score documented prior to IA alteplase or MER initiation at this hospital.
  Examples:
  - "Initial NIHSS score 4 documented by the ED nurse at this hospital. No other NIHSS scores were documented prior to IA alteplase or MER initiation." Select '4'.
  - "NIHSS score 6 prior to transfer to this hospital. IV alteplase 'drip and ship'. Arrival Time at this hospital 2319. NIHSS score 8 at 2325 and NIHSS score 10 at 2340. IA Thrombolytic Initiation Time 0015." Select '10'.
  - "NIHSS score 10 on arrival. IV alteplase given at 0800. NIHSS score 8 at 0900. IA infusion start time 0950." Select '8'.
  - "IV alteplase given at a transferring hospital. Nurse documented NIHSS score 18 via telemedicine prior to arrival at this hospital. Patient went directly to OR for mechanical thrombectomy procedure. No NIHSS score documented at this hospital prior to intervention." Select '18'.
- For purposes of this data element, score documentation between 0 and 42 is acceptable. Only one score may be selected. Select the last NIHSS score documented prior to the start time of IA alteplase **OR** first pass of a mechanical reperfusion device whichever intervention is performed first, i.e. "IA alteplase first then MER" or "MER first then IA alteplase", at this hospital.
- If only one NIHSS score is documented prior to IA alteplase or MER initiation and no other score(s) are available for comparison, enter the value for that score.
- If no NIHSS score is documented prior to IA alteplase or MER initiation, select UTD.
- If unable to determine the last NIHSS score documented prior to IA alteplase or MER initiation, select UTD.

Suggested Data Sources:

- Consultation notes
- History and physical
- Nursing flow sheet
- Progress notes
- Transfer sheet
- Admitting note
- Ambulance record
- Emergency room records
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the highest NIHSS score documented within 36 hours following initiation of IV (alteplase) thrombolytic therapy?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation

Collected For: CSTK-05

Definition: The highest NIHSS score documented within 36 hours following initiation of IV thrombolytic (alteplase) therapy. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Suggested Data Collection Question: What is the highest NIHSS score documented within 36 hours following initiation of IV (alteplase) thrombolytic therapy?

Format

Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- Look for the highest NIHSS score documented in less than or equal to 36 hours following initiation of IV thrombolytic (alteplase) therapy.
- For purposes of this data element, score documentation between 0 and 42 is acceptable.
- If only one NIHSS score is documented within the first 36 hours following initiation of IV thrombolytic (alteplase) therapy and no other NIHSS score(s) are available for comparison, enter the value for that score.
- If multiple scores are documented within the first 36 hours following initiation of IV thrombolytic (alteplase) therapy, select the highest score.
  EXAMPLES:
  - NIHSS Score is 10 at 1500 and 20 at 2300. Both scores are documented following the initiation of IV thrombolytic therapy. Select NIHSS score of 20.
  - IV thrombolytic therapy initiated on 9/5/20XX at 0900. NIHSS score is 8 on 9/5/20XX at 2300, 10 on 9/6/20XX at 0100, and 8 on 9/6/20XX at 0300. Select NIHSS score 10.
  - IV thrombolytic therapy initiated on 9/5/20XX at 0900. NIHSS score 3 on 9/6/20XX at 0900, 2 on 9/8/20XX at 0900, and 6 on 9/10/2012 at 0900. Select 3.
- If no NIHSS score is documented within 36 hours following IV thrombolytic (alteplase) therapy, select UTD.
- If unable to determine the highest score documented within 36 hours following IV thrombolytic (alteplase) therapy, select UTD.

Suggested Data Sources:

- Consultation notes
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the highest NIHSS score documented within 36 hours following IA alteplase or MER initiation?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Highest NIHSS Score Documented Within 36 Hours Following IA alteplase or MER Initiation

Collected For: CSTK-05

Definition: The highest NIHSS score documented within 36 hours following initiation of IA thrombolytic (alteplase) therapy or mechanical endovascular reperfusion therapy (MER). The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Suggested Data Collection Question: What is the highest NIHSS score documented within 36 hours following IA alteplase or MER initiation?

Format

Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

- The NIHSS score may be documented by the physician/APN/PA or nurse (RN).
- Look for the highest NIHSS score documented in less than or equal to 36 hours following initiation of IA alteplase or MER therapy.
- For purposes of this data element, score documentation between 0 and 42 is acceptable.
- If only one NIHSS score is documented within the first 36 hours following initiation of IA alteplase or MER therapy and no other NIHSS score(s) are available for comparison, enter the value for that score.
- If multiple scores are documented within the first 36 hours following initiation of IA alteplase or MER therapy, select the highest score.
  EXAMPLES:
  - IA alteplase initiated at 1247 with first deployment of a mechanical reperfusion device at 1303. NIHSS Score is 10 at 1500 and 20 at 2300. Select NIHSS score of 20.
  - IA alteplase infusion initiated on 9/5/20XX at 0900. NIHSS score is 8 on 9/5/20XX at 2300, 10 on 9/6/20XX at 0100, and 8 on 9/6/20XX at 0300. Select NIHSS score 10.
  - MER initiated on 9/5/20XX at 0900. NIHSS score 3 on 9/6/20XX at 0900, 2 on 9/8/20XX at 0900, and 6 on 9/10/2012 at 0900. Select 3.
- If no NIHSS score is documented within 36 hours following IA alteplase or MER therapy initiation, select UTD.
- If unable to determine the highest score documented within 36 hours following IA alteplase or MER therapy initiation, select UTD.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Nursing assessment

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Modified NIHSS scores
- Estimated NIHSS scores
- Scoring methodologies other than NIHSS

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Was there a positive finding on brain imaging of parenchymal hematoma, SAH, and/or IVH following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Positive Brain Image

Collected For: CSTK-05

Definition: Documentation of a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA thrombolytic (alteplase) therapy, OR mechanical endovascular reperfusion therapy initiation. The major risk of reperfusion therapy is hemorrhage

Suggested Data Collection Question: Was there a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation?

Format

Length:1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (YES) Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was detected on brain imaging following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation.

N (No) Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was not detected on brain imaging following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation, OR Unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- For purposes of this data element, **do not use brain imaging reports for CT/MRI performed prior to IV or IA thombolytic (alteplase) initiation, or mechanical endovascular reperfusion (MER) therapy.** Abstract only brain imaging reports for tests done after these interventions to select 'YES'.
- Patients with a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage on brain imaging following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation, are acceptable to select Yes.
    - A confirmed report is not necessary. Reports of preliminary findings within this timeframe may be used in abstraction.
    - If the report documents that hemorrhage cannot be excluded, cannot R/O hemorrhage, or findings suggestive of hemorrhage, select Yes.
- When conflicting information is documented in the medical record, select 'YES'.
- Documentation that the hemorrhage is "old", select 'NO'. **Do not infer that a hemorrhage is old unless explicitly documented.**
- See the inclusion list for acceptable examples of documentation of a positive finding. The list is not all inclusive.

Suggested Data Sources:

ONLY acceptable data source

- Brain imaging reports
- Diagnostic test reports
- Radiology reports

Guidelines for Abstraction

Inclusion:

- Bleed
- Brain hemorrhage
- Cerebral hemorrhage
- ECASS criteria PH1 or PH2
- Hemorrhage
- Hemorrhagic conversion
- Hemorrhagic expansion
- Hemorrhagic transformation
- Intracerebral hemorrhage (ICH)
- Intraventricular hemorrhage
- Parenchymal hematoma
- Parenchymal hemorrhage
- Parenchymal intracerebral hemorrhage
- Subarachnoid hemorrhage (SAH)

Exclusion: None

- ECASS criteria H1 or H2
- Incidental
- Micro
- Petechial
- Trace

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Date/Time of positive brain image

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Positive Brain Image Date/Time

Collected For: CSTK-05

Definition: The month, date, year and time for which a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was documented. Early hemorrhagic transformation occurs in about one in ten patients with acute ischemic stroke, but only parenchymal hematoma predicts poor outcomes, according to the research.

Suggested Data Collection Question: What was the date and time of the positive brain image finding?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date when a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was first documented following IV or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy initiation. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different positive brain image dates (either different brain images or corresponding with the same brain image), enter the earliest date.
- If the date of positive brain image 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the positive brain image date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the positive brain image 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Positive Brain Image Date allows the case to be accepted into the warehouse.
- Use the time at which symptomatic intracranial hemorrhage was first documented following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different symptomatic intracranial hemorrhage times (either different brain images or corresponding with the same brain image), enter the earliest time.
- 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 symptomatic intracranial hemorrhage 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 time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates primary brain image time was 3300. No other documentation in the medical record provides a valid time. Since primary brain image 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Primary Brain Image Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Diagnostic test reports
- Brain imaging reports
- Radiology reports

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

OPTIONAL COMPREHENSIVE: Results of positive brain image

For patients with documentation of a positive finding of intracranial hemorrhage, select the type of hemorrhage

- PH2: Parenchymal Hematoma Type 2, defined by ECASS criteria as a hematoma occupying >30% of the infracted area accompanied by significant mass effect.
- IVH: Intraventricular Hemorrhage
- SAH: Subarachnoid Hemorrhage
- RIH: Remote site of intraparenchymal hemorrhage outside the area of infarction
- Other positive finding not listed above
- None of the above or not documented

S ***Admission Data, Hospitalization Data, Radiology notes***

REQUIRED FOR COMPREHENSIVE: Is there documentation that a procoagulant reversal agent was initiated at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Procoagulant Reversal Agent Initiation

Collected For: CSTK-04

Definition: A procoagulant reversal agent was initiated at this hospital. Procoagulant reversal agents are medications that increase coagulation factors to promote clotting.

Suggested Data Collection Question: Is there documentation that a procoagulant reversal agent was initiated at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) A procoagulant reversal agent was initiated at this hospital.

N (No) A procoagulant reversal agent was not initiated at this hospital, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If a procoagulant reversal agent was initiated at this hospital, select Yes.
- **Only accept reversal agents identified in the list of inclusions. No other terms for reversal agents will be accepted.**
- If Vitamin K only was administered as the sole form of reversal and no other procoagulant agent was administered, select No.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medication reconciliation form

Guidelines for Abstraction

Inclusion:

- Activated prothrombin complex concentrates
- Anti-inhibitor coagulant complex
- Autoplex T
- Bebulin VH
- Eptacog alfa
- Factor IX Complex
- Factor VIIa (Recombinant)
- Feiba VH Immuno
- Fresh frozen plasma (FFP)
- NovoSeven
- NovoSeven RT
- Profilnine SD
- Proplex T
- Prothrombin complex concentrates (PCCs)
- rFVIIa
- (Kcentra) PCC-Human
- Pradaxa (dabigatran) reversal agent: Praxbind (idarucizumab)
- Xarelto (rivaroxaban)/ Eliquis (apixaban) reversal agent: Andexxa (andexanet alfa)

Exclusion:

- Vitamin K Only
- Factor IX (without complex)

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Reason for Not Administering a Procoagulant Reversal Agent

Collected For: CSTK-04

Definition:

Reason for not administering a procoagulant reversal agent.

- Adverse reaction to a procoagulant reversal agent
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist.

Procoagulant reversal agents are medications that increase coagulation factors to promote clotting.

Suggested Data Collection Question: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not administering a procoagulant reversal agent.

N (No) There is no documentation of a reason for not administering a procoagulant reversal agent OR unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons for not administering a procoagulant reversal agent must be documented by the physician/APN/PA or pharmacist.
  - Physician/APN/PA or pharmacist documentation of a hold on a procoagulant reversal agent or discontinuation of a procoagulant reversal agent constitutes a ?#8364;œclearly implied?#8364;? reason for not administering the procoagulant reversal agent.
- **If reasons are not mentioned in the context of a procoagulant reversal agent, do not make inferences** (e.g., do not assume that a procoagulant reversal agent was not administered because of an adverse reaction to a procoagulant reversal agent unless documentation explicitly states so.)
  - Reasons must be explicitly documented (e.g., "Allergic to cow milk. Do not give NovoSeven.")
- When conflicting information is documented in the medical record, select "Yes".

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary

Guidelines for Abstraction

Inclusion:

- Patient/family refusal

Exclusion: None

Summary of Changes

OPTIONAL COMPREHENSIVE: Date/Time procoagulant initiated

Enter the Date/Time procoagulant therapy was initiated at this hospital. If patient receives multiple acceptable procoagulant therapies, enter the date that the first treatment was initiated.

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

$ ***Admission Data, Hospitalization Data***

REQUIRED FOR COMPREHENSIVE: Is there documentation that nimodipine was administered at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Nimodipine Administration

Collected For: CSTK-06

Definition: Documentation that nimodipine was administered at this hospital. Nimodipine is a cerebroselective calcium channel blocker that inhibits calcium transport into vascular smooth muscle cells, thereby suppressing contractions. Nimodipine is used in the treatment of subarachnoid hemorrhage patients to prevent or limit the severity of cerebral vasospasm.

Suggested Data Collection Question: Is there documentation that nimodipine was administered at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) Nimodipine was administered at this hospital.

N (No) Nimodipine was not administered at this hospital,OR unable to determine from medical record documentation.

Notes for Abstraction:

- Nimodipine treatment must be administered at this hospital within the first 24 hours of arrival to select 'YES'. It is not necessary to review documentation outside of this timeframe.
- If nimodipine was administered at another hospital and the patient was subsequently transferred to this hospital and nimodipine treatment continued on admission to this hospital, select 'YES'
- If nimodipine was administered at this hospital later than the first 24 hours after arrival, select 'NO'.
- If nimodipine was administered at another hospital and the patient was subsequently transferred to this hospital and nimodipine treatment was not resumed or discontinued, select 'NO'.
- A physician order for nimodipine that is not executed, select 'NO'.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medical transport records
- Medication reconciliation form

Guidelines for Abstraction

Inclusion:

- Nimodipine
- Nimotop
- Nymalize

Exclusion:

- All other calcium channel blocker medications other than those listed as inclusions.

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering nimodipine treatment?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Reason for Not Administering Nimodipine Treatment

Collected For: CSTK-06

Definition:

Reason for not administering nimodipine treatment:

- Nimodipine allergy
- Non-aneurysmal subarachnoid hemorrhage (SAH)
- Reversible cerebral vasoconstriction syndrome
- Cerebral amyloid angiopathy
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist

Nimodipine inhibits calcium transport into vascular smooth muscle cells, thereby preventing or limiting cerebral vasospasm.

Suggested Data Collection Question: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering nimodipine treatment?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not administering nimodipine treatment.

N (No) There is no documentation of a reason for not administering nimodipine treatment, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons for not administering nimodipine must be documented by the physician/APN/PA or pharmacist within 24 hours of hospital arrival. It is not necessary to review documentation outside of this timeframe.
- The following are acceptable as stand-alone reasons for not administering nimodipine treatment – Nimodipine linkage is not needed:
  - Non-aneurysmal subarachnoid hemorrhage (SAH)
  - Reversible cerebral vasoconstriction syndrome
  - Cerebral amyloid angiopathy
- **If reasons are not mentioned in the context of nimodipine treatment, do not make inferences** (e.g., do not assume that nimodipine was not administered because of hypotension unless documentation explicitly states so.)
  - Reasons must be explicitly documented (e.g., BP 80/40 No nimodipine.)
  - Physician/APN/PA or pharmacist documentation of a hold on nimodipine or discontinuation of nimodipine that occurs within the first 24 hours constitutes a clearly implied reason for not administering nimodipine treatment. A hold/discontinuation of all p.o. medications counts if nimodipine (i.e., Nimotop) was on order at the time of the notation.
    EXCEPTION:
    Documentation of a conditional hold or discontinuation of nimodipine (e.g., Hold nimodipine if SBP < 100 mm/Hg, Stop nimodipine if AST > 50 IU/L.)
- When conflicting information is documented in the medical record, select Yes.
- Documentation that the patient is NPO or has a nasogastric tube (NGT) without mention that nimodipine should not be administered is insufficient. Do not infer that nimodipine is not needed unless explicitly documented.
  - Physician orders for NPO except medications does not count as a reason for not administering nimodipine, select No.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medication reconciliation form

Excluded Data Sources

- Any documentation dated/timed later than 24 hours after hospital arrival.

Guidelines for Abstraction

Inclusion:

- Patient/family refusal

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the date and time that nimodipine was first administered to this patient at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Nimodipine Administration Date/Time

Collected For: CSTK-06

Definition: The month, date, year and time (military time) that the first dose of nimodipine was administered to a patient with subarachnoid hemorrhage at this hospital. Nimodipine inhibits calcium transport into vascular smooth muscle cells, thereby preventing or limiting cerebral vasospasm.

Suggested Data Collection Question: What is the date and time that nimodipine was first administered to this patient at this hospital?

Format

Length: 10 - MM-DD-YYYY (includes dashes) or UTD, 5 - HH-MM (with or without colon) or UTD
Type: Date/Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unable to Determine

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

- Use the date at which administration of nimodipine was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different nimodipine administration dates (either different nimodipine episodes or corresponding with the same episode), enter the earliest date.
- If the date nimodipine treatment was administered 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the nimodipine administration date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the nimodipine administration 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Nimodipine Administration Date allows the case to be accepted into the warehouse.
- Use the time at which initiation of nimodipine administration was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different nimodipine administration times (either different nimodipine episodes or corresponding with the same episode), enter the earliest time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- Nimodipine administration time refers to the time that the first dose of nimodipine was administered.
- Do not use physician orders as they do not demonstrate administration of nimodipine treatment (in the ED this may be used if signed/initialed by a nurse).
- If the time of nimodipine administration 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 time) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the nimodipine administration time was 3300. No other documentation in the medical record provides a valid time. Since the nimodipine administration 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.
  Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Nimodipine Administration Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medical transport records
- Medical reconciliation form

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Summary of Changes

Other In-Hospital Treatments and Screening

Patient NPO throughout the entire hospital stay?
Was patient screened for dysphagia prior to any oral intake including water or medications?
If yes, Dysphagia screening results:
Treatment for Hospital-Acquired Pneumonia
VTE Interventions
Active bacterial or viral infection at admission or during hospitalization

REQUIRED: Patient NPO throughout the entire hospital stay?

Indicate if the patient was NPO (nothing by mouth), including food, water, or medications, for the entire hospital stay. This includes any medications delivered in the Emergency Room phase of care.

- Yes: The patient was kept NPO during the entire hospitalization and was discharged, transferred, or deceased NPO.
- No/ND: The patient was not kept NPO during entire hospital stay or the patient received food, water or medication by mouth during the hospitalization (even if there was an NPO order).

Notes for Abstraction:

- Data abstractors should wait until either patient is taken off NPO or discharged prior to answering this question.
- The delivery of food, fluid, or medication via a nasogastric tube, orogastric tube, or percutaneous gastrostomy tube should be independent of the assessment of NPO. "NPO except medications" is a commonly used order on patients who will be undergoing surgery or procedures in the near future to prevent the risk of peri-procedure complications. This order is used to limit the amount of material in the stomach prior to a procedure and is not relevant to the issue of dysphagia. "NPO except medications" is not an acceptable treatment order for patients who have not yet undergone dysphagia screening. Patient can be NPO and still receive delivery of food, fluid, or medication via a nasogastric tube (PNGT), orogastric tube (POGT), or percutaneous gastrostomy tube (PGT).
- It is critical to review medication administration records from the ER to identify any oral medication received prior to the patient being made NPO or undergoing dysphagia screening, as this is a very common occurrence (for example "Aspirin 325mg POx1"

prior to stroke team activation).
- For inpatient stroke, assess NPO status from Date/Time of discovery of stroke symptoms? If the patient was made NPO prior to stroke symptom discovery and was kept NPO throughout the entire hospitalization select “Yes”.

Admission Data, Hospitalization Data, especially Speech Pathology consultation or progress notes

Summary of Changes

REQUIRED: Was patient screened for dysphagia prior to any oral intake including water or medications?

Stroke patients should be screened for dysphagia before being given any oral intake including food, fluids, or medications.

- Yes: There is documentation of screening for dysphagia prior to any oral intake.
- No/ND: There is either documentation of oral intake prior to screening for dysphagia or there is no documentation of screening for dysphagia.
- NC: There are documented reasons for not performing a screening for dysphagia prior to any oral intake.

Notes for Abstraction:

- Documentation in the record should indicate that an assessment of the patient's ability to swallow was completed by a health care professional prior to oral intake of food, fluid, or medications. A screening test need not be a formal evaluation of swallowing by a speech and language pathologist, but should be a standardized method of swallowing assessment accepted by the institution.
- A variety of methods may be employed to assess swallowing status. These methods may include but are not limited to:
  - Bedside swallow assessment
  - Simple water swallow test
  - Burke water swallow test
  - Bedside swallowing assessment
  - Simple standardized bedside swallowing assessment (SSA)
  - Barium swallow
  - Video fluoroscopy
  - Double contrast esophagoscopy
  - Radio nucleotide studies
  - Manometry
  - Endoscopy
  - Formal evaluation by speech language pathologist
- If the patient was ONLY given sublingual (SL) medication specifically formulated for sublingual delivery (e.g., nitroglycerin) or traditionally given by sublingual route prior to dysphagia screen, this is not considered oral intake. These include medication formulations such as pills (e.g., lorazepam), orally disintegrating tablets (e.g., olanzipine) or wafers (e.g., clonazepam). If these sublingual medications are the only oral intake prior to dysphagia screen select “Yes”. If medications that are not traditionally given via the sublingual route are taken by the patient before dysphagia screening, then select the answer as “No/ND”.
- The following are not acceptable as swallow screening:
  - Patient evaluation using the NIH/NIHSS (National Institute of Health/National Institute of Health Stroke Scale) is NOT considered dysphagia screening
  - Documentation of "Cranial nerves intact" is NOT considered dysphagia screening
  - Positive gag reflex noted
- Reasons for not performing a dysphagia screen must be explicitly documented by a physician, advance practice nurse, or physician assistant. If reasons are not mentioned in the context of dysphagia screening, do not make inferences.
- Acceptable reasons for not performing dysphagia screening include patient refused treatment, patients who are made CMO prior to receiving anything by mouth and patients with complete recovery of all symptoms and neurological deficits prior to hospital arrival (for these patients you may select the answer option of “NC” for this data element).
- For inpatient stroke, assess dysphagia screen prior to oral intake from the date/time of discovery of stroke symptoms. If the patient arrives to the hospital with transient symptoms that resolve and was screened for dysphagia (prior to oral intake) but later in the hospital stay has new onset stroke symptoms and meets criteria to be entered as an inpatient stroke, a new dysphagia screen should be performed and dysphagia screen prior to oral intake should be assessed from the date/time stroke symptom discovery.

Examples:

- Patient 210a is admitted to the in-patient unit from the ED as NPO. The ED physician notes document evidence of dysphagia and a formal swallowing evaluation is ordered and performed. Data entry will be to check "Yes".
- Patient 210b is admitted with dysarthria and drooling. The ED physician notes evidence of dysphagia and the diet order reads NPO except meds. No formal swallowing evaluation is performed. Data entry is "No/ND".
- Patient 210c is admitted to the hospital on 4/1/2012 for heart failure. The patient is given PO food and medications. On 4/3/2012 the nurse discovers that the patient has difficulty speaking and facial droop and calls the stroke team. The stroke PA performs an NIHSS and dysphagia screen. The patient did not receive any food, water or medications from the date/time of discovery of stroke symptoms to the date/time that the dysphagia screen was performed. Data entry is to Select “Yes”.
- Patient 210d arrives to the hospital on 3/22/2012 with transient symptoms that resolve in the ED prior to admission. The patient had a dysphagia screen in the ED prior to oral intake. The patient is admitted to the stroke unit. Later that day nurse discovered that the patient developed new onset right sided-weakness. The nurse activates the stroke team and when the stroke physician arrives, the patient is eating dinner. The nurse did not do a repeat dysphagia screen. Data entry is to Select “No/ND.” Note, this patient would be entered as an inpatient stroke.

Admission Data, Hospitalization Data, especially Speech Pathology consultation or progress notes

Summary of Changes

REQUIRED FOR COVERDELL: If yes, Dysphagia screening results:

If dysphagia screening occurred prior to oral intake, select result of the initial screen:

- Pass
- Fail
- ND

Notes for Abstraction:

- Select "Pass" if there is documentation that the screen is passed, or that the patient successfully demonstrates safe swallowing on the initial bedside screening evaluation. Do not record the results of subsequent dysphagia screenings. Documentation might include evidence that oral intake of food or medication without modification of consistency or other swallowing related features is permitted unsupervised. Restrictions on type of diet such as amounts of calories, protein, etc are not relevant to this item.
- Select "Fail" if there is documentation that the screen is failed, or that the patient did not demonstrate safe swallowing on dysphagia screening protocol. Restrictions in oral intake generally follow as a result of failure in screen.
- Select "ND" if there was a screen performed but there is no documentation as to the results of the dysphagia screen.

Admission Data, Hospitalization Data, especially Speech Pathology consultation or progress notes

Summary of Changes

OPTIONAL: Treatment for Hospital-Acquired Pneumonia (Was the patient treated for pneumonia during this admission?)

Indicate if patient was treated for nosocomial (hospital-acquired) pneumonia after 48 hours of admission.

- Yes: There is clinical mention of hospital-acquired pneumonia by the physician, and treatment with an antibiotic for pneumonia.
- No: There is clinical mention of hospital-acquired pneumonia by the physician, but treatment with an antibiotic was not prescribed.
- NC

Notes for Abstraction:

- Documentation does not need to include the words “hospital acquired.” Classification of hospital acquired pneumonia can be accomplished by determining if there is clinical suspicion or mention of pneumonia in the medical record 48 or more hours after admission and then determining if pneumonia or clinical suspicion of pneumonia was documented on hospital admission. If there is no mention of pneumonia on admission, it is considered hospital acquired pneumonia.
- The intent of this data element is to determine if there is clinical mention of pneumonia 48 or more hours after admission AND if subsequent treatment for pneumonia was administered. If there is clinical mention of pneumonia 48 or more hours after admission, but NO treatment with antibiotic, select “No”

Example: Patient 220a is admitted with stroke symptoms and started on an oral diet after passing a dysphagia screen. A chest X-ray from day 2 describes "pneumonia vs. atlectasis." This is mentioned in the physician notes but the decision is made to treat for congestive heart failure and wait for a fever before starting antibiotics. No antibiotics are subsequently given. Since a diagnosis of pneumonia was not made, select "NC".

Admission Data, Hospitalization Data, especially Speech Pathology consultation or progress notes

Summary of Changes

REQUIRED and REQUIRED FOR COVERDELL: VTE Interventions

Please Note: As this is a data element that is shared by GWTG, TJC, and Coverdell the definition below comes directly from the Specifications Manual for National Hospital Inpatient Quality measures. This VTE interventions list only contains medications and devices that are FDA approved for VTE prophylaxis (items 1-8). If a patient is receiving therapeutic anticoagulation for an indication other than prophylaxis (i.e. full dose IV heparin or an alternate anticoagulant such as dabigatran) and is not receiving any interventions on this list, select “A – None of the above or not documented or unable to determine from medical record documentation” here and then select the appropriate medication from the “Other Therapeutic Anticoagulation” list. If a patient is receiving Rivaroxaban (Xarelto) and is not receiving any other medication on this list, select 8-Oral factor Xa inhibitor here and also select Rivaroxaban (Xarelto) under the “Other Therapeutic Anticoagulation” list. If a patient is receiving Apixaban (Eliquis) and is not receiving any other medication on this list, select 8-Oral factor Xa inhibitor here and also select Apixaban (Eliquis) under the “Other Therapeutic Anticoagulation” list. ***If a patient is receiving treatment with an intervention on this VTE interventions list and is also receiving an alternate anticoagulant, just select the appropriate interventions from the “VTE Interventions” list.***

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

The type of venous thromboembolism (VTE) prophylaxis documented in the medical record:

1. **1- Low dose unfractionated heparin (LDUH)**
2. **2- Low molecular weight heparin (LMWH)**
3. **3- Intermittent pneumatic compression devices (IPC)**
4. **5- Factor Xa Inhibitor**
5. **6- Warfarin**
6. **7- Venous foot pumps (VFP)**
7. **8- Oral Factor Xa Inhibitor**
8. **A- None of the above or not documented or unable to determine from medical records documentation**

Notes for Abstraction:

- No value should be selected more than once. If a value of "A" is selected, no other selection should be recorded.
  Example:
  Lovenox is ordered and substituted with dalteparin. Only abstract value "2" once, as both are LMWH.

- Application of mechanical prophylaxis may be documented by any personnel.
  Example:
  Nursing assistant documentation of IPC application during the allowable timeframe is acceptable.
- Selection of allowable values 1-8 includes any prophylaxis that was initially administered in the allowable time frame.
  Example:
  If a patient was admitted on 12/8/20xx and had IPCs applied at 13:00 on 12/09/20xx and LMWH was administered at 22:00 on 12/8/20xx, select values “2” and “3”.
- Only select prophylaxis if there is documentation that it was administered. Documentation in the physician progress notes under assessment/Plan: “DVT prophylaxis – IPC” is not enough to select Value “3.”
- If one pharmacological medication is ordered and another medication is substituted (such as per pharmacy formulary substitution or protocol), abstract the medication administered.
  Note: No copy of the formulary or protocol is required in the medical record.
  Example:
  Lovenox is ordered, but not received and is substituted with fondaparinux sodium, which is received by the patient. Abstract fondaparinux sodium as Value “5” for VTE Prophylaxis and abstract the date it was administered for VTE Prophylaxis Date.
- Abstract ALL VTE prophylaxis(s) that was administered the day of or the day after hospital admission. If no VTE prophylaxis was administered during this timeframe, select "A."
- VTE Prophylaxis administered in the ED or Observation prior to the hospital admission order is not sufficient.

Suggested Data Sources:

PHARMACOLOGICAL AND MECHANICAL

- **Emergency department record**
- **Graphic/flow sheets**
- **Medication administration record**
- **Nursing notes**
- **Physician notes**
- **Progress notes**

Inclusion Guidelines for Abstraction: Refer to Appendix H, Table 2.1 VTE Prophylaxis Inclusion Table.

Exclusion Guidelines for Abstraction: None

S ***Admission Data, Hospitalization Data***

Summary of Changes

REQUIRED and REQUIRED FOR COVERDELL: What date was the VTE prophylaxis administered?

Please Note: As this is a data element that is shared by GWTG, TJC, and Coverdell the definition below comes directly from the Specifications Manual for National Hospital Inpatient Quality Measures.

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

The day, month and year that VTE prophylaxis (mechanical and/or pharmacologic) was administered after hospital admission.

- MM = Month (1-12)
- DD = Day (01-31)
- YYYY = Year (20xx)
- UTD = Unable to Determine

Notes for Abstraction:

STK

- The earliest date associated with a form of prophylaxis should be entered.
  Example:
  If the patient was admitted on 12-08-20xx and IPCs were applied at 13:00 on 12-08-20xx and LMWH was administered at 02:00 on 12-09-20xx, record the 12-08-20xx date.

STK or VTE

- 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) and no other documentation is found that provides this information, the abstractor should select “UTD”.
  Example:
  Documentation indicates the VTE Prophylaxis Date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the *VTE Prophylaxis 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”.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commission’s Data Warehouse. Use of “UTD” for VTE Prophylaxis Date allows the case to be accepted into the warehouses.”

Suggested Data Sources:

- Graphic/flow sheets
- Medication administration record
- Nursing notes
- Physician notes
- Progress notes

Inclusion Guidelines for Abstraction: None

Exclusion Guidelines for Abstraction: None

REQUIRED FOR TJC if VTE Interventions is 4 or A: Is there physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission?

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

Data Element Name: Reason for No VTE Prophylaxis ?#8364;“ Hospital Admission

Collected For: STK-01

Definition: Physician/APN/PA or pharmacist documentation why mechanical AND pharmacological VTE prophylaxis was not administered at hospital admission.

- Explicit documentation of a contraindication to BOTH mechanical prophylaxis AND pharmacological prophylaxis is needed.

- Yes: there is physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission.
- No: there is no physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission or unable to determine from medical record documentation.

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission.

N (No) There is no physician/APN/PA or pharmacist documentation why VTE prophylaxis was not administered at hospital admission or unable to determine from medical record documentation.

Notes for Abstraction:

- If a patient received prophylaxis as per the data element VTE Prophylaxis, select "No."
- To select "Yes" for this data element, documentation must be dated from arrival to the day after hospital admission or surgery end date. Documentation written after arrival but prior to admission is acceptable.
- Reasons for not prescribing mechanical and pharmacological 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.
    Example:
    Patient refused heparin, select “Yes.”
- **For patients on anticoagulants:**
  - For patients on continuous IV heparin therapy the day of or day after hospital admission, select “Yes.”
  - If warfarin is listed as a home or current medication, select “Yes” regardless of other documentation.
  - For patients receiving anticoagulant therapy for atrial fibrillation or for other conditions (e.g. angioplasty), with anticoagulation administered on the day of or the day after hospital admission, select “Yes.”
- **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 or pharmacist documentation of bleeding risk, review the chart for documentation about reasons for no mechanical AND reasons for no pharmacological VTE prophylaxis.
- **EXCEPTION:**
  - Documentation within the timeframe specified that the patient is a bilateral lower extremity amputee is an acceptable reason for no mechanical prophylaxis.
- Physician/APN/PA or pharmacist documentation that the patient is ambulating without mention of VTE prophylaxis is insufficient. Do not infer that VTE prophylaxis is not needed unless explicitly documented.
  Examples:
  - There is documentation of “No VTE Prophylaxis, patient ambulating,” select “Yes.”
  - There is documentation of “Patient low risk for VTE, ambulating,” select “Yes.”
- For patients with a reason for no pharmacologic or no mechanical prophylaxis and an order for ANY prophylaxis that was NOT administered without a reason, select “No.”
  Example:
  - Patient has documentation of an order for IPCs and no documentation that IPCs were applied, select “No.
- If two physicians/APN/PA or pharmacists document conflicting or questionable risk/needs for prophylaxis, select “No.”
- If a risk assessment is used, and notes anything other than low risk (e.g. intermediate risk, moderate risk, or high risk), additional documentation must be present to answer “Yes.” **Explicit documentation** of a contraindication to mechanical AND contraindication to pharmacological prophylaxis must be addressed.
  - If there is physician documentation of “bleeding, no pharmacologic prophylaxis” the chart must be reviewed for documentation about a reason for no mechanical prophylaxis in order to select “Yes.”
    Examples:
    - Bleeding, no pharmacologic prophylaxis, no mechanical prophylaxis.
    - Active GI bleed – low molecular weight heparin contraindicated, no mechanical prophylaxis needed.
    - "No VTE Prophylaxis", "No VTE Prophylaxis needed" [no reason given].

- If Comfort Measures Only (CMO) was documented after the day after arrival (Day 1) but by the day after hospital admission, select “Yes.”
  Example:
  - Patient arrives in the ED on 06/01/20xx but is in observation until admission to the hospital on 06/03/20xx. If CMO is documented by 06/04/20xx, select “Yes.”
- Documentation that the patient is adequately anticoagulated or already anticoagulated on warfarin, select “Yes.”
  Examples:
  - Patient is already anticoagulated, taking Coumadin at home prior to admission.
  - INR therapeutic and adequately anticoagulated at this time.
- Documentation synonymous with “abruptly reversed anticoagulation for major bleeding,” select “Yes.”
  Examples:
  - INR reversal for major bleeding.
  - Reverse anticoagulation for intracranial hemorrhage.
- Documentation of administration of IV alteplase is NOT a stand-alone reason for no VTE prophylaxis.

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

- Consultation notes
- Emergency Department record
- History and physical
- Physician orders
- Physician progress notes
- Risk assessment form
- Transfer form
- Medication administration record
- Nurses notes
- Risk Assessment

Additional Notes: None

Guidelines for Abstraction:

Inclusion
None

Refer to Appendix H, Table 2.7 Anticoagulation Therapy for Atrial Fibrillation and Other Conditions.

Exclusion
- Unchecked checkbox next to a reason (e.g., blank checkbox on a form or electronic template next to “cogulapathy” or “bilateral amputee”).
- Checked checkbox next to "other reason" with a blank space for the specific reason

Summary of Changes

Is there physician/APN/PA or pharmacist documentation why Oral Factor Xa Inhibitor was administered for VTE prophylaxis?

For discharges on or after 01/01/2013

Collected For: STK-1

Definition: Documentation why Oral Factor Xa was administered for VTE prophylaxis

Question: Is there physician/APN/PA documentation why Oral Factor Xa was administered for VTE prophylaxis?

Format: Single Select

Allowable Values:

- Yes
- No

Notes of Abstraction:

- **Yes - There is physician/APN/PA or pharmacist documentation why Oral Factor XA Inhibitor was administered for VTE Prophylaxis.**
- **No - There is no physician/APN/PA or pharmacist documentation why Oral Factor XA Inhibitor was administered for VTE Prophylaxis.**
- **The only acceptable reasons are identified in the list of inclusions. No other reasons will be accepted.**
- History of atrial fibrillation/flutter or current finding of atrial fibrillation/flutter, select “Yes”.
- If the patient has a history of previous strokes and/or taking an Oral Factor Xa Inhibitor prior to hospital arrival, select "Yes".
- History of hip or knee replacement surgery, select “Yes”.
- When conflicting information is documented in the medical record, select “Yes”.
- History of treatment of venous thromboembolism or current treatment for venous thromboembolism, select “Yes”.

- Physician/APN/PA or pharmacist documentation only for the following acceptable sources:
  - Anesthesia Record
  - Consultation Notes
  - Emergency Department Record
  - History and Physical
  - Operative Note
  - Physician Orders
  - Progress Notes

- Risk Assessment Form
- Transfer Sheet

Additional Notes / Guidelines for Abstraction:

- Inclusion
  - AF
  - A-Fib
  - Atrial Fibrillation
  - Atrial flutter
  - History of any remote episode of documented atrial fibrillation or flutter except within 8 weeks following CABG
  - PAF
  - Paraoxysmal atrial fibrillation
  - Partial hip arthroplasty
  - Partial hip replacement
  - Persistent atrial fibrillation
  - Stroke prevention / history of stroke
  - THR
  - TKR
  - Total hip arthroplasty
  - Total hip replacement
  - Total knee arthroplasty
  - Total knee replacement
  - Treatment of venous thromboembolism
- Exclusion:
  - Atrial flutter
  - History of any remote episode of documented atrial fibrillation or flutter except within 8 weeks following CABG
  - PAF
  - Paraoxysmal atrial fibrillation
  - Partial hip arthroplasty
  - Partial hip replacement
  - Persistent atrial fibrillation
  - Stroke prevention / history of stroke
  - THR
  - TKR
  - Total hip arthroplasty
  - Total hip replacement
  - Total knee arthroplasty
  - Total knee replacement
  - Treatment of venous thromboembolism

OPTIONAL: Other Therapeutic Anticoagulation

If patient did not receive one of the listed "VTE Interventions" 1-7 but was receiving therapeutic anticoagulation therapy by the end of the day after hospital admission for an indication other than VTE prophylaxis, or if the patient was receiving an Oral Factor Xa Inhibitor, select the medication received.

- Unfractionated heparin IV
- Dabigatran (Pradaxa)
- Argatroban
- Desirudin (Iprivask)
- Rivaroxaban (Xarelto)
- Apixaban (Eliquis)
- Lepirudin (Refludan)
- Other Anticoagulant

Examples:

Patient 240d arrives at ED on Monday at 05:00 with an ischemic stroke. He is started on continuous IV heparin at 7:00. Pneumoboots are prescribed and initiated the following morning. Select "VTE Interventions = Intermittent pneumatic compression devices (IPC)". Since this patient is already on IPC, the "Other Therapeutic Anticoagulation" section will be grayed out and you will not need to enter that the patient received IV Heparin in this section.

Summary of Changes

REQUIRED FOR COVERDELL: Was DVT or PE documented? (Was evidence of DVT or PE (pulmonary embolus) documented?)

Indicate if evidence of DVT or PE was documented in the medical record. This question refers to the in-hospital development of DVT or PE. Pre-existing DVT or PE prior to admission should not be counted.

- Yes
- No/ND

The documentation of DVT or PE must be confirmed by ultrasound, venous imaging or appropriate diagnostic modality. [The Joint Commission defines this as objectively confirmed DVT based on duplex ultrasound, contrast venography, CT with contrast or CT venogram, MR imaging or MR venography]. Insure that the report clearly indicates that a deep vein, and not a superficial vein, is involved.

Examples:

- Patient 250a was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. On day 4 of admission the patient had a tender calf, ultrasound revealed a DVT of the left calf. Answer would be "Yes".
- Patient 250b was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. On day 4 of admission the patient had a tender calf, ultrasound was negative for DVT. Answer would be "No/ND".
- Patient 250c was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. On the day of admission, the patient complained of a tender calf for the previous 3 days. Ultrasound revealed a DVT of the left calf. Answer would be "No/ND".
- Patient 250d was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. There is no documentation about imaging studies performed to identify DVT. Answer would be "No/ND".

Admission Data, Hospitalization Data

Summary of Changes

REQUIRED: Was antithrombotic therapy administered by the end of hospital day 2?

Note for Stroke Core Measure/TJC users: This field autopopulates "Was antithrombotic therapy administered by the end of hospital day 2?" in the Core Measure tab. Verify that the antithrombotic medication is acceptable for TJC stroke core measures by checking Appendix C Table 8.2 in the most current specifications manual. If the medication administered does not appear in Table 8.2, you must change the autopopulated response in the Core Measure Tab to "Was antithrombotic therapy administered by the end of hospital day 2?" to "No" in order to be compliant with TJC standards.

Collected For: ASR-IP-2, ASR-OP-2, STK-5

Definition: Documentation that antithrombotic therapy was admistered by the end of hospital day 2. Antithrombotics include both anticoagulant and antiplatelet drugs.

Suggested Data Collection Question: Was antithrombotic therapy administered by the end of hospital day 2?

- Yes: Antithrombotic therapy was administered by the end of hospital day 2.
- No/ND: Antithrombotic therapy was not administered by the end of hospital day 2, OR unable to determine from medical record documentation.
- NC: There is documentation in the medical record of a reason for not administering antithrombotic therapy by end of hospital day 2.

Notes for Abstraction:

- Refer to Table 4 and Table 5 for acceptable antithrombotic therapy.Antithrombotics include both anticoagulant and antiplatelet drugs.
- To compute end of Hospital Day two, count the day of arrival at this hospital as day one. If antithrombotic therapy was administered by 11:59 PM of hospital day two, answer “Yes” for this data element.**It is not necessary to review documentation outside of this timeframe to answer this data element.**
  - Examples:
    - Patient arrives in ED on Monday 05:00, antithrombotic therapy must be initiated before 23:59 on Tuesday;
    - Patient arrives at 23:30 on Monday antithrombotic therapy must be initiated by 23:59 on Tuesday.
- For antithrombotic therapy administered in the Emergency Department/observation area prior to the end of hospital day 2, select “Yes”.
- Antithrombotic therapy administration information must demonstrate actual administration of the medication.
  - Example: Do not use physician orders as they do not demonstrate administration of the antithrombotic therapy (in the ED this may be used if signed/initialed by a nurse).
- When antithrombotic is noted as a “home” or “current” medication or documentation indicates that it was received prior to hospital arrival only, select “No”.
- Lovenox SQ for VTE prophylaxis (i.e. enoxaparin SQ 40 mg once daily; enoxaparin SQ 30 mg Q12 hours) is not sufficient. If no other antithrombotic therapy is administered by the end of the hospital day 2, select "No."
- Reasons for not prescribing antithrombotic medication must be documented by a physician, advance practice nurse or physician assistant (with one exception: Patient/family refusal does not have to be documented by a physician/APN/PA or pharmacist but it must be documented in the timeframe of arrival to the end of hospital day 2.).
- **If reasons are not mentioned in the context of antithrombotics, do not make inferences** (e.g., do not assume that antithrombotic medication is not being prescribed because of a bleeding disorder unless documentation explicitly states so).
- Documentation for allowable value “NC” must be found within the timeframe of arrival to the end of hospital day 2. It is not necessary to review documentation outside of this timeframe to answer this data element.
- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication can be ordered.
- Orders to hold antithrombotic therapy without a documented reason is NOT acceptable to select “NC”.
- Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs the day of or day after hospital arrival constitutes a “clearly implied” reason for not administering antithrombotic therapy by end of hospital day 2. A hold/discontinuation of all p.o. medications counts if an antithrombotic was on order at the time of the notation.
- For patients on warfarin therapy prior to hospital arrival, but placed on hold the day of or after arrival due to “high INR”, select “Yes”.
- Acceptable reasons for not giving antithrombotic medication by the end of the 2nd hospital day include:
  - Allergy to or complication related to antithrombotic
  - Aortic dissection
  - Bleeding disorder
  - Brain/CNS cancer
  - CVA, hemorrhagic
  - Extensive/metastatic CA
  - Hemorrhage, any type
  - Intracranial surgery/biopsy
  - Patient/family refusal
  - Peptic ulcer
  - Planned surgery within 7 days following discharge

- Risk of bleeding or discontinued due to bleeding
- Serious side effect to medication
- Unrepaired intracranial aneurysm
- Terminal Illness
- Other documented by physician/APN/PA or pharmacist

- If antithrombotic held for 24 hours due to status post IV alteplase, select “NC”.
- For inpatient stroke, to compute end of Hospital Day two, count the day of stroke symptom discovery as day one. If antithrombotic therapy was administered by 11:59 PM of the day after stroke symptom disc very, answer “Yes” for this data element. If the patient was re ceiving antithrombotic therapy prior to date/time stroke discovery you still need to assess whether the patient was receiving antithrombo tic therapy by the second hospital day after the discovery of stroke symptoms.

Admission Data, Hospitalization Data, Emergency department record, Nursing notes, Nusing flow sheet, Progress notes, Physician ordres, Medication administration record (MAR)

Excluded Data Sources

- Emergency medical system (EMS) or ambulance documentation.
- Any documentation dated/timed prior to hospital arrival or after hospital day 2

Additional Notes:

Guidelines for Abstraction:

Inclusion

- Refer to Appendix C, Table 8.2 for a list of medications used for antithrombotic therapy.

Exclusion

- Heparin Flush
- Heparin SQ
- Hep-Lock

Summary of Changes

OPTIONAL: If yes, Select all that apply

If antithrombotic therapy was administered by the end of hospital day 2, indicate whether an antiplatelet and/or anticoagulant was administered.

- Antiplatelet: See Table 4 for a list of antiplatelet medications.
- Anticoagulant: See Table 5 for a list of anticoagulant medications.

Summary of Changes

OPTIONAL FOR COVERDELL ONLY: Was patient treated for a urinary tract infection (UTI) during this admission?

Indicate if patient was treated for hospital-acquired urinary tract infection that developed following admission.

- Yes
- No/ND

Select Yes if there was clinical mention of UTI by the physician, and treatment with an antibiotic for UTI. Select No/ND if there was clinical mention of UTI by the physician, but treatment with an antibiotic was not prescribed, or if there is no clinical mention of UTI.

Admission Data, Hospitalization Data

Summary of Changes

OPTIONAL FOR COVERDELL ONLY: If patient was treated for a UTI, did the patient have a Foley catheter during this admission?

Indicate if the patient had a Foley catheter during this admission.

- Yes, patient had catheter in place on arrival
- Yes, but only after admission
- No
- Unable to determine

For the Foley catheter, if the patient had a catheter in place prior to the event/admission select choice 1. If patient did not arrive with a catheter in place, but required a Foley after admission, select 2. If patient had a condom catheter only, select No.

Admission Data, Hospitalization Data

Active bacterial or viral infection at admission during hospitalization

Definition: Documentation that the patient had an active bacterial or viral infection at admission or during this hospitalization.

Question: Was there an active bacterial or viral infection at admission or during hospitalization?

Format: Multi-Select

Allowable Values:

- None
- Bacterial Infection
- Emerging Infectious Disease
  - SARS-COV-1
  - SARS-COV-2 (COVID-19)
  - MERS
  - Other Emerging Infectious Disease
- Influenza
- Seasonal cold
- Other viral infection

Notes for Abstraction:

- Select Emerging Infectious Disease when the patient is known to have:
  - **SARS-COV-1** (Severe Acute Respiratory Syndrome-associated coronavirus) - May include ICD-10- CM code B97.21
  - **SARS-COV-2** (COVID-19) (Severe Acute Respiratory Syndrome-associated coronavirus) - May include ICD-10-CM code U07.1
  - **MERS** (Middle East Respiratory Syndrome) - May include ICD-10-CM code B97.29
- Select one of the allowable values only when a confirmed diagnosis is documented by the provider or when a positive test result is documented in the patient medical record.
  - **SARS-COV-1 or SARS-COV-2**: A confirmed diagnosis includes a positive RT-PCR test, a positive IgM antibody test, or a clinical diagnosis using hospital specific criteria.
  - **Influenza**: A confirmed diagnosis includes a positive rapid AG or positive PCR test
- Do **not** select if the documentation states only "suspected", "possible", "probable" or "inconclusive" infection.
- Select None if no bacterial or viral infection was documented.

Suggested Data Sources:

- **Admission Data**
- **Hospitalization Data**

Additional Notes / Guidelines for Abstraction: N/A

Advanced Stroke Care

- ^Is there documentation that the route of thrombolytic (alteplase) administration was intra-arterial (IA)?
- ^Is there documentation that IA thrombolytic therapy was initiated at this hospital?
- ^What is the date and time that IIA thrombolytic therapy was initiated for this patient at this hospital?
- ^Is there documentation in the medical record that the first endovascular treatment was initiated greater than 8 hours after arrival at this hospital?
- ^Is there documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?
- ^What is the date and time of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?
- ^^Was a mechanical endovascular reperfusion procedure attempted during this episode of care (at this hospital)?
- ^Was a mechanical thrombectomy procedure attempted but unsuccessful or aborted before removal of the LVO?
- ^^Are reasons for not performing mechanical endovascular reperfusion therapy documented?
- ^^If EVT treatment at this hospital, type of device:
- ^Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?
- ^What is the date and time of the first pass of a clot retrieval device at this hospital?
- Reasons for not performing mechanical endovascular reperfusion therapy (select all that apply):
- ^^Is a cause(s) for delay in performing mechanical endovascular reperfusion therapy documented?>
- ^^Reasons for delay (select all that apply):
- ^What cerebral artery is occluded?
- ^^Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade
- What is the location of the clot in the cerebral circulation?
- ^Is there a documented TICI reperfusion gradepost-treatment?
- Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade Date/Time

General Information:
The purpose of the endovascular thrombectomy (EVT) data elements in this tab is to capture patients ages 18 years and older who have a diagnosis of acute ischemic stroke and were treated with a reperfusion therapy – either IV or IA thrombolytic therapy or mechanical endovascular reperfusion therapy.

Note: The tab will appear for sites that have enabled the tab or are submitting data to TJC for CSTK. Please note that fields that contain an asterisk(^) are required TJC fields. The CSTK data elements will **only be** enabled if the patient included in the initial patient population per TJC algorithm. Otherwise, the field will remain grayed out.

To enable/ disable the Advanced Stroke Care tab, follow the steps outlined below:

1. Logon to the GWTG - Stroke module
2. On the **Community Page**, select the **Update Stroke Site Characteristics**
3. On the **organization form**, scroll to the bottom of the page
4. Under **Settings** (last section), respond to the following question: **Mechanical endovascular reperfusion procedures for acute stroke are performed at my hospital?** By selecting the **YES** option.
    a. To disable, select the NO option.
5. Select the **Save Changes** button.

Endovascular Stroke Treatment

REQUIRED FOR COMPREHENSIVE: Is there documentation that the route of thrombolytic (alteplase) administration was intra-arterial (IA)?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IA Route of alteplase Administration

Collected For: CSTK-05, CSTK-07, CSTK-08, CSTK-09

Definition: The route of thrombolytic (alteplase) administration was intra-arterial (IA). Thrombolytic therapy may be administered intra-venously (IV) by infusion directly into a vein through a peripheral or central venous catheter, or it may be given through an endovascular mircrocatheter delivery system positioned in an artery to directly infuse alteplase into the clot.

Suggested Data Collection Question: Is there documentation that the route of thrombolytic (alteplase) administration was intra-arterial (IA)?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) The route of alteplase administration was intra-arterial (IA).

N (No) The route of alteplase administration was not intra-arterial (IA), OR unable to determine from medical record documentation.

Notes for Abstraction:

- If the route of thrombolytic administration is documented as intra-arterial (IA), select "Yes"
- If both intravenous (IV) and intra-arterial (IA) thrombolysis are given either in different procedures or the same procedure, select "Yes".
  Examples:
    - "IV alteplase given at hospital 'A' prior to transfer to hospital 'B' (i.e. drip and ship). Mechanical thrombectomy with IA thrombolysis was performed at hospital 'B'".
    - "NIHSS score 3 on arrival to this hospital. IV alteplase initiated in ED with initial improvement noted and NIHSS score zero post-infusion. NIHSS score 5 one hour later. Patient taken to interventional suite and IA alteplase administered."
- If the only route of thrombolytic administration was intra-venous (IV) at this hospital or a transferring hospital, select "No".
- If IA thrombolytic was administered at another hospital and the patient subsequently transferred to this hospital, select "No".

Suggested Data Sources:

ONLY acceptable data source

- Consultation notes
- Diagnostic test reports
- Operative notes
- Procedure notes

Guidelines for Abstraction

Inclusion:

Only Acceptable Thrombolytic Therapy for Stroke

- Activase
- Alteplase
- IA alteplase
- Recombinant Tissue Plasminogen Activator (rt-PA)
- Tissue plasminogen Activator (t-PA)

Exclusion:

- Intravenous (IV) alteplase (t-PA)
- IA administration of thrombolytic agents not listed as inclusions

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation that IA thrombolytic therapy was initiated at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IA Thrombolytic Initiation

Collected For: CSTK-07

Definition: Intra-arterial (IA) thrombolytic therapy was initiated at this hospital. IA thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Suggested Data Collection Question: Is there documentation that IA thrombolytic therapy was initiated at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) IA thrombolytic was initiated at this hospital.

N (No) IA thrombolytic was not initiated at this hospital, OR unable to determine from medical record documentation.

Notes for Abstraction:

- When a "start time" or "infusion time" for IA thrombolytic is documented in the medical record, select "Yes".
- If the data element "IA Route of alteplase Administration" is "Yes", select "Yes" for this data element.
- If IA thrombolytic initiation is unable to be determined from medical record documentation, select "No".
- If IA thrombolytic was administered at another hospital and the patient subsequently transferred to this hospital, select "No".

Suggested Data Sources:

ONLY acceptable data source

- Consultation notes
- Diagnostic test reports
- Operative notes
- Procedure notes

Guidelines for Abstraction

Inclusion:

Only Acceptable Thrombolytic Therapy for Stroke

- Activase
- Alteplase
- IA alteplase
- Recombinant Tissue Plasminogen Activator (rt-PA)

Exclusion:

- Intravenous (IV) alteplase
- IA administration of thrombolytic agents not listed as inclusions

Summary of Changes

What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IA Thrombolytic Initiation Date, IA Thrombolytic Initiation Time

Definition: The date associated with the time that Intra-arterial (IA) thrombolytic therapy was initiated to a patient with ischemic stroke at this hospital. IA thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Data Collection Question: What is the date associated with the time that IA thrombolytic therapy was initiated for this patient at his hospital?

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 (2001-Current Year)

UTD = Unable to Determine

Notes for Abstraction:

- If the date IA alteplase or MER was initiated 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) **and** no other documentation is found that provides this information, the abstractor should select UTD.

  Example:

  Documentation indicates the MER initiation date as 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the MER initiation 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.

  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for *IA alteplase or Mer Initiation Date* allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Procedure Notes
- Operative notes
- Diagnostic test reports

Additional Notes:

Guidelines for Abstraction: No exclusion

REQUIRED FOR COMPREHENSIVE: Is there documentation in the medical record that the first endovascular treatment procedure was initiated greater than 8 hours after arrival at this hospital?

> ***Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide***
>
> **Data Element Name: Delayed Endovascular Rescue Procedure**
>
> **Collected For: CSTK-09, CSTK-11**
>
> **Definition: Endovascular treatment (EVT) with a device and/or intra-arterial (IA) thrombolysis (alteplase) that was first performed at this hospital later than 8 hours after hospital arrival.**
>
> **Suggested Data Collection Question: Is there documentation in the medical record that the first endovascular treatment procedure was initiated greater than 8 hours after arrival at this hospital?**
>
> **Format:**
>
> **Length: 1**
> **Type: Alphanumeric**
> **Occurs: 1**
>
> **Allowable Values:**
>
> **Y (Yes)There is documentation that the first endovascular treatment procedure was initiated greater than 8**

hours after arrival at this hospital.
N (No) There is no documentation that the first endovascular treatment procedure was initiated greater than 8 hours after arrival at this hospital, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If EVT was initiated greater than 8 hours after hospital arrival AND there was no EVT procedure, i.e., mechanical embolectomy/ thrombectomy and/or IA thrombolysis (alteplase) performed during the first 8 hours after hospital arrival, then select "Yes".
  Example:
  Patient arrives at the hospital ED on 01-11-20XX at 0013. NIHSS 2. IV alteplase given. On 01-14-20XX, patient found with slurred speech, left-sided facial droop and paresthesia. Stroke alert call at 0900. Thrombectomy performed on 01-14-20XX at 1010.
- If EVT was initiated within 8 hours after hospital arrival and another EVT procedure performed later than 8 hours following hospital arrival, select "No".
  Example: Patient arrives at the hospital ED on 01-15-20XX at 1513. IA alteplase initiated at 1605. Thrombectomy performed 01-17-20XX at 0640.
- If unable to determine, select "No".

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Operative notes
- Operative report
- Procedure notes
- Procedure report

Guidelines for Abstraction

Inclusion:Patients with ICD-10-PCS procedure codes on Table 8.1a Thrombolytic Agent Procedures or Table 8.1b Mechanical Endovascular Reperfusion Procedures, if medical record documentation states that such a procedure was initiated later than 8 hours after hospital arrival

Exclusion:Patients with ICD-10-PCS procedure codes on Table 8.1a Thrombolytic Agent Procedures or Table 8.1b Mechanical Endovascular Reperfusion Procedures, if medical record documentation states that such a procedure was initiated within 8 hours after hospital arrival

Table Number 8.1a: Thrombolytic Agent Procedures (Version 2020A2)

Table 8.1b Mechanical Endovascular Reperfusion Procedures (Version 2020A2)

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Skin Puncture

Collected For: CSTK-09, CSTK-12

Definition: Puncture of the skin with a needle or introducer to provide an entry site for arterial access. Arterial access (e.g., brachial, carotid, femoral, radial) is needed for endovascular treatment of a cerebral artery occlusion with a device (e.g., stent-retriever) and/or intraarterial thrombolysis (alteplase).

Suggested Data Collection Question:Is there documentation of skin puncture at this hospital to access the arterial site selected
for endovascular treatment of a cerebral artery occlusion?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion.
N (No) There is no documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If skin puncture was done at this hospital and documented in the medical record, select "Yes".

- If skin puncture was not done at this hospital, select "No".
- If skin puncture at this hospital is not documented or unable to determine from medical record documentation, select "No".

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Operative notes
- Operative report
- Procedure notes

Guidelines for Abstraction

Inclusion: Arterial access

Exclusion: None

Summary of Changes

REQUIRED FOR COMPREHENSIVE ^What is the date and time associated with the time of skin puncture at this hospital to access arterial site selected for endovascular treatment of a cerebral arteryocclusion?

Data Element Name: Skin Puncture Date**, Skin Puncture Time**

Collected For: CSTK-09,, CSTK-12

Definition: The date associated with the time of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion.

Data Collection Question: What is the date associated with the time of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?

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

Type: Date

Occurs: 1

MM = Month (01-12)

DD = Day (01-31)

YYYY = Year (2012-Current Year)

UTD = Unable to Determine

Notes for Abstraction:

- If the date of skin puncture at this hospital 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) and no other documentation is found that provides this information, the abstractor should select UTD.

  Examples:

- Documentation indicates that the Skin Puncture Date was 03-**42-**20xx. No other documentation in the medical record provides a valid date. Since the Skin Puncture 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 Skin Puncture Date was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the Skin Puncture Date 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 Joint Commission’s Data Warehouse. Use of "UTD" for Skin Puncture Date allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Operative notes
- Operative report
- Procedure notes
- Procedure report

Additional Notes:

Guidelines for Abstraction: No exclusion criteria.

REQUIRED FOR COMPREHENSIVE: Did the patient receive intravenous (IV) alteplase at this hospital or a transferring hospital prior to receiving intra-arterial (IA) alteplase or mechanical reperfusion therapy at this hospital?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: IV Thrombolytic Therapy Prior to IA or Mechanical Reperfusion Therapy

Collected For: CSTK-05, CSTK-08, CSTK-10

Definition: There is documentation in the record that the patient received intravenous (IV) thrombolytic (alteplase) therapy at this hospital or a transferring hospital prior to receiving intra-arterial (IA) thrombolytic therapy or mechanical reperfusion therapy at this hospital.

Suggested Data Collection Question: Did the patient receive intravenous (IV) alteplase at this hospital or a transferring hospital prior to receiving intra-arterial (IA) alteplase or mechanical reperfusion therapy at this hospital?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) Patient received IV alteplase prior to IA thrombolytic therapy or mechanical reperfusion therapy.

N (No) Patient did not receive IV alteplase prior to IA thrombolytic therapy or mechanical reperfusion therapy, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Documentation in the medical record must reflect that the patient received IV thrombolytic (alteplase) therapy at this hospital or a transferring hospital (i.e., drip and ship) prior to receiving IA thrombolytic therapy or mechanical reperfusion therapy at this hospital.

Suggested Data Sources:

- Emergency department record
- Progress notes
- Medication records
- Transfer forms
- Medical transport records

Guidelines for Abstraction

Inclusion:

Only Acceptable Thrombolytic Therapy for Stroke

- Activase
- Alteplase
- IV alteplase
- Recombinant Tissue Plasminogen Activator (rt-PA)
- Tissue plasminogen activator (t-PA)

Exclusion: None

Summary of Changes

Was a mechanical endovascular reperfusion procedure attempted during this episode of care (at this hospital)?

Required Field, Guidance for GWTG- Stroke users

Data Element Name: EVT attempted at this hospital

Collected For: GWTG® EVT Measure Set

Definition: Mechanical endovascular reperfusion procedures include the use mechanical clot disruption or retrieval and intracranial angioplasty. Patients should receive endovascular therapy with a stent retriever if they meet all the following criteria (Class I; Level of Evidence A):

a. Pre-stroke mRS score 0 to 1,
b. Acute ischemic stroke receiving intravenous r-tPA within 4.5 hours of onset according the guidelines from professional medical societies,
c. Causative occlusion of the ICA or proximal MCA (M1),
d. Age ≥18 years,
e. NIHSS score of ≥6,
f. ASPECTS of ≥6,
g. Treatment can be initiated (groin puncture) within 6 hours of symptom onset

Data Collection Question: Was a mechanical endovascular reperfusion procedure attempted during this episode of care (at this hospital)?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Y (Yes) Patient taken to the procedure suite with the intent of performing endovascular thrombectomy and at minimum arterial puncture was performed.

N (No) Patient was taken to the procedure suite, but did not proceed with endovascular thrombectomy (e.g. improvement in patient condition or clot dissolved, thus procedure aborted).

Notes for Abstraction:

Select "No" if the patient was taken to the procedure suite and at minimum no arterial puncture was made.

Examples of a mechanical endovascular devices include, but not limited to:

- Solitaire
- Trevo
- Merci Retrieval System
- Penumbra Stroke System
- A Direct Aspiration First Pass Technique (ADAPT)

Suggested Data Sources:

- Consultation notes
- Diagnostic test reports
- Operative notes
- Procedure notes
- Medication records

Additional Notes:

None

Guidelines for Abstraction:

Exclusion: If medical record documentation does not indicate that the procedure attempted was a mechanical thrombectomy for removal of LVO.

^Was a mechanical thrombectomy procedure attempted but unsuccessful or aborted before removal of the LVO?

Collected For: CSTK

Definition: Documentation demonstrates that a mechanical thrombectomy procedure was attempted to remove a large vessel cerebral occlusion (LVO) but was unsuccessful and/or aborted.

Question: Was a mechanical thrombectomy procedure attempted but unsuccessful or aborted before removal of the LVO?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes - There is documentation that a mechanical thrombectomy procedure was attempted but unsuccessful or aborted before removal of the LVO.
- No - There is no documentation that a mechanical thrombectomy procedure was attempted but unsuccessful or aborted before removal of the LVO, OR unable to determine from medical record documentation.
- If medical record documentation does not include an ICD-10-PCS Principal or Other Procedure Code on Table 8.1b Mechanical Endovascular Reperfusion Procedures, continue to review the record for documentation that an extirpation procedure failed. When documentation clearly indicates that a mechanical thrombectomy procedure was attempted but unsuccessful or aborted before removal of the LVO, select &qoot;Yes." Examples:
  - 67 Y/O male presents with acute right MCA stroke and occlusion. Neuroendovascular interventionalist documents in a procedure note, e.g., "Despite multiple passes with the wire, distal access with the microcatheter could not be obtained. Given the tortuosity, distal nature of clot, and chronicity/organization of the clot, the procedure was concluded."
  - Operative note states, e.g., "Attempted mechanical thrombectomy of M1 occlusion, S/P unsuccessful mechanical thrombectomy. Procedure terminated after multiple attempts at clot. The M1 segment remained occluded with no recanalization."
- If a mechanical thrombectomy procedure was attempted and down coded to the root ICD-10-PCS Principal or Other Procedure Code due to extirpation procedure failure, select "Yes." A procedure code on Table 8.1c is not necessary to select "Yes" for this data element but may assist abstraction. Examples:
  - Operative note includes documentation that left groin was punctured but thrombectomy intervention could not be completed due to inability to access the target parent vessel. Pre-procedure TICI 0; post-procedure TICI 0. No root procedure code assigned. ICD-10-PCS B3121ZZ fluoroscopy is the only procedure code. Select "Yes".

    - ICD-10-PCS procedure code 037J3ZZ Dilation of Left Common Carotid Artery, Percutaneous Approach assigned. ICD-10-PCS 037J3ZZ is on Table 8.1c. Medical record documentation indicates that mechanical thrombectomy attempted but unsuccessful. Select "Yes".
- If medical record documentation includes an ICD-10-PCS Principal or Other Procedure Code on Table 8.1b Mechanical Endovascular Reperfusion Procedures, select "No."
    - ICD-10-PCS procedure codes 037J3ZZ Dilation of Left Common Carotid Artery, Percutaneous Approach and 03CL3ZZ Extirpation of Matter from Left Internal Carotid Artery, Percutaneous Approach assigned. TICI score 2A post-procedure, select "No".
- If medical record documentation includes only an ICD-10-PCS Principal or Other Procedure Code on Table 8.1c Thrombectomy Root Procedures and no documentation of extirpation procedure failure, select "No."
    - ICD-10-PCS procedure code 037J3ZZ Dilation of Left Common Carotid Artery, Percutaneous Approach assigned. Medical record documentation indicates that carotid artery stenting was performed. Select "No".
- If medical record documentation mentions that a mechanical thrombectomy procedure was planned but not initiated, select "No".
    - Patient taken to the interventional suite for possible MER procedure. No arterial/groin puncture. Patient returned to ICU bed for monitoring, select "No".
    - Patient taken to angio for MER procedure. Groin punctured. Clot dissolved with IV t-PA. TICI 3. Mechanical thrombectomy not initiated, select "No".
- If unable to be determined from medical record documentation that the procedure attempted was a mechanical thrombectomy for removal of a LVO, select "No"/UTD.

Suggested Data Sources:

- Consultation Notes
- Diagnostic Test Reports
- Operative Notes
- Procedure Notes

Additional Notes / Guidelines for Abstraction:

- Inclusion:
    - Patients with ICD-10-PCS procedure codes on Table 8.1c Thrombectomy Root Procedures, if medical record documentation states that the mechanical thrombectomy procedure was attempted but unsuccessful or aborted before removal of the LVO. Refer to Appendix A, Table 8.1c Thrombectomy Root Procedures for examples of acceptable ICD-10-PCS procedure codes.
    - Patients with ICD-10-PCS procedure codes on Table 8.1c Thrombectomy Root Procedures, if medical record documentation does not indicate that the procedure attempted was a mechanical thrombectomy for removal of a LVO. Refer to Appendix A, Table 8.1c Thrombectomy Root Procedures for examples of acceptable ICD-10-PCS procedure codes.

^^Are reasons for not performing mechanical endovascular reperfusion therapy documented?
Required field when enabled

Data Element Name:

Documented Reason for Not Performing MER

Collected For:

GWTG® EVT Measure Set

Definition:

Documented reason acute ischemic stroke patients for whom mechanical endovascular reperfusion therapy was not initiated during this episode of care at your hospital.

Data Collection Question:

Are reasons for not performing mechanical endovascular reperfusion therapy documented?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is a documented reason by a physician/ANP/PA for not initiating mechanical endovascular reperfusion therapy during this episode of care.

N (No) No documented reason in the medical record by a physician/ANP/PA for why mechanical endovascular reperfusion therapy was not initiated during this episode of care.

Notes for Abstraction:

Documentation in the medical record must be by a physician/ANP/PA.

Suggested Data Sources:

· Consultation notes

· Procedure notes

· Operative notes

· Radiology Reports

Additional Notes:

None

Guidelines for Abstraction: None.

^^Reasons for not performing mechanical endovascular reperfusion therapy (select all that apply):
Required field when enabled

Data Element Name:	Reasons for Not Performing MER
Collected For:	GWTG® EVT Measure Set
Definition:	Acute ischemic stroke patients for whom mechanical endovascular reperfusion therapy was not initiated during this episode of care. Select the specific reason(s) documented in the medical record for not initiating mechanical endovascular reperfusion therapy at this hospital.
Data Collection Question:	Reasons for not performing mechanical endovascular reperfusion therapy (select all that apply):
Format:	**Length:** 1 **Type:** Multi-select field **Occurs:** Minimum: 1 option selected. Maximum: All 14 options selected
Allowable Values:	· Significant pre-stroke disability (pre-stroke mRS > 1) · No evidence of proximal occlusion · NIHSS < 6 · Brain imaging not favorable (ASPECTS score < 6) /hemorrhage transformations · Groin puncture could not be initiated within 6 hours of symptom onset · Anatomical reason- unfavorable vascular anatomy that limits access to the occluded artery · Patient/family refusal · MER performed at outside hospital · Allergy to contrast material · Equipment-related delay * · No endovascular specialist available * · Delay in stroke diagnosis * · Vascular imaging not performed* · Advanced Age * · Other * * These reason does not exclude from measure population
Notes for Abstraction:	• The reasons are not intended to supersede physician judgement, but serve as a guideline to abstractors for acceptable reasons why MER was not initiated. As always, the physician must exercise due caution in providing treatment, given the risks and benefits to the individual patient and the available information at the time of treatment decision. • Documentation in the medical record must be by a physician/ANP/PA. • Inferences for the following three reasons can be made for not initialing endovascular therapy: 1. No evidence of proximal occlusion 2. NIHSS <6 3. Brain imaging not favorable/hemorrhage transformation (ASPECTS score < 6) • All other reasons require documentation by a physician/APN/PA.
Suggested Data Sources:	· Consultation notes · Procedure notes · Operative notes

· Radiology Reports

Additional Notes: The response options with an asterisk (*), do not exclude the patient from the MER measure set.

Guidelines for Abstraction: None.

^^If MER Treatment at this hospital, type of device:
Required field when enabled

Data Element Name:	Device used for EVT
Collected For:	GWTG® EVT Measure Set
Definition:	If MER Treatment at this hospital, select the type of treatment:
Data Collection Question:	What EVT provided at your hospital, what was the device used to provide this treatment?
Format:	**Length:** 1 **Type:** Multi-select **Occurs:** Minimum: 1 option selected. Maximum: All 6 options selected
Allowable Values:	· Retrievable stent · Another mechanical clot retriever device (not retrievable stent) · Clot suction device · Intracranial angioplasty, with or without permanent non-retrieved stent · Cervical carotid angioplasty, with or without stent · Other
Notes for Abstraction:	• Examples of a Retrievable stent: Solitaire and Trevo • Example of Other Mechanical Clot Retriever: Merci Retrieval System • Example of a Clot Suction Device: Penumbra Stroke System
Suggested Data Sources:	· Consultation notes · Procedure notes · Operative notes · Radiology Reports
Additional Notes:	None

Guidelines for Abstraction: None.

REQUIRED FOR COMPREHENSIVE: ^Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?

Data Element Name:	First Pass of a Mechanical Reperfusion Device
Collected For:	CSTK-07, GWTG® - EVT Measures
Definition:	First pass (i.e., deployment) of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital. A mechanical reperfusion device is also known as a clot retrieval device. Clot retrieval devices are designed to treat ischemic stroke by removal of the clot from the cerebral artery. Several brand names are used to identify clot retrieval devices which include, Merci, Penumbra, Trevo, and Solataire. For purposes of this data element, “pass” means mechanical deployment of a clot retrieval device.
Data Collection Question:	Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	Y (Yes) There is documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital. N (No) There is no documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital, OR unable to determine from medical record documentation.
Notes for Abstraction:	· If the first pass of the mechanical reperfusion device at this hospital is unable to be determined from medical record documentation, select “No”. · If conflicts with other sources documenting the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery, use the documentation found in the diagnostic test report.
Suggested Data Sources:	· Consultation notes · Diagnostic test reports · Operative notes

· Procedure reports

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
· Access · Advance · Aspiration · Attempt · Deployment · Pass · Run	None

REQUIRED FOR COMPREHENSIVE: ^What is the date and time of the first pass of a clot retrieval device at this hospital?
Required for GWTG

Data Element Name:	First Pass Date and Time	
Collected For:	CSTK-07, GWTG® - EVT Measures	
Definition:	The date and time (military time) of the first pass (i.e., mechanical deployment) of a clot retrieval device at this hospital.	
Data Collection Question:	What is the date and time of the first pass (i.e., mechanical deployment) of a clot retrieval device at this hospital?	
Format:	**Length:**	15- MM-DD-YYYY (includes dashes) HH-MM (with or without colon) or Unknown
	Type:	Date and Time
	Occurs:	1

Allowable Values:

Date
MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2012-Current Year)
UTD = Unknown

Time

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unknown

Time must be recorded in military time format. Except for 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 *First Radiographic Image 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 *First Radiographic Image Date*.
Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- If the date of the first pass is unable to be determined from medical record documentation, select Unknown
- 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) and no other documentation is found that provides this information, the abstractor should select UTD
  Examples:
  - Documentation indicates the first pass date was 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the first pass 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 *First Pass Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *First Pass Date* is after the *Discharge Date* (death), it is outside of the parameters of care and the abstractor should select "UTD."
- 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 *First Pass Time* 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 time) **and** no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the first pass time was 3300. No other documentation in the medical record provides a valid time. Since the first pass 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".
- The earliest time should be used regardless of how many vessels were treated or which ones were successful vs. unsuccessful.

Suggested Data Sources:

· Consultation notes

· Diagnostic test reports

· Procedure notes * Operative notes

· Procedure report

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Anesthesia start time · Groin puncture time · Procedure start time

^^Is a cause(s) for delay in performing mechanical endovascular reperfusion therapy documented?

Data Element Name: Documented Reason for Delaying EVT

Collected For: GWTG® EVT Measure Set

Definition: As with intravenous r-tPA, reduced time from symptom onset to reperfusion with endovascular therapies is highly associated with better clinical outcomes. Thus, when there is a delay, what is the documented reason.

Data Collection Question: Are reasons for delay in performing mechanical endovascular reperfusion therapy documented?

Format:
Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is a documented reason for delay in initiating mechanical endovascular reperfusion therapy when it's greater than 120 minutes after hospital arrival.

N (No) No documented reason in the medical record for why there was a delay in initiating mechanical endovascular reperfusion therapy during this episode of care.

Notes for Abstraction: Documentation in the medical record must be by a physician/ANP/PA.

Suggested Data Sources:

· Consultation notes

· Procedure notes

· Operative notes

· Radiology Reports

Additional Notes: None

Guidelines for Abstraction: None.

^^If EVT Treatment at this hospital, type of device:
Required field when enabled

Data Element Name:	Device used for EVT
Collected For:	GWTG® EVT Measure Set
Definition:	If MER Treatment at this hospital, select the type of treatment:
Data Collection Question:	What EVT provided at your hospital, what was the device used to provide this treatment?
Format:	**Length:** 1 **Type:** Multi-select **Occurs:** Minimum: 1 option selected. Maximum: All 6 options selected
Allowable Values:	· Retrievable stent · Another mechanical clot retriever device (not retrievable stent) · Clot suction device · Intracranial angioplasty, with or without permanent non-retrieved stent · Cervical carotid angioplasty, with or without stent · Other
Notes for Abstraction:	• Examples of a Retrievable stent: Solitaire and Trevo • Example of Other Mechanical Clot Retriever: Merci Retrieval System • Example of a Clot Suction Device: Penumbra Stroke System
Suggested Data Sources:	· Consultation notes · Procedure notes · Operative notes · Radiology Reports
Additional Notes:	None

Guidelines for Abstraction: None.

^Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?

Data Element Name:	First Pass of a Mechanical Reperfusion Device
Collected For:	CSTK-07
Definition:	First pass (i.e., deployment) of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital. A mechanical reperfusion device is also known as a clot retrieval device. Clot retrieval devices are designed to treat ischemic stroke by removal of the clot from the cerebral artery. Several brand names are used to identify clot retrieval devices which include, Merci, Penumbra, Trevo, and Solataire. For purposes of this data element, “pass” means mechanical deployment of a clot retrieval device.
Data Collection Question:	Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	Y (Yes) There is documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital. N (No) There is no documentation of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital, OR unable to determine from medical record documentation.
Notes for Abstraction:	· If the first pass of the mechanical reperfusion device at this hospital is unable to be determined from medical record documentation, select “No”. · If conflicts with other sources documenting the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery, use the documentation found in the diagnostic test report.
Suggested Data Sources:	· Consultation notes · Diagnostic test reports · Operative notes · Procedure reports
Additional Notes:	
Guidelines for Abstraction:	

Inclusion	Exclusion
· Access · Advance · Aspiration · Attempt · Deployment · Pass · Run	None

^What is the date and time of the first pass of a clot retrieval device at this hospital?
Required for GWTG

Data Element Name:	First Pass Date and Time	
Collected For:	GWTG® - EVT Measures	
Definition:	The date and time (military time) of the first pass (i.e., mechanical deployment) of a clot retrieval device at this hospital.	
Data Collection Question:	What is the date and time of the first pass (i.e., mechanical deployment) of a clot retrieval device at this hospital?	
Format:	**Length:**	15- MM-DD-YYYY (includes dashes) HH-MM (with or without colon) or Unknown
	Type:	Date and Time
	Occurs:	1

Allowable Values:

Date
MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2012-Current Year)
UTD = Unknown

Time

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unknown

Time must be recorded in military time format. Except for 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 *First Radiographic Image 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 *First Radiographic Image Date*.
Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- If the date of the first pass is unable to be determined from medical record documentation, select Unknown

- 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) and no other documentation is found that provides this information, the abstractor should select UTD
  Examples:
  - Documentation indicates the first pass date was 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the first pass 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 *First Pass Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *First Pass Date* is after the *Discharge Date* (death), it is outside of the parameters of care and the abstractor should select “UTD.”
- 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 *First Pass Time* 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 time) **and** no other documentation is found that provides this information, the abstractor should select “UTD”.
  Example:
  Documentation indicates the first pass time was 3300. No other documentation in the medical record provides a valid time. Since the first pass 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”.
- The earliest time should be used regardless of how many vessels were treated or which ones were successful vs. unsuccessful.

Suggested Data Sources:
· Consultation notes
· Diagnostic test reports
· Procedure notes * Operative notes
· Procedure report

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Anesthesia start time · Groin puncture time · Procedure start time

^^Is a cause(s) for delay in performing mechanical endovascular reperfusion therapy documented?

Data Element Name: Documented Reason for Delaying EVT

Collected For: GWTG® EVT Measure Set

Definition: As with intravenous r-tPA, reduced time from symptom onset to reperfusion with endovascular therapies is highly associated with better clinical outcomes. Thus, when there is a delay, what is the documented reason.

Data Collection Question: Are reasons for delay in performing mechanical endovascular reperfusion therapy documented?

Format:
Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:
Y (Yes) There is a documented reason for delay in initiating mechanical endovascular reperfusion therapy when it’s greater than 120 minutes after hospital arrival.

N (No) No documented reason in the medical record for why there was a delay in initiating mechanical endovascular reperfusion therapy during this episode of care.

Notes for Abstraction: Documentation in the medical record must be by a physician/ANP/PA.

Suggested Data Sources:
· Consultation notes
· Procedure notes
· Operative notes
· Radiology Reports

Additional Notes: None

Guidelines for Abstraction: None.

Reasons for delay (select all that apply):

Data Element Name:	Reasons for delaying EVT
Collected For:	GWTG® EVT Measure Set
Definition:	As with intravenous alteplase, reduced time from symptom onset to reperfusion with endovascular therapies is highly associated with better clinical outcomes. Indicate the reason(s) documented in the medical record for delay.
Data Collection Question:	Are reasons for delay in performing mechanical endovascular reperfusion therapy documented?
Format:	**Length:** 1 **Type:** Multi-select field **Occurs:** 1 – 9
Allowable Values:	· Social/religious · Initial refusal · Care-team unable to determine eligibility · Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation) · Investigational or experimental protocol for thrombolysis · Additional proximal vascular procedure required prior to first pass (stent) · Need for additional PPE for suspected/ confirmed infectious disease · Delay in stroke diagnosis * · In-hospital time delay * · Equipment-related delay * · Need for additional imaging* · Catheter lab not available* Other * _____ * *does not exclude patient from the measure population*
Notes for Abstraction:	Documentation in the medical record must be by a physician/ANP/PA. • Social/Religious means that the patient and/or family refused treatment due to their cultural or religious beliefs. As patients do have the right to change their treatment decisions, this choice should be selected if there is documentation that treatment with EVT was initially refused due to any social or religious reason. Example: Patient wishes to consult clergy prior to deciding whether he wishes to receive treatment. Clergy takes 30 minutes to arrive. After speaking with clergy, the patient decides to proceed with treatment. Treatment is provided once the patient consents (now 75 minutes after arrival). • Initial refusal should be selected if there is documentation that the patient and/or family initially refused treatment for any reason other than a social/religious reason. • For patients that cannot participate in shared decision making or provide consent, select "Initial Refusal" if there is documentation that there was a delay in treatment due to reasonable attempts to contact a proxy decision maker to obtain consent. • "Care-team unable to determine eligibility" means that the diagnosis of stroke was made but that eligibility for EVT could not be established or verified by the clinician. • Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation) • Investigational or experimental protocol for thrombolysis: Documentation indicates that administration of IV alteplase was delayed due to an investigational or experimental thrombolytic protocol. If investigational or experimental protocol was used, there should be a signed IRB consent in the medical record. • "Additional proximal vascular procedure required prior to first pass (stent)" if a revascularization procedure (e.g. angioplasty, stenting, other), is performed in an artery proximal to the site of occlusion that is causing the stroke, before the first deployment of the EVT device. The most common example is the need to first perform angioplasty, with or without stenting, in a stenotic cervical internal carotid artery, to allow the passage of the EVT device to reach a distal target intracranial occlusion. ◦ **Do NOT** select this reason if the delay was related to difficulty advancing catheters due to torturous anatomy or other reasons not unrelated to performing a proximal revascularization procedure • Need for additional PPE for suspected/ confirmed infectious disease: Select this option when there is documentation in the patient medical record that treatment was delayed so that health care providers could obtain additional Personal Protection Equipment (PPE) because the patient had a confirmed or suspected infection.
Suggested Data Sources:	· Consultation notes · Diagnostic test reports · Operative notes

· Operative report

· Procedure notes

· Procedure report

Additional Notes: None

Guidelines for Abstraction: None.

^What is the location of the clot in the cerebral circulation?

Data Element Name:	*Proximal or Distal Occlusion*
Collected For:	CSTK-08,
Definition:	Documentation in the medical record of the location of the clot in either the large arteries in the neck or base of the brain (proximal), or small arteries higher up in the brain (distal). Arterial occlusions arising more proximally are associated with poorer outcomes.
Data Collection Question:	What is the location of the clot in the cerebral circulation?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	1 Proximal cerebral occlusion 2 Distal cerebral occlusions 3 Neither proximal or distal, OR unable to determine (UTD) from the medical record documentation
Notes for Abstraction:	· If the occlusion is documented in an artery listed as an inclusion term for "proximal", select '1'. · If the occlusion is documented in an artery listed as an inclusion term for "distal", select '2'. · If multiple occlusions, select "proximal" or "distal" for the primary vessel occlusion. · If unable to determine, select '3'.
Suggested Data Sources:	· Consultation notes · Emergency department record · History and physical · Progress notes · Discharge summary · Diagnostic test reports · Operative notes · Procedure notes · Admitting notes · Procedure reports

Additional Notes:

Guidelines for Abstraction:

Inclusion	**Exclusion**
PROXIMAL:	None
· Internal Carotid Artery (ICA)	
· ICA terminus	
· Middle Cerebral Artery (MCA)	
· Middle Cerebral Artery (MCA) M1 segment	
· M1	
· T-occlusion (T-lesion)	
· Vertebral Artery	
· Basilar Artery	
DISTAL:	
· Anterior Cerebral Artery (ACA)	

· Anterior Cerebral Artery (ACA) A1 segment

· A1

· Anterior Cerebral Artery (ACA) A2 segment

· A2

· Anterior Cerebral Artery (ACA) A3 segment

· A3

· Middle Cerebral Artery (MCA) M2 segment

· M2

· Middle Cerebral Artery (MCA) M3 segment

· M3

· Middle Cerebral Artery (MCA) M4 segment

· M4

· Posterior Cerebral Artery (PCA)

· Posterior Cerebral Artery (PCA) P1 segment

· P1

· Posterior Cerebral Artery (PCA) P2 segment

· P2

· Posterior Cerebral Artery (PCA) P3 segment

· P3

^What cerebral artery is occluded?

Note:	**Similar GWTG® element appears under the Hospitalization Tab**
Data Element Name:	*Site of Primary Vessel Occlusion*
Collected For:	CSTK
Definition:	Documentation in the medical record of the clinical location of the primary occluded vessel.
Data Collection Question:	What cerebral artery is occluded?
Format:	Single-select
Allowable Values:	· Anterior cerebral artery (ACA) · A1 ACA · Anterior communicating artery · Internal carotid artery (ICA) · ICA terminus (T-lesion; T occlusion) · Middle cerebral artery (MCA) · M1 MCA · M2 MCA · M3/M4 MCA · Vertebral artery (VA) · Basilar artery (BA) · Posterior cerebral artery (PCA) · Another cerebral artery branch/segment · The clinical location of the primary occluded vessel was not documented, OR unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:
- Collect the documented clinical location of the primary occluded arterial segment treated with IA alteplase therapy and/or mechanical endovascular reperfusion therapy.

Suggested Data Sources:
· Consultation notes
· Emergency department record
· History and physical
· Progress notes
· Discharge summary
· Diagnostic test reports
· Operative notes
· Procedure notes
· Admitting notes
· Procedure reports

Additional Notes/Guidelines for Abstraction: N/A

^^Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

Data Element Name: *TICI Reperfusion Grade*

Collected For: EVT Measure Set

Definition: The Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade is used to measure cerebral reperfusion. Results with this scoring system range between zero and three: 0 (no perfusion); 1 (perfusion past the initial occlusion, but no distal branch filling); 2 (perfusion with incomplete or slow distal branch filling); and, 3 (full perfusion with filling of all distal branches). Reperfusion past the target arterial occlusion and into the distal arterial bed and terminal branches, in conjunction with recanalization of the target arterial occlusion, demonstrates flow restoration or revascularization.

Question: Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

Format: Single-select

Allowable Values:
- Grade 0
- Grade 1
- Grade 2a
- Grade 2b
- Grade 3
- ND

Notes for Abstraction:
- Grade 0: No Perfusion. No antegrade flow beyond the point of occlusion.
- Grade 1: Penetration with Minimal Perfusion. The contrast material passes beyond the area of obstruction but fails to opacify the entire cerebral bed distal to the obstruction for the duration of the angiographic run.
- Grade 2a: Partial tissue reperfusion in < 50% of the occluded artery.
- Grade 2b: Partial reperfusion in ≥50% of the occluded artery territory.
- Grade 3: Essentially complete Perfusion. Antegrade flow into the bed distal to the obstruction occurs as promptly as into the obstruction and clearance of contrast material from the involved bed is as rapid as from an uninvolved other bed of the same vessel or the opposite cerebral artery.
- Select "Grade 2b" if documentation includes 2b, 2c, or a grade 2 with any modifier that indicates 50 - 99 percent reperfusion.
- If a TICI reperfusion grade was not done post treatment or cannot be determined from medical record documentation, select “ND.”
- TICI grade must be documented by a Physician/APN/PA.
- **Rationale:** Endovascular therapy (EVT) is now the standard of care for treatment of acute ischemic stroke due to large-vessel occlusion (LVO). In 2015, the American Heart Association/American Stroke Association published a focused update to the 2013 Guidelines for the Early Management of Patients with Acute Ischemic Stroke regarding endovascular treatment (Powers WJ, et. al., 2015). Endovascular therapy with a stent retriever is recommended for eligible patients. To ensure benefit, reperfusion to TICI 2B/3 should be achieved as early as possible and within 6 hours of stroke onset. As with IV alteplase, reduced time from symptom onset to reperfusion with EVT is highly associated with better clinical outcomes.

Suggested Data Sources:
· Consultation notes
· Diagnostic test reports
· Procedure reports

Additional Notes / Guidelines for Abstraction:
- Sang Hyun Suh, Harry J. Cloft, Jennifer E. Fugate, Alejandro A. Rabinstein, David S. Liebeskind and David F. Kallmes Stroke. 2013;44:1166-1168.

^Is there a documented TICI reperfusion grade post-treatment?

Data Element Name:	*Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade*
Collected For:	CSTK-08, CSTK-11, CSTK-12,
Definition:	Documentation that the Thrombolysis in Cerebral Infarction (TICI) reperfusion grade was 2B (i.e., partial perfusion greater than or equal to 50% of vascular distribution of occluded artery) or higher post-treatment. The TICI scale is a tool used to grade the degree of perfusion obtained following recanalization of an arterial occlusion. Recanalization of an arterial occlusion increases reperfusion into distal segments of the artery and restores blood flow to brain tissue. Scores may range from 0 (no perfusion) to 3 (full perfusion with filling of all distal branches).
Data Collection Question:	Is there a documented TICI reperfusion grade post-treatment?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	1 = A TICI reperfusion grade greater than or equal to (≥) 2B was documented post-treatment. 2 = A TICI reperfusion grade less than (<) 2B was documented post-treatment. 3 = A TICI reperfusion grade was not done post-treatment, OR Unable to determine (UTD) from the medical record documentation.
Notes for Abstraction:	· The TICI grade may be documented by the physician/APN/PA, or a nurse (RN),circulating nurse, operating room technician, radiology technician or other individual designated to scribe during the procedure. · When multiple TICIs are documented because more than one vessel or branches of an artery are occluded, select the TICI grade associated with the site of primary vessel occlusion. ·When multiple TICIs are documented for the primary vessel occlusion, select the highest grade documented · If unable to determine whether the TICI reflects reperfusion of the primary vessel, then select "UTD".
Suggested Data Sources:	· Consultation notes · Emergency department record · History and physical · Progress notes · Discharge summary · Diagnostic test reports · Operative notes · Procedure notes · Admitting notes
Guidelines for Abstraction:	Inclusion: • Reperfusion time • Stroke reperfusion time Exclusion criteria: - TIBI, TIMI, or Scoring methodologies other than TICI

Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade Date/ Time

Collected For: CSTK

Definition: The date and time that a Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade was first documented during the mechanical thrombectomy procedure.

Question: What was the date that a TICI was first documented during the mechanical thrombectomy procedure?

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - MM = Month (01-12)
  - YYYY = Year (2012 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)
  - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- Use the date a TICI 2B/3 was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If multiple dates are documented during the procedure, use the earliest date.
- If a TICI 2B/3 was not achieved but a TICI less than 2B/3 was documented for the procedure, then select that date.
- The procedure end date may be used if an earlier date is not documented during the procedure.
- If the date a TICI 2B/3 was first documented 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) and no other documentation is found that provides this information, the abstractor should select "UTD". Example:
    - Documentation indicates the Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade Date was 03-*42*-20xx. No other documentation in the medical record provides a valid date. Since the Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade 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".
- 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
- Use the time a TICI 2B/3 was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If multiple times are documented during the procedure, use the earliest time.
- If a TICI 2B/3 was not achieved by a TICI less than 2B/3 was documented for the procedure, then select that time.
- The procedure end time may be used if an earlier time is not documented during the procedure.
- 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 a TICI 2B/3 was first documented is unable to be determined from medical record documentation, select "UTD".
- A grade value (e.g., 2B/3) must be documented to meet this data element. Do not infer a TICI grade based on other documentation in the medical record, e.g., TICI estimated from the dictated angiography report.
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error (not a valid time) and no other documentation is found that provides this information, the abstractor should select "UTD". Example:
    - Documentation indicates the Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade Time was 3300. No other documentation in the medical record provides a valid time. Since the Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade 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".

Suggested Data Sources:

- Consultation Notes
- Progress Notes
- Operative Notes
- Procedure Notes

Additional Notes / Guidelines for Abstraction:

- Inclusion:
    - Recanalization Time
    - Reperfusion Time
    - Revascularization Time
    - Stroke Reperfusion Time
    - TICI Time

Complications

^Was there a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrage following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation?

Collected For: CSTK

Definition: Documentation of a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA alteplase therapy, OR mechanical endovascular reperfusion therapy initiation. The major risk of reperfusion therapy is hemorrhage

Question: Was there a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrage following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes - Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was detected on brain imaging following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation.
- No - Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was not detected on brain imaging following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation, OR Unable to determine (UTD) from the medical record documentation.
- For purposes of this data element, do not use brain imaging reports for CT/MRI performed prior to IV or IA alteplase initiation, or mechanical endovascular reperfusion (MER) therapy. Abstract only brain imaging reports for tests done after these interventions to select 'YES'.
- Patients with a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage on brain imaging following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation, are acceptable to select "Yes".
    - A confirmed report is not necessary. Reports of preliminary findings within this timeframe may be used in abstraction.
    - If the report documents that "hemorrhage cannot be excluded", "cannot R/O hemorrhage", or "findings suggestive of hemorrhage", select "Yes".
- When conflicting information is documented in the medical record, select 'YES'.
- Documentation that the hemorrhage is "old", select "NO". Do not infer that a hemorrhage is old unless explicitly documented.
- See the inclusion list for acceptable examples of documentation of a positive finding. The list is not all inclusive.

Suggested Data Sources:

- ONLY acceptable data source:
    - Brain Imaging Reports
    - Diagnostic Test Reports
    - Radiology Reports

Additional Notes / Guidelines for Abstraction:

- Inclusion
    - Bleed
    - Blood
    - Blood product(s)
    - Brain hemorrhage
    - Cerebral hemorrhage
    - ECASS criteria PH1 or PH2
    - Hemorrhage
    - Hemorrhagic Conversion
    - Hemorrhagic Expansion
    - Hemorrhagic Transformation
    - Intracerebral Hemorrhage (ICH)
    - Intraparenchymal hemorrhage
    - Intraventricular hemorrhage
    - Parenchymal hematoma
    - Parenchymal hemorrhage
    - Parenchymal intracerebral hemorrhage
    - Small (e.g., bleed, hemorrhage)
    - Subarachnoid hemorrhage (SAH)
- Exclusion
    - ECASS criteria H1 or H2
    - Incidental
    - Micro
    - Petechial
    - Punctate
    - Trace

^Date/Time of positive brain image:

Data Element Name:	Positive Brain Image Date and Time
Collected For:	CSTK-05,
	The month, date, and year for which a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was documented.
Definition:	The time (military time) for which a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was documented. Early hemorrhagic transformation occurs in about one in ten patients with acute ischemic stroke, but only parenchymal hematoma predicts poor outcomes, according to the research.
Data	What was the date and time of the positive brain image finding?

Collection Question:

Length: 10 - MM-DD-YYYY (includes dashes) or Unknown
Type: Date
Occurs: 1

Format:

Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

MM = Month (01-12)
DD = Day (01-31)
YYYY = Year (2001-Current Year)
UTD = Unknown

HH = Hour (00-23)
MM = Minutes (00-59)
UTD = Unable to Determine

Notes for Abstraction:

· Use the date when a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was first documented following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different positive brain image dates (either different brain images or corresponding with the same brain image), enter the earliest date.

· If the date of positive brain image is unable to be determined from medical record documentation, select Unknown.

Example:
Documentation indicates the positive brain image date was 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the positive brain image date is outside of the range listed in the Allowable Values for Day, it is not a valid date and the abstractor should select Unknown. Time must be recorded in military time format. Except for 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

Suggested Data Sources:

· Diagnostic test reports
· Brain imaging reports
· Radiology reports

Additional Notes:

Guidelines for Abstraction:

· Use the time at which symptomatic intracranial hemorrhage was first documented following IV or IA thrombolytic (alteplase) therapy, or mechanical endovascular reperfusion therapy initiation. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different symptomatic intracranial hemorrhage times (either different brain images or corresponding with the same brain image), enter the earliest time.

· 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 symptomatic intracranial hemorrhage is unable to be determined from medical record documentation, select Unknown.

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

· **Example:**
Documentation indicates primary brain image time was 3300. No other documentation in the medical record provides a valid time. Since primary brain image time is outside of the range listed in the Allowable Values for hour. it is not a valid time and the abstractor should select Unknown.

^^Results of positive brain image
Optional Field, Unique to GWTG

Data Element Name:	*Results Positive Brain Image*
Collected For:	GWTG ® Data Element
Definition:	Documentation of a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA thrombolytic (alteplase) therapy, OR mechanical endovascular reperfusion therapy initiation. The major risk of reperfusion therapy is hemorrhage
Data Collection Question:	Results of positive brain image
Format:	**Length:** 1 **Type:** Single-select, dropdown menu **Occurs:** 1
Allowable Values:	· PH2: Parenchymal Hematoma Type 2, defined by ECASS criteria as a hematoma occupying >30% of the infracted area accompanied by significant mass effect. · IVH: Intraventricular Hemorrhage · SAH: Subarachnoid Hemorrhage · RIH: Remote site of intraparenchymal hemorrhage outside the area of infarction · Other positive finding not listed above · None of the above or not documented
Notes for Abstraction:	· None.
Suggested Data Sources:	· Diagnostic test reports · Brain imaging reports · Radiology reports
Guidelines for Abstraction:	No additional Inclusion or exclusion criteria

^What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?

Data Element Name:	*NIHSS Score Documented Closest to IV Thrombolytic Initiation*
Collected For:	CSTK-05
Definition:	The NIHSS score documented closest to IV thrombolytic initiation is the last NIHSS score documented prior to IV thrombolytic initiation at this hospital. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.
Data Collection Question:	What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?
Format:	**Length:** 3 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	Score = 0-42 UTD = Unable to Determine
Notes for Abstraction:	· The NIHSS score may be documented by the physician/APN/PA or nurse (RN). · Look for the last NIHSS score documented prior to IV thrombolytic initiation at this hospital. Examples: o “Initial NIHSS score 4 documented by the ED nurse at this hospital. “No other NIHSS scores were documented prior to IV alteplase initiation.” Select ‘4’. o “Symptoms resolved by time of hospital arrival at 1200. Initial NIHSS score zero documented in ED. Symptoms returned at 1330, NIHSS score 2, and IV alteplase given at 1338.” Select ‘2’. o “Patient transferred to this hospital. NIHSS score 10 done at transferring hospital. No NIHSS score documented at this hospital prior to IV alteplase.” Select ‘10’. o “Nurse documented NIHSS score 8 via telemedicine prior to arrival at this hospital. IV alteplase initiated at 1712. NIHSS score 2 at 1800.” Select ‘8’.

· For purposes of this data element, score documentation between 0 and 42 is acceptable. Only one score may be selected. Select the last NIHSS score documented prior to *IV Thrombolytic Initiation Time* at this hospital

· If only one NIHSS score is documented prior to IV thrombolytic initiation and no other score(s) are available for comparison, enter the value for that score.

· If no NIHSS score is documented prior to IV thrombolytic initiation, select UTD.

· If unable to determine the last NIHSS score documented prior to IV thrombolytic initiation, select UTD.

Suggested Data Sources:

· Consultation notes
· History and physical
· Nursing flow sheet
· Progress notes
· Transfer sheet
· Admitting note
· Ambulance record
· Emergency room records
· Nursing assessment

Additional Notes: None

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Modified NIHSS scores · Estimated NIHSS scores · Scoring methodologies other than NIHSS

^What is the highest NIHSS score documented within 36 hours following initiation of IV (alteplase) thrombolytic therapy?

Data Element Name: Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation

Collected For: CSTK-05

Definition: The highest NIHSS score documented within 36 hours following initiation of IV thrombolytic (alteplase) therapy. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Data Collection Question: What is the highest NIHSS score documented within 36 hours following initiation of IV (alteplase) thrombolytic therapy?

>**Format:**
Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

· The NIHSS score may be documented by the physician/APN/PA or nurse (RN).

· Look for the highest NIHSS score documented in less than or equal to 36 hours following initiation of IV thrombolytic (alteplase) therapy.

· For purposes of this data element, score documentation between 0 and 42 is acceptable.

· If only one NIHSS score is documented within the first 36 hours following initiation of IV thrombolytic (alteplase) therapy and no other NIHSS score(s) are available for comparison, enter the value for that score.

· If multiple scores are documented within the first 36 hours following initiation of IV thrombolytic (alteplase) therapy, select the highest score.
EXAMPLES:

o NIHSS Score is 10 at 1500 and 20 at 2300. Both scores are documented following the initiation of IV thrombolytic therapy. Select NIHSS score of 20.

o IV thrombolytic therapy initiated on 9/5/20XX at 0900. NIHSS score is 8 on 9/5/20XX at 2300, 10 on 9/6/20XX at 0100, and 8 on 9/6/20XX at 0300. Select NIHSS score 10.

o IV thrombolytic therapy initiated on 9/5/20XX at 0900. NIHSS score 3 on 9/6/20XX at 0900, 2 on 9/8/20XX at 0900, and 6 on 9/10/2012 at 0900. Select 3.

· If no NIHSS score is documented within 36 hours following IV thrombolytic (alteplase) therapy, select “UTD”.

· If unable to determine the highest score documented within 36 hours following IV thrombolytic (alteplase) therapy, select “UTD”.

Suggested Data Sources:

· Consultation notes
· Emergency department record
· History and physical
· Nursing flow sheet
· Progress notes
· Admitting note
· Nursing assessment

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Modified NIHSS scores · Estimated NIHSS scores · Scoring methodologies other than NIHSS

^What is the last NIHSS score documented prior to initiation of IA alteplase or MER at this hospital?

Data Element Name: NIHSS Score Documented Closest to IA alteplase or MER Initiation

Collected For: CSTK-05,

Definition: The NIHSS score documented closest to IA thrombolytic (alteplase) therapy or mechanical endovascular reperfusion (MER) therapy initiation is the last NIHSS score documented prior to IA alteplase or MER initiation (i.e., the initiation time of the intervention performed first) at this hospital. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Data Collection Question: What is the last NIHSS score documented prior to initiation of IA alteplase or MER at this hospital?

Format:
Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

· The NIHSS score may be documented by the physician/APN/PA or nurse (RN).

· Look for the last NIHSS score documented prior to IA alteplase or MER initiation at this hospital. Examples:

o “Initial NIHSS score 4 documented by the ED nurse at this hospital. No other NIHSS scores were documented prior to IA alteplase or MER initiation.” Select ‘4’.

o “NIHSS score 6 prior to transfer to this hospital. IV alteplase ‘drip and ship’. Arrival Time at this hospital 2319. NIHSS score 8 at 2325 and NIHSS score 10 at 2340. IA Thrombolytic Initiation Time 0015.” Select ‘10’.

o “NIHSS score 10 on arrival. IV alteplase given at 0800. NIHSS score 8 at 0900. IA infusion start time 0950.” Select ‘8’.

o “IV alteplase given at a transferring hospital. Nurse documented NIHSS score 18 via telemedicine prior to arrival at this hospital. Patient went directly to OR for mechanical thrombectomy procedure. No NIHSS score documented at this hospital prior to intervention.” Select ‘18’.

· For purposes of this data element, score documentation between 0 and 42 is acceptable. Only one score may be selected. Select the last NIHSS score documented prior to the start time of IA alteplase OR first pass of a mechanical reperfusion device whichever intervention is performed first, i.e. “IA alteplase first then MER” or “MER first then IA alteplase”, at this hospital.

· If only one NIHSS score is documented prior to IA alteplase or MER initiation and no other score(s) are available for comparison, enter the value for that score.

· If no NIHSS score is documented prior to IA alteplase or MER initiation, select UTD.

· If unable to determine the last NIHSS score documented prior to IA alteplase or MER initiation, select UTD.

Suggested Data Sources:

· Consultation notes
· History and physical
· Nursing flow sheet
· Progress notes
· Transfer sheet
· Admitting note
· Ambulance record
· Emergency room records
· Nursing assessment

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Modified NIHSS scores · Estimated NIHSS scores · Scoring methodologies other than NIHSS

^What is the highest NIHSS score documented within 36 hours following IA alteplase or EVT initiation?

Data Element Name: Highest NIHSS Score Documented Within 36 Hours Following IA alteplase or MER Initiation

Collected For: CSTK-05

Definition: The highest NIHSS score documented within 36 hours following initiation of IA thrombolytic (alteplase) therapy or mechanical endovascular reperfusion therapy (MER). The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.

Data Collection Question: What is the highest NIHSS score documented within 36 hours following IA alteplase or MER initiation?

Format:
Length: 3
Type: Alphanumeric
Occurs: 1

Allowable Values:
Score = 0-42
UTD = Unable to Determine

Notes for Abstraction:

· The NIHSS score may be documented by the physician/APN/PA or nurse (RN).

· Look for the highest NIHSS score documented in less than or equal to 36 hours following initiation of IA alteplase or MER therapy.

· For purposes of this data element, score documentation between 0 and 42 is acceptable.

· If only one NIHSS score is documented within the first 36 hours following initiation of IA alteplase or MER therapy and no other NIHSS score(s) are available for comparison, enter the value for that score.

· If multiple scores are documented within the first 36 hours following initiation of IA alteplase or MER therapy, select the highest score.
EXAMPLES:

o IA alteplase initiated at 1247 with first deployment of a mechanical reperfusion device at 1303. NIHSS Score is 10 at 1500 and 20 at 2300. Select NIHSS score of 20.

o IA alteplase infusion initiated on 9/5/20XX at 0900. NIHSS score is 8 on 9/5/20XX at 2300, 10 on 9/6/20XX at 0100, and 8 on 9/6/20XX at 0300. Select NIHSS score 10.

o MER initiated on 9/5/20XX at 0900. NIHSS score 3 on 9/6/20XX at 0900, 2 on 9/8/20XX at 0900, and 6 on 9/10/2012 at 0900. Select 3.

- If no NIHSS score is documented within 36 hours following IA alteplase or MER therapy initiation, select UTD.
- If unable to determine the highest score documented within 36 hours following IA alteplase or MER therapy initiation, select UTD.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Nursing assessment

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
None	· Modified NIHSS scores · Estimated NIHSS scores · Scoring methodologies other than NIHSS

^Is there documentation that a procoagulant reversal agent was initiated at this hospital?

Data Element Name: Procoagulant Reversal Agent Initiation

Collected For: CSTK-04,

Definition: A procoagulant reversal agent was initiated at this hospital. Procoagulant reversal agents are medications that increase coagulation factors to promote clotting.

Data Collection Question: Is there documentation that a procoagulant reversal agent was initiated at this hospital?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) A procoagulant reversal agent was initiated at this hospital.

N (No) A procoagulant reversal agent was not initiated at this hospital, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If a procoagulant reversal agent was initiated at this hospital, select Yes.
- **Only accept reversal agents identified in the list of inclusions. No other terms for reversal agents will be accepted.**
- If Vitamin K only was administered as the sole form of reversal and no other procoagulant agent was administered, select No.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medication reconciliation form

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
· Activated prothrombin complex concentrates · Anti-inhibitor coagulant complex	· Vitamin K Only · Factor IX (without complex)

- Autoplex T
- Bebulin VH
- Eptacog alfa
- Factor IX Complex
- Factor VIIa (Recombinant)
- Feiba VH Immuno
- Fresh frozen plasma (FFP)
- NovoSeven
- NovoSeven RT
- Profiling SD
- Proplex T
- Prothrombin complex concentrates (PCCs
- rFVIIa
- (Kcentra) PCC-Human
- Pradaxa (dabigatran) reversal agent: Praxbind (idarucizumab)

^^Date/Time procoagulant initiated
Required field

Data Element Name:	*Date/Time procoagulant initiated*
Collected For:	GWTG ® Data Element, Optional field
Definition:	The Date/Time procoagulant therapy was initiated at this hospital.
Data Collection Question:	Date/Time procoagulant initiated
Format:	**Length:** 10 - MM-DD-YYYY (includes dashes) or Unknown **Type:** Date **Occurs:** 1
Allowable Values:	**Length:** 5 - HH-MM (with or without colon) or Unknown **Type:** Time **Occurs:** 1 · Date and Time · Date only · Unknown
Notes for Abstraction:	· If patient receives multiple acceptable procoagulant therapies, enter the date that the first treatment was initiated.
Suggested Data Sources:	· Emergency department record · Nursing flow sheet · Progress notes · Medication administration record (MAR) · Medication reconciliation form
Guidelines for Abstraction:	No additional Inclusion or exclusion criteria

^Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?

Data Element Name: Reason for Not Administering a Procoagulant Reversal Agent

Collected For: CSTK-04,

Definition:

Reason for not administering a procoagulant reversal agent.

- Adverse reaction to a procoagulant reversal agent
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist.

Procoagulant reversal agents are medications that increase coagulation factors to promote clotting.

Data Collection Question: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not administering a procoagulant reversal agent.

N (No) There is no documentation of a reason for not administering a procoagulant reversal agent OR unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons for not administering a procoagulant reversal agent must be documented by the physician/APN/PA or pharmacist.
  - Physician/APN/PA or pharmacist documentation of a hold on a procoagulant reversal agent or discontinuation of a procoagulant reversal agent constitutes a ?#8364;œclearly implied?#8364;? reason for not administering the procoagulant reversal agent.
- If reasons are not mentioned in the context of a procoagulant reversal agent, do not make inferences (e.g., do not assume that a procoagulant reversal agent was not administered because of an adverse reaction to a procoagulant reversal agent unless documentation explicitly states so.)
  - o Reasons must be explicitly documented (e.g., “Allergic to cow milk. Do not give NovoSeven.
- When conflicting information is documented in the medical record, select “Yes.”

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
· Patient/family refusal	None

^^If initial INR > 1.4 and treated with procoagulant, Date/Time first INR ≤ 1.4 after treatment:
Optional Field

Data Element Name: *Date/Time first INR ≤ 1.4 after treatment*

Collected For: GWTG ® Data Element, Optional field

Definition:

Documentation that the international normalized ratio (INR) value after treatment is less than 1.4. This value correlates to the ability of the blood to clot. Higher values greater than 1.4 are associated with an increased risk of hemorrhage.

The first date/time recorded after treatment with procoagulant that the INR is less than or equal to 1.4.

Data Collection Question: ^^If initial INR > 1.4 and treated with procoagulant, Date/Time first INR ≤ 1.4 after treatment:

Format:

Length: 10 - MM-DD-YYYY (includes dashes) or Unknown
Type: Date
Occurs: 1

	Length: 5 - HH-MM (with or without colon) or Unknown **Type:** Time **Occurs:** 1
Allowable Values:	· Date and Time (military time) · Date only · No documented INR ≤ 1.4 after Tx
Notes for Abstraction:	· If there is no documentation of an INR value less than 1.4 after treatment with procoagulant, select the checkbox that indicates 'No documented INR ≤ 1.4 after Tx.'
Suggested Data Sources:	· Emergency department record · Nursing flow sheet · Progress notes · Medication administration record (MAR) · Medication reconciliation form
Guidelines for Abstraction:	No additional Inclusion or exclusion criteria

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HEMORRHAGIC STROKE TREATMENT

^Is there documentation that nimodipine was administered at this hospital?
Required for TJC CSTK Users

Data Element Name:	Nimodipine Administration
Collected For:	CSTK-06
Definition:	Documentation that nimodipine was administered at this hospital. Nimodipine is a cerebroselective calcium channel blocker that inhibits calcium transport into vascular smooth muscle cells, thereby suppressing contractions. Nimodipine is used in the treatment of subarachnoid hemorrhage patients to prevent or limit the severity of cerebral vasospasm.
Data Collection Question:	Is there documentation that nimodipine was administered at this hospital?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	Y (Yes) Nimodipine was administered at this hospital. N (No) Nimodipine was not administered at this hospital, OR unable to determine from medical record documentation.
Notes for Abstraction:	· Nimodipine treatment must be administered at this hospital within the first 24 hours of arrival to select "'YES'. It is not necessary to review documentation outside of this timeframe. · If nimodipine was administered at another hospital and the patient was subsequently transferred to this hospital and nimodipine treatment continued admission to this hospital, select "'YES'". · If nimodipine was administered at this hospital later than the first 24 hours after arrival, select 'NO'. · If nimodipine was administered at another hospital and the patient was subsequently transferred to this hospital and nimodipine treatment was not resumed or discontinued, select "'NO'. · A physician order for nimodipine that is not executed, select "'NO'".
Suggested Data	· Emergency department record

Sources:
- Nursing flow sheet
- Progress notes
- Medication administration record (MAR)
- Medical transport records
- Medication reconciliation form

Additional Notes:

Guidelines for Abstraction:

Inclusion	Exclusion
· Nimodipine · Nimotop · Nymalize	All other calcium channel blocker medications other than those listed as inclusions.

^What is the date and time that nimodipine was first administered to this patient at this hospital?
Required for TJC CSTK Users

Data Element Name: *Nimodipine Administration Date and Time*

Collected For: CSTK-06

Definition: The date and time (military time) for which the first dose of nimodipine was administered to a patient with subarachnoid hemorrhage at this hospital. Nimodipine inhibits calcium transport into vascular smooth muscle cells, thereby preventing or limiting cerebral vasospasm.

Data Collection Question: What is the date and time of nimodipine administration for this patient at this hospital?

Length: 10 - MM-DD-YYYY (includes dashes) or Unknown
Type: Date
Occurs: 1

Format:

Length: 5 - HH-MM (with or without colon) or Unknown
Type: Time
Occurs: 1

Allowable Values:
- Date and Time (military time)
- Date only
- Unknown

Notes for Abstraction:
- Use the date at which administration of nimodipine was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different nimodipine administration dates (either different nimodipine episodes or corresponding with the same episode), enter the earliest date.
- If the date nimodipine treatment was administered is unable to be determined from medical record documentation, select Unknown.
- 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) **and** no other documentation is found that provides this information, the abstractor should select Unknown.
Example:
Documentation indicates the nimodipine administration date was 03-**42**-20xx. No other documentation in the medical record provides a valid date. Since the nimodipine administration 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.
- Use the time at which initiation of nimodipine administration was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different nimodipine administration times (either different nimodipine episodes or corresponding with the same episode), enter the earliest time.
- For times that include seconds, remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00
- Nimodipine administration time refers to the time that the first dose of nimodipine was administered.

· Do not use physician orders as they do not demonstrate administration of nimodipine treatment (in the ED this may be used if signed/initialed by a nurse).

· If the time of nimodipine administration is unable to be determined from medical record documentation, select Unknown.

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

· Example:
Documentation indicates the nimodipine administration time was 3300. No other documentation in the medical record provides a valid time. Since the nimodipine administration time is outside of the range listed in the Allowable Values for Hour, it is not a valid time and the abstractor should select Unknown.

· **Note:** Transmission of a case with an invalid date or time as described above will be rejected from the Joint Commission's Data Warehouse. Use of Unknown for *Nimodipine Administration Time* allows the case to be accepted into the warehouse.

Suggested Data Sources:

· Emergency department record

· Nursing flow sheet

· Progress notes

· Medication administration record (MAR)

· Medical transport records

· Medication reconciliation form

Additional Notes: None.

Guidelines for Abstraction: None.

^Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering nimodipine treatment?
Required for TJC CSTK Users

Data Element Name: Reason for Not Administering Nimodipine Treatment

Collected For: CSTK-06

Definition:

Reason for not administering nimodipine treatment:

· Nimodipine allergy

· Non-aneurysmal subarachnoid hemorrhage (SAH)

· Reversible cerebral vasoconstriction syndrome

· Cerebral amyloid angiopathy

· Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist.

· In general, nimodipine inhibits calcium transport into vascular smooth muscle cells, thereby preventing or limiting cerebral vasospasm.

Data Collection Question: Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering nimodipine treatment?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not administering nimodipine treatment.

N (No) There is no documentation of a reason for not administering nimodipine treatment, OR unable to determine from medical record documentation.

Notes for Abstraction:

· Reasons for not administering nimodipine must be documented by the physician/APN/PA or pharmacist within 24 hours of hospital arrival. It is not necessary to review documentation outside of this timeframe.

· The following are acceptable as stand-alone reasons for not administering nimodipine treatment – Nimodipine linkage is not needed:

o Non-aneurysmal subarachnoid hemorrhage (SAH)

o Reversible cerebral vasoconstriction syndrome

o Cerebral amyloid angiopathy

· **If reasons are not mentioned in the context of nimodipine treatment, do not make inferences** (e.g., do not assume that nimodipine was not administered because of hypotension unless documentation explicitly states so.)

o Reasons must be explicitly documented (e.g., BP 80/40 No nimodipine.)

o Physician/APN/PA or pharmacist documentation of a hold on nimodipine or discontinuation of nimodipine that occurs within the first 24 hours of hospital arrival constitutes a "clearly implied" reason for not administering nimodipine treatment. A hold/discontinuation of all P.O. medications counts if nimodipine (i.e., Nimotop, Nymalize) was on order at the time of the notation.
EXCEPTION:
Documentation of a conditional hold or discontinuation of nimodipine (e.g., Hold nimodipine if SBP < 100 mm/Hg, Stop nimodipine if AST > 50 IU/L.

· When conflicting information is documented in the medical record, select Yes.

· Documentation that the patient is NPO or has a nasogastric tube (NGT) without mention that nimodipine should not be administered is insufficient. Do not infer that nimodipine is not needed unless explicitly documented.

o Physician orders for NPO except medications" does not count as a reason for not administering nimodipine, select No.

Suggested Data Sources:
· Emergency department record
· Nursing flow sheet
· Progress notes
· Medication administration record (MAR)
· Medication reconciliation form

Additional Notes:
Excluded Data Sources:
· Any documentation dated/timed later than 24 hours after hospital arrival.

Guidelines for Abstraction:

Inclusion	Exclusion
Patient/family refusal	None

^^Surgical treatment for ICH at this hospital?

Data Element Name:	*Surgical treatment for ICH at this hospital*
Collected For:	GWTG ® Data Element, Optional field
Definition:	*Indicate if surgical treatment was initiated at this hospital for ICH.*
Data Collection Question:	Surgical treatment for ICH at this hospital?
Format:	**Length:** 1 **Type:** Alphanumeric **Occurs:** 1
Allowable Values:	· Y (Yes) surgical treatment for ICH at this hospital. · N (No) surgical treatment for ICH at this hospital OR unable to determine from medical record documentation
Notes for Abstraction:	· None.
Suggested Data Sources:	· Emergency department record · Nursing flow sheet · Progress notes · Medication administration record (MAR) · Medication reconciliation form
Guidelines for Abstraction:	No additional Inclusion or exclusion criteria

^^If surgical treatment for ICH at this hospital, type:

Data Element Name:	*Type of surgical treatment for ICH*

Collected For: GWTG ® Data Element, Optional field

Indicate type of surgical intervention performed at this hospital for ICH.

Rationale and Definition:

Patients with cerebellar hemorrhage who are deteriorating neurologically or who have brainstem compression and/or hydrocephalus from ventricular

obstruction should undergo surgical removal of the hemorrhage as soon as possible (Class I; Level of Evidence B). Initial treatment of these patients with

ventricular drainage rather than surgical evacuation

is not recommended (Class III; Level of Evidence C). (Unchanged from the previous guideline)

For most patients with supratentorial ICH, the usefulness of surgery is not well established (Class IIb; Level of Evidence A).

Specific exceptions and potential subgroup considerations are outlined below in recommendations

The effectiveness of minimally invasive clot evacuation with stereotactic or endoscopic aspiration with or without thrombolytic usage is uncertain (Class IIb; Level of Evidence B). (Revised from the previous guideline)

Data Collection Question: ^^ If surgical treatment for ICH at this hospital, type

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

- External Ventricular Drain (EVD)
- Endoscopic evacuation
- Conventional craniotomy and evacuation of clot under direct vision
- Stereotaxic evacuation
- Hemicraniectomy without clot evacuation
- Fibrinolytic infusion via catheter
- Other

Notes for Abstraction:

- None.

Suggested Data Sources:

- Progress notes
- Medication reconciliation form Consultation notes
- Emergency department record
- Discharge summary

Guidelines for Abstraction: No additional Inclusion or exclusion criteria

^^If ICH was evacuated, time from ictus to evacuation procedure start was:

Data Element Name: *Time from ictus to evacuation procedure start*
Collected For: GWTG ® Data Element, Optional field
Definition: The total hours from the onset of stroke to the start of the surgical procedure.
Data Collection Question: ^^If ICH was evacuated, time from ictus to evacuation procedure start was:

Format:

Length: 2
Type: Numeric
Occurs: 1

Allowable Values:

- Indicate the time, in hours, between ictus and surgery.

Notes for Abstraction:

- The start of surgery is defined as the time documented in the operative or procedure note.

Suggested Data Sources:

- Progress notes
- Medication reconciliation form Consultation notes
- Emergency department record
- Discharge summary

Guidelines for Abstraction: No additional Inclusion or exclusion criteria

OPTIONAL: IA catheter-based treatment at outside hospital?

Indicate if IA catheter-based treatmen was initiated at an outside hospital prior to transfer to this hospital.

- Yes
- No

Admission Data, Hospitalization Data

Measurements (first measurement upon presentation to your hospital)

Lipids, A1C, and Blood Glucose

Record patient's lipid, A1C, and blood glucose values.

- Total Chol (mg/dL)
- Triglycerides (mg/dL)
- HDL (mg/dL)
- **REQUIRED: LDL (mg/dL)**
- Lipids ND: Only select if ALL of the lipid values are not documented or if the first lipid values available are measured greater than 48 hours after arrival.
- Lipids NC: Only select if the patient refuses to have labs drawn or there is documentation that the patient is comfort measures only within 48 hours of arrival.
- A1C (%)
- A1C ND: A1C value is not measured or is measured but the value is not available.
- **REQUIRED FOR COMPREHENSIVE & PATIENTS THAT RECEIVE IV alteplase:** What is the first blood glucose value obtained prior to or after hospital arrival?
- Blood Glucose ND: Blood glucose is not measured or is measured but the value is not available.
- Blood Glucose Too High or Too Low: If the glucometer reading states “Low” or “High” as opposed to a numeric value, select the appropriate checkbox of either “Too Low” or “Too High.”

Notes for Abstraction:

- For the lipid measurements, enter the highest value measured within the first 48 hours after arrival or within 30 days prior to hospital arrival. Fasting and non-fasting LDL-c values are both acceptable.(1)
- If the first lipid values available are measured greater than 48 hours after arrival, select “Lipids: ND”. Do not enter values measured after 48 hours.
- For patients whose triglycerides are >400 mg/dL, enter the values for total cholesterol, HDL and triglycerides, BUT leave the LDL value blank. EXCEPTION: If your hospital has the capability to directly measure LDL levels and this is available to you, enter that value.
- If triglycerides are < 400 mg/dL, LDL can be calculated from the following formula:
  LDL = Total Cholesterol - (HDL + (Triglycerides / 5)). However, if triglycerides are >= 400 mg/dL, this formula cannot be used to compute LDL.
- For the A1C measurement, enter the first value measured or if available within 30 days in the outpatient record for diabetics.
- For Blood Glucose (mg/dL), enter the first measurement upon arrival to your hospital. If supplemental glucose was given prior to hospital arrival, enter the blood glucose level obtained in the pre-hospital setting prior to the provision of glucose if that level is available. Blood Glucose is a required data element for patients that receive IV alteplase.
- If an outpatient value is available within 30 days for lipids and another lipid panel is measured in the hospital within 48 hours of arrival enter the more recent values.
- For inpatient strokes:
  - Only enter lipids measured within 48 hours of actual arrival or if available as a fasting sample within 30 days in the outpatient record.
  - A1C and blood glucose should be the first values measured upon arrival to your hospital.

Example: Patient 270a arrived in your ED on 7/25/2011. A non-fasting sample for lipid testing was drawn in the ED on arrival. A second fasting sample was taken on 7/29/2011. Enter the values obtained from the ED as the non fasting sample is acceptable and the second sample was drawn greater than 48 hours after arrival.

Hospitalization Data

(1)
Gore JM, Goldberg RJ, Matsumoto AS, et al. Validity of serum total cholesterol level obtained within 24 hours of acute myocardial infarction. Am J Cardiol. 1984;54:722-725.
Van Dis FJ, Keilson LM, Rundell CA, et al. Direct measurement of serum low-density lipoprotein cholesterol in patients with acute myocardial infarction on admission to the emergency room. Am J Cardiol. 1996;77:1232-1234.
Craig SR, Amin RV, Russell DW, Paradise NF. Blood cholesterol screening influence of fasting state on cholesterol results and management decisions. J Gen Intern Med. 2000 Jun;15(6):395-9.
Weiss R, Harder M, Rowe J. The relationship between nonfasting and fasting lipid measurements in patients with or without type 2 diabetes mellitus receiving treatment with 3-hydroxy-3-methylglutaryl-coenzyme A reductase inhibitors. Clin Ther. 2003 May;25(5):1490-7.
Pitt B, Loscalzo, Ycas J, Raichlen JS. Lipid Levels After Acute Coronary Syndromes. J Am Coll Cardiol 2008;51;1440-1445.

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial Blood Glucose Value at Hospital Arrival

Collected For: CSTK-05, CSTK-08

Definition: Documentation of the first blood glucose value obtained prior to or after hospital arrival. A blood glucose test measures the amount of a type of sugar, called glucose, in the blood.

Suggested Data Collection Question: What is the first blood glucose value obtained prior to or after hospital arrival?

Format

Length: 3
Type: Alphanumeric
Occurs:1

Allowable Values:
BG= blood glucose value (no decimals)
UTD = Unable to Determine

Notes for Abstraction:

- To determine the value for this data element, review the blood glucose values obtained prior to and after hospital arrival.
- Select the earliest documented blood glucose value regardless of location of testing. Values obtained and documented by EMS, a transferring hospital, or your hospital are acceptable.
  The first documented value should be used.
- Values obtained with point-of-care (POC) devices, finger-stick, or laboratory values are acceptable.

Suggested Data Sources:

- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Transfer sheet
- Admitting note
- Ambulance record
- Consultation form/note
- Nursing assessment
- EMS records

Excluded Data Sources:

- Discharge Summary

Guidelines for Abstraction

Inclusion: None
Exclusion: None

Summary of Changes

OPTIONAL: Serum Creatinine

Enter the patient's Serum Creatinine value in units of mg/dL. Enter the patient's first measurement upon presentation to your hospital.

Notes for Abstraction:

- It is often abbreviated as Cr. It is part of the standard set of blood chemistries (e.g. electrolytes) typically ordered when patients arrive at the hospital. It is different from urine creatinine, and also creatine phosphokinase (CPK) which is frequently measured to exclude heart attack. It is often reported out with the Blood Urea Nitrogen (BUN) value and typically ranges from 0.8 - 1.4 mg/dL in healthy individuals. Enter the number rounded to one decimal point.
- For inpatient strokes, enter the first value measured upon presentation to your hospital.

Hospitalization Data

Summary of Changes

REQUIRED FOR COMPREHENSIVE: What is the first platelet count obtained prior to or after hospital arrival?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial Platelet Count at Hospital Arrival

Collected For: CSTK-05, CSTK-08

Definition: Documentation of the first platelet count obtained prior to or after hospital arrival. Platelets are one of three components of human blood. Platelets play a very important role in the healing process and the formation of blood clots at the time of injury.

Suggested Data Collection Question: What is the first blood glucose value obtained prior to or after hospital arrival?

Format

Length: 6 (no comma, no decimal)
Type: Alphanumeric
Occurs:1

Allowable Values:
PLT = platelet count value (no commas, no decimal)
UTD = Unable to Determine

Notes for Abstraction:

- To determine the value for this data element, review the platelet counts obtained prior to and after hospital arrival.
- Select the earliest documented platelet count regardless of location of testing. Values obtained and documented by EMS, a transferring hospital, or your hospital are acceptable. The first documented platelet count should be used.
- Platelet counts obtained with point-of-care (POC) devices or laboratory values are acceptable.

Suggested Data Sources:

- History and physical
- Nursing flow sheet
- Progress notes
- Transfer sheet
- Admitting note
- Ambulance record
- Consultation form/note
- Emergency room records
- Nursing assessment
- EMS records

Excluded Data Sources:

- Discharge Summary

Guidelines for Abstraction

Inclusion: None
Exclusion: None

Summary of Changes

OPTIONAL: INR

International Normalized Ratio (INR). This numerical value reflects the degree of anticoagulation for patients on long-term warfarin therapy. It is not valid for patients who are currently receiving argatroban. Enter the number rounded to one decimal point.

- INR value
- NC - Select NC for patients currently receiving argatroban
- ND

Notes for Abstraction:

- Enter the first INR value performed after hospital arrival.
- For patients treated with procoagulant, if no INR value is documented as being performed prior to procoagulant initiation, select "ND." See ***Comprehensive: Is there documentation that a procoagulant reversal agent was initiated at this hospital?*** for list of procoagulant medications.
- For inpatient strokes, enter INR value obtained after discovery of stroke symptoms.

S ***Hospitalization Data***

Summary of Changes

REQUIRED FOR COMPREHENSIVE: Is there documentation in the medical record that the INR value performed closest to hospital arrival was greater than 1.4?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: INR Value > 1.4

Collected For: CSTK-04

Definition: Documentation that the international normalized ratio (INR) value performed closest to hospital arrival was greater than 1.4. This value correlates to the ability of the blood to clot. Higher values greater than 1.4 are associated with an increased risk of hemorrhage.

Suggested Data Collection Question: Is there documentation in the medical record that the INR value performed closest to hospital arrival was greater than 1.4?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation that the INR value performed closest to hospital arrival was greater than 1.4.

N (No) There is no documentation that the INR value performed closest to hospital arrival was greater than 1.4, OR unable to determine from medical record documentation.

Notes for Abstraction:

- To determine the value for this data element, review the INR values obtained closest to hospital arrival (i.e., before and after hospital arrival). If any result is greater than 1.4, select "Yes".
- INR values obtained at a transferring hospital may be used to select 'YES' if a more recent INR value was not done after arrival at this hospital.

Suggested Data Sources:

- Emergency department record
- Laboratory report
- Nursing notes
- Progress notes
- Transfer sheet

Guidelines for Abstraction

Inclusion: None
Exclusion: None

Summary of Changes

OPTIONAL COMPREHENSIVE: If initial INR > 1.4 and treated with procoagulant, Date/Time first INR <= 1.4 after treatment

Enter the first date/time recorded after treatment with procoagulant that the INR is less than or equal to 1.4. If there is no documentation of an INR value less than 1.4 after treatment with procoagulant, leave this data element blank.

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

S ***Hospitalization Data***

OPTIONAL: Vital Signs: Heart Rate and Blood Pressure

Enter the patient's Heart Rate in beats per minute and Blood Pressure (systolic/diastolic) in mmHg. Enter the patient's first measurement upon presentation to your hospital. Blood pressure is a required data element for patients that receive IV alteplase.

Notes for Abstraction:

- For inpatient strokes, enter the first heart rate and blood pressure obtained after discovery of stroke symptoms.

S ***Hospitalization Data***

REQUIRED FOR COMPREHENSIVE: What is the first blood pressure obtained prior to or after hospital arrival?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Initial Blood Pressure at Hospital Arrival

Collected For: CSTK-05, CSTK-08

Definition: Documentation of the first blood pressure (systolic and diastolic values) obtained prior to or after hospital arrival. Systolic blood pressure is the amount of pressure that blood exerts on vesseles while the heart is beating. In a blood pressure reading (e.g., 120/80), it is the number on the top. The diastolic blood pressure number or the bottom number indicates the pressure in the arteries when the heart rests between beats. A normal diastolic blood pressure number is less than 80.

Suggested Data Collection Question: What is the first blood pressure obtained prior to or after hospital arrival?

Format

Length: 7
Type: Alphanumeric
Occurs: 1

Allowable Values:
BP = systolic and diastolic blood pressure values
UTD = Unable to Determine

Notes for Abstraction:

- To determine the value for this data element, review blood pressure readings obtained prior to and after hospital arrival.
- Select the earliest documented blood pressure regardless of where it was done. Blood pressure readings obtained and documented by EMS, a transferring hospital, or your hospital are acceptable. The first documented blood pressure should be used.

Suggested Data Sources:

- History and physical
- Nursing flow sheet
- Progress notes
- Transfer sheet
- Admitting note
- Ambulance record
- Consultation form/note
- Emergency room records
- Nursing assessment
- EMS records

Excluded Data Sources:

- Discharge Summary

Guidelines for Abstraction

Inclusion: None
Exclusion: None

Summary of Changes

OPTIONAL: Height, Weight, Waist Circumference, and BMI

Height, Weight, and BMI - REQUIRED for Target: Type 2 Diabetes with hx of DM or new diagnosis

Enter the patient's height and weight. Indicate if these are measured in inches, cm or lbs, kg respectively. BMI will be calculated by the computer. If height/weight information is not documented, select ND. Waist circumference is the distance around the patient's waist (measured horizontally at the iliac crest). The goal for waist circumference is less than 40 inches for men and less than 35 inches for women.

S ***Hospitalization Data***

Discharge Tab

Discharge Information

- **Get With The Guidelines® Ischemic Stroke-Only Estimated Mortality Rate**
- **Get With The Guidelines® Global Stroke Estimated Mortality Rate (Ischemic Stroke, SAH, ICH, Stroke not otherwise specified)**
- **In-hospital Death**
- **Ambulatory status at discharge?**
- **Modified Rankin Scale at discharge**
- **If yes (Modified Rankin Scale)**
- **Total Score (Modified Rankin Scale)**
- **Discharge Blood Pressure**

REQUIRED: Discharge Date and Time (Date and Time of discharge from hospital)

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

- Date:MM/DD/YYYY
- Time: HH:MM
- 24-hour clock (military time)

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 discharge date is correct. If the abstractor determines through chart review that the claim 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 claim discharge date.
- The discharge date is the day that the patient is discharged from your institution's acute care unit OR the date of the patient's expiration OR the date of the patient's discharge OR date patient left against medical advice (AMA) OR date of transfer to, a

rehabilitating, skilled nursing, or hospice unit in your institution OR transfer to an acute in-patient unit outside of your own institution, even if that hospital is affiliated with your own OR expired. If the patient is never admitted to your facility (i.e. you answered the data element of “Not Admitted” as “Yes, Not Admitted” enter the date of discharge from the ED or observation unit.”

Administrative Data: ,UB-04, Field Location: 6, Medical Record: Discharge summary, face sheet, nursing discharge notes, physician orders, progress notes, transfer notes.

Summary of Changes

OPTIONAL: Get With The Guidelines® Ischemic Stroke-Only Estimated Mortality Rate

Calculation of predicted probability of in-hospital death based on stroke patient risk factors present on admission. This reported percentage represents the individual patient's predicted risk for in-hospital mortality. It is calculated based on the following risk factors at the time of hospital presentation: age, gender, arrival mode, medical history, date and time of arrival, and NIHSS (if present). This predicted probability formula was derived and validated using the Get With The Guidelines®-Stroke database using a model that is applicable only to Ischemic stroke patients. This risk prediction is intended to enhance not replace clinical assessment and physician judgment. If too many of the necessary variables are missing, the mortality rate cannot be calculated for the patient.

Any of the following cases will exclude the calculation of a risk score:

- Patient was transferred from another hospital
- Patient was transferred from your ED to another acute care hospital
- Final clinical diagnosis related to stroke is TIA or no stroke related diagnosis
- Patient received IV alteplaseA at an outside hospital
- First NIH Stroke Scale total score recorded by hospital personnel is greater than 42

Summary of Changes

OPTIONAL: Get With The Guidelines® Global Stroke Estimated Mortality Rate (Ischemic Stroke, SAH, ICH, Stroke not otherwise specified)

Calculation of predicted probability of in-hospital death based on stroke patient risk factors present on admission. This reported percentage represents the individual patient's predicted risk for in-hospital mortality. It is calculated based on the following risk factors at the time of hospital presentation: age, gender, arrival mode, stroke type, medical history, date and time of arrival, and NIHSS (if present). This predicted probability formula was derived and validated using the Get With The Guidelines®-Stroke database using a model that includes all stroke types. This risk prediction is intended to enhance not replace clinical assessment and physician judgment. If too many of the necessary variables are missing, the mortality rate cannot be calculated for the patient.

Any of the following cases will exclude the calculation of a risk score:

- Patient was transferred from another hospital
- Patient was transferred from your ED to another acute care hospital
- Final clinical diagnosis related to stroke is TIA or no stroke related diagnosis
- Patient received IV alteplase at an outside hospital
- First NIH Stroke Scale total score recorded by hospital personnel is greater than 42

Summary of Changes

Modified Rankin Scale at discharge
Required field for GWTG - Stroke

Definition: Documentation in the medical record of a Modified Rankin Scale (mRS) completed at time of discharge. The Modified Rankin Score (mRS) is a 6- point disability scale with possible scores ranging from 0 to 5. A separate category of 6 is usually added for patients who expire.

Data Collection Question: Was a Modified Rankin Scale (mRS) performed at discharge?

Format: Single-select field

Allowable Values:

- **Yes:** A Modified Rankin Scale was performed at discharge
- **No/ND:** A Modified Rankin Scale was not performed or was performed but the total score is not available.

Notes for Abstraction:

- This mRS assessment is intended to measure disability at the time of discharge. If there is more than 1 measured, use the mRS measured closest to hospital discharge. Ideally the mRS will be measured at discharge.
- If a mRS measurement has not been documented in the medical record, but sufficient information is available from the physical therapy (PT) notes, occupational therapy (OT) notes, and/or other sources to allow a mRS to be assigned retrospectively assigned mRS score may be entered into the case report form. Select "Yes" to this data element and enter the findings under Total Score.
- If the mRS is not measured or documented and a mRS cannot be assigned retrospectively, then select "No/ND."
- It is highly recommended that the mRS be measured by certified individuals.
- Two formal scoring methods for the mRS are the Simplified Questionnaire (SQ) and the Rankin Focused Assessment (RFA).
    - The Simplified Questionnaire may not be the most appropriate for use in the pre-discharge setting.

- The more detailed Rankin Focused Assessment may be more appropriate for use at post-discharge visits, but also may be helpful to use selectively for cases in which pre-discharge scoring based on the SQ is uncertain.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

If Yes, (Modified Rankin Scale Collected at Discharge)

Optional field for GWTG – Stroke

Note: Field is only enabled if "Modified Rankin Score at Discharge" = YES. Else, field will be grayed out.

Definition: If there was documentation in the medical record of a Modified Rankin Score (mRS) completed at time of discharge, indicate method that was used to obtain the score at the time of discharge.

Data Collection Question: What method was used to obtain the mRS score at the time of discharge?

Format: Single-select field

Allowable Values

- **Actual:** mRS score was documented in the record as the result of the scale being performed
- **Estimated from the record:** mRS score was reconstructed retrospectively
- **ND:** The method of mRS score calculation was not documented

Notes for Abstraction:

- If a Modified Rankin Scale score is present in eCRF (PMT) what method was used to obtain the score recorded.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Total Score

Required Field only if "Modified Rankin Score at Discharge" = YES. Else, field will be grayed out.

Definition: If a Modified Rankin Scale was measured at discharge, record the total score for this patient. Click on (Show/Hide) to display the scale.

Data Collection Question: What is the total score recorded by hospital personnel closest to discharge?

Format: Text Field (numeric values)

Allowable Values:

- **0 – 6**
- **The values 0-6 correspond to the mRS documented at time of discharge:**
- 0 =No disability
- 1 =No significant disability: despite symptoms: able to carry out all usual duties and activities.
- 2 =Slight disability: unable to carry out all routine activities but able to look after own affairs without assistance.
- 3 =Moderate disability: requiring some help, but able to walk without assistance.
- 4 =Moderately severe disability: unable to walk without assistance, and unable to attend to own bodily needs without assistance.
- 5 =Severe disability: bedridden, incontinent and requiring constant nursing care and attention.
- 6 =Dead

Notes for Abstraction:

- Modified Rankin Score (mRS) may be documented by the physician/APN/PA, nurse (RN), medical assistant, or any individual trained to perform the mRS.
- No value should be recorded more than once

Suggested Data Sources:

- Discharge Data

Ambulatory status at discharge?

Required for Coverdell

Definition: Indicate the patient's ambulatory status at discharge.

Data Collection Question: What was patient's ambulatory status at discharge?

Format: Single-select field

Indicate the patient's ambulatory status at discharge.

- Able to ambulate independently (no help from another person) w/or w/o device
- With assistance (from person)
- Unable to ambulate
- ND

Notes for Abstraction:

- **Able to ambulate independently (no help from another person) w/or w/o device:** Patient ambulating without assistance (no help from another person) with or without a device. This means patient is able to ambulate without help from another person. The use of a device, such as a cane, still meets this definition. Patient ambulating to and from the bathroom unassisted. Even though actual ambulation is not documented in the medical record, privileges to walk to and from the bathroom and evidence of the patient getting out of bed unassisted are considered to meet the definition of ambulation.
- **With assistance (from person):** Patient ambulating with assistance of another person.
- **Unable to ambulate:** Patient is on bedrest. Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile) at discharge
- **ND:** If it is unable to determine from documentation.
- **Examples:** Patient 310a is ambulating with assistance from nursing. There is documented evidence of the patient walking around the unit with assistance from his nurses. Choose "With assistance (from person)."

Suggested Data Sources:

- Hospitalization Data
- Discharge Data

Discharge Blood Pressure (Measurement closest to discharge)

Optional Field

Definition: Intent of the element is to capture if the patient's BP is within the normal range based on the AHA Guidelines. Record the patient's last blood pressure reading taken prior to discharge from hospital.

Data Collection Question: What was the patient's last blood pressure prior to deing discharge from the hospital?

Format: Text fields

Allowable Values:

- **Numeric values**
- **ND**

Notes for Abstraction:

- Unit of measurement: **mmHg**
- Enter the value for systolic in the first field
- Enter the systolic in the second field

Suggested Data Sources:

- Discharge Data
- Hospitalization Data

Discharge Treatments

General Instructions for these sections:

- If the discharge destination is expired or "left against medical advice" or Hospice, these fields will be pre-selected as NC or "None - contraindicated". If the patient did not receive a medication at discharge due to a contraindication, or if the treatment was not indicated (i.e., not applicable) for the patient in question, or if the patient refused, select NC or "None - contraindicated".
- If a patient is discharged with instructions that a medication will be started at a follow-up visit, select No.
- If the reason for non-treatment specifically documents a contraindication, select NC or "None - contraindicated".

Examples:

- Patient 320a was admitted to your facility with an ischemic stroke. On discharge he was given a prescription for Coumadin and it is documented in the record that he is not to start the medication for one week due to an increased risk of bleeding. Data entry for antithrombotic medication at discharge would be None-contraindicated or NC.
- Patient 320b was admitted to your facility with an ischemic stroke. His LDL was found to be 130. The patient had some issues with elevated LFTs and the physician writes in the medical record that he will start the patient on a cholesterol reducing medication in a follow up appointment after discharge given the patients LFTs. Data entry for cholesterol reducing medication at discharge would be None-contraindicated or NC.

S *Hospitalization Data, Discharge Data*

Summary of Changes

- ***Antithrombotic Therapy approved in stroke***
- ***Antiplatelet***
- ***Antiplatelet Medication***
- ***Anticoagulant***

- ***Anticoagulant Medication***
- ***If no antithrombotic therapy at discharge, give reason(s)***
- ***Other Antithrombotic(s)***
- ***Persistent or Paroxysmal Atrial Fibrillation/Flutter***
- ***If atrial fib/flutter or history of PAF documented, was patient discharged on anticoagulation?***
- ***If no anticoagulation, give reason(s)***
- ***Antihypertensive Tx***
- ***Cholesterol-Reducing Tx***
- ***Statin Medication and Dose***
- ***Documented Reason for Not Prescribing Guideline Recommended Dose?***
- ***Documented reason for not prescribing a statin medication at discharge***
- ***New Diagnosis of Diabetes?***
- ***Basis for Diagnosis***
- ***Anti-hyperglycemic medications***
- ***If yes (Anti-Hyperglycemic), select medications***
- ***Was there a documented reason for not prescribing a medication with proven CVD benefit?***
- ***Follow-up appointment scheduled for diabetes management?***
- ***Date of scheduled follow-up appointment***
- ***Anti-Smoking Tx***
- ***Smoking Cessation Therapies Prescribed***
- ***Was the patient prescribed any antidepressant class of medication at discharge?***

REQUIRED: Antithrombotic Therapy approved in stroke

Prescribed: Was antithrombotic medication approved in stroke prescribed at discharge?

- Yes: Antithrombotic therapy was prescribed at hospital discharge (see inclusion list below).
- No/ND: Antithrombotic therapy was not prescribed at hospital discharge, OR an alternate antithrombotic not on the list was prescribed at discharge, OR unable to determine from medical record documentation
- NC: There is documentation in the medical record of a reason for not prescribing an antithrombotic therapy on the list below at hospital discharge

Notes for Abstraction:

- See Table 4 & Table 5 for a list of antithrombotic medications. Antithrombotics include both anticoagulant and antiplatelet drugs.
- Select "Yes" **only** if one of the following antithrombotic medications was prescribed at discharge.

Antiplatelet Inclusion:	**Anticoagulant Inclusion:**
Aspirin	Apixaban (Eliquis)
Aspirin/dipyridamole (Aggrenox)	Argatroban
Clopidogrel (Plavix)	Dabigatran (Pradaxa)
Ticlopidine (Ticlid)	Edoxaban (Savaysa)
	Fondaparinux (Arixtra)
	Full dose LMW heparin
	Lepirudin (Refludan)
	Rivaroxaban (Xarelto)
	Unfractionated heparin IV
	Warfarin (Coumadin)

- In determining whether antithrombotic therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an antithrombotic that is not included in any of the other discharge medication 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 an antithrombotic in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - **Consider it a discharge medication in the absence of contradictory documentation.**
- If documentation is contradictory (e.g., physician noted “d/c Plavix” in the discharge orders, but Plavix 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 "No").
- Consider documentation of a hold on an antithrombotic after discharge in one location and a listing of that antithrombotic as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not **defined** (e.g., “Hold Plavix”). Examples of a hold with a defined timeframe include “Hold Plavix x2 days” and “Hold ASA until after stress test.”
- If an antithrombotic is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of antithrombotic therapy after discharge (e.g., “Hold Plavix x2 days,” “Start Plavix as outpatient,” “Hold Plavix”), select “No”.
- If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.

  Examples:

  - Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
  - Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.

- Disregard an antithrombotic medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on aspirin”). Documentation must be clearer that an antithrombotic was actually prescribed at discharge.

- Disregard documentation of antithrombotic prescribed at discharge when noted only by medication class (e.g., “Antithrombotic Prescribed at Discharge: Yes” on a core measures form). The antithrombotic must be listed by name.
- Prasugrel (Effient) is contraindicated in post ACS/PCI patients with stroke or TIA and is NOT considered an acceptable antithrombotic (antiplatelet) therapy for stroke prevention treatment. If Prasugrel (Effient) is the only antithrombotic medication prescribed at discharge, select “No/ND” here and answer the subsequent data element of "Other Antithrombotic(s) - Prescribed" = "Yes" and choose Prasugrel from the drop down.
    - **EXCEPTION:** If Prasugrel (Effient) is prescribed in addition to aspirin, select “Yes” for antithrombotic prescribed at discharge. Note the abstractor should select “Antiplatelet” class and “Aspirin” under medication. The subsequent data element of "Other Antithrombotic(s) - Prescribed" should also be answered as "Yes" and Prasugrel should be selected from the drop down.
- Reasons for not prescribing antithrombotic therapy at hospital discharge must be documented by a physician/APN/PA or pharmacist.
- **If reasons are not mentioned in the context of antithrombotics, do not make inferences** (e.g., do not assume that antithrombotic therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
    - Reasons must be explicitly documented (e.g., Active GI bleed – antithrombotic therapy contraindicated”, “No ASA” [no reason given].).
    - Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs during the hospital stay constitutes a “clearly implied” reason for not prescribing antithrombotic therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral antithrombotic medication (e.g., Plavix) was on order at the time of the notation.
      EXCEPTIONS:
        - Documentation of a conditional hold or discontinuation of an antithrombotic medication (e.g., “Hold ASA if guaiac positive”, “Stop plavix if rash persists,” “No ASA for 24 hours following thrombolytic therapy”).
        - Discontinuation of a particular antithrombotic medication documented in combination with the start of a different antithrombotic medication (i.e., switch type of antithrombotic medication) does not count as a reason for not prescribing an antithrombotic medication at discharge.
          Examples:
          - “Stop Plavix” and “Start Plavix 75 mg po daily” in same physician order
          - “Change Plavix to aspirin” in progress note
          - “Do not continue after discharge” checked for Plavix and “Continue after discharge” checked for clopidogrel on a physician-signed discharge medication reconciliation form
        - Discontinuation of an antithrombotic medication at a particular dose documented in combination with the start of a different dose of that antithrombotic (i.e., change in dosage) does not count as a reason for not prescribing an antithrombotic medication at discharge.
          Examples:
          - “Stop Ecotrin 300 mg po daily” and “Start Ecotrin 325 mg po daily” in same physician order
          - “Increase Ectotrin 81 mg to 325 mg daily” in progress note
          - “Do not continue after discharge” checked for Ecotrin 300 mg and “Continue after discharge” checked for Ecotrin 325 mg on a physician-signed discharge medication reconciliation form
    - Deferral of antithrombotic therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing antithrombotic therapy at discharge unless the problem underlying the deferral is also noted.
      Examples:
      - “Consulting neurologist to evaluate pt. for warfarin therapy.” – DO NOT select “NC”.
      - “Rule out GI bleed. Start ASA if OK with neurology.” - select “NC”.
    - If there is documentation of a plan to initiate/restart antithrombotic therapy, and the reason/problem underlying the delay in starting/restarting antithrombotic therapy is also noted, this constitutes a “clearly implied” reason for not prescribing antithrombotic therapy at discharge.
        - Acceptable examples (select “NC”):
          - “Stool Occult Blood positive. May start Coumadin as outpatient.”
          - “Start ASA if hematuria subsides.”
        - Unacceptable examples (DO NOT select “NC”):
          - “Consider starting Coumadin in a.m.”
          - “May add Plavix when pt. can tolerate”
    - Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating “no ASA due to rectal bleeding” - select “NC,” even if documentation indicates that the rectal bleeding has resolved by the time of discharge and ASA was restarted).
    - Crossing out of an antithrombotic medication counts as a "clearly implied reason" for not prescribing antithrombotic therapy at discharge only if on a pre-printed form.
- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication can be ordered.
- When conflicting information is documented in the medical record, select “NC.”
- When the current record includes documentation of a pre-arrival reason for no antithrombotic therapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
    - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the underlying reason/problem is also noted (e.g., “Coumadin held in transferring hospital due to possible GI bleed”).
    - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No ASA") (e.g., "Hx GI bleeding with ASA" in transferring ED record).
- Acceptable reasons for not giving antithrombotic medication at hospital discharge may include:
    - Allergy to or complication related to antithrombotic
    - Serious side effect to medication
    - Aortic dissection
    - Bleeding disorder
    - Brain/CNS cancer
    - CVA, hemorrhagic
    - Extensive/metastatic CA
    - Hemorrhage, any type
    - Intracranial surgery/biopsy
    - Patient/family refusal
    - Peptic ulcer
    - Planned surgery within 7 days following discharge

- Risk of bleeding or discontinued due to bleeding
- Unrepaired intracranial aneurysm
- Terminal Illness
- Other documented by physician/APN/PA or pharmacist

Please note: Anticoagulants at doses (low dose) designed to prevent deep vein thrombosis are insufficient as antithrombotic therapy to prevent recurrent ischemic stroke or TIA. Conversely, antiplatelet agents at doses to prevent recurrent ischemic stroke or TIA are insufficient therapy to prevent deep vein thrombosis. However, anticoagulants at full therapeutic doses (such as full dose LMW heparin, unfractionated heparin IV, or warfarin) are considered acceptable treatment options for both DVT prophylaxis and antithrombotic medication.

- DVT prevention doses may include:
  - dalteparin (Fragmin): 2500 or 5000 units SQ every day
  - enoxaparin (Lovenox): 30-40 mg SQ every day or 2 times a day
  - fondaparinux (Arixtra): 2.5 mg SQ every day
  - Heparin: 5000 units SQ every 8-12 hrs
  - rivaroxaban (Xarelto) Oral: 10 mg every day for prevention of DVT after hip surgery
- Therapeutic doses, that may prevent DVT and also be effective as therapeutic anticoagulation to prevent stroke, may include:These doses are provided to aid chart abstraction and not as an endorsement of any of the specific medicines for treatment or prevention of stroke. In many cases these medicines are not approved by the FDA for treatment or prevention of stroke, but could reasonably be used off-label for that purpose.
  - apixaban (Eliquis): 5mg twice daily (2.5 mg twice daily in patients with two or more of the following: age >/= 80 years, weight </= 60kg, or serum creatinine >/= 1.5mg/dL)
  - argatroban at any dose IV infusion
  - dabigatran (Pradaxa): 150 mg 2 times a day (75 mg 2 times a day in patients with renal failure)
  - dalteparin (Fragmin) : 100 IU/kg SQ every 12hrs
  - fondaparinux (Arixtra): 5-10 mg SQ every day
  - Heparin: continuous IV infusion titrated to elevated PTT outside the normal range. Typical ranges could include PTT 50-70 or 60-84; however, IV heparin is not of proven benefit for acute ischemic stroke or secondary prevention of stroke.
  - lepirudin (Refludan) at any dose IV infusion
  - rivaroxaban (Xarelto) Oral: 20 mg every day (15 mg every day in patients with renal failure)

If "Yes" is selected, a class (Antiplatelet or Anticoagulant) and medication is required.
Recording the dosage and frequency are OPTIONAL.

Examples:

- Patient 330a is admitted to the in-patient unit following treatment with thrombolytic therapy. He is discharged on day 5 with instructions to start aspirin in one week due to the risk of bleeding from his large stroke. Data Entry will be to check NC.
- Patient 330b is admitted with new onset atrial fibrillation and a minor stroke. He is discharged on dalteparin 100 IU/kg sq twice a day along with a plan to start warfarin in 7 days. Data Entry will be to check YES.
- Patient 330c is admitted with new onset atrial fibrillation and a minor stroke. He is discharged on enoxaparin 40 mg sq daily for DVT prophylaxis. Data Entry will be to check NO.

S ***Hospitalization Data, Discharge Data***

Summary of Changes

REQUIRED: Antiplatelet: See Table 4 for a list of antiplatelet medications.

Check the box if the patient was prescribed an antiplatelet medication at discharge.

REQUIRED: Antiplatelet Medication (Specify):

If antiplatelet was prescribed at discharge, select the specific medication.

- Aspirin
- Aspirin/Dipyridamole (in separate formulations or as Aggrenox)
- Clopidogrel (Plavix)
- Ticlopidine (Ticlid)

Recording the dosage and frequency are OPTIONAL.

REQUIRED: Anticoagulant: See Table 5 for a list of anticoagulant medications

Check the box if the patient was prescribed an anticoagulant medication at discharge.

REQUIRED: Anticoagulant Medication (Specify):

- Unfractionated heparin IV
- Full dose LMW heparin
- Warfarin (Coumadin)
- dabigatran (Pradaxa)
- argatroban
- fondaparinux (Arixtra)
- lepirudin (Refludan)
- rivaroxaban (Xarelto)
- edoxaban (Savaysa)

S ***Hospitalization Data, Discharge Data***

Summary of Changes

OPTIONAL: If NC, documented contraindications (Select all that apply)

Select the specific reason(s) documented for not prescribing antithrombotic therapy at discharge.

- Allergy to or complication related to aspirin, ticlopidine, clopidogrel, dipyridamole, warfarin or heparins (hx or current)
- Patient/Family refused
- Risk for bleeding or discontinued due to bleeding
- Serious side effect to medication
- Terminal illness/Comfort Measures Only
- Other

Notes for Abstraction

- Reasons for not prescribing antithrombotic therapy must be documented by a physician, advance practice nurse or physician assistant.
- If reasons are not mentioned in the context of antithrombotics, do not make inferences (e.g., do not assume that antithrombotics are not being prescribed because of a bleeding disorder unless documentation explicitly states so.)
- It is not intended that this list of reasons is inclusive of all possible reasons for not prescribing antithrombotic at discharge. Select if any of these were documented as reasons for not prescribing antithrombotic therapy at discharged.

Hospitalization Data, Discharge Data

Summary of Changes

OPTIONAL: Other Antithrombotic(s) Prescribed:

Was an antithrombotic medication not on the "Antithrombotic Therapy approved in stroke" list (an alternate antithrombotic medication) prescribed at discharge?

- Yes: An alternate antithrombotic therapy was prescribed at hospital discharge
- No: An alternate antithrombotic therapy was not prescribed at hospital discharge, OR unable to determine from medical record documentation

OPTIONAL: If yes, Medication

Other Antithrombotic(s) Medication (Specify Medication, Dosage, and Frequency):

- Desirudin (Iprivask)
- Ticagrelor (Brilinta)
- Prasugrel (Effient)
- Other

Notes for Abstraction:

- Therapeutic doses, that may prevent DVT and also be effective as therapeutic anticoagulation to prevent stroke, may include: these doses are provided to aid chart abstraction and not as an endorsement of any of the specific medicines for treatment or prevention of stroke. In many cases these medicines are not approved by the FDA for treatment or prevention of stroke, but could reasonably be used off-label for that purpose.
  - desirudin (Iprivask): 15 mg every 12 hours

REQUIRED: Persistent or Paroxysmal Atrial Fibrillation/Flutter (Was atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF), documented during this admission?)

Any evidence of atrial fibrillation or flutter observed or identified during the hospital admission. The medical record should contain documentation by a physician or other provider which describes the episode OR EKG/monitor finding of atrial fibrillation or flutter. This includes persistent or paroxysmal fibrillation/flutter.

- Yes
- No

Notes for Abstraction:

- Documentation of atrial fibrillation or flutter on current EKG, select “Yes”.
- Diagnosis of current atrial fibrillation or flutter anywhere in the medical record, select “Yes”.
- See the inclusion list for acceptable examples of documentation. The list is not all-inclusive.

Inclusion Guidelines for Abstraction:

- AF
- A-fib
- Atrial fibrillation
- Atrial flutter
- Persistent atrial fibrillation
- Paroxysmal atrial fibrillation
- PAF

Examples:

- Patient 340a had no prior history of atrial fibrillation. They are admitted with an ischemic stroke and new onset atrial fibrillation is documented in the ED. The patient is discharged on Coumadin for non-valvular atrial fibrillation. Data entry will be to select "Yes" for Persistent or Paroxysmal Atrial Fibrillation/Flutter (Data entry for Previously known medical history is NOT to check Atrial Fib/Flutter).
- Patient 340b was admitted with the diagnosis of acute ischemic stroke, a history of paroxysmal atrial fibrillation, but the EKG in the ED shows sinus rhythm. Holter monitor during the hospitalization does not show evidence of atrial fibrillation. Data entry will be to select "No" for Persistent or Paroxysmal Atrial Fibrillation/Flutter. (Data entry for Previously known medical history is to check Atrial Fib/Flutter)
- Patient 340c was admitted with the diagnosis of acute ischemic stroke and a remote history of a brief period of self-limited atrial fibrillation after bypass surgery 6 years ago and negative Holter monitoring in the years since. The patient is in sinus rhythm and on no current management for AF. There is no evidence of atrial fibrillation during the hospitalization. (Data entry for Previously known medical history is NOT to check Atrial Fib/Flutter and "No" for Persistent or Paroxysmal Atrial Fibrillation/Flutter.)

Admission Data, Hospitalization Data, (includes: EKG report, Holter monitor report, rhythm strip with documented interpretation of atrial fibrillation/flutter, transfer sheet), Discharge Data

Summary of Changes

REQUIRED: If atrial fib/flutter or history of PAF documented, was patient discharged on anticoagulation?

Patients with Atrial fib/flutter are at increased risk for stroke. This includes patients who have afib or flutter during the hospital stay or patients who have a history of any Afib/Flutter including PAF documented in the medical record, even without evidence of afib or flutter during the current hospitalization. Even in patients who have undergone catheter ablation therapy there is uncertainty as to what the risk of recurrence of AF is over the long term, AF can recur without symptoms and be unrecognized by the patient or physician. Therefore anticoagulation is still indicated stroke patients with catheter ablation therapy for AF.

- Yes: Anticoagulation therapy was prescribed at discharge.
- No/ND: Anticoagulation therapy was not prescribed at discharge or unable to determine from medical record documentation.
- NC: There is documentation of a reason for not prescribing anticoagulation therapy at hospital discharge

Notes for Abstraction:

- See Table 5 for a list of medications used for anticoagulation therapy :
- Select "No/ND" for patients who are discharged only on low doses (5000 units subQ bid) of heparin or equivalent doses for DVT prophylaxis using LMWH
- Select “No/ND” for patients who are discharged only on antiplatelet therapy, without anticoagulation therapy
- In determining whether anticoagulation therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an anticoagulant that is not included in any of the other discharge medication 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 an anticoagulant in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - **Consider it a discharge medication in the absence of contradictory documentation.**
    - If documentation is contradictory (e.g., physician noted “d/c Coumadin” in the discharge orders, but Coumadin 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 "No").
    - Consider documentation of a hold on an anticoagulant after discharge in one location and a listing of that anticoagulant as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not **defined** (e.g., “Hold Coumadin”). Examples of a hold with a defined timeframe include “Hold Coumadin x2 days” and “Hold warfarin until after stress test.”
    - If an anticoagulant is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of anticoagulation therapy after discharge (e.g., “Hold Coumadin x2 days,” “Start Coumadin as outpatient,” “Hold Coumadin”), select “No”.
    - If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
      Examples:
      − Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
      − Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
- Disregard an anticoagulant medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on dabigatran”). Documentation must be clearer that an anticoagulant was actually prescribed at discharge.
- Disregard documentation of anticoagulant prescribed at discharge when noted only by medication class (e.g., “Anticoagulant Prescribed at Discharge: Yes” on a core measures form). The anticoagulant must be listed by name.
- Reasons for not prescribing anticoagulation therapy must be documented by a physician, advance practice nurse or physician assistant.
- **If reasons are not mentioned in the context of anticoagulation therapy, do not make inferences** (e.g., do not assume that anticoagulation therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
    - Reasons must be explicitly documented (e.g., “Active GI bleed – anticoagulation therapy contraindicated”, “No warfarin” [no reason given].).
    - Physician/APN/PA or pharmacist documentation of a hold on an anticoagulant medication or discontinuation of an anticoagulant medication that occurs during the hospital stay constitutes a “clearly implied” reason for not prescribing anticoagulation therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral anticoagulant medication (e.g., warfarin) was on order at the time of the notation.
      EXCEPTIONS:
        - Documentation of a conditional hold or discontinuation of an anticoagulant medication (e.g., “Hold Coumadin if guaiac positive”, “Stop warfarin if rash persists”, “No warfarin for 24 hours post thrombolytic therapy”).
        - Discontinuation of a particular anticoagulant medication documented in combination with the start of a different anticoagulant medication (i.e., switch type of anticoagulant medication) does not count as a reason for not prescribing an anticoagulant medication at discharge. Examples:

- "Stop warfarin" and "Start warfarin 2 mg po daily" in same physician order
- "Change Coumadin to Pradaxa" in progress note
- Do not continue after discharge" checked for warfarin and "Continue after discharge" checked for Coumadin on a physician-signed discharge medication reconciliation form

  - Discontinuation of an anticoagulant medication at a particular dose documented in combination with the start of a different dose of that anticoagulant (i.e., change in dosage) does not count as a reason for not prescribing an anticoagulant medication at discharge.
    Examples:
    - "Stop warfarin 5 mg po daily" and "Start warfarin 2.5 mg po daily" in same physician order
    - "Decrease dabigatran 150 mg po BID to 75 mg po BID" in progress note
    - Do not continue after discharge" checked for Coumadin 5 mg and "Continue after discharge" check for Coumadin 2.5 mg on a physician-signed discharge medication reconciliation form

- Deferral of anticoagulation therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing anticoagulation therapy at discharge unless the problem underlying the deferral is also noted. Examples:
  - "Consulting neurologist to evaluate pt. for warfarin therapy." - select "No".
  - "Rule out GI bleed. Start Coumadin if OK with neurology." - select "Yes".
- If there is documentation of a plan to initiate/restart anticoagulation therapy, and the reason/problem underlying the delay in starting/restarting anticoagulation therapy is also noted, this constitutes a "clearly implied" reason for not prescribing anticoagulation therapy at discharge. Acceptable examples (select "Yes"):
  - "Stool Occult Blood positive. May start Coumadin as outpatient."
  - "Start warfarin if hematuria subsides."

  Unacceptable examples (select "No"):
  - "Consider starting Coumadin in a.m."
  - "May add warfarin when pt. can tolerate
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no warfarin due to rectal bleeding" - select "Yes," even if documentation indicates that the rectal bleeding has resolved by the time of discharge and warfarin was restarted).
- Crossing out of an anticoagulant medication counts as a "clearly implied reason" for not prescribing anticoagulation therapy at discharge only if on a pre-printed form.
- An allergy or adverse reaction to one type of anticoagulant would NOT be a reason for not administering all anticoagulants. Another medication can be ordered.
- When the current record includes documentation of a pre-arrival reason for no anticoagulation therapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the underlying reason/problem is also noted (e.g., "Coumadin held in transferring hospital due to possible GI bleed")
  - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No warfarin") (e.g., "Hx GI bleeding with warfarin" in transferring ED record).
- Reasons for not PRESCRIBING anticoagulation therapy at hospital discharge:
  - Allergy to all anticoagulant medications
  - Aortic dissection
  - Bleeding disorder
  - Brain/CNS cancer
  - CVA, hemorrhagic
  - Extensive/metastatic CA
  - Hemorrhage, any type
  - Intracranial surgery/biopsy
  - Patient/family refusal
  - Peptic ulcer
  - Planned surgery within 7 days following discharge
  - Risk of bleeding
  - Unrepaired intracranial aneurysm
  - Other documented by physician/APN/PA or pharmacist

S *Hospitalization Data, Discharge Data*

Summary of Changes

OPTIONAL: If NC, documented reasons for no anticoagulation (Select all that apply)

Select the specific reason(s) documented for not prescribing anticoagulation therapy at discharge for patients with atrial fibrillation/flutter.

- Allergy to or complication r/t warfarin or heparins (hx or current)
- Mental status
- Patient refused
- Risk for bleeding or discontinued due to bleeding
- Risk for falls
- Serious side effect to medication
- Terminal illness/Comfort Measures Only

Notes for Abstraction:

- Reasons for not prescribing anticoagulation therapy must be documented by a physician, advance practice nurse or physician assistant.
- If reasons are not mentioned in the context of anticoagulation, do not make inferences (e.g., do not assume that anticoagulation therapy is not being prescribed because of a bleeding disorder unless documentation explicitly states so.)
- It is not intended that this list of reasons is inclusive of all possible reasons for not prescribing anticoagulation therapy at discharge. Select if any of these were documented as reasons for not prescribing antithrombotic therapy at discharged.

Hospitalization Data, Discharge Data

Summary of Changes

OPTIONAL: Antihypertensive Tx

Determine if antihypertensive treatment was prescribed at discharge. The appropriate time to initiate antihypertensive medication in the setting of acute ischemic stroke is unknown. However, many patients are discharged on antihypertensive medications. Record all agents based on class of action. For combination agents, record both classes. Select the class of medication regardless of the indication for this medication. Medications in these classes may be used to treat alternate conditions beyond hypertension. A list of anti-hypertensive medications can be found in Table 1.

- None prescribed/ND
- None - contraindicated
- ACE Inhibitors
- ARB
- Beta Blockers
- Ca++ Channel Blockers
- Diuretics
- Other anti-hypertensive med

Examples:

- Patient 350a is admitted to the in-patient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. Paroxysmal atrial fibrillation (PAF) is noted during admission but he returns to sinus rhythm spontaneously. He is discharged on day 5 on his original pre-admission medications and the DASH diet. Data Entry will be to multi-select "ACE Inhibitors" and "Diuretics".
- The notes for Patient 350b document critical intracranial stenosis. At discharge his blood pressure is 100/60 and his lisinopril and furosemide were held with a plan to restart if BP increases. Data entry would be to select "None - contraindicated".

Hospitalization Data, Discharge Data

REQUIRED: Cholesterol-Reducing Tx (Select all that apply)

Enter the cholesterol reducing medication the patient has been prescribed upon discharge.

- **None prescribed/ND:** Cholesterol reducing treatment was not prescribed at discharge or unable to determine from medical record documentation
- **None contraindicated:** There is documentation of a reason for not prescribing cholesterol reducing treatment at discharge
- **Statin:** See Table 2 for a list statin containing medications
- **Fibrate:** See Table 2 for a list of fibrate medications
- **Niacin:** See Table 2 for a list of niacin containing medications
- **Absorption Inhibitor:** See Table 2 for a list of absorption inhibitor containing medications
- **PCSK9 Inhibitor:** See Table 2 for a list of PCSK Inhibitor containing medications
- **Other med:** See Table 2 for a list of other medications

Notes for Abstraction:

- In determining whether cholesterol reducing therapy was prescribed at discharge, it is not uncommon to see conflicting documentation among different medical record sources. For example, the discharge summary may list a drug that is not included in any of the other discharge medication sources (e.g., discharge orders). All discharge medication documentation available in the medical record should be reviewed and taken into account by the abstractor.
    - In cases where there is a cholesterol reducing drug noted in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select the specified class of cholesterol reducer) unless documentation elsewhere in the medical records suggest that it was NOT prescribed at discharge – **Consider it a discharge medication in the absence of contradictory documentation.**
    - If documentation is contradictory (e.g., MD noted discontinuation of the cholesterol reducing therapy in the discharge medication orders, but it 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 "None prescribed/ND").
    - When there is a documented plan to delay initiation/restarting of a cholesterol reducing therapy for a time period after discharge, select "None prescribed/ND".
- For combination agents, select both medication classes. (e.g. Patient is prescribed Vytorin, select "Statin" AND "Absorption inhibitor"
- Reasons for not prescribing cholesterol reducing medication must be documented by a physician, advance practice nurse or physician assistant
- If reasons are not mentioned in the context of cholesterol reducing treatment, do not make inferences (e.g., do not assume that cholesterol reducing medication is not being prescribed because of a history of ICH unless documentation explicitly states so.)
- Documented reasons for not prescribing cholesterol reducing treatment may include (list is not all-inclusive):
    - Allergy to or complication related to cholesterol reducing treatment
        - Documentation of an allergy/sensitivity to one particular statin medication is acceptable to take as an allergy to the entire class of statin medications (e.g., "Allergic to Lipitor").
        - An allergy or adverse reaction to one class of cholesterol reducing medications would NOT be a reason for not administering all cholesterol reducing medications. Another medication class can be ordered. (e.g. If patient is allergic to statins, a fibrate could be prescribed).
    - Patient/family refusal
    - Terminal illness/Comfort Measures Only
    - Hepatitis
    - Hepatic failure

- Myalgias
- Rhabdomyolysis
- ICH within prior 6 months

Example: Patient 360a is admitted to the in-patient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. LDL is noted to be 180 and he has a recent non-q wave MI. He is discharged on day 5 on his original pre-admission medications and pravastatin plus a low-cholesterol diet. Data entry will be to select "Statin".

Hospitalization Data, Discharge Data

Summary of Changes

REQUIRED: Statin Medication and Dose (Specify)

Select from the list the specific statin containing medication and the total daily dosage that was prescribed at discharge.

Notes for Abstraction:

- Statin medications are routinely prescribed to be taken once daily. If the patient is prescribed a statin dose to be taken more than once daily, add the individual doses and enter as “Total Daily Dosage.”
- If the patient is prescribed Atorvastatin(Lipitor) at a total daily dose of 40 mg or greater, select “ >= 40 mg”. 40 mg is the minimum daily dosage which qualifies as intensive statin therapy. For all other dosages, select the specific total daily dose prescribed.
- If the patient is prescribed Rosuvastatin (Crestor) at a total daily dose of 20 mg or greater, select >= 20 mg. 20 mg is the minimum daily dosage which qualifies as intensive statin therapy. For all other dosages, select the specific total daily dose prescribed.
- Fluvastatin XL is only available in dose, 80mg daily and there is NOT an unknown option for that medication dose. In the absence of a documented daily dose for fluvastatin, you may select 80mg. This exception is only for Fluvastatin XL due to the availability of one dosing option and DOES NOT extend to other statin medications.
- Medications may contain both a statin along with another medication, such as Niacin. Where these medications may meet the guideline directed dose for statins, they will quality for inclusion in the Intensive Statin Therapy numerator.
- Statin therapy with intensive lipid-lowering effects may be defined as those statin agents and doses which have been demonstrated to produce a mean LDL reduction of approximately 50% or greater.
- You will be required to document a reason for non-treatment if the statin daily dose does not meet the guideline recommended dose. Patients 75 years or younger should receive a high intensity statin dose unless contraindicated. Patients greater than 75 years should receive a moderate or high dose. Please refer to table 6 for classifications of low, moderate and high dose statins.
- If the statin daily dose prescribed is not documented or is not among those listed in the dose dropdown, select "Unknown"

Additional information can be found in the *2018 AHA/ACC/AACVPR/AAPA/ABC/-ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol
https://www.ahajournals.org/doi/10.1161/CIR.0000000000000625

Hospitalization Data, Discharge Data

Summary of Changes

REQUIRED: Documented Reason for Not Prescribing Guideline Recommended Dose?

Specify the reasons for not prescribing the appropriate guideline recommended dose:

- Intolerant to moderate or greater intensity
- No evidence of atherosclerosis (cerebral, coronary or peripheral vascular disease)
- Other documented reason
- Unknown/ND

Notes for Abstraction:

- Reasons for not prescribing guideline recommended dose for statin therapy at discharge must be documented by a physician, PA, or APN.
- Reasons for not prescribing guideline recommended dose must be mentioned in the context of statin therapy intensity, do not make inferences. (e.g. Do not assume that more intense statin therapy is not being prescribed because a patient has muscle pain and weakness. Documentation must mink muscle pain or weakness to a reason for not prescribing a higher dose of statin therapy.)
- Select "Intolerant to moderate or greater intensity" if there is documentation in the medical record that the reason for not prescribing guideline recommended dose is that the patient was intolerant to a higher intensity statin than prescribed.
    - Acceptable examples include: "patient intolerant to greater intensity statin, maintain current dose", "muscle pain in past, trial of low dose statin", "chronic kidney disease - proceed with 10mg Simvastatin"; "liver disease so intolerant to higher dose".
- Select "No evidence of atherosclerosis (cerebral, coronary or peripheral vascular disease)", if there is documentation that the patient's stroke is not of atherosclerotic origin AND there is no other history or evidence that the patient has atherosclerosis.
- "Other documented reasons" may include patient/family refusal to increase statin dose.
- Select "Unknown/ND" if the reason for not prescribing a guideline recommended dose is not documented in the medical record.

Examples:

- Patient was admitted with cardio embolic ischemic stroke and no other vascular risk factors. The patient has elevated cholesterol with LDL measurement of 115 mg/dL and is discharged on atorvastatin 20 mg. The physician documents that the patient is not a candidate for intensive statin therapy due to no atherosclerosis. Select "No evidence of atherosclerosis".

Hospitalization Data, Discharge Data

Summary of Changes

Documented Reason for Not Prescribing a Statin Medication at Discharge

Collected For: STK-6

Definition: Reasons for not prescribing a statin medication at discharge:

- Statin medication allergy
- LDL-c less than 70 mg/dL
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist

Statins are a class of pharmaceutical agents that modify LDL cholesterol by blocking the action of an enzyme in the liver which is needed to synthesize cholesterol thereby decreasing the level of cholesterol circulating in the blood.

Question: Is there documentation of a reason for not prescribing a statin medication at discharge?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes - There is documentation of a reason for not prescribing a statin medication at discharge.
- No - There is no documentation of a reason for not prescribing a statin medication at discharge, OR unable to determine from the medical record documentation.
- A statin medication "allergy" or "sensitivity" documented at anytime during the hospital stay counts as an allergy regardless of what type of reaction might be noted (e.g., "Allergies: Atorvastatin - Nausea" - select "Yes.").
- Documentation of an allergy/sensitivity to one particular statin medication is acceptable to take as an allergy to the entire class of statin medications (e.g., "Allergic to Lipitor").
- Documentation of a LDL-c less than 70 mg/dL anytime during the hospital stay is an acceptable stand-alone reason for not prescribing statin medication at discharge – Linkage with statin is not needed. If more than one LDL value is documented, the highest value must be less than 70 mg/dL. Direct or calculated fasting or non-fasting values are both acceptable. LDL values obtained within 30 days prior to hospital arrival are acceptable to select “Yes.”
- When conflicting information is documented in a medical record, select "Yes".
- Reasons for not administering statin therapy must be documented by a physician/APN/PA or pharmacist with one exception: Patient/family refusal of any form of statin therapy (e.g., “Lipitor refused,” “Patient refusing statin therapy”) may be documented by a nurse.
- In determining whether there is a reason documented by physician/APN/PA or pharmacist for not prescribing a statin medication at discharge:
    - Reasons must be explicitly documented (e.g., "Chronic liver failure - Statins contraindicated", "Hx muscle soreness with statins in past") or clearly implied (e.g., "No evidence of atherosclerosis - no statin therapy", "Pt. refusing all medications," "Supportive care only - no medication," statin medication on pre-printed order form is crossed out, "Statins not indicated," "No statin medications" [no reason given]). If reasons are not mentioned in the context of statin medications, do not make inferences (e.g., do not assume that a statin medication is not being prescribed because of the patient's history of alcoholism or severe liver disease alone).
    - Documentation of "do not continue" or "do not convert" a home statin medication to an inpatient medication,or an inpatient statin medication to a discharge medication, does not count as a reason for not prescribing statin medication at discharge. Do not infer that a statin medication was not prescribed or discontinued without explicit documentation of a reason for not prescribing a statin medication at discharge. Example:
        - Patient on Atorvastin 80 mg while an inpatient. During discharge medication reconcilliation, physician checks "do not convert" box next to atorvastin, select "No."
    - Reason documentation which refers to a more general medication class is not acceptable (e.g., "No cholesterol-reducers," "Hold all lipid-lowering medications").
    - Deferral of statin medication from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing a statin medication unless the problem underlying the deferral is also noted. Examples:
        - "Consulting neurologist to evaluate pt. for statin therapy" - select "No."
        - "Severe diarrhea. Start statin if OK with neurology." - select "Yes."
    - If there is documentation of a plan to initiate/restart a statin medication, and the reason/problem underlying the delay in starting/restarting the medication is also noted, this constitutes a "clearly implied" reason for not prescribing a statin medication at discharge.
    - Acceptable examples (select "Yes"):
        - "Liver enzymes high. May start lovastatin as outpatient."
        - "Add statin if myalgias resolve"
    - Unacceptable examples (select "No"):
        - "Consider starting statins in a.m"
        - "May add Zocor when pt. can tolerate."
    - Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no statin medications due to abnormal liver enzymes" - select "Yes," even if documentation indicates that the liver enzyme levels normalized by the time of discharge and the lipid-lowering medication was restarted).
    - Statin medications may also be referred to as HMG CoA reductase inhibitors
    - When the current record includes documentation of a pre-arrival reason for no statin medication, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay. Examples:

- "Pre-arrival statin allergy"
- "Hx muscle soreness to statins in past" documented in a transferring record.

Suggested Data Sources:

- Consultation Notes
- Emergency Department Record
- History and Physical
- Progress Notes
- Physician Orders
- Discharge Summary
- Medication Administration Record (MAR)
- After Visit Summary (AVS)
- Medication Reconciliation Form
- **Excluded Date Sources:** Any documentation dated/ timed after discharge, except discharge summary.

Additional Notes / Guidelines for Abstraction:

- Inclusion:
  - None
  - Refer to Appendix C, Table 8.1 for a comprehensive list of Statin Medications

Element definition from Manual for National Hospital Inpatient Quality Measures

Reasons for not prescribing a statin medication at discharge:

Statins are a class of pharmaceutical agents that modify LDL cholesterol by blocking the action of an enzyme in the liver which is needed to synthesize cholesterol thereby decreasing the level of cholesterol circulating in the blood.

Yes (There is documentation of a reason for not prescribing a statin medication at discharge.)

No (There is no documentation of a reason for not prescribing a statin medication at discharge, OR unable to determine from medical record documentation.)

Notes for Abstraction:

- A statin medication "allergy" or "sensitivity" documented at anytime during the hospital stay counts as an allergy regardless of what type of reaction might be noted (e.g., "Allergies: Atorvastatin - Nausea" - select "Yes.").
- Documentation of an allergy/sensitivity to one particular statin medication is acceptable to take as an allergy to the entire class of statin medications (e.g., "Allergic to Lipitor").
- Documentation of a LDL-c less than 70 mg/dL anytime during the hospital stay is an acceptable stand-alone reason for not prescribing statin medication at discharge – Linkage with statin is not needed. If more than one LDL value is documented, the highest value must be less than 70 mg/dL. Direct or calculated fasting or non-fasting values are both acceptable. LDL values obtained within 30 days prior to hospital arrival are acceptable to select “Yes.”
- When conflicting information is documented in a medical record, select "Yes".
- Reasons for not administering statin therapy must be documented by a physician/APN/PA or pharmacist with one exception: Patient/family refusal of any form of statin therapy (e.g., “Lipitor refused,” “Patient refusing statin therapy”) may be documented by a nurse.
- In determining whether there is a reason documented by physician/APN/PA or pharmacist for not prescribing a statin medication at discharge:
  - Reasons must be explicitly documented (e.g., "Chronic liver failure - Statins contraindicated", "Hx muscle soreness with statins in past") or clearly implied (e.g., "No evidence of atherosclerosis - no statin therapy", "Pt. refusing all medications," "Supportive care only - no medication," statin medication on pre-printed order form is crossed out, "Statins not indicated," "No statin medications" [no reason given]). If reasons are not mentioned in the context of statin medications, do not make inferences (e.g., do not assume that a statin medication is not being prescribed because of the patient's history of alcoholism or severe liver disease alone).
  - Physician/APN/PA or pharmacist documentation of a hold on a statin medication or discontinuation of a statin medication that occurs during the hospital stay constitutes a "clearly implied" reason for not prescribing a statin medication at discharge. A hold/discontinuation of all p.o. medications counts if statin medication p.o. was on order at the time of the notation.
    - **EXCEPTIONS**:
    - Documentation of a conditional hold or discontinuation of a statin medication (e.g., "Hold Zocor if severe diarrhea persists," "Stop atorvastatin if myalgias persist").
    - Discontinuation of a particular statin medication documented in combination with the start of a different statin medication (i.e., switch in type of statin medication) does not count as a reason for not prescribing a statin medication at discharge.
      Examples:
      - “Stop lovastatin” and “Start atorvastatin 80 mg po q hs” in same physician order
      - “Change Crestor to Lipitor” in progress note
      - “Do not continue after discharge” checked for Vytorin and “Continue after discharge” checked for Advicor on a physician-signed discharge medication reconciliation form
    - Discontinuation of a statin medication at a particular dose documented in combination with the start of a different dose of that statin (i.e., change in dosage) does not count as a reason for not prescribing a statin medication at discharge.
      Examples:
      - “Stop Simvastatin 20 mg po q hs” and “Start Simvastatin 40 mg po q hs” in same physician order
      - “Increase Pravachol 40 mg to 80 mg” in progress note
      - “Do not continue after discharge” checked for Zocor 40 mg and “Continue after discharge” checked for Zocor 80 mg on a physician-signed discharge medication reconciliation form

- Reason documentation which refers to a more general medication class is not acceptable (e.g., “No cholesterol-reducers”, “Hold all lipid-lowering medications”).
- Deferral of statin medication from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing a statin medication unless the problem underlying the deferral is also noted.
  - Examples:
  - " Consulting neurologist to evaluate pt. for statin therapy" - select " No. "
  - "Severe diarrhea. Start statin if OK with neurology." - select " Yes ."
- If there is documentation of a plan to initiate/restart a statin medication, and the reason/problem underlying the delay in starting/restarting the medication is also noted, this constitutes a "clearly implied" reason for not prescribing a statin medication at discharge.
  - Acceptable examples (select "Yes"):
    - "Liver enzymes high. May start lovastatin as outpatient."
    - "Add statin if myalgias resolve"

    Unacceptable examples (select "No"):
    - "Consider starting statins in a.m."
    - "May add Zocor when pt. can tolerate."
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no statin medications due to abnormal liver enzymes" - select "Yes," even if documentation indicates that the liver enzyme levels normalized by the time of discharge and the lipid-lowering medication was restarted).
- Crossing out of a statin medication counts as a "clearly implied reason" for not prescribing statin medication at discharge only if on a pre-printed form.
- Statin medications may also be referred to as HMG CoA reductase inhibitors

- When the current record includes documentation of a pre-arrival reason for no statin medication, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival statin medication allergy
  - Pre-arrival hold/discontinuation or notation such as "No stain medications" IF the underlying reason/problem is also noted (e.g., "Lipitor discontinued in transferring hospital secondary to severe diarrhea").
  - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No statin medications") (e.g., "Hx muscle soreness to statins in past" in transferring ED record).

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Emergency Department record
- History and physical
- Medication administration record
- Physician orders
- Medication reconciliation form
- Progress Notes

Excluded Data Sources: Any documentation dated/timed after discharge, except discharge summary.

Inclusion Guidelines for Abstraction:
None

Refer to Appendix C, Table 8.1 for a comprehensive list of Statin Medications.

$ ***Hospitalization Data, Discharge Data***

Summary of Changes

OPTIONAL: New Diagnosis of Diabetes

REQUIRED for Target: Type 2 Diabetes with new no Previous hx of DM

A new diagnosis of diabetes mellitus made during hospitalization in a patient with no prior medical history of diabetes mellitus.

- Yes
- No
- Not Documented

Notes for Abstraction:

- Select "Yes" if there is a clinical mention of Diabetes with no mention of a prior history of diabetes.
- Select "No" if there is a clinical mention that the patient does not have a new diagnosis of Diabetes or if the patient has a past medical history of Diabetes.
- Select "Not Documented" if there is insufficient documentation related to in the medical record.
- Diagnosis may be made by any of the following: (Note - There must ALSO be clinical mention of diabetes in the medical record to establish the diagnosis)
  - Symptoms of diabetes plus non-fasting plasma glucose concentrations greater than or equal to 200 mg/dL (the classic symptoms of diabetes include: polyuria, polydipsia, and unexplained weight loss)
  - Fasting blood glucose greater than or equal to 126 mg/dL. Fasting is defined as no caloric intake for at least 8 hours.

- 2-hr post load glucose greater than or equal to 200mg/dL during an oral glucose tolerance test (OGTT). The test should be performed as described by WHO, using a glucose load of 75G of anhydrous glucose dissolved in water.
- HbA1c > 7.0%
- Evidence of hyperglycemia in hospital (for example inc hemoglobin a1c, impaired oral glucose tolerance) are not sufficient to establish a diagnosis of diabetes.

Hospitalization Data

Summary of Changes

OPTIONAL: Basis for Diagnosis

REQUIRED for Target: Type 2 Diabetes with new diagnosis of DM

Test(s) which served as the basis for new diagnosis of diabetes mellitus. Select from the following choices:

- HbA1c
- Fasting Blood Sugar
- Oral Glucose Tolerance
- Test Other

Reference: Diagnosis and Classification of Diabetes mellitus - Position Statement from the American Diabetes Association

Hospitalization Data

OPTIONAL: Anti-hyperglycemic medications

REQUIRED for Target: Type 2 Diabetes

Prescribed?:

Question: Was an anti-hyperglycemic medication prescribed at discharge?

- Yes: There is documentation that the patient was prescribed an anti-hyperglycemic at hospital discharge.
- No: An anti-hyperglycemic was not prescribed at hospital discharge, OR unable to determine from medical record documentation.
- NC: There is a documentation in the medical record of a reason for not prescribing an anti-hyperglycemic medication at hospital discharge.

Notes for Abstraction:

Prescription of an anti-hyperglycemic medication does not have to be documented for the treatment of diabetes. If a patient is prescribed an anti-hyperglycemic medication for other reasons, including weight loss, diabetes prevention, and or heart failure treatment, you should select "Yes".

Admission Data, Hospitalization Data

Summary of Changes

OPTIONAL: If yes (Anti-Hyperglycemic), select medications (select all that apply)

Definition: Documentation of the type of anti-hyperglycemic medication that was prescribed at discharge.

Question: If yes, the patient was prescribed any anti-hyperglycemic medication at discharge, select the medication(s)

Format: Multi-Select

Allowable Values:

- DPP-4 Inhibitors
- GLP-1 receptor agonist
- Insulin
- Metformin
- SGLT2 Inhibitor
- Sulfonylurea
- Thiazolidinedione
- Other oral agents
- Other injectable/subcutaneous agents

Notes for Abstraction:

- Select the class of anti-hyperglycemic medication(s) the patient was prescribed upon discharge.
- Reference Table 7 for list of anti-hyperglycemic medications and classes.

Suggested Data Sources:

- Hospitalization Data
- Discharge Data

Summary of Changes

Was there a documented reason for not prescribing a medication with proven CVD benefit?

Question: Is there a documented reason for not prescribing a medication with proven CVD benefit (cardioprotective)?

- Yes: There is a documented reason for not prescribing a cardioprotective anti-hyperglycemic medication at hospital discharge (GLP-1 receptor agonist, or SGLT-2 inhibitor)
- No/ND: There is no documentation as to a reason for not prescribing a cardioprotective anti-hyperglycemic medication at hospital discharge.

Suggested Data Sources:

- Hospitalization Data
- Discharge Data

Additional Notes / Guidelines for Abstraction:

- In order to select "Yes," reasons for not *prescribing a medication with proven CVD benefit (GLP-1 receptor agonist, or SGLT-2 inhibitor) must be documented by a physician, Advanced Practice Provider (e.g. advance practice nurse, physician assistant) and mentioned in the context of medication with proven CVD benefit (GLP-1 receptor agonist, or SGLT-2 inhibitor).* **If reasons are not mentioned in the context of medications with proven CVD benefit do not make inferences** *(e.g., GLP-1 receptor agonist, or SGLT-2 inhibitor).*
- If there is documentation of a plan to initiate/restart a medication with proven CVD benefit (GLP-1 receptor agonist, or SGLT-2 inhibitor), and the reason/problem underlying the delay in starting/restarting the medication is also noted, this constitutes a "clearly implied" reason for not prescribing a medication with proven CVD benefit (GLP-1 receptor agonist, or SGLT-2 inhibitor) at discharge.
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable
- Patient/family refusal may be documented by a nurse.
- *For full prescribing information and updates, please refer to the FDA website. See appendix **Table 7** for a list of GLP-1 receptor agonists and SGLT2 Inhibitors.*

Summary of Changes

Follow-up Appointment Scheduled for Diabetes Management

Collected For: TT2D

Definition: Documentation of a scheduled follow-up appointment specifically for diabetes management.

Question: Was a follow-up appointment for diabetes management scheduled and documented in the hospitalization medical record including type (office, tele-health) and date of the appointment?

Format: Single Select

Allowable Values:

- Yes
- No/ND
- NC

Notes for Abstraction:

- Yes - A follow-up appointment was scheduled for the patient
- No - A follow-up visit was not scheduled; a follow-up appointment was scheduled with a provider for management of condition other than diabetes or cannot be determined from medical record documentation.
- Select "Yes" if the follow up appointment for diabetes management was scheduled as a tele-health or office visit.
- The follow-up visit must be with one of the following healthcare providers: physician, PA, APN, or RN and must be related to management of diabetes.

Suggested Data Sources:

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Date of Diabetes Management Follow-Up Appointment:

Collected For: TT2D

Definition: The date and time of the scheduled follow up appointment for diabetes management.

Question: Record the month, date, year and time of the first scheduled follow-up appointment for diabetes management with any of the following healthcare providers: physician, PA, APN, or RN.

Format: MM/DD/YYYY; HH:MM; Drop Down for Alternative Formats

Allowable Values:

- Date: MM/DD/YYYY
  - MM = Month (01-12)
  - DD = Day (01-31)
  - YYYY = Year (2001 - Current Year)
- Time: 24 Hour Clock (Military Time)
  - HH = Hour (00-23)

    - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- For Date, Use the format MM/DD/YYYY.
- For Time, Use military time: HH:MM
- If multiple follow-ups are scheduled, enter the first scheduled date.
- If the date of follow-up is unknown select Not Documented.
- The follow-up appointment must be with one of the following healthcare providers: physician, PA, APN or RN and must be related to management of diabetes.

Suggested Data Sources:

- Discharge Data

Additional Notes / Guidelines for Abstraction: N/A

REQUIRED: Anti-Smoking Tx

For patients who have smoked at least one cigarette within the past year, indicate whether the patient received counseling to stop smoking or smoking cessation advice during the hospitalization as documented in progress notes or physician orders at discharge or admissions. It does not meet criteria of "Yes" to simply advise the patient that smoking is bad for their health.

- Yes
- No/ND
- NC

Notes for Abstraction

- If smoking cessation therapies such as patch, gum, etc, are prescribed, select "Yes"
- Smoking cessation therapies such as patch, gum, etc, are also equivalent to counseling.
- If the patient refused smoking cessation advice or counseling during this hospital stay, select "Yes"
- If the patient has a history of cigarette smoking within the year prior to arrival date but the patient does not currently smoke, they should be advised to continue not smoking. For these patients, if this advice/counseling was not done, select "No/ND".
- If the patient is prescribed Wellbutrin (bupropion), it should not be assumed that this is a smoking cessation aid unless specifically noted as such. It is sometimes used as an antidepressant unrelated to smoking.

Acceptable forms of advice and counseling include:

- Direct discussion with patient or caregiver about stopping smoking (e.g., "advised patient to stop smoking")
- Prescription of smoking cessation aid (e.g., Habitrol, NicoDerm, Nicorette, Nicotrol, Prostep, Zyban) during hospital stay or at discharge
- Prescription of Wellbutrin/bupropion during hospital stay or at discharge aid or alternative FDA-approved smoking cessation medication if prescribed as smoking cessation
- Referral to smoking cessation class/program
- Smoking cessation brochures/handouts/video
- Any of the above interventions directed at the patient's caregiver if the patient is unable to comprehend

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary and operative/procedure/diagnosis test reports (from procedure done during hospital stay).

Example: Patient 390a is admitted to the in-patient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. He hasn't smoked in 3 months, but was a pack a day smoker until then. The nursing notes document a discussion with the patient about the risks of smoking and its relationship to his stroke. He is given quit smoking pamphlet. He is discharged on day 5 on his original pre-admission medications and pravastatin plus a low-cholesterol diet. Data Entry will be to select Yes.

$ *Hospitalization Data, Discharge Data*

OPTIONAL: Smoking Cessation Therapies Prescribed: (select all that apply)

Note: Field only enabled if "anti-smoking tx" has the response option, "yes" selected. Otherwise, field is not enabled.

Allowable Values:

- Counseling
- Over the Counter Nicotine Replacement Therapy
- Prescription Medications
- Other
- Treatment not specified

Notes for Abstraction:

- Include any of the above interventions directed at the patient's caregiver if the patient is unable to comprehend
- <**Counseling:** Direct discussiopn with patient or caregiver about stopping smoking (e.g., "advised patient to stop smoking"); referral to smoking cessation class/program; Smoking cessation brochures/handouts/video

- **Over the Counter Nicotine Replacement Therapy:** if over-the-counter nicotine replacement therapies were prescribed, select this option. These products help to reduce cravings and withdrawal symptoms. Therapies include nicotine patches, gum, and lozenges.
- **Prescription Medications:** Prescription of smoking cessation medications (e.g., Chantix, buproprion, Zyban, Buproban, and varenicline, etc.) during hospital stay or at discharge
- Prescription of Wellbutrin/bupropion during hospital stay or at discharge aid or alternative FDA-approved smoking cessation medication if prescribed as smoking cesation.
- If the patient is prescribed Wellbutrin (bupropion), it should not be assumed that this is a smoking cessation aid unless specifically noted as such. It is sometimes used as an antidepressant unrelated to smoking.
- **Other:** select this option if another therapy was given.
- **Treatment not specified:** Select this option if therapy was given, but the type of therapy was not written in the medical record.
- If "treatment not specified" is selected, the other response options will be disabled.

$ *Hospitalization Data, Discharge Data*

OPTIONAL: Was the patient prescribed any antidepressant class of medication at discharge?

- Yes, SSRI: The patient was prescribed an SSRI medication at discharge.
- Yes, any other antidepressant class: The patient was prescribed any other class of medication in the antidepressant class of medications that is not an SSRI.
- No/ND: The patient was not prescribed any antidepressant class of medication at discharge.

Notes for Abstraction:

- Select "Yes, SSRI" if the patient was prescribed a medication in the SSRI class at discharge.
  - Select "Yes, SSRI" if any of the SSRI class of medications is listed in the discharge medications regardless of the indication for this medication.
  - Selective serotonin reuptake inhibitors SSRIs include: Citalopram (Celexa), Escitalopram (Lexapro), Fluoxetine (Prozac), Paroxetine (Paxil, Pexeva) Sertraline (Zoloft)];
- Select "Yes, any other antidepressant class" if the patient was prescribed any antidepressant class of medication at discharge that is not an SSRI.
  - Medications in this class may be used to treat alternate conditions beyond depression.
  - Select "Yes" if any of the antidepressant class of medications on the following list is listed in the discharge medications regardless of the indication for this medication.
    - Example: Patient discharged on Cymbalta for pain management. Select "Yes, any other antidepressant class."
    - Example: Patient discharged on Bupropion for smoking cessation. Select "Yes, any other antidepressant class."
  - Antidepressant classes include tricyclic and tetracyclic antidepressants [TCAs; imipramine (Tofranil), amitriptyline (Elavil), nortriptyline (Pamelor), doxepin (Sinequan)]; serotonin and norepinephrine reuptake inhibitors (SNRIs; Duloxetine (Cymbalta), Venlafaxine (Effexor XR), Desvenlafaxine (Pristiq)]; monoamine oxidase inhibitors [MAOIs Isocarboxazid (Marplan), Phenelzine (Nardil),Selegiline (Emsam),Tranylcypromine (Parnate)]; norepinephrine reuptake inhibitors [NRIs; Bupropion (Wellbutrin), Teniloxazine (Lucelan), Reboxetine (Edronax]; norepinephrine-dopamine reuptake inhibitors (NDRIs), serotonin receptor antagonists/agonists, and 2-adrenergic receptor antagonists.

Other Lifestyle Interventions

- ***Reducing weight and/or increasing activity recommendations***
- ***TLC Diet or Equivalent***
- ***Antihypertensive Diet***
- ***Was Diabetes Teaching Provided?***

OPTIONAL: Reducing weight and/or increasing activity recommendations

REQUIRED for Diabetes with hx of DM or new diagnosis

Determine if weight management and increased activity recommendations were provided at discharge. Patients who are overweight or obese (BMI 25 or greater) are candidates for intervention in weight management or increased physical activity. The treatment can be medication, diet or physical activity instruction. Patients who exercise less than three (3) days a week for 30 minutes should receive a written activity recommendation or referral to stroke rehabilitation involving increased activity.

- Yes
- No/ND
- NC

Example: Patient 400a is admitted to the in-patient unit with right hand weakness and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. He weighs 230 lbs but no height is documented, and no mention is made of weight loss or increasing activity. He is discharged home on day 5 on his original pre-admission medications and pravastatin plus a low-cholesterol diet. Data Entry will be to check "No/ND"

$ *Hospitalization Data, Discharge Data*

Summary of Changes

OPTIONAL: TLC Diet or Equivalent

REQUIRED for Diabetes with hx of DM or new diagnosis

Indicate if the patient was put on a Therapeutic Lifestyle Changes (TLC) diet or equivalent at discharge. TLC is an example of daily dietary patterns that are consistent with AHA-recommended dietary goals. Select "NC" for patients who are at their appropriate body weight, do not require cholesterol-reduction, currently exercise at or in excess of 30 minutes per day, 3 days a week.

- Yes
- No/ND
- NC

TLC Features

- TLC Diet
- Saturated fat <7% of calories, cholesterol <200 mg/day
- Consider increased viscous (soluble) fiber (10-25 g/day) and plant stanols/sterols (2g/day) as therapeutic options to enhance LDL lowering
- Weight management

The TLC Diet is a low saturated fat, low cholesterol diet that will help to reduce your blood cholesterol level to decrease your chance of developing heart disease, future heart attacks, and other heart disease complications. Equivalent diets are those that emphasize risk reduction for atherosclerosis and includes diets that are low in fat, low in cholesterol, and reduced sodium intake.

Hospitalization Data, Discharge Data, especially Diet or Nutrition services consultation or progress notes

Summary of Changes

OPTIONAL: Antihypertensive Diet

Indicate if the patient was put on an antihypertensive diet, such as the Dietary Approaches to Stop Hypertension (DASH) diet at discharge. For more information, please visit http://www.nhlbi.nih.gov/health/public/heart/hbp/dash. DASH is an example of daily dietary patterns that are consistent with AHA-recommended dietary goals. Select "NC" if the patient has no evidence for hypertension and the treatment is not provided.

- Yes
- No/ND
- NC

The "Dietary Approaches to Stop Hypertension" eating plan features plenty of fruits, vegetables, whole grains, and other foods that are heart healthy and lower in salt/sodium. The DASH diet eating plan has been proven to lower blood pressure in studies sponsored by the National Institutes of Health. The DASH eating plan follows heart healthy guidelines to limit saturated fat and cholesterol. It focuses on increasing intake of foods rich in nutrients that are expected to lower blood pressure, mainly minerals (like potassium, calcium, and magnesium), protein, and fiber. It includes nutrient-rich foods so that it meets other nutrient requirements as recommended by the Institute of Medicine.

Hospitalization Data, Discharge Data, especially Diet or Nutrition services consultation or progress notes

Summary of Changes

OPTIONAL: Was Diabetes Teaching Provided?

Indicate if patient received Diabetes Teaching.

- Yes
- No/ND
- NC

Discharge Data

Summary of Changes

Stroke Education

- ***Risk Factors for Stroke***
- ***Stroke Warning Signs and Symptoms***
- ***How to activate EMS for stroke***
- ***Need for follow-up after discharge***
- ***Their prescribed medications***

OPTIONAL: Patient and/or caregiver received education and/or resource materials regarding all of the following:

Select the "Check all as Yes" to quickly answer "Yes" to all five Education questions.

REQUIRED: Risk Factors for Stroke

Documentation that the patient/caregiver received educational materials that address risk factors for stroke. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

Yes - WRITTEN instructions/educational material given to patient/caregiver address risk factors for stroke.

No - WRITTEN instructions/educational material given to patient/caregiver do not address risk factors for stroke, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Educational material must specifically address risk factors for stroke:
- Example:
- Stroke Risk Factors:
  - Overweight
  - Smoking
  - Sedentary lifestyle
- See the inclusion list for acceptable risk factors for stroke. The list is not all-inclusive.
- **Individual risk factors that are not mentioned in the context of education provided on the risk factors for stroke, do not count** (e.g., discharge instruction to limit alcohol without explicit documentation that excessive alcohol consumption is a risk factor for stroke).
  - If individual risk factors are mentioned in the context of education provided on the risk factors for stroke, then it may be inferred that the education was personalized and patient-specific.
- Educational material which addresses risk factors for transient ischemic attack (TIA) is acceptable.
- Documentation of education which does not include stroke and risk factors, select "No."
  Examples:
  - Stroke binder given to patient's family.Ã¢€Â
  - Ã¢€œAneurysm education completed.Ã¢€Â
- If documentation reflects that educational material regarding risk factors for stroke was given to the patient/caregiver, select Ã¢€œYesÃ¢€Â , even if a copy of the material is not present in the medical record.
- Documentation must clearly convey that the patient/caregiver was given a copy of the discharge instructions to take home which listed all discharge medications prescribed for the patient by name. When the discharge instructions are present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material. An electronic staff signature documenting in the medical record that the after visit summary (AVS) was printed for the patient/caregiver to take home is acceptable.
- **Use only documentation provided in the medical record itself.** Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the patient refused written instructions/material which addressed risk factors for stroke , select "Yes."
- If documentation indicates that written instructions/material on risk factors for stroke were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health/VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- Nursing notes
- Progress notes
- Discharge summary
- Discharge instruction sheet
- Education record
- Home health referral form
- Nursing discharge notes
- Teaching sheet

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
Risk Factors for Stroke: • Age • Atrial fibrillation • Carotid artery stenosis • Carotid/peripheral or other artery disease • Cigarette smoking	Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Stroke Risk Factors teaching sheet given to patient"). Core measures forms

- Diabetes mellitus
- Excessive alcohol consumption
- Heredity (family history)
- High blood pressure
- Other heart disease (e.g., coronary heart disease, heart failure, dilated cardiomyopathy)
- Overweight (BMI >= 25)
- Physical inactivity
- Poor diet (e.g., high in saturated fat, trans fat, cholesterol or sodium)
- Prior stroke, TIA or heart attack
- Race
- Sex (gender)
- Sickle cell disease (also called sickle cell anemia)

Discharge Data

Summary of Changes

REQUIRED: Stroke Warning Signs and Symptoms

Documentation that the patient/caregiver received educational materials that address the warning signs and symptoms of stroke. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

Yes - WRITTEN instructions/educational material given to patient/caregiver address warning signs and symptoms of stroke.

No - WRITTEN instructions/educational material given to patient/caregiver do not address warning signs and symptoms of stroke, OR unable to determine from medical record documentation

Notes for Abstraction:

- Educational material must address what to do if warning signs or symptoms of stroke or transient ischemic attack (TIA) are noted.
- Examples:
  - "Call 911 immediately if sudden numbness or weakness of an extremity is noted."
- If the medical record contains documentation of education that does not include stroke and warning signs and symptoms, select “No.”
  Examples:
  - Ã¢€œStroke binder given to patientÃ¢€™s family.Ã¢€Â
  - Ã¢€œAneurysm education completed.Ã¢€Â
- If documentation reflects that educational material regarding warning signs or symptoms of stroke was given to the patient/caregiver, select Ã¢€œYesÃ¢€Â , even if a copy of the material is not present in the medical record
- Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material. This applies to educational materials in the form of discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, DVDs or other patient-oriented materials. Providing a link to electronic materials is not sufficient.
- **Use only documentation provided in the medical record itself.** Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the medical record contains documentation that instructions were given or sent to the patient/caregiver after discharge, select “No.”
- If the patient refused written instructions/material which addressed warning signs and symptoms of stroke, select "Yes."
- If documentation indicates that written instructions/material on warning signs and symptoms of stroke were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health/VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
Warning Signs and Symptoms of Stroke •.F.A.S.T (Face, Arms, Speech, Time) • Sudden numbness or weakness of the face, arm or leg, especially on one side of the body • Sudden confusion, trouble speaking or understanding • Sudden trouble seeing in one or both eyes • Sudden trouble walking, dizziness, loss of balance or coordination • Sudden severe headache with no known cause	Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Warning Signs and Symptoms of Stroke").

Discharge Data

Summary of Changes

REQUIRED: How to activate EMS for stroke

Documentation that the patient/caregiver received educational materials that address the need for activation of the emergency medical system (EMS) if signs or symptoms of stroke occur. Immediate activation of the emergency medical system by calling 911 or another EMS number improves hospital arrival time and the likelihood of thrombolytic administration.

Yes - WRITTEN instructions/educational material given to patient/caregiver address activation of the emergency medical system (EMS) if signs or symptoms of stroke occur .

No - WRITTEN instructions/educational material given to patient/caregiver do not address activation of the emergency medical system (EMS) if signs or symptoms of stroke occur , OR unable to determine from medical record documentation.

Notes for Abstraction:

- Educational material must address activation of the emergency medical system if signs or symptoms of stroke or transient ischemic attack (TIA) occur.
  Example:
  - "Call 911 immediately if you experience signs or symptoms of stroke, such as sudden numbness or weakness of an extremity"
- If the medical record does not contain documentation of education regarding stroke and EMS activation, select Ã¢€œNo.Ã¢€Â
  Examples:
  - Ã¢€œStroke binder given to patientÃ¢€™s family.Ã¢€Â
  - Ã¢€œAneurysm education completed.Ã¢€Â
- If documentation reflects educational material regarding EMS activation was given to the patient/caregiver, select Ã¢€œYesÃ¢€Â , even if a copy of the material is not present in the medical record.
- Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
- **Use only documentation provided in the medical record itself.** Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If there is documentation that instructions were given or sent to the patient/caregiver after discharge, select Ã¢€œNo.Ã¢€Â
- If the patient refused written instructions/material which addressed activation of the emergency medical system (EMS) if signs or symptoms of stroke occur , select "Yes."
- If documentation indicates that written instructions/material on activation of the emergency medical system (EMS) were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health/VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary

Guidelines for Abstraction:

Inclusion	Exclusion
Emergency Medical System: • EMS • 911	Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Activation of the Emergency Medical System").
Warning Signs and Symptoms of Stroke • F.A.S.T. (Face, Arms, Speech, Time) • Sudden numbness or weakness of the face, arm or leg, especially on one side of the body • Sudden confusion, trouble speaking or understanding • Sudden trouble seeing in one or both eyes • Sudden trouble walking, dizziness, loss of balance or coordination • Sudden severe headache with no known cause	

Discharge Data

Summary of Changes

REQUIRED: Need for follow-up after discharge

Documentation that the patient/caregiver received educational materials that address the need for continuing medical care after discharge. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

Yes - WRITTEN instructions/educational material given to patient/caregiver address follow-up with a physician/APN/PA after discharge.

No - WRITTEN instructions/educational material do not address follow-up with a physician/APN/PA or unable to determine from medical record documentation.

Notes for Abstraction:

- Educational material must address follow-up after discharge.
  Example:
  Ã¢€œIt is important for you to keep all follow-up appointments with your physician and reschedule appointments that you cannot make as soon as possible.Ã¢€Â
- Educational material which addresses follow-up after discharge for transient ischemic attack (TIA) is acceptable.
- If the medical record contains documentation of education that does not include stroke and follow-up after discharge, select “No.”
  Examples:
  - “Stroke binder given to patient’s family.”
  - “Aneurysm education completed.”
- Documentation must reflect that follow-up after discharge will be with a physician/APN/PA in order to select Ã¢€œYesÃ¢€Â for this data element. The date, time, and name of the provider may be mentioned in the written material but all three are not required to select Ã¢€œYesÃ¢€Â .
- In the absence of explicit documentation that follow-up involves contact with a physician/APN/PA, the abstractor may infer contact with a physician/APN/PA, unless documentation suggests otherwise (e.g., BP check, laboratory work only).
- If documentation reflects that educational material regarding follow-up after discharge was given to the patient/caregiver, select “Yes”, even if a copy of the material is not present in the medical record.
- Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material. This applies to educational materials in the form of discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, DVDs or other patient-oriented materials. Providing a link to electronic materials is not sufficient.
- **Use only documentation provided in the medical record itself.** Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the medical record contains documentation that instructions were given or sent to the patient/caregiver after discharge, select “No.”
- If the patient refused written instructions/material which addressed follow-up, select "Yes."
- If documentation indicates that written instructions/material on follow-up after discharge were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select

"Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health/VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
None	• Follow-up prescribed on PRN or as needed basis • Follow-up noted only Ã¢€œas directedÃ¢€Â or Ã¢€œas instructedÃ¢€Â • Follow-up noted only as Not Applicable (N/A), None, or left blank • Follow-up only in the form of a direction to the patient to bring a copy of a form to their next appointment • Pre-printed follow-up appointment instruction with all fields left blank (e.g., “Please return for follow up appointment with Dr. [blank line] on [blank line]”, "Make an appointment with your physician in [blank line] for follow up), unless next to checked checkbox • Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to " Call Dr. 's office for appointment within two weeks")

Discharge Data

Summary of Changes

REQUIRED: Their prescribed medications

Documentation that the patient/caregiver received educational materials that address all medications prescribed at discharge. Instructions must address at least the names of all discharge medications but may also include other usage instructions such as dosages, frequencies, side effects, etc. The importance of medications prescribed to prevent a second stroke (e.g., Plavix) should be emphasized.

> **Yes - WRITTEN instructions/educational material given to patient/caregiver address discharge medications.**
>
> **No - WRITTEN instructions/educational material do not address all discharge medications, OR unable to determine from medical record documentation.**

NOTE: The sections regarding full medication reconciliation, as described below, are ONLY required for those sites collecting for The Joint Commission (PSC and Core Measures). All others still need to provide stroke education as detailed above, but full medication reconciliation is not required as part of the stroke education measure.

Abstraction is a two-step process:

1. Compile a list of all of the medications being prescribed at discharge, based on available medical record documentation.

- ALL discharge medication documentation in the chart should be reviewed and taken into account by the abstractor.
- Discharge medication information included in a discharge summary dated after discharge should be used as long as it was added within 30 days after discharge
- If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
  Examples

    - Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
    - Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
- If discharge medications are noted using only references such as Ã¢€œcontinue home meds,Ã¢€Â Ã¢€œresume other meds,Ã¢€Â or Ã¢€œsame medications,Ã¢€Â rather than lists of the names of the discharge medications, the abstractor should use all sources to compile a list of medications the patient was on prior to arrival (or in the case of acute care transfers, use the medications the patient was on prior to arrival at the first hospital).
- Discharge medications can be listed in any of the acceptable data sources to be considered a discharge medication. If there is a medication in one source that is not mentioned in other sources, consider it a discharge medication.
  Example:
    - Discharge orders list Lasix but the discharge medication reconciliation form does not mention Lasix. Consider Lasix a discharge medication.
- If there is documentation in the medical record that specifically states a medication was NOT prescribed at discharge, do not consider it a discharge medication.
- If documentation is contradictory (e.g., physician noted “d/c ASA” in the discharge orders, but it is listed in the discharge summary’s discharge medication list), or, after careful examination of circumstances, context, timing, etc., documentation is still unclear, the case should be deemed "unable to determine” (select "No”).
- If there is documentation of a plan to start/restart a medication after discharge or a hold has been placed on a medication for a defined timeframe after discharge (e.g.,“Start Plavix as outpatient,” “Hold Lasix x 2 days,” “Hold ASA until after endoscopy”), consider this a discharge medication requiring education.
- Disregard a medication documented only as a recommended medication for discharge. e.g., Ã¢€œRecommend sending patient home on Vasotec.Ã¢€Â Documentation must reflect that the medication was actually prescribed at discharge.
- If a medication name is missing from a discharge medication source, disregard the medication.
- Disregard a discharge medication list labeled as preliminaryÃ¢€Â or Ã¢€œinterimÃ¢€Â .
- As needed (PRN) medications are required on the discharge instructions, with ONE exception: When discharge medications outside of the written discharge instructions are noted using ONLY references such as “continue current medications” or “continue present meds,” rather than lists of the names of the discharge medications, and the abstractor is referencing what medications the patient was taking on the day of
  discharge (for comparison against the written discharge instructions, to confirm completeness of that list), medications which are clearly listed as PRN (given on an as needed basis only) do NOT need to be included in the instructions.
- Medications which the patient will not be taking at home (and/or the caregiver will not be giving at home) are NOT required in the medication list included in the written discharge instructions (e.g., monthly B12 injections, dialysis meds, chemotherapy).

2. Check this list of discharge medications against the written discharge instructions given to the patient to ensure that the discharge instructions addressed at least the names of all of the discharge medications prescribed. If medications are included in the discharge instructions that are not on the a list of discharge medications, or discharge medications are missing from the list in the instructions and it cannot be determined that the list of medications in the instructions is complete, then the case should be deemed Ã¢€œunable to determineÃ¢€Â (select Ã¢€œNoÃ¢€Â).
Example:
Lasix is a medication listed on the discharge instruction sheet but Lasix is not in the discharge summary or documented as a discharge medication elsewhere in the medical record, select Ã¢€œNo.Ã¢€Â

- **EXCEPTION:** Medications listed on the discharge instructions but not mentioned as discharge medications elsewhere in the medical record are acceptable if the physician/APN/PA has signed or initialed the discharge instructions. Signatures that are dated/ timed after discharge are not acceptable.
  Example:
    - Discharge instruction sheet lists Plavix and aspirin. No other mention of Plavix or aspirin as a discharge medication in the medical record. Discharge instruction sheet is signed by Dr. X Ã¢€“ Select Ã¢€œYes.Ã¢€Â
- In making medication name comparisons, consider two medications that are **brand/trade name vs. generic name** in nature or that have the **same generic equivalent** as matches.
  Examples of matches:
    - Coumadin vs. Warfarin
    - ASA vs. EC ASA
    - Plavix vs. Clopidogrel
    - Mevacor vs. Lovastatin
    - Lopressor vs. Metoprolol
    - Metoprolol vs. Metoprolol succinate

- **If there is documentation that the patient was discharged on insulin(s) of ANY kind, ANY reference to insulin as a discharge medication in the written discharge instructions can be considered a match, for the purposes of the Stroke Education measure (STK-8). E.g., D/C summary notes patient discharged on Ã¢€œHumulin InsulinÃ¢€Â and Ã¢€œInsulin 70/30Ã¢€Â is listed on the discharge instruction sheet Ã¢€“ Consider this a match. However, contradictory documentation abstraction guidelines still apply to insulin cases (e.g., D/C summary notes patient discharged on Ã¢€œNovolog 50 unitÃ¢€™s t.i.d.Ã¢€Â and Ã¢€œNovolog 50 unitÃ¢€™s t.i.d.Ã¢€Â is discontinued on discharge medication reconciliation form Ã¢€“ Select Ã¢€œNoÃ¢€Â).**
- **Medications must be listed on the discharge instruction by name. Documentation to continue home medications without documentation of home medications listed by name, select Ã¢€œNo.Ã¢€Â**
- **Do not give credit in cases where there is a reference to a medication by class only on the written discharge instructions, (e.g., “Continue ACEI Inhibitor”), select “No.”**
- **Do not give credit in cases where the patient was given written discharge medication instructions only in the form of written prescriptions.**
- **Documentation must clearly convey that the patient/caregiver was given a copy of the discharge instructions to take home which listed all discharge medications prescribed for the patient by name. When the discharge instructions are present in the medical**
record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has
signed the material.

- **Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.**
- **Written instructions given or sent to the patient/caregiver after discharge, select "No."**
- **If the patient refused written discharge instructions/material which addressed discharge medications, select "Yes."**
- **If documentation indicates that written instructions/material on discharge medications were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes."**
- **The caregiver is defined as the patient's family or any other person (e.g.,home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.**

Suggested Data Sources:

- Nursing notes
- Progress notes
- Discharge summary
- Discharge instruction sheet
- Education Record
- Home health referral form
- Nursing discharge notes
- Teaching sheet

Excluded Data Sources:

- Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
None	• Laxatives • Proton pump inhibitors • Vitamins • Minerals (EXCEPT potassium) • Food Supplements • Herbs • Medications listed by class only (e.g., Ã¢€œheparinoidsÃ¢€Â) • Oxygen

Discharge Data

Summary of Changes

Stroke Rehabilitation

- ***Patient was assessed for and/or received rehabilitation services during this hospitalization?***
- ***Check all rehab services that patient received or was assessed for***

REQUIRED: Patient assessed for and/or received rehabilitation services during this hospitalization?

Documentation that the patient was assessed for or received rehabilitation services during this hospitalization. Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness, or disease to as normal a condition as possible.

- Yes - Patient was assessed for and/or received rehabilitation services during this hospitalization.
- No - Patient was not assessed for nor did patient receive rehabilitation services during this hospitalization, OR unable to determine from medical record documentation.

Notes for Abstraction:

- The assessment for rehabilitation services must be completed by a qualified provider. See the inclusion list.
- If a documented reason exists for not completing a rehabilitation assessment, select "Yes".
  - Examples:
    - "Patient returned to prior level of function, rehabilitation not indicated at this time."
    - "Patient unable to tolerate rehabilitation therapeutic regimen."
    - Patient/family refusal
- Do not infer that documentation of symptoms resolved means that a rehabilitation assessment was completed, unless mentioned in the context of rehabilitation service.
  - Example: "Symptoms resolved - no rehab needed."
- When an assessment is not found in the medical record but documentation indicates that the patient was seen by a member of the rehabilitation team (e.g., PT, OT, Speech Pathology) during the hospital stay, select "Yes".
  - Examples:
    - "PT X 2 for range of motion (ROM) exercises at bedside."
    - Patient aphasic - evaluated by speech pathology"
- When patient is transferred for rehabilitation or referred to rehabilitation services following discharge, select "Yes."

Suggested Data Sources:
PHYSICIAN/APN/PA/KT/PT/OT/SLT OR NEUROPSYCHOLOGIST DOCUMENTATION ONLY FOR REHABILITATION ASSESSMENT:

- Consultation notes
- Discharge summary
- History and physical
- Progress notes
- Referral forms
- Rehabilitation records
- Therapy notes (e.g., KT/PT/OT/SLT)

Excluded Data Sources:
Any documentation other than Physician/APN/PA/KT/PT/OT/SLT/Neuropsychologist

Guidelines for Abstraction:

Inclusion	Exclusion
• Assessment/consult done by a member of the rehabilitation team. • Patient received rehabilitation services from a member of the rehabilitation team. • Members of the rehabilitation team: • Advanced Practice Nurse (APN) • Kinesiotherapist (KT) • Neuro-psychologist (PsychD) • Occupational therapist (OT) • Physical therapist (PT) • Physician • Physician Assistant (PA) • Speech and language pathologist (SLT)	• Request/order for inpatient rehabilitation consult that was not performed

S ***Discharge Data, especially Physical or Occupational therapy consultation or progress notes***

Summary of Changes

OPTIONAL: Check all rehab services that patient received or was assessed for:

If patient received or was assessed for rehabilitation services, check all that apply:

- Patient received rehabilitation services during hospitalization
- Patient transferred to rehabilitation facility
- Patient referred to rehabilitation services following discharge
- Patient ineligible to receive rehabilitation services because symptoms resolved
- Patient ineligible to receive rehabilitation services due to impairment (i.e. poor prognosis, patient unable to tolerate rehabilitation therapeutic regimen)

Rehabilitation services include, but are not limited to physical therapy, occupational therapy, and speech and language therapy.

S *Discharge Data, especially Physical or Occupational therapy consultation or progress notes*

Summary of Changes

Health Related Social Needs Assessment

- ***During this admission, was a standardized health related social needs form or assessment completed?***
- ***If yes, identify the areas of unmet social need (select all that apply)***

During this admission, was a standardized health related social needs form or assessment completed?

Collected For: GWTG

Definition: Documentation that a standardized health related social needs form or assessment was completed during this hospitalization.

Question: During this admission, was a standardized health related social needs form or assessment completed?

Format: Single Select

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Select "Yes" if there was a standardized health related social needs form or assessment completed.
- Select "No/ND" if there was not a standardized health related social needs form or assessment completed or when the medical record documentation does not indicate an assessment was completed.

Suggested Data Sources:

- Admission Data
- Hospitalization Data
- Discharge Data

Additional Notes / Guidelines for Abstraction: N/A

If yes, identify the areas of unmet social need (select all that apply)

Collected For: GWTG

Definition: Documentation of the areas of unmet social needs obtained from the standardized health related social needs form or assessment.

Question: If areas of unmet social need were identified, select all that apply.

Format: Multi-Select

Allowable Values:

- None
- Education
- Employment
- Financial Strain
- Food
- Living Situation/ Housing
- Mental Health
- Personal Safety
- Substance Use
- Transportation Barriers
- Utilities

Notes for Abstraction:N/A

Suggested Data Sources:

- Admission Data
- Hospitalization Data
- Discharge Data

Additional Notes / Guidelines for Abstraction: N/A

S ***Discharge Data, especially Physical or Occupational therapy consultation or progress notes***

Summary of Changes

OPTIONAL: Check all rehab services that patient received or was assessed for:

If patient received or was assessed for rehabilitation services, check all that apply:

- Patient received rehabilitation services during hospitalization
- Patient transferred to rehabilitation facility
- Patient referred to rehabilitation services following discharge
- Patient ineligible to receive rehabilitation services because symptoms resolved
- Patient ineligible to receive rehabilitation services due to impairment (i.e. poor prognosis, patient unable to tolerate rehabilitation therapeutic regimen)

Rehabilitation services include, but are not limited to physical therapy, occupational therapy, and speech and language therapy.

S *Discharge Data, especially Physical or Occupational therapy consultation or progress notes*

Summary of Changes

STROKE DIAGNOSTIC TEST AND INVERVENTIONS

Collected For: GWTG Data Element

Definition: Required when no stroke etiology documented in the medical record or Cryptogenic stroke selected as the documented stroke etiology. Optional for all other records.

Question: Were any of the following stroke diagnostic tests and interventions performed during this admission, prior to arrival or post discharge?

Format: Single Select

Allowable Values:

- Cardiac Ultrasound/Echocardiograph
- Extended Implantable Cardiac Rhythm Monitoring
- Carotid Imaging
- Hypercoagulability Testing
- Carotid Revascularization
- Intracranial Vascular Imaging
- Extended Surface Cardiac Rhythm Monitoring > 7 days
- Short-term Cardiac Rhythm Monitoring ≤ 7 days
    - Performed during this admission or in the 3 months prior
    - Planned Post Discharge
    - Not Performed or Planned

Notes for Abstraction:

- **Procedures/ Tests**:
    - **Cardiac ultrasound/echocardiograph**: Includes transthoracic (TTE) or transesophageal (TEE) echocardiography
    - **Carotid imaging**: Includes carotid duplex ultrasonography, CT angiography, MR angiography or transfemoral contrast angiography of the carotid artery
    - **Carotid revascularization**: Includes carotid endarterectomy, carotid bypass grafting, or carotid angioplasty or stent procedures.
    - **Extended surface cardiac rhythm monitoring > 7 days**: Includes continued monitoring lasting more than 7 days. Includes prolonged ambulatory ECG, mobile cardiac telemetry (MCT) or external event recorders/intermittent cardiac event monitors of greater than 7 days. Does not include 24-72 hour monitoring by Holter or other modalities, or heart rate monitoring without rhythm detection.
    - **Extended implantable cardiac rhythm monitoring**: Includes implantable cardiac monitor (ICM) or implantable loop recorder (ILR) for continuous cardiac rhythm monitoring.
    - **Hypercoagulability testing**: Tests will vary per institutional protocol and may be customized based on individual patient profiles, but includes tests beyond the routine hematologic and coagulation studies of complete blood counts, platelets, and PT/INR/PTT. Special clotting tests for hypercoagulability include, but are not limited to, anticardiolipin antibodies, Lupus anticoagulant tests, activated Protein C resistance, Factor VIII, mixing studies, d-dimer, PAI-1, prothrombin gene mutation, platelet aggregation studies, protein C, protein S, lipoprotein (a), cryoglobulins and homocysteine. These tests are usually ordered in younger patients (age <55) without traditional risk factors and typically only a few of these tests will be performed.
    - **Intracranial vascular imaging**: Includes CT angiography, MR angiography, transcranial Doppler ultrasound or transfemoral contrast angiography of the intracranial arteries or their branches. This includes branches of the internal carotid artery above the skull base (ophthalmic, middle cerebral,anterior cerebral arteries) or the vertebral arteries (cerebellar, basilar or posterior cerebral arteries).
    - **Short-term cardiac rhythm monitoring ≤ 7 days**: Includes continued monitoring lasting ≤ 7 days. Includes 24-72 hour Holter monitors or equivalent. Does not include heart rate monitoring without rhythm detection.
- **Tming of the Procedure** - Select all that apply:
    - **Performed during this admission or in the 3 months prior**: The diagnostic test or intervention was performed during this episode of care or within three months prior to this admission. Also, if patient has a test performed during admission and a repeat test is planned post discharge, this option should be selected.
    - **Planned Post Discharge**: There is documentation in the patient medical record that the test or intervention was not done during the admission but is planned following hospital discharge. This may be indicated by a specific appointment time for the procedure, or by reference to the plan after discharge, such as “Cardiac monitoring for 28 days will be arranged post discharge”, or “Patient will be referred for carotid endarterectomy after review of CT at 4 weeks post stroke to evaluate swelling and hemorrhagic transformation”. If a TTE was performed during admission, but a repeat TTE or TEE is planned post discharge, do not select this option.
    - **Not Performed or Planned**: There is no documentation in the patient medical record that the test or interventions was performed during this episode of care or planned post-discharge.

Suggested Data Sources:

- **Hospitalization Data**:
- **Discharge Data**:

Additional Notes / Guidelines for Abstraction: N/A

Summary of Changes

Comprehensive: Post Discharge Follow-Up Form

COMPREHENSIVE: What is the patient's Modified Rankin Score (mRS) at 90 days post discharge?
[Data element is found on the Stroke Post-Discharge Follow-Up Form, *Comprehensive Stroke Follow-Up* Tab]

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Modified Rankin Score (mRS)

Collected For: CSTK-02

Definition: Documentation in the medical record of a Modified Rankin Score (mRS). The Modified Rankin Score (mRS) is a 6 point disability scale with possible scores ranging from 0 to 5. A separate category of 6 is usually added for patients who expire. The Modified Rankin Score (mRS) is the most widely used outcome measure in stroke clinical trials. Standardized interviews to obtain a mRS score are recommended at 3 months (90 days) following hospital discharge.

Suggested Data Collection Question: What is the patients Modified Rankin Score (mRS) at 90 days post-discharge?

Format

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

0 The patient has no residual symptoms.

1 The patient has no significant disability; able to carry out all pre-stroke acitivities.

2 The patient has slight disability; unable to carry out all pre-stroke activities but able to look after self without daily help.

3 The patient has moderate disability; requiring some external help but able to walk without the assistance of another individual.

4 The patient has moderately severe disability; unable to walk or attend to bodily functions without assistance of another individual.

5 The patient has severe disability; bedridden, incontinent, requires continuous care.

6 The patient has expired (during the hospital stay or after discharge from the hospital).

7 Unable to contact patient/caregiver.

8 Modified Rankin Score not performed, OR unable to determine (UTD) from the medical record documentation.

Notes for Abstraction:

- Modified Rankin Score (mRS) may be documented by the physician/APN/PA, nurse (RN), medical assistant, or any individual trained to perform the mRS.
- No value should be recorded more than once.
- If value 8 (UTD) is selected, no other values should be selected.
- Select the value (values 0-6) corresponding to the mRS documented at 90 days post-discharge.
- If more than one value is documented at 90 days, select the highest value.
- If a score range is documented, e.g. 2-3, select the higher value.
- If no mRS is documented, select UTD.
- Documentation of a mRS obtained within the 90 day timeframe (i.e., 75 to 105 days after hospital discharge) via telephone or in-person is acceptable.
- If the patient cannot be interviewed because of communication deficits or other limitations, an interview with the patients caregiver is acceptable.
- If documentation reflects that after 3 attempts to contact the patient and/or caregiver, the mRS could not be obtained because attempts to contact the patient and/or caregiver were unsuccessful, select allowable value 7.
- If the Modified Rankin Score was not performed, OR unable to determine (UTD) from the medical record documentation (allowable value “8”), then use the discharge date for the Modified Rankin Score Date.
  EXAMPLES:
  - Home phone number provided at discharge is a wrong number, AND no e-mail address or other contact information was provided by the patient and/or caregiver at discharge.
  - Calls placed go to a voicemail system. Message left for patient and/or caregiver requesting a return phone call, but no return call received.
  - Calls placed within the 90 day timeframe. Message left for patient and/or caregiver. Call returned after 105 days.

- If documentation reflects that the mRS could not be obtained due to a language barrier with the patient and/or caregiver, and no hospital or patient translator was available to interpret, select allowable value "7".
- If the patient and/or caregiver refuse to be interviewed, select allowable value "7".
- If documentation reflects that the mRS could not be obtained because the patient is a resident of a nursing home or extended/immediate care facility, and the facility refuses to provide patient information due to HIPPA regulations or other reasons, select allowable value "7".
- The caregiver is defined as the patients family or other person (e.g. home health, VNA provider, prison official or law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- History and physical
- Progress notes
- Care Transition Record
- Consultation form
- Home health forms
- Logs from follow-up phone calls or other logs that record follow-up information
- Outpatient record

Guidelines for Abstraction

Inclusion: None

Exclusion:

- Unchecked checkbox next to a mRS (e.g., blank checkbox on a pre-printed form next to mRS).
- Pre-printed Modified Rankin Score Form (mRS) left blank

COMPREHENSIVE: What is the date that the Modified Rankin Score (mRS) was obtained post discharge?

Element definition from The Joint Commission Comprehensive Stroke Performance Measurement Implementation Guide

Data Element Name: Modified Rankin Score (mRS) Date

Collected For: CSTK-02

Definition: The month, date, and year that the Modified Rankin Score (mRS) was obtained post-discharge. The Modified Rankin Score (mRS) is a 6 point disability scale with possible scores ranging from 0 to 5. A separate category of 6 is usually added for patients who expire. The Modified Rankin Score (mRS) is the most widely used outcome measure in stroke clinical trials. Standardized interviews to obtain a mRS score are recommended at 3 months (90 days) following hospital discharge.

Suggested Data Collection Question: What is the date that the Modified Rankin Score (mRS) was obtained post-discharge?

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 (2012-Current Year)
UTD = Unable to Determine

Notes for Abstraction:

- The Modified Rankin Score (mRS) should be done at 90 days (i.e., plus or minus 15 days; ≥ 75 days and ≤ 105 days) following the patients discharge from the hospital. When multiple dates are recorded during this timeframe, use the earliest date in the 90-day period for the Modified Rankin Score (mRS) Date.
- Example: Discharge Date 02-22-20XX. First mRS dated 05-25-20XX. Second mRS dated 06-01-20XX. Select 05-25-20XX for the Modified Rankin Score (mRS) Date.
- If a Modified Rankin Score (mRS) was obtained sooner than 75 days post-discharge and no mRS is dated within the 90-day timeframe, select the date for the score closest to 75 days for the Modified Rankin Score (mRS) Date.
- Example: Discharge Date 02-22-20XX. First mRS dated 05-18-20XX. Second mRS dated 07-01-20XX. Select 05-18-20XX for the Modified Rankin Score (mRS) Date.
- If a Modified Rankin Score (mRS) was obtained later than 105 days post-discharge and no mRS is dated within the 90-day timeframe, select the date for the score closest to 105 days for the Modified Rankin Score (mRS) Date.
  Example: Discharge Date 02-22-20XX. First mRS dated 07-01-20XX. Second mRS dated 08-10-20XX. Select 07-01-20XX for the Modified Rankin Score (mRS) Date.
- If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more mRS dates (either different mRS episodes or corresponding with the same episode), enter the earliest date.
- For patients who expire during the hospital stay, use the Discharge Date for the Modified Rankin Score Date.
- For patients who expire after hospital discharge, select the date of the interview call or visit which notified the hospital of the patient's death and not the actual date of death. If a Modified Rankin Score was not done because

the hospital was notified of the patient's death prior to the interview call or visit, select the date of the notification for the Modified Rankin Score Date.
Examples:
  - Patient discharged home on 12-16-20XX. Telephone mRS done on 03-22-20XX. Family informs interviewer that patient expired at home on 03-01- 20XX. Select 03-22-20XX, the date of the interview call, for the Modified
    Rankin Score Date.
  - Patient discharged home on 12-16-20XX. Outpatient visit scheduled for 01-16-20XX. Appointment cancelled in the EHR on 12-30-20Xx with a note that patient expired at home. Select 12-30-20XX for the Modified Rankin Score Date.
- If Modified Rankin Score allowable value '7' was chosen, select the date of the last attempt to contact the patient. If more than three unsuccessful attempts, then use the date of the third attempt.
- If the Modified Rankin Score (mRS) 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) and no other documentation is found that provides this information, the abstractor should select UTD.
  Example:
  Documentation indicates the mRS date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the mRS 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.
  Note: Transmission of a case with an invalid date as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Modified Rankin Score (mRS) Date allows the case to be accepted into the warehouse.

Suggested Data Sources:

- History and physical
- Progress notes
- Care Transition Record
- Consultation Form
- Home health forms
- Logs from follow-up phone calls or other logs that record follow-up information
- Outpatient record

Guidelines for Abstraction

Inclusion: None

Exclusion: None

Optional Fields

The Optional fields can be used to track any additional information not already collected in the Patient Management Tool. To use these, your Stroke team will need to decide on consistent representations for the fields you will use. For instance, Optional 1 will always be used to track the hospital floor. Optional 1 through Optional 10 are text fields that can hold up to 20 alphanumeric characters. Optional 11 and Optional 12 are actual site-maintained code lists, similar to the Physician/Service list. With the right user privileges you will find under the "My Account" tab a link to Manage Code Lists. Here you can add or edit the codes you want to appear in these lists. For additional analytical power, you can filter reports using Optional 11 and Optional 12. Optional 13 and Optional 14 have been added as Date/Time fields. Date and Time formatting will be maintained more consistently upon data download when using these fields. Do not enter any personal health information/protected health information (PHI) in Optional Fields 1-10, 11, & 12 or in the Additional Comments section.

Optional 1
Optional 2
Optional 3
Optional 4
Optional 5
Optional 6
Optional 7
Optional 8
Optional 9
Optional 10
Optional 11
Optional 12
Optional 13
Optional 14
Additional Comments

Administrative

- ***PMT used concurrently or retrospectively or combination?***
- ***Was a stroke admission order set used in this patient?***
- ***Was a stroke discharge checklist used in this patient?***
- ***Patient adherence contract/compact used?***

OPTIONAL: PMT used concurrently or retrospectively or combination?

Was the PMT (Patient Management Tool) used concurrently (prior to hospital discharge to enter data and/or guideline check feature) or retrospectively (only after hospital discharge) or in combination?

- Concurrently
- Retrospectively
- Combination

OPTIONAL: Was a stroke admission order set used in this patient?

Standardized order sets used with this patient.

- Yes
- No

Admission Data

OPTIONAL: Was a stroke discharge checklist used in this patient?

Standardized order sets used with this patient.

- Yes
- No

Discharge Data

OPTIONAL: Indicate if the care team used a patient adherence contract/compact, as evident by documentation or a copy in the medical record

Indicate if an adherence contract/compact was used for this patient.

- Yes
- No

Discharge Data

Additional TJC Stroke Core Measure Fields

- ***Check if patient is part of a sample***
- ***Arrival Information***
  - *Demographics*
  - *First Name*
  - *Last Name*
  - *Race*
  - *Zip Code*
  - *Homeless*
- ***Insurance***
  - *What is the patient's source of payment for this episode of care?*
  - *HIC Number*
- ***History & Last Known Well***
  - *Was there physician/APN/PA documentation of a diagnosis, signed ECG tracing, or a history of ANY atrial fibrillation/flutter in the medical record?*
  - *Is there documentation that the patient was on a lipid-lowering medication prior to hospital arrival?*
  - *Is there documentation that the date an time of last known well was witnessed and reported?*
  - *What was the date/time at which the patient was last known to be well or at his of her baseline state of health?*
  - *When is the earliest physician/APN/PA documentation of comfort measures only?*
- ***Thrombolytics***
  - ***Is there documentation that IV alteplase was initiated at this hospital?***
  - ***Is there documentation on the day of or day after hospital arrival of a reason for extending the initiation of IV thrombolytic to 3 to 4.5 hours of Time Last Known Well?***
  - ***Did the patient receive IV or IA alteplase therapy at this hospital or within 24 hours prior to arrival?***
  - ***Is there documentation on the day of or day after hospital arrival of a reason for not initiating IV thrombolytic?***
- ***Early Antithrombotics***
  - *Was antithrombotic therapy administered by the end of hospital day 2?*
  - *Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering antithrombotic therapy by end of hospital day 2?*
- ***Labs***
  - *Was LDL-c measured within the first 48 hours or 30 days prior to hospital arrival?*
  - *Was the patient's highest LDL-c level greater than or equal to 100 mg/dL in the first 48 hours or within 30 days prior to hospital arrival?*
- ***Outpatient***
  - *Encounter Date*
  - *E/M Code*
  - *What is the date/time the patient departed from the emergency department?*
  - *For discharges on or after 07/01/2012: What was the patient's discharge code from the outpatient setting?*

Special Initiatives (Prehospital Care) Tab

EMS refers to the full scope of prehospital stroke care, including 9-1-1 activation and dispatch emergency medical response, triage and stabilization in the field, and ground or air ambulance transport.

Several studies have shown that prehospital notification leads to significant reductions in several stroke time benchmarks, including time from arrival to physician assessment, CT performance, and CT interpretation, and is associated with higher rates of administering IVA alteplase.

Note: Only complete the following data elements for patients that arrive at your hospital via EMS from home/scene or by Mobile Stroke Unit (MSU). This section is optional and is meant to allow sites to capture information related to pre-hospital management of stroke.

The entry criteria to enable the EMS fields on the Special Initiatives tab is as follows:

- 1 The EMS form group is enabled for your site

  AND

- 2 The field,“How patient arrived to your hospital” has the response option EMS from home/scene or Mobile Stroke Unit selected

The following 8 fields will be required if the EMS fields on the Special Initiatives Tab are enabled AND the patient arrived at your hospital by EMS Home/scene or Mobile Stroke Unit:

1. EMS Unit Arrived on Scene
2. EMS Unit Left Scene
3. EMS Arrived at Patient
4. Last Known Well as Documented by EMS
5. Blood Glucose level (mg/dL)
6. (EMS) Suspected Stroke?
7. Indicate the stroke screen tool used
    - Stroke Screen Outcome
    - Indicate the severity scale used
8. Source used to obtain prehospital care data:

General Information:

Note: To populate the EMS Agency list for your site, follow the steps outlined below:

1. Select the "**My Account**" tab
2. Select "**Manage Code List**" link
3. Select "**EMS Agency List**" link
4. Select the "**New Code**" link
    a. EMS Agency ID Picker will appear
    b. Enter at least 2 items to search for the agency
    c. Find the agency you are looking for from the list and highlight by clicking
    d. Click "Save Selected" to place the highlighted agency to your list
5. **Note:** To remove an agency from your drop down list in the patient form:
    1. Select the "**My Account**" tab
    2. Select "**Manage Code List**" link
    3. Select "**EMS Agency List**" link
        a. Click on "Edit" to the right of the Agency that you would like to make inactive
        b. Enter an Ending Date that you would no longer like to see the Agency in your drop down list.
        c. Click save
            - The Agency name will remain on your Agency list in your code list section, but the option will no longer be available in the patient form drop down list.
        - ***Patient care record available at time of patient arrival***
        - ***Patient care record available later during hospitalization***
        - ***EMS Agency List***
        - ***Run/Sequence number***
        - ***Date/Time brain imaging initiated by MSU***
        - ***Date/Time IV alteplase Administered by MSU***
        - ***Initial 911 Call for Help***
        - ***EMS Unit Notified by Dispatch***
        - ***Dispatched as suspected stroke***
        - ***EMS Unit Arrived on Scene***
        - ***EMS Arrived at Patient***
        - ***EMS Unit Left Scene***
        - ***Last Known Well as Documented by EMS***
        - ***Discovery of Stroke Symptoms by EMS***
        - ***Date/Time pre-notifcation provided to hospital***
        - ***Additional Information provided as part of pre-notification***
        - ***Blood Glucose level (mg/dL)***
        - ***Initial Blood Pressure by EMS***
        - ***Suspected stroke?***
        - ***Indicate the stroke screen tool used***
        - ***Stroke Screen Outcome***
        - ***Indicate the severity scale used***
        - ***Positive for LVO***
        - ***If severity scale assessment completed, enter total score***
        - ***How was destination decision made?***
        - ***Was a Thrombolytic Checklist used?***
        - ***If severity scale used, did result alter hospital destination***
        - ***Source Used to Obtain Prehospital Care Data***

- ***Comments: (EMS Feedback form)***
- ***Interfacility Transfer Layer Elements***

Patient care record available at time of patient arrival
Optional Field

Definition: Indicate if the patient record was available at the time patient arrived at your hospital.

Data Collection Question: Was the patient care record available at time the patient arrived at your hospital?

Format: Single-select.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- **Yes:** There was an EMS patient care record (or equivalent) or documentation that an EMS patient care record (or equivalent) was available at the time of patient arrival to your ED.
- **No/ND:** There was no EMS patient care record (or equivalent) or documentation that an EMS patient care record (or equivalent) was available at the time of patient arrival OR unable to determine from medical record.
- An EMS patient care record may also be termed a Run Sheet, Trip Sheet/Record/Ticket, EMS Form, EMS Event Record, or a Patient Care Report (PCR or ePCR).
- This is the form on which EMS documents the details of the patient encounter.

Suggested Data Sources:

- ED Notes

Patient care record available later during hospitalization
Optional Field

Note: If you select *Patient care record available at time of patient arrival = "Yes,"* then this field will be disabled.

Definition: Indicate if the patient record was available after arrival to ED but prior to discharge.

Data Collection Question: Was the patient care record available during hospitalization?

Format: Single-select.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- **Yes:** There was an EMS patient care record (or equivalent) in the medical record or documentation that an EMS patient care record (or equivalent) was available only after arrival (at some point during the hospitalization), but prior to discharge.
- **No/ND:** There was no EMS patient care record (or equivalent) in the medical record throughout the hospitalization.
- An EMS patient care record may also be termed a Run Sheet, Trip Sheet/Record/Ticket, EMS Form, EMS Event Record, or a Patient Care Report.
- This is the form on which EMS documents the details of the patient encounter.
- This data element is looking to capture if a patient care record became available only after arrival and prior to discharge.

Suggested Data Sources:

- ED Notes
- EMS Run Sheet
- Patient Care Report

EMS Agency List:
Optional Field

Definition: Once a hospital creates a customized list of EMS Agencies, select the EMS Agency from the dropdown list that transported the patient to your hospital.

Data Collection Question: Which EMS agency transported the patient to your hospital?

Format: Single-select. Dropdown menu.

Allowable Values:

- Customized list for each site (centralized IDs)
- Unknown

Notes for Abstraction:

- Enter the formal name of the responding EMS agency. This may be the EMS Agency Name or a unique number assigned by the state EMS office.
  - This information can be found in the patient care report under the "Agency" section. Look for "Agency Number" or "Agency Name"
  - EMS Agency Name: eResponse.02 NEMSIS/PCR
  - EMS Agency Number: eResponse.01 NEMSIS/PCR
- If not documented or unknown, select "Unknown"

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Run/Sequence number (Incident Number)
Optional Field

Definition: Enter the unique number assigned by the EMS agency for the identification of the patient transported to your hospital.

Data Collection Question: What is the number assigned by the EMS agency for the identification of the transport

Format: Text field - alphanumeric

Allowable Values:

- Customized number for each transport
- Unknown

Notes for Abstraction:

- Enter the run number per the EMS Run Sheet
  - This information can be found in the patient care report under the "Response" section. Look for "Incident Number."
  - Incident Number: eResponse.03 in NEMSIS/PCR
  - If not documented or unknown, select "Unknown."

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Date/Time Brain Imaging Initiated by MSU
Optional Field

Note: The field is enabled when the field, "IV alteplase at an outside hospital or EMS / Mobile Stroke Unit?" under the Hospitalization Tab = Yes OR "How patient arrived at your hospital" = Mobile Stroke Unit. Otherwise, the field will remain disabled.

Definition: Record the date and time that the brain imaging was initiated by the Mobile Stroke Unit.

Data Collection Question: What is the date/time Brain Imaging Initiated by MSU?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Unknown

Notes for Abstraction:

- Brain imaging is referring to non-contrast computed tomography (CT) or MR Diffusion.

Suggested Data Sources:

- EMS Run Sheet
- Admission Data

Date/Time IV alteplase Administered by MSU
Optional Field

Note: The field is enabled when the field, "IV alteplase at an outside hospital or EMS / Mobile Stroke Unit?" under the Hospitalization Tab = Yes OR "How patient arrived at your hospital" = Mobile Stroke Unit. Otherwise, the field will remain disabled

Definition: Record the date and time the Intravenous (IV) alteplase was given (time of bolus administration) by MSU. If multiple dates/times are documented, use the earliest date recorded.

Data Collection Question: What was the date/time IV alteplase was initiated by MSU prior to arrival at your hospital?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Unknown

Notes for Abstraction:

- None.

Suggested Data Sources:

- EMS Run Sheet
- Admission data

Initial 911 Call for Help
Optional Field

Definition: Record the date and time the call made to 9-1-1 by the patient, family member, neighbor, or bystander was received.

Data Collection Question: What was the date and time the 911 call for help was received at the public safety answering point?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Unknown

Notes for Abstraction:

- This element is intended to capture the date and time the phone rings (911 call to public safety answering point or other designated entity) requesting EMS services.
- The information may be found in the patient care record under the "Times" section. Look for "eTimes.01 - PSAP Call Date/Time"

Suggested Data Sources:

- EMS Run Sheet
- Electronic patient care report (e-PCR)

EMS unit Notified by Dispatch
Optional Field

Definition: Record the date and time the responding EMS unit was notified by dispatch.

Data Collection Question: What was the date and time the responding EMS unit was notified by the 911 dispatcher?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Notes for Abstraction:

- Do not capture those patients that are transferred between hospitals via EMS.
- The date and time that the first call was received by the EMS dispatcher as recorded may be found in the patient care record under the "Times" section. Look for "Unit Notified by Dispatch Date/Time."
- EMS Unit notified by Dispatch Date/time: eTimes.03 NEMSIS/ePCR

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Dispatched as suspected stroke?
Optional Field

Collected For: Documentation of Time Last Known Well or Time of Discovery of Stroke Symptoms, Evaluation of Blood Glucose, Stroke Screen Performed and Reported, Stroke Severity Screen Performed and Reported, and Advanced Notification with Triage Findings.

Definition: Record whether there is documentation that the case was identified as a possible stroke at the time the EMS agency was being dispatched to the scene. Studies indicate if there is diagnostic concordance of stroke between dispatchers and EMS, the scene time and run times are shortened.

Data Collection Question: Was the EMS agency dispatched for a suspected stroke patient?

Format: Single-select. Radio buttons

Allowable Values:

- Yes
- No
- Not Documented

Notes for Abstraction:

- **Yes:** There is documentation that the EMS unit was dispatched for a patient describing signs and symptoms of stroke.
    - EMS Patient Care Reports often collect this discrete element under the heading of "Complaint Reported by Dispatch." Stroke/CVA. Code for imported data will be Look for code 2301067 in XML file.
        - Complaint Reported by Dispatch: eDispatch.01
    - The Narrative Section of the Patient Care report may provide additional information regarding the signs, symptoms, and complaints identified at dispatch. This may be commonly found in the narrative under the "D" section if the Agency follows the DCHARTE method of documentation.
        - Please note that some state hospitals may not receive the details in the narrative (e.g. "the complaint dispatch reported to the responding unit").
- **No:**There is documentation of the reason the EMS unit was dispatched to the patient, but there is no mention of signs and symptoms of stroke from the 911 dispatcher.
- **Not Documented:** There is no documentation in the medical record as to why the EMS unit was dispatched.
- The following language is sufficient to identify patients with suspected stroke:
    - Any use of the word "stroke" or “CVA”
    - Any documentation of signs & symptoms consistent with stroke such as:
        - * Sudden numbness or weakness of face, arm or leg - especially on one side of the body.
        - * Sudden confusion, trouble speaking or understanding.
        - * Sudden trouble seeing in one or both eyes.
        - * Sudden trouble walking, dizziness, loss of balance or coordination.
        - * Sudden severe headache with no known cause.

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

EMS Unit Arrived on Scene
Required Field for GWTG and Coverdell users

Collected For: GWTG Pre-hospital care measures

Definition: Enter the date/time the responding unit arrived on scene; that is, the time the vehicle stopped moving at the scene.

Data Collection Question: What is the date/time the responding EMS unit arrived on the scene?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Notes for Abstraction:

- Record the time the EMS vehicle arrived at the scene per the EMS documentation.
- Please note that date/time arrival at scene is not the same time as when the EMS agency arrived at the patient.
- This information can be found in the patient care report under the "Times" section. Look for "EMS Unit Arrived on Scene Date/Time."
    - EMS Unit Arrived On-Scene: eTimes.06 - NEMSIS/ePCR

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

EMS Arrived at Patient:
Required Field

Collected For: GWTG Times from First Medical Contact On-Scene (FMC) to EVT

Definition: Record date/time the responding unit arrived at the patient's side. Enter the date when the patient was first evaluated by emergency medical services (EMS in the field) prior to arrival at your facility. Enter the date of first medical contact only for patients who were transported by ambulance or air directly (from the field); this is NOT the date of arrival to your facility.

Data Collection Question: What is the date/time the responding unit arrived at the patient's side?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Unknown

Notes for Abstraction:

- Please note that date/time first medical contact arrived at the patient is **not** the same as when the EMS vehicle arrived at the scene.
- First Medical Contact time is commonly identified as the "At Patient Side Date/Time" on the EMS Patient Care Report
- EMS Arrived at Patient Date and Time: eTimes.07

Suggested Data Sources:

- EMS Run Sheet
- Admission Data
- Electronic patient care report (e-PCR)

EMS Unit Left Scene
Required Field

Collected For: GWTG On-Scene Times for Suspected Stroke

Definition: Record the date/time the responding unit left the scene with a patient (started moving).

Data Collection Question: What is the date and time the EMS unit left the scene with the patient to transport to the hospital?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Notes for Abstraction:

- Enter the date/time the EMS vehicle left the scene to transport the patient to your hospital. This is commonly identified as "unit left scene" on the Patient Care Report.
    - EMS Unit Left Scene Date and Time: eTimes.09 Nemsis/ePCR
- If date/time is unknown or not documented, select "Unknown".

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Last Known Well as Documented by EMS
Required Field

Collected For: Documentation of Time Last Known Well

Definition: Record the estimated date and time the patient was last known to be well or in their usual state of health as documented by EMS. This is described or estimated by the patient, family,and/or bystanders. This information is critical in determining the patient's eligibility for fibrinolytic treatment.

Data Collection Question: What is the date and time the patient was last known to be normal or usual state of health, as documented by EMS?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown
- Checkbox for "unknowable"

Notes for Abstraction:

- Select "Unknown" if the date/time was not documented,
- If date/time last known to be well could not be determined by the responding EMS personnel (e.g., no family member present and patient was unresponsive or confused), then select "Unknowable" since this information was not available to EMS.
    - This information may be available in the Electronic patient care report under the patient History. Review the "Barriers to Patient Care" and "Date/Time Last Known Well."
    - 'eSituation.18 - Date/time Last Known Well - NEMSIS/ePCR

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Discovery of Stroke Symptoms by EMS
Optional Field

Collected For: Documentation of Time Discovery of Stroke Symptoms

Definition: The EMS documented date and time the symptoms were first noticed (or were discovered). This is described or estimated by the patient, family, and/or healthcare professionals.

Data Collection Question: What is the date and time the patient's symptoms were discovered per EMS documentation?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknowable

Notes for Abstraction:

- This should be the time that patient was discovered to have symptoms. This date and time should not vary. If the event was witnessed, then the last known well date and time and the discovery date and time will be identical. Record both, even if identical
- If the date/time of discovery of stroke symptoms could not be determined by the responding EMS personnel (e.g., no family member present and patient was unresponsive or confused), then select "Unknowable" since this information was not available to EMS.
- **Example:** If a patient goes to bed at 10:00 p.m. (2200) without symptoms and wakes up at 7:00 a.m. with symptoms. Time last known well = 10:00 p.m. (2200), Symptom onset is unknown since it occurred during sleep, Discovery of symptoms = 7:00 a.m. (0700)
- Discovery of Stroke Symptoms as Documented by EMS: eSituation.01 - Date/Time of Symptom Onset - NEMSIS/ePCR

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Date/Time pre-notification provided to hospital (Pre-arrival Alert)
Optional Field

Note: The field is enabled if the field, "How patient arrived at your hospital" = EMS from home/scene or Mobile Stroke Unit AND "Advanced notification by EMS/Mobile Stroke Unit? (Traditional Responder or Mobile Stroke Unit)" = YES. Otherwise, field will remain greyed out.

Collected For: GWTG Pre-notification, Advanced Notification with Triage Findings

Definition: Record the date and time advanced notification was provided by the responding EMS unit to the receiving hospital.
The intent of this element is to determine when prehospital notification is provided, does that shorten the time until the initial computed tomography (CT) or magnetic resonance imaging (MRI) in comparison to those patients that arrive to the hospital without prior notification.

Data Collection Question: What is the date and time the pre-notification and pre-arrival alert was provided to the receiving hospital by the EMS unit?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Unknown

Notes for Abstraction:

- This information can be found in the patient care report under the "Disposition" section. Look for "Date/Time of Destination Prearrival Alert or Activation" or "Destination Team Pre-Arrival Alert or Activation."
- "Date/Time of Destination Prearrival Alert or Activation: eDisposition.25

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Additional Information provided as part of pre-notification?
Optional Field

Note: The field is enabled if the field, "How patient arrived at your hospital" = EMS from home/scene or Mobile Stroke Unit **AND** "Advanced notification by EMS/Mobile Stroke Unit? (Traditional Responder or Mobile Stroke Unit)" = YES. Otherwise, field will remain greyed out.

Collected For: GWTG Advanced Notification with Triage Findings

Definition: Record any additional information that was provided by the responding EMS unit as part of pre-notification to the hospital.

Data Collection Question: What additional information was provided to the receiving hospital by the EMS unit during prenotification?

Format: Multi-select

Allowable Values:

- Blood Glucose Value
- Blood Pressure
- LKW time per EMS
- Result of Stroke/Screen Severity Score
- Seizure Activity

Notes for Abstraction:

- The information can be found in the patient care report, under the "patient's narrative" section or on call taker notes in the ED.

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- electronic patient care record (e-PCR)

Blood Glucose level (mg/dL)
Required Field

Collected For: Evaluation of Blood Glucose

Definition: Record the earliest blood glucose value recorded by EMS personnel in the pre-hospital care setting. In the event, the glucometer reads "low" or "high" as opposed to displaying a value, select the appropriate "too low" or "too high" response option.

Data Collection Question: What is the earliest blood glucose value recorded by EMS prior to patient being transported to your hospital?

Format: Single-select. Dropdown menu.

Allowable Values:

- Numerical value to be entered (0-999 mg/dL)
- Too high
- Too low
- Glucometer not available
- Patient refused
- Not Documented/Not required to perform

Notes for Abstraction:

- Multiple values must be available for this field. Enter the earliest blood glucose value take by EMS.
  - If available, a numerical value should be entered.
  - However, if the glucometer being used reads "low" or "high" as opposed to displaying a value, select the appropriate "too low" or "too high" response option.
- If there is documentation that a glucometer was not available, select "glucometer not available."Â
- If no documentation of glucose checked or unknown, select "Unknown"Â
- If the EMS provider was not required to perform Blood Glucose per protocol, select "Not Documented"
- If patient did not allow EMS personnel to check their glucose level, select "Patient refused."
  - This information is located under the Vital Signs section: Blood Glucose Level.

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Initial Blood Pressure by EMS
Optional Field

Definition: Record the earliest blood pressure (BP) recorded by EMS personnel in the pre-hospital care setting.

Data Collection Question: What is the earliest BP reading recorded by EMS prior to patient being transported to your hospital?

Format: Single-select. Text field and checkbox.

Allowable Values:

- Systolic acceptable range: 50 - 200 mm Hg.
- Diastolic acceptable range: 30 - 160 mm Hg.
- ND

Note to Abstractor:

- Record the earliest blood pressure recorded by EMS personnel.
  - This information can be found in the patient care record under the "Vitals section." Look for "SBP (Systolic Blood Pressure)" and "DBP (Diastolic Blood Pressure)."
  - eVitals.06 - SBP (Systolic Blood Pressure)
  - eVitals.07 - DBP (Diastolic Blood Pressure)
- If the information is not available in the patient's medical record, including the EMS run sheet, select the checkbx for "not documented." Please note that the acronym "ND" refers to Not Documented.Â

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Suspected stroke?
Required Field

Collected For: All GWTG Pre-hospital Care Measures

Definition: Record whether there is documentation that the patient was identified as a possible stroke in the providers primary or secondary impression.

Data Collection Question: Is there documentation that the patient was identified as a possible stroke in the providers primary or secondary impression?

Format: Single-select. Radio button.

Allowable Values:

- Yes
- No
- Not Documented

Notes for Abstraction:

- **Yes:** There is documentation that the providers primary impression was that of stroke.
- **No:** There is documentation of a primary impression, but the provider's primary impression did not mention stroke or signs and symptoms of stroke.
- **Not Documented:** There is no documentation relating to the providers impression.
- This information can be found in the Patient Care Report under the "Situation" section. Review the Provider's Primary Impression, Provider's Secondary Impressions.
  - Providers Primary Impression: eSituation.11
  - Providers Secondary Impressions: eSituation.12

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Indicate the stroke screen tool used
Required Field

Collected For: GWTG Stroke Screen Performed and Reported

Definition: Indicate the type of stroke screen used by EMS. Numerous prehospital neurological assessment tools have been developed to accurately identify stroke patients, which facilitates appropriate field treatment, prearrival notification,

and routing to an appropriate hospital destination.

Data Collection Question: Which prehospital stroke assessment was used by EMS personnel in the field?

Format: Single-select. Drown-down.

Allowable Values:

- BE FAST
- CPSS
- DPSS
- FAST
- LAPSS
- MASS
- Med PACS
- MEND
- mLAPSS
- OPSST
- ROSIER
- Other - if selected, please specify
- Stroke screen tool used, but tool used is unknown
- No stroke screen tool used
- Not Documented

Notes for Abstraction:

- If multiple screenings completed, capture the first positive stroke screen prior to hospital arrival.
- In the patient care report, this data may be found under the "Vitals" section. Look for "Stroke Scale Type," which will display the type of stroke scale used.
    - Stroke Scale Type: eVitals.30
- **Examples of nationally recognized pre-hospital stroke screens include:**
    - **Cincinnati Prehospital Stroke Scale (CPSS)**
        - The CPSS was derived from a simplification of the 15-item National Institutes of Health Stroke Scale (NIHSS) and evaluates the presence or absence of facial palsy, asymmetric arm weakness, and speech abnormalities in potential stroke patients. Speech is tested by asking the patient to repeat the sentence, "The sky is blue in Cincinnati," and abnormality is reported if the patient slurs words, says the wrong words, or is unable to speak.
    - **Miami Emergency Neurologic Deficit (MEND)**
        - The components on the MEND exam are provided in a checklist format checklist that provides key information. It incorporates the three components of the Cincinnati Prehospital Stroke Scale (CPSS) as well as additional components from the NIH Stroke Scale (NIHSS). MEND does not indicate large vessel occlusion.
        - The information for "MEND" can be found in the vital signs or in the narrative section of the EMS Run Report. Look for "Stroke Scale Type."
    - **Los Angeles Prehospital Stroke Scale (LAPSS)**
        - The LAPSS is a longer instrument consisting of 4 history items, a blood glucose measurement, and 3 examination items designed to detect unilateral motor weakness (facial droop, hand grip, and arm strength).
    - **Modified LAPSS**
    - **Vision, aphasia, and neglect (VAN)**
    - **Melbourne Ambulance Stroke Scale (MASS)**
    - **LA County Department of Social Services (DPSS)**
    - **Ontario Prehospital Stroke Screening Tool**
    - **Face Arm Speech Time (FAST)**
        - The FAST contains 3 key elements (facial weakness, arm weakness, and speech disturbance) from the CPSS, but avoids the need to repeat a sentence as a measure of speech, instead using assessment of language ability by the paramedic during normal conversation with the patient.
    - Recognition of Stroke in the Emergency Room Scale (ROSIER)

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Source: Diagnostic Accuracy of Stroke Referrals From Primary Care, Emergency Room Physicians, and Ambulance Staff Using the Face Arm Speech Test. Joseph Harbison, Omar Hossain, Damian Jenkinson, John Davis, Stephen J. Louw and Gary A. Ford. Stroke. 2003;34:71-76, originally published January 1, 2003.

Stroke Screen Outcome
Conditionally Required Field
Note: If "Indicate the stroke screen tool used" has a screen tool selected, then this is a required field.

Collected For: GWTG Stroke Screen Performed and Reported

Definition: Early detection of stroke is essential to triage patients with a possible stroke. This is critical to improve patient outcomes and decrease long term disability. Record the result of the stroke screening (positive or negative). If the stroke screen is performed multiple times, capture the positive screen.

Data Collection Question: Did the results of the screening tool used by EMS indicate patient was positive or negative for a stroke?

Format: Single-select. Drown-down.

Allowable Values:

- Positive
- Negative
- Not Documented

Notes for Abstraction:

- This information can be found in the vital signs or in the narrative section of the EMS Run Report. Look for "Stroke Scale Score."
    - Stroke Scale Score - eVitals.29/ePCR
- If the stroke screen is performed multiple times, capture the positive screen.
- **Positive:** Select this option if the results indicate the patient's symptoms were suggestive of stroke.
- **Negative:** Select this option if the results indicated the patient's symptoms were not suggestive of stroke or if the results are inconclusive.
- **Not Documented:** Select this option if the results of the screening tool used are not in the medical record.

Suggested Data Sources:

- EMS Run Sheet - narrative section or vital signs
- Admission data
- Electronic patient care report (e-PCR)

Indicate the severity scale used

Collected For: GWTG Stroke Severity Screen Performed and Reported

Definition: A severity assessment could help EMS personnel determine the presence of a large vessel occlusion, which could potentially impact where the patient is directly transported (e.g., endovascular-capable facility rather than a primary stroke center). Record the type of stroke scale used.

Data Collection Question: Which severity scale assessment was used by EMS personnel?

Format: Drown Down

Allowable Values:

- CPSSS/CSTAT
- FAST ED
- LAMS
- MPSS
- RACE
- VAN
- Other - when selected, please specify
- Severity scale used, but tool used is unknown
- No severity scale used
- Not Documented

Notes for Abstraction:

- Examples of nationally recognized pre-hospital stroke severity assessment include:
    - Cincinnati Prehospital Stroke Severity Scale (CPSSS)
    - Lost Angeles Motor Scale (LAMS)
    - Field Assessment Stroke Triage for Emergent Destination (FAST ED)
    - Rapid Arterial Occlusion Evaluation (RACE)
    - Maria Prehospital Stroke Scale (MPSS)
    - Stroke Vision, Aphasia, Neglect (VAN)

Suggested Data Sources:

- EMS Run Sheet - narrative section or vital signs
- Admission data
- Electronic patient care report (e-PCR)

Positive for LVO
Optional Field

Note: If "Indicate the severity scale used?" = Not Documented, then the field, "Positive for LVO?" is greyed out.

Definition: A severity assessment could help EMS personnel determine the presence of a large vessel occlusion stroke. Record if the result of the stroke severity assessment indicated the presence of a large vessel occlusion (LVO).

Data Collection Question: Did the results of the severity assessment indicate patient had a large vessel occlusion?

Format: Single-select. Dropdown menu.

Allowable Values:

- Yes
- No
- Not Documented

Notes for Abstraction:

- Response for this field is based on the predictive value of the severity scale used.
- **Yes:** Select this option if results of the severity assessment indicate patient was positive for a large vessel occlusion.
    - CPSSS/CSTAT ≥ 2 indicates the presence of large vessel occlusion (LVO) in patients
    - FAST ED ≥ 4 indicates the presence of large vessel occlusion (LVO) in patients
    - LAMS ≥ 4 indicates the presence of large vessel occlusion (LVO) in patients
    - RACE ≥ 5 indicates the presence of large vessel occlusion (LVO) in patients
- **No:** Select this option if results of the severity assessment indicate patient did not have a large vessel occlusion
- **Not Documented:** Select this option if the results of the severity assessment used are not in the medical record.

Suggested Data Sources:

- EMS Run Sheet - narrative section or vital signs
- Admission data
- Electronic patient care report (e-PCR)

If severity scale assessment completed, enter total score
Conditionally Required Field

Note: The field is enabled if "stroke screen tool" = positive AND "severity screen scale used" has a tool indicated. If "severity screen scale used" has the response "not documented" selected, then this field will not be enabled.

Collected For: GWTG Stroke Severity Screen Performed and Reported

Definition: Record the findings of the severity scale used to assess the patient exhibiting stroke-like symptoms

Data Collection Question: If the severity scale was completed, what was the total score?

Format: Text Field

Allowable Values:

- **Below are the acceptable ranges based on the severity tool assessment selected by user:**
    - CPSSS/CSTAT: numerical values Range: 0 to 4
    - FAST ED: numerical values Range: 0 to 9
    - LAMS: numerical values Range: 0 to 5
    - RACE: numerical values Range: 0 to 9
    - OTHER: numerical values Range: 0 to 99

Notes for Abstraction:

- Values entered outside the given range will cause the tool to display an error on the screen.
- The information for this field can be found in the patient care report, under the "Patient Assessment" or in the narrative section Look for "Stroke Scale Type" or "Stroke Scale Score."
- **Not Documented:** Select this option if the severity score is unknown or not in the patient's medical record.

Suggested Data Sources:

- EMS Run Sheet - narrative section or vital signs
- Admission data
- Electronic patient care report (e-PCR)

How was destination decision made?
Optional Field

Collected For: GWTG Pre-hospital care measures

Definition: Select the reason the unit chose to deliver or transfer the patient to the destination.

Data Collection Question: What was the reason for EMS delivering the patient to the destination?

Format: Single-select. Radio button

Allowable Values:

- Directed to a designated stroke center by protocol
- Directed to the nearest facility by protocol
- Patient/Family choice
- Online medical direction

- Closest facility
- Other
- Unknown/Not documented

Notes for Abstraction:

- This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination." eDisposition.20
  - Reason for Choosing Destination: eDisposition.20 NEMSIS/ePCR
- Select **Directed to a designated stroke center by protocol** when patients are transported to a designated stroke center based on an established protocol that is directing the destination be based on the presumed stroke diagnosis. EMS services are often required by either state or regional EMS medical advisory committees to transport patients to specific destinations unless otherwise directed.
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicating reason is "Regional Specialty Center."
- Select **Directed to the nearest facility by protocol** when patients are transported to the nearest facility based on an established protocol that is directing the destination to the nearest facility. EMS services are often required by either state or regional EMS medical advisory committees to transport patients to specific destinations unless otherwise directed.
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicated reason is "Protocol"
- Select **Patient/Family choice** when documentation indicates that a patient or family's choice of facility determined the hospital destination (differently than EMS would have otherwise chosen).
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicated reason is "Family Choice" or "Patient Choice"
- **On-line medical direction** is the medical direction provided directly to out-of-hospital providers by the medical director or designee, generally in an emergency, either on-scene or by direct voice communication. The mechanism for this contact may be radio, telephone or other means as technology develops, but must include person-to-person communication of patient status, and orders to be carried out.
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicated reason is "On-Line/On-Scene Medical Direction"
- Select **closest facility when the patient is taken to the closest hospital by default. This would be when there is no protocol in place.**
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicated reason is "Closest Facility"
- Select **Other** if the patient was transported to a hospital based on a protocol/rationale not mentioned in the current list.
  - This information can be found in the Patient Care Report under the "Disposition" section. Look for "Reason for choosing destination" and the indicated reason is "Other" or any of the other options indicated.
- Select **Unknown/ Not Documented** if there is no documentation regarding how decision to transport a patient to a hospital was made.

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

Was a Thrombolytic Checklist used?
Optional Field

Collected For: Use of Thrombolytic Checklist (Coverdell)

Definition: A thrombolytic checklist is intended to be used in the prehospital identification of patients who may benefit from the administration of thrombolytics for acute ischemic stroke. Record if a thrombolytic checklist was used by EMS personnel when treating a patient for stroke in the field.

Data Collection Question: Was a thrombolytic checklist used in the field?

Format: Single-select.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- The information can be found in the patient care report, under the "patient's narrative" section or under the "Vitals" section. Look for "Reperfusion Checklist."
  - Reperfusion Checklist: eVitals.31 NEMSIS/ePCR
- **Yes:** A thrombolytic checklist was used
- **No/Not documented:** No thrombolytic checklist was documented

Suggested Data Sources:

- EMS Run Sheet
- Admission data
- Electronic patient care report (e-PCR)

If severity scale used, did result alter hospital destination (e.g. CSC vs. PSC)>
Optional Field

Note: This field is enabled if "severity screen scale used" has a tool indicated. Otherwise, this field will not be enabled (e.g., response option, "Not Documented" is selected).

Definition: A severity assessment could help EMS personnel determine the presence of a large vessel occlusion, which could potentially impact where the patient is directly transported (e.g., endovascular-capable facility rather than a primary stroke center). Record which severity scale tool was used.

Data Collection Question: If severity scale used did the result alter hospital destination (e.g. CSC vs. PSC)?

Format: Single Select. Drop Down.

Allowable Values:

- Yes
- No
- Not Documented

Notes for Abstraction:

- **Yes:** Select this option if the results of the severity assessment changed the hospital destination the patient was being transported to by EMS.
- **No:** Select this option if the results of the severity assessment did not change the hospital destination the patient was being transported to by EMS
- **Not Documented:** Select this option if the result of the severity assessment impacted the hospital destination is unknown or the information is not available in the patient's medical record and/or EMS Run Sheet.

Suggested Data Sources:

- EMS Run Sheet

Source Used to Obtain Prehospital Care Data
Optional Field

Note: Field will appear only for Coverdell users.

Definition: Indicate the source used to complete the data entry for the patient.

Data Collection Question: What was the primary source used to complete the EMS data questions under the "Special Initiatives" tab at your hospital?

Format: Single-select. Dropdown menu.

Allowable Values:

- Hospital records on EMS
- EMS records
- Other

Notes for Abstraction:

- Indicate the primary source utilized to complete the EMS data questions under the "Special Initiatives" tab at your hospital.
- If the EMS Run Sheet or the Electronic Patient Care Report were the main source, select "EMS Records."

Suggested Data Sources:

- ED Notes
- Admission Data
- Electronic patient care report (e-PCR)

Comments: (EMS Feedback form)

Optional Field

Definition: General comments or notes related to EMS that will appear on the EMS Feedback form if created for this record.

Format: Multi-line, 200-character text

Interfacility Transfer Layer Elements

Date/Time Transport Requested

Definition: The date and time that the EMS transport agency was contacted by the referring center to request a transport unit for transfer of this patient.

Data Collection Question: What is the date and time that the referring center initiated request for EMS transport for the patient to be transferred to the receiving center?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Notes for Abstraction:

- If the referring center contacts the EMS agency directly to request transport enter the date/time of that communication.
- If the referring hospital contacts a transfer center for coordination of requesting EMS transport as well as transfer acceptance by the receiving hospital, enter the date/time that the referring center contacted the transfer center to initiate that process.
- If multiple agencies are contacted to secure transport, enter the date/time of the first communication.

Suggested Data Sources:

- EMS Run Sheet
- Transfer Center Call Log
- Medical Record
- ER Record

Date/Time Transport Arrived

Definition: The date and time that the requested EMS transport unit arrived at the referring center.

Data Collection Question: What is the date and time that EMS transport arrived at the referring center for the patient to be transferred to the receiving center?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Suggested Data Sources:

- EMS Run Sheet
- Transfer Center Call Log
- Medical Record
- ER Record

Date/Time Transfer Requested by Referring Hospital:

Definition: The date and time that the referring center initiated the request for transfer the patient to the receiving center through direct contact or through a call center.

Data Collection Question: What is the date and time that the referring center initiated request for transfer the patient to the receiving center?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Notes for Abstraction:

- If the referring center contacts the receiving hospital directly, enter the date/time of that communication.
- If the referring hospital contacts a transfer center for coordination of requesting transfer to the receiving hospital, enter the date/time that the referring center contacted the transfer center to initiate that process.

Suggested Data Sources:

- EMS Run Sheet
- Transfer Center Call Log
- Medical Record

- ER Record

Date/Time Transfer Requested by Receiving Hospital:

Definition: The date and time that the receiving center accepted or approved the patient for transfer.

Data Collection Question: What is the date and time that the receiving center accepted or approved the patient for transfer to their facility?

Format: Single-select. Dropdown menu.

Allowable Values:

- Date and Time (military time): MM/DD/YYYY HH:MM
- Date: MM/DD/YYYY
- Unknown

Suggested Data Sources:

- EMS Run Sheet
- Transfer Center Call Log
- Medical Record
- ER Record

Mode of Transport

Definition: The mode of transport used by the inter-facility EMS agency for transfer of this patient.

Data Collection Question: What mode of transport will the inter-facility EMS agency use for transfer of this patient to the receiving center?

Format: Single-select. Radio button

Allowable Values:

- Air
- Ground Ambulance

Notes for Abstraction:

- Air includes rotor (helicopter) and fixed wing.

Suggested Data Sources:

- EMS Run Sheet
- Transfer Center Call Log
- Medical Record
- ER Record

Inter-Facility EMS Agency

Definition: Select the EMS Agency from the dropdown list that performed the inter-facility transfer for this patient.

Data Collection Question: Which EMS agency performed the inter-facility transport from your hospital?

Format: Single-select.

Allowable Values:

Notes for Abstraction:

- Enter the formal name of the inter-facility EMS agency.
    - This information can be found in the patient care report under the "Agency" section. Look for "Agency Number" or "Agency Name."
        - EMS Agency Name: eResponse.02 Nemsis/PCR
        - EMS Agency Number: eResponse.01 in Nemsis/PCR
    - If not documented or unknown, select "Unknown"

Suggested Data Sources:

- EMS Run Sheet
- Admission Data
- Electronic patient care report (e-PCR)

Discharge Tab

- ***Discharge Information***
    - ***Discharge Date/Time***
    - ***Was antithrombotic therapy prescribed at hospital discharge?***

- ***Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering antithrombotic therapy hospital discharge?***
- ***Was anticoagulation therapy prescribed at hospital discharge?***
- ***Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering anticoagulation therapy hospital discharge?***
- ***Was a statin medication prescribed at discharge?***

Check if patient is part of a sample

Check if patient is part of a sample

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

Notes:

1. 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.
2. Required for transmission of aggregate data to The Joint Commission. Refer to the ORYX Technical Implementation Guide for more information.

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'.

Arrival Information Demographics OPTIONAL: First Name

The patient's first name

Format:
Length: 30

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

OPTIONAL: Last Name

The patient's last name

Format:
Length: 60

Allowable Values:
Enter the patient's first 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

Race

Collected For:STK, CSTK, ASR

Definition:Documentation of the patient's race.

Question:What is the patient's race?

Format:Multi-Select

- 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/Pacific Islander
- 5 - Retired Value (Native Hawaiian or Pacific Islander): Effective 01-01-2021
- 6 - Retired Value: Effective 07-01-05
- 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," "Latino," and "Spanish" 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, or Spanish 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, or Spanish include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican-American, Puerto Rican, and South or Central American.

Suggested Data Sources:

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

Additional Notes / Guidelines for Abstraction:

- **Inclusion:**
- **Black or African American:** A person having origins in any of the black racial groups of Africa (e.g., Jamaican, Haitian, Nigerian, Ethiopian, Somali, Negro)
- **American Indian or Alaska Native:** A person having origins in any of the original peoples of North America (including Central America) and who maintains tribal affiliation or community attachment (e.g., any recognized tribal entity in North and Central America, Native American).
- **Asian or Pacific Islander:** 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, the Pacific Islands, Native Hawaiian, Guam, Samoa, Thailand, and Vietnam.
- **White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (e.g., German, Irish, English, Italian, Lebanese, Egyptian).

Zip Code

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.

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

Homeless See instructions for Zip Code above. **Insurance**

Source of Payment

Collected For: STK, CSTK, ASR

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

Format: Single Select

Allowable Values:

- Medicare
- Non-Medicare

Notes for Abstraction:

- If Medicare is listed as the primary, secondary, tertiary, or even lower down on the list or 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 aliens
  - Aliens paroled into a United States port of entry for the purpose of receiving eligible services
  - Mexican citizens permitted to enter the United States for not more than 72 hours under the authority of a laser visa, issued in accordance with the requirements of regulations prescribed under the Immigration and Nationality Act

Suggested Data Sources:

- Face sheet
- UB-04

Additional Notes / Guidelines for Abstraction:

- Black Lung
- End Stage Renal Disease (ESRD)
- Medicare Fee for Service (includes DRF or PPS)
- Medicare HMO/ Medicare Advantage
- Medicare Part A, B, C, D, F, G, K, L, M and N
- Medicare Secondary Payer
- Railroad Retirement Board (RRB)

HIC Number

Definition: Enter the Health Insurance Claim (HIC) Number and/or the Medicare Beneficiary Identifier (MBI)

The Health Insurance Claim Number was created by the Centers for Medicare and Medicare Services (CMS). The HIC number is an SSN-based number used to identify people with Medicare and to administer the CMS program.

In April 2018, to reduce medical identity theft, CMS started mailing newly-designed Medicare cards with the new Medicare Beneficiary Identifier, or Medicare Number. People enrolling in Medicare for the first time will be among the first to get the new cards, no matter where they live. Current Medicare beneficiaries will get their new cards on a rolling basis over the coming months. CMS will continue to accept the Health Insurance Claim Number (HICN) through the transition period.

Question: What is the patient's Health Insurance Claim Number or the Medicare Beneficiary Identifier?

Allowable Values: 1 through - 999,999

General Rules

- No embedded dashes or spaces or special characters
- Must have both alpha and numeric characters
- Alpha characters must be upper case
- Length cannot be more than 12 or less than 7 characters
- For alphanumeric values, do not allow all numeric values to be 9's For example do not allow 1 alpha + 999999999, etc.

If First Character is Numeric

Suffix rules:

- If the **first character is numeric, (0-9)**, then the first 9 characters must be numeric.
  For example:

HIC # length - Rule

- 10 - 9 numeric + 1 alpha
- 11 - 9 numeric + 1 alpha + 1 numeric Or 9 numeric + 2 alpha

If First Character is Alpha

Prefix rules:

- If the **first character is alpha**, there must be 1-3 alpha characters followed by 6 or 9 numbers.

For example:

HIC # length - Rule

- 7 - 1 alpha + 6 numeric
- 8 - 2 alpha + 6 numeric
- 9 - 3 alpha + 6 numeric
- 10 - 1 alpha + 9 numeric
- 11 - 2 alpha + 9 numeric
- 12 - 3 alpha + 9 numeric
- • *Patient HIC#* is required for data transmission of all cases that have a standard HIC#.

Suggested Data Sources:

- Emergency department record
- Face sheet
- UB-04

History & Last Known Well

REQUIRED FOR TJC: Was there physician/APN/PA documentation of a diagnosis, signed ECG tracing, or a history of ANY atrial fibrillation/flutter in the medical record?

Documentation by a physician/APN/PA that the patient has a history of **ANY** atrial fibrillation (e.g., remote, persistent, or paroxysmal) or atrial flutter OR a diagnosis or signed ECG tracing of **ANY** atrial fibrillation or flutter.

Y (Yes) There is physician/APN/PA documentation of a diagnosis or a history of **ANY** atrial fibrillation/flutter.

N (No) There is no physician/APN/PA documentation of a diagnosis or a history of **ANY** atrial fibrillation/flutter, OR unable to determine from medical record documentation.

Notes for Abstraction:

- If there is a documented history or diagnosis of **ANY** condition (e.g., remote, persistent, or paroxysmal) described in the definition statement, select "Yes."
- If there is documentation of atrial fibrillation or flutter on a signed ECG, select "Yes."
- If there is a diagnosis of atrial fibrillation or flutter anywhere in the medical record, or documentation of a past history of atrial fibrillation or flutter anywhere in the medical record, select "Yes."
- If there is physician/APN/PA documentation of any of the following examples, disregard and continue to review the medical record for a confirmed diagnosis. If no other documentation exists, select "No."
  - "suspected/suspicion of atrial fibrillation or flutter"
  - "rule out atrial fibrillation/flutter"
  - "questionable atrial fibrillation/flutter"
  - "possible atrial fibrillation/flutter"
- If there is documentation of a history of an ablation procedure for atrial fibrillation/flutter, select "Yes."
- If there is documentation of a history of atrial fibrillation or flutter that terminated within 8 weeks following CABG, select "No."
- If there is documentation of a history of transient and entirely reversible episode of atrial fibrillation or flutter due to thyrotoxicosis, select "No."

Suggested Data Sources: PHYSICIAN/APN/PA DOCUMENTATION ONLY

- Discharge instruction sheet
- Discharge summary
- History and physical
- ECG report
- Holter monitor report
- Problem list
- Progress Notes
- Transfer sheet

Guidelines for Abstraction:

Inclusion	Exclusion
• None	• PAC • Paroxysmal atrial tachycardia • Paroxysmal supraventricular tachycardia • PAT • Premature atrial contraction • PST

REQUIRED FOR TJC: Is there documentation that the patient was on a lipid-lowering medication prior to hospital arrival?

Documentation in the medical record that the patient was on a lipid-lowering medication prior to hospital arrival.

Y (Yes) There is documentation that the patient was on a lipid-lowering medication prior to hospital arrival.

N (No) There is no documentation that the patient was on a lipid-lowering medication prior to hospital arrival or unable to determine from medical record documentation.

Notes for Abstraction:

• If there is documentation that the patient was prescribed a lipid-lowering medication at home but there is indication it was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost), select "Yes".

• When conflicting information is documented in a medical record, select "Yes."

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Medication reconciliation form
- Nursing admission assessment
- Progress notes
- Transfer sheet

Inclusion Guidelines for Abstraction: Refer to Appendix C, Table 1.6 for a comprehensive list of Lipid-Lowering Medications.

Exclusion Guidelines for Abstraction: None

REQUIRED FOR TJC & ASR: Is there documentation that the date and time of last known well was witnessed or reported?

The date and time prior to hospital arrival at which it was witnessed or reported that the patient was last known to be without the signs and symptoms of the current stroke or at his or her baseline state of health.

Y (Yes) There is documentation that the date and time of last known well was witnessed or reported.

N (No) There is no documentation that the date and time of last known well was witnessed or reported , OR date, time, or both date and time are unknown.

Notes for Abstraction:

- Select "Yes" if BOTH a Date and a Time *Last Known Well* are documented.
- Select “No” if there is ANY physician/APN/PA documentation that *Last Known Well* is “UNKNOWN.” Documentation must explicitly state that the *Last Known Well* is unknown/uncertain/unclear. Documentation that time of symptom onset is unknown/uncertain/unclear is also acceptable when *Time Last Known Well* is not documented. If *Last Known Well* is not explicitly documented as unknown, **do not make inferences** (e.g. do not assume that patient woke with stroke so *Last Known Well* unknown unless explicitly documented).
    - If one physician documents a *Time Last Known Well* and another documents time of symptom onset unknown, select “Yes.”
    - If physician documents a *Time Last Known Well* and nurse/EMS documents Last Known Well unknown, select “Yes.”
    - If one physician documents *Last Known Well* unknown and another documents a *Time Last Known Well*, select “No.”
      EXCEPTION
    - If the physician documents *Last Known Well* as unknown and the same physician crosses out unknown or mentions in a later note that *Last Known Well* is now known with a time documented, select “Yes.”
    - If the physician documents *Last Known Well* or stroke/symptom onset unknown as a *Reason for Not Initiating IV Thrombolytic* and the *Last Known Well* is also on a Code Stroke Form or elsewhere in the medical record, “unknown” should be disregarded and “Yes” selected.
- If the *Time Last Known Well* is clearly greater than 2 hours prior to hospital arrival AND **no time** is documented, select “No.”
  Example:
  “Patient OK last night.” Select “No” because no other documentation of a specific time/time range/time reference was present in the medical record and the time is required for the *Time Last Known Well*.
- If the only *Time Last Known Well* is documented as a time immediately before hospital arrival without a specific time range in minutes, e.g., “symptoms started just prior to ED arrival,” select “Yes.”
- If there is no documentation that *Last Known Well* or stroke signs/symptoms occurred prior to hospital arrival but there is documentation that *Last Known Well* first occurred after Arrival Time (e.g., in-house stroke), select “No.”

Suggested Data Sources:

- Emergency department records
- History and physical
- Nursing Notes
- Nursing flow sheets
- Progress notes
- Medication administration record (MAR)

- Transfer sheet
- Ambulance record
- Code Stroke form/template
- IV flow sheets

Guidelines for Abstraction:

Inclusion	Exclusion
Signs and Symptoms of Stroke	Delay in Stroke Diagnosis
• Sudden numbness or weakness of the face, arm or leg, especially on one side of the body • Sudden confusion, trouble speaking or understanding • Sudden trouble seeing in one or both eyes • Sudden trouble walking, dizziness, loss of balance or coordination • Sudden severe headache	

REQUIRED FOR TJC & ASR: What was the date/time at which the patient was last known to be well or at his or her baseline state of health?

The date/time prior to hospital arrival at which the patient was last known to be without the signs and symptoms of the current stroke or at his or her baseline state of health.

- MM = Month (01 - 12)
- DD = Day (01 - 31)
- YYYY = Year (20xx)
- 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 p.m. - 23:59

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20XX, review supporting documentation to determine if the *Date Last Known Well* 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 *Date Last Known Well.*

Example: Midnight or 24:00 on 11-24- 20XX = 00:00 on 11-25- 20XX .

Notes for Abstraction:

- **Enter the date associated with the Time Last Known Well.**
- If the *Date Last Known Well* is unable to be determined from medical record documentation, select "UTD."
  EXCEPTION:
  If the only *Date Last Known Well* is documented as a time immediately before hospital arrival without a specific time range in minutes, e.g., Ã¢€œsymptoms started just prior to ED arrival,Ã¢€Â and no other documentation mentioning time last known well is available in the medical record, use the *Arrival Time* for *Date Last Known Well*.
- 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) **and** no other documentation is found that provides this information, the abstractor should select "UTD."
  - Example:
    - Documentation indicates the *Date Last Known Well* was 03- **42** -20XX. No other documentation in the medical record provides a valid date. Since the *Date Last Known Well* is outside of the range listed in the Allowable Values for "Day," it is not a valid date and the abstractor should select "UTD."
  - **Note:** Transmission of a case with an invalid date as described above will be rejected from the Joint Commission's Data Warehouse. Use of "UTD" for *Date Last Known Well* allows the case to be accepted into the warehouse.

- If the date last known well is documented as one **specific date** and entered as *Date Last Known Well* on a "Code Stroke" form or stroke-specific electronic template, enter that date as the *Date Last Known Well*. Documentation of *Date Last Known Well* on a stroke-specific form or template should be selected regardless of other dates last known well documented elsewhere in the medical record.
- References in relation to Arrival Date are acceptable (e.g., today, tonight, this evening, and this morning). The Date Last Known Well and the Arrival Date may be the same date or a different date.
  Examples:
  - "Wife reports patient normal this evening until approximately 9 PM." Hospital arrival is 0030 on 12-10-20xx." Date Last Known Well is 12-09-20xx.
  - "Patient states he felt perfectly fine earlier today. At noon, he began to have trouble seeing." Hospital arrival is 3:59 PM on 12-10-20xx." Date Last Known Well is 12-10-20xx.
- If a reference to date last known well is documented without a specific date, enter that date for the Date Last Known Well. If multiple dates are documented, select the earliest date.
  Examples:
  - "Patient last known well today (day of arrival)." Select Arrival Date for Date Last Known Well.
  - "Patient normal yesterday (day before arrival) documented in H&P and consult note documents that patient was last known to be well on Monday (two days prior to arrival)." Select Monday's date for Date Last Known Well.
- The Time Last Known Well must be a time prior to the patient's Arrival Time. Do no tuse times after hospital arrival for Time Last Known Well.
- 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 Last Known Well is unable to be determined from medical record documentation, select "UTD."
  EXCEPTION:
  If the only Time Last Known Well is documented as a time immediately before hospital arrival without a specific time range in minutes, e.g., "symptoms started just prior to ED arrival," and no other documentation mentioning time last known well is available in the medical record, use the Arrival Time for Time Last Known Well.
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error (not a valid time) **and** no other documentation is found that provides this information, the abstractor should select "UTD."
  Example:
  Documentation indicates the Time Last Known Well was 3300. No other documentation in the medical record provides a valid time. Since the time last known well is outside of the range listed 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 Joint Commission's Data Warehouse. Use of "UTD" for *Time Last Known Well* allows the case to be accepted into the warehouse.
- If the Time Last Known Well is documented as one specific time and entered as Time Last Known Well on a "Code Stroke" form or stroke-specific electronic template, enter that time as the Time Last Known Well. Documentation of Time Last Known Well on a
  stroke-specific form or template should be selected regardless of other times last known well documented elsewhere in the medical record.
  Exceptions:
  - ANY physician/APN/PA documentation that Last Known Well /onset of signs/symptoms is unknown/uncertain/unclear takes precedence over specific time on "Code Stroke" form.
  - Crossing out of a specific time on a Code Stroke Form and a specific time documented on the same or different Code Stroke Form, use the specific time that is not crossed out.
  - A specific time on a Code Stroke Form and another time reference documented, e.g. <8 hours, on the same or different Code Stroke Forms, use the specific time.
  - Multiple specific times on the same or different Code Stroke Forms, use abstraction guidelines for multiple Times Last Known Well.
  - Unable to determine if a form is a Code Stroke Form, continue to review the medical record for Time Last Known Well documentation in other sources.
- A Code Stroke Form is used by the stroke team or ED staff to document the acute stroke process.
- See the inclusion list for acceptable terms used for a Code Stroke Form. The list is not all-inclusive.
- Time Last Known Well on a Code Stroke Form may be documented by a nurse.
- If the time last known well is documented as being a specific number of hours prior to arrival (e.g., felt left side go numb 2 hours ago) rather than a specific time, subtract that number from the time of ED arrival and enter that time as the time last known well.
- If the time last known well is noted to be a range of time prior to ED arrival (e.g., felt left side go numb 2 - 3 hours ago), assume the maximum time from the range (e.g., 3 hours), and subtract that number of hours from the time of arrival to compute the time last known well.
- If the time is noted to be "less than" a period of time prior to ED arrival, assume the maximum range.
  Example:
  Time Last Known Well less than one hour ago. Subtract one hour from the time of arrival to compute time last known well.
- If both the time last known well and the time of symptom onset are documented, select the Time Last Known Well.
  Examples:
  - H&P states, "Patient watching TV with family and complained of blurred vision in both eyes at 8:30 PM." ED MD notes, "Patient normal at 8:30 PM." Time Last Known Well is 2030.
  - "Patient was doing well at 4:30 PM -- noticed difficulty speaking around 6 PM." Time Last Known Well is 1630.

    - Patient normal at 2200 before going to bed. Awoke at 0200 with headache and took two aspirin before returning to sleep. OK at 0700 and went to work. Felt confused, unable to speak without slurring at 0800. Time Last Known Well is 0700.
- If the only time documented is time of symptom onset without mention of when the patient was last known well, use the time of symptom onset for time last known well.
  Example:
  "Sudden onset headache one hour before ED arrival," documented by EDMD. Arrival time 19:24. No other documentation referencing time last known well available in medical record. Time Last Known Well 18:24.
- If there are multiple times of last known well documented in the absence of the Time Last Known Well explicitly documented on a "Code Stroke" form, use physician documentation first before other sources, e.g., nursing, EMS.
  Example:
  "Patient last seen normal this morning at 1000" per H&P. ED nurse documented 09:50 as time last well. Time Last Known Well is 1000.
- If multiple times of last known well are documented by different physicians or by the same provider, user the earliest time recorded
- If there is documentation of one or more episodes of stroke symptoms AND documentation of symptom resolution between episodes, use the time of the most recent (last) episode prior to arrival, regardless if all symptoms resolved prior to arrival.
  Examples:
    - "Patient reported right hand paresthesia two days ago that resolved spontaneously after a few minutes. New onset of symptoms today around 0700 involving right arm and right leg." Time Last Known Well is 0700.
    - "Wife states that he was having trouble with slurred speech and confusion yesterday. Symptom free this morning. Return of symptoms with facial droop noted around noon." Time Last Known Well is 1200.
    - "Wife noticed slurred speech at 8:30 last night. Without symptoms early this morning. Wife noticed slurred speech again at 0900 during breakfast conversation." Time Last Known Well is 0900.
    - "Wife noticed slurred speech at 8:30 last night. Symptom-free this morning. Came to ED to get checked out." Time Last Known Well is 2030.

Suggested Data Sources:

- Ambulance Record
- Code Stroke form/template
- Emergency Department records
- History and Physical
- IV flow sheets
- Medication administration record
- Nursing flow sheets
- Progress notes
- Transfer sheet

Inclusion Guidelines for Abstraction:

Signs and Symptoms of Stroke

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache

Code Stroke Form

- Stroke Activation Form
- Stroke Alert Form
- Stroke Assessment Form
- Stroke Intervention Form
- Stroke Rapid Response Form
- Thrombolysis Checklist
- tPA Eligibilty Form

Exclusion Guidelines for Abstraction:

Code Stroke Form

- Stroke Education Form
- Core Measure Form

REQUIRED FOR TJC & COMPREHENSIVE: When is the earliest physician/APN/PA documentation of comfort measures only?

NOTE: Determination of hospital day in this question differs from the rest of the PMT

Indicate if there is any evidence that the patient's care was restricted to "Comfort Measures Only" prior to the end of hospital day 2.

1. Day 0 or 1
2. Day 2 or after
3. Timing unclear
4. Not Documented/UTD

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).

- **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).
- **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+).
- **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.
- **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

Thrombolytics

Is there documentation that IV alteplase was initiated at this hospital?

Collected For: STK, CSTK, ASR

Definition: Intravenous (IV) alteplase was initiated at this hospital. IV alteplase converts plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Question: Is there documentation that IV alteplase was initiated at this hospital?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes - IV alteplase was initiated at this hospital.
- No - IV alteplase was not initiated at this hospital, OR unable to determine from medical record documentation.
- When a "hang time" or "infusion time" for IV alteplase is documented in the medical record, select "Yes."
- If IV alteplase was administered at another hospital and patient was subsequently transferred to this hospital, select "No."
- If the patient was transferred to this hospital with IV alteplase infusing, select "No."

Suggested Data Sources:

- Emergency Department Record
- Progress Notes

- IV Flow Sheets
- Medication Records

Additional Notes / Guidelines for Abstraction

- Inclusion:
  - Only FDA-Approved Thrombolytic Therapy for Stroke:
    - Activase
    - Alteplase
    - IV t-PA
    - Recombinant t-PA Tissue Plasminogen Activator
    - T-PA Tissue Plasminogen Activator
  - Reasonable Alternative to Alteplase
    - Tenecteplase
    - TNK
    - TNKase
- Exclusion:
  - Intra-arterial (IA) t-PA
  - Thrombolytic agents other than alteplase or tenecteplase
  - Thrombolytic administration to flush, open or maintain patency of central line, e.g., PICC line

REQUIRED FOR TJC & ASR: Is there documentation on the day of or day after hospital arrival of a reason for extending the initiation of IV thrombolytic to 3 to 4.5 hours of Time Last Known Well?

Reasons for extending the initiation of IV thrombolytic to 3 to 4.5 hours.

- Documentation of treatment to lower blood pressure prior to IV thrombolytic initiation
- Documentation of patient/family refusal of IV thrombolytic which was recanted/reversed prior to IV thrombolytic initiation
- Documentation of cardiac arrest, respiratory arrest, cardiopulmonary resuscitation, defibrillation, or intubation in the emergency department prior to IV thrombolytic initiation
- Other reasons for extending the initiation of IV thrombolytics to 3 to 4.5 hours documented by physician/APN/PA or pharmacist.

Y (Yes) There is documentation on the day of or the day after hospital arrival of a reason for extending the initiation of IV thrombolytic to 3 to 4.5 hours of Time Last Known Well.

N (No) There is no documentation on the day of or day after hospital arrival of a reason for extending the initiation of IV thrombolytic to 3 to 4.5 hours of Time Last Known Well, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- **Documentation of a reason for extending the initiation of IV thrombolytic to 3 to 4.5 hours must be done on the day of or the day after hospital arrival and must refer to the time period prior to IV thrombolytic initiation. It is not necessary to review documentation outside of this timeframe to answer this data element.**
- "Other" reasons for extending the initiation of IV thrombolytic therapy to 3 to 4.5 hours must be documented by a physician/APN/PA or pharmacist.
  EXCEPTION:
  Nursing documentation of a telemedicine/teleneurology reason for extending the initiation of IV thrombolytic therapy to 3 to 4.5 hours is acceptable.
- The following are acceptable as **stand-alone reasons** for extending the initiation of IV thrombolytics -- IV thrombolytic therapy linkage is not needed:
  - Documentation of treatment to lower blood pressure, (e.g. nicardipine, hydralazine), prior to IV thrombolytic initiation
  - Documentation of patient/family refusal of IV thrombolytic which was recanted/reversed prior to IV thrombolytic initiation
  - Documentation of cardiac arrest, respiratory arrest, cardiopulmonary resuscitation, defibrillation, or intubation in the emergency department prior to IV thrombolytic initiation
- **If "other" reasons are not mentioned in the context of IV thrombolytics, do not make inferences** (e.g., do not assume that IV thrombolytic was initiated in 3 to 4.5 hours because patient consent could not be obtained from family in 3 hours unless explicitly documented).
  - Documentation to initiate IV thrombolytic for worsening symptoms following documentation to not give tPA because symptoms resolved after hospital arrival, select “Yes.”
  - NIHSS score of 1 on arrival. IV thrombolytic ordered 4 hours after hospital arrival, select “No.”
- **System reasons are not acceptable as "other" reasons, regardless of any linkage to IV thrombolytics:**
  - Equipment-related (e.g., CT not available, IV pump malfunction)
  - Pharmacy-related (e.g., thrombolytic agent not available from pharmacy)
  - Staff-related (e.g., unable to contact consulting MD)

Suggested Data Sources:

- Consultation notes

- Emergency room records
- History and physical
- Medical transport records
- Medication reconciliation form
- Nursing notes
- Physician orders
- Progress Notes
- Transfer forms

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
- Delay in hospital arrival greater than 2 hours
- Delay in stroke diagnosis
- Hold IV thrombolytic without a documented reason
- No IV access

Did the patient receive IV or IA thrombolytic (alteplase) therapy at this hospital or within 24 hours prior to arrival?

Collected For: STK, ASR

Definition There is documentation in the record that the patient received intravenous (IV) or intra-arterial (IA) alteplase at this hospital or within 24 hours prior to arrival. Antithrombotic administration within 24 hours of IV alteplase may be contraindicated.

Question: Did the patient receive IV or IA alteplase at this hospital or within 24 hours prior to arrival?

Format: Single Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Yes - Patient received IV or IA alteplase therapy at this hospital or within 24 hours prior to arrival.
- No - Patient did not receive IV or IA alteplase at this hospital or within 24 hours prior to arrival , OR unable to determine from medical record documentation.
- Documentation in the medical record must reflect that the patient received IV or IA thrombolytic (alteplase) therapy at this hospital or within 24 hours prior to arrival, (i.e., drip and ship).
- If there is documentation that the patient received IV or IA alteplase and mechanical thrombectomy at this hospital or within 24 hours prior to arrival, select “Yes”.
- If there is documentation that the patient received mechanical thrombectomy only with no IV or IA alteplase given, select “No”.

Suggested Data Sources:

- Emergency Department Record
- Progress Notes
- Transfer Sheet
- Medication Records
- Medical Transport Records

Additional Notes / Guidelines for Abstraction:

- Inclusion:
  - Only FDA-Approved Thrombolytic Therapy for Stroke:
    - Activase
    - Alteplase
    - IV t-PA
    - Recombinant t-PA Tissue Plasminogen Activator
    - tPA Tissue Plasminogen Activator
  - Reasonable Alternative to Alteplase
    - Tenecteplase
    - TNK
    - TNKase
- Exclusion:
  - Heparin Flush
  - Heparin lock
  - Intra-arterial (IA) tenecteplase
  - Thrombolytic agents other than alteplase or tenecteplase
  - Thrombolytic administration to flush, open or maintain patency of central line, e.g., PICC line

REQUIRED FOR TJC & ASR: Is there documentation on the day of or day after hospital arrival of a reason for not initiating IV thrombolytic?

Reasons for not initiating IV thrombolytic.

- Documentation that intravenous (IV) or intra-arterial (IA) thrombolytic was initiated by a transferring hospital or emergency medical staff (EMS) prior to hospital arrival
- Documentation of patient/family refusal of IV thrombolytic
- Documentation of a National Institutes for Health Stroke Scale (NIHSS) score of zero in the emergency department
- Documentation by a physician/APN/PA that the patient has “no neurological deficit” or “normal neurological exam” in the emergency department
- Documentation of cardiac arrest, respiratory arrest, cardiopulmonary resuscitation, defibrillation, or intubation in the emergency department
- Comfort Measures Only documented by a physician/APN/PA
- Other reasons for not initiating IV thrombolytics documented by physician/APN/PA or pharmacist

IV thrombolytics convert plasminogen to plasmin, which in turn breaks down fibrin and fibrinogen, thereby dissolving thrombus.

Y (Yes) There is documentation on the day of or the day after hospital arrival of a reason for not initiating IV thrombolytic.

N (No) There is no documentation on the day of or day after hospital arrival of a reason for not initiating IV thrombolytic, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- **Documentation of a reason for not initiating IV thrombolytic must be done on the day of or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.**
- "Other" reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist.
  EXCEPTION:
  Nursing documentation of a telemedicine/teleneurology reason for not initiating IV thrombolytic therapy is acceptable.
- The following are acceptable as **stand-alone reasons** for not initiating IV thrombolytics -- IV thrombolytic therapy linkage is not needed:
  - Documentation that intravenous (IV) or intra-arterial (IA) thrombolytic was initiated by a transferring hospital or EMS prior to hospital arrival
  - Documentation of patient/family refusal of IV thrombolytic
  - Documentation of NIHSS score of zero in the emergency department
  - Documentation of cardiac arrest, respiratory arrest, cardiopulmonary resuscitation, defibrillation, or intubation in the emergency department
  - Comfort Measures Only documented by a physician/APN/PA
- **If "other" reasons are not mentioned in the context of IV thrombolytics, do not make inferences** (e.g., do not assume that IV thrombolytic was not initiated because of a bleeding disorder unless explicitly stated in the documentation). **Acceptable examples** (select "Yes"):
  - "Patient with Stage IV cancer -- No alteplase"
  - "Increased risk of bleeding -- hold alteplase for further evaluation"
  - **Unacceptable examples** (select "No"):
  - "Age"
  - "Stroke too mild"
  - "Stroke too severe"
  - “Symptoms resolving”
  - “No gait deficit”
  - “Metastatic brain tumor”
- Documentation by a physician/APN/PA or pharmacist that the patient is not a alteplase candidate, not eligible for IV thrombolytic therapy, thrombolytics are not indicated, or alteplase is contraindicated, without mention of the underlying reason, is acceptable as an "other" reason if it is documented on the day of or day after hospital arrival.
- Reason documentation which refers to intravenous medications only (e.g., "Hold IV medications," "No IVs"), is not acceptable.
- **System reasons are not acceptable as "other" reasons, regardless of any linkage to IV thrombolytics:**
  - Equipment-related (e.g., CT not available, IV pump malfunction)
  - Pharmacy-related (e.g., thrombolytic agent not available from pharmacy)

- Staff-related (e.g., unable to contact consulting MD)

Suggested Data Sources:

- Consultation notes
- Emergency room records
- History and physical
- Medical transport records
- Medication reconciliation form
- Nursing notes
- Physician orders
- Progress Notes
- Transfer forms

Inclusion Guidelines for Abstraction:

- None

Exclusion Guidelines for Abstraction:

- Delay in hospital arrival greater than 2 hours
- Delay in stroke diagnosis
- Hold IV thrombolytic without a documented reason
- No IV access

Early Antithrombotics

REQUIRED FOR TJC: Was antithrombotic therapy administered by the end of hospital day 2?

Documentation that antithrombotic therapy was administered by the end of hospital day 2. Antithrombotics include both anticoagulant and antiplatelet drugs.

Y (Yes) Antithrombotic therapy was administered by the end of hospital day 2.

N (No) Antithrombotic therapy was not administered by the end of hospital day 2, OR unable to determine from medical record documentation.

Notes for Abstraction:

- To compute end of hospital day 2, count the arrival date as hospital day 1. If antithrombotic therapy was administered by 11:59 P.M of hospital day two, answer "Yes" for this data element. Documentation of antithrombotic administration must be found within the timeframe of arrival to the end of hospital day 2. It is not necessary to review documentation outside of this timeframe to answer this data element.
- For antithrombotic therapy administered in the Emergency Department/observation area prior to the end of hospital day 2, select "Yes."
- Antithrombotic therapy administration information must demonstrate actual administration of the medication.
  - Example: Do not use physician orders as they do not demonstrate administration of the antithrombotic therapy (in the ED this may be used if signed/initialed by a nurse).
- When antithrombotic is noted as a "home" or "current" medication or documentation indicates that it was received prior to hospital arrival only, select "No".
- Lovenox SQ for VTE prophylaxis (i.e. enoxaparin SQ 40 mg once daily; enoxaparin SQ 30 mg Q12 hours) is not sufficient. If no other antithrombotic therapy is administered by the end of hospital day 2, select “No.”

Suggested Data Sources:

- Emergency department record
- Medication administration record (MAR)
- Progress notes
- Nursing flow sheet
- Nursing notes

Excluded Data Sources:

- Emergency medical system (EMS) or ambulance documentation
- Any documentation dated/timed prior to hospital arrival or after hospital day 2.

Inclusion Guidelines for Abstraction:

Refer to Appendix C, Table 8.2 for a list of medications used for antithrombotic therapy.

Exclusion Guidelines for Abstraction:

- Heparin SQ
- Heparin Flush
- Hep-Lock

REQUIRED FOR TJC & ASR: Is there documentation by a physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist in the medical record of a reason for not administering antithrombotic therapy by end of hospital day 2?

Reason for not administering antithrombotic therapy by end of hospital day 2.

- .Other reasons documented by physician/APN/PA or pharmacist.

Y (Yes) There is physician/APN/PA or pharmacist documentation of a reason for not administering antithrombotic therapy by end of hospital day 2.

N (No) There is no physician/APN/PA or pharmacist documentation of a reason for not administering antithrombotic therapy by end of hospital day 2 or unable to determine from the medical record documentation.

Notes for Abstraction:

- Documentation for allowable value "Yes" must be found within the timeframe of arrival to the end of hospital day 2. It is not necessary to review documentation outside of this timeframe to answer this data element.
- To compute end of hospital day 2, count the arrival date as hospital day 1. If a reason for not administering antithrombotic therapy was documented by 11:59 P.M of hospital day 2, select "Yes" for this data element.
- Reasons for not administering antithrombotic therapy must be documented by a physician/APN/PA or pharmacist with one exception: Patient/family refusal of any form of
  antithrombotic therapy (e.g., “ASA refused”, “Patient refusing antithrombotic therapy”) may
  be documented by a nurse. However, it must be documented in the timeframe of arrival to
  the end of hospital day 2.
  Example: Patient arrived on 03/01/XX. Nursing notes on 03/02/20XX indicates that patient
  refused antithrombotic therapy, select “YES”.
- **If reasons are not mentioned in the context of antithrombotics, do not make inferences** (e.g., do not assume that antithrombotic therapy was not administered because of a bleeding disorder unless documentation explicitly states so).
  - Reasons must be explicitly documented (e.g., “Hemorrhagic transformation – do not give aspirin”, “Active GI bleed – antithrombotic therapy contraindicated”, “H/O bleeding disorder – anticoagulation therapy contraindicated”, “Low platelet count - do not give antiplatelet medications”, “No ASA” [no reason given]).
  - Consider the terms “anticoagulant”, “antiplatelet”, and “blood thinners” synonymous with antithrombotic therapy. Physician/APN/PA or pharmacist documentation, (e.g., “no blood thinners”, “no anticoagulant medications”, “no antiplatelet medications”), select “Yes”
  - For patients with an order for ANY antithrombotic that was NOT administered without a documented reason or administered after day 2, select “No” Example: Patient has documentation of an order for aspirin on day 2. No documentation that aspirin was administered by end of day 2. No documentation of a hold or discontinuation of the aspirin order or other documented reason,select “No”
  - Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs the day of or day after hospital arrival constitutes a “clearly implied” reason for not administering antithrombotic therapy by end of hospital day 2. A hold/discontinuation of all P.O. medications counts if an antithrombotic was on order at the time of the notation.
  - For patients with an order for ANY antithrombotic that was NOT administered without a documented reason or administered after day 2, select ?#8364;œNo.?#8364;? Example: Patient has documentation of an order for aspirin on day 2. No documentation that aspirin was administered by end of day 2. No documentation of a hold or discontinuation of the aspirin order or other documented reason, select ?#8364;œNo.?#8364;?
- NPO is NOT a reason for not administering antithrombotic therapy without explicit documentation that no antithrombotic medication should be given. Another route of administration can be used.
- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication can be ordered.
- For patients on warfarin therapy prior to hospital arrival, but placed on hold the day of or after arrival due to “high INR”, select “Yes”.

Suggested Data Sources:

ONLY PHYSICIAN/APN/PA OR PHARMACIST DOCUMENTATION OF A REASON FOR NOT ADMINISTERING ANTITHROMBOTIC THERAPY:

- Consultation notes
- Emergency room records
- History and physical
- Medication reconciliation form
- Progress Notes

SUGGESTED DATA SOURCES FOR PATIENT/FAMILY REFUSAL (other than physician/APN/PA or pharmacist documentation of a reason for not administering

antithrombotic therapy as noted above):

- Medication Administration Record
- Nurses notes

Excluded Data Sources: Any documentation dated/timed prior to hospital arrival or after hospital day 2.

Guidelines for Abstraction:

Inclusion	Exclusion
None	▪ Delay in stroke diagnosis
Refer to Appendix C, Table 8.2 for a comprehensive list of Antithrombotic Medications	

Labs

REQUIRED FOR TJC: Was the LDL-cholesterol (LDL-c) measured within the first 48 hours or 30 days prior to hospital arrival?

LDL-cholesterol (LDL-c) measurement obtained within the first 48 hours or 30 days prior to hospital arrival . Lipid levels drawn in the first 48 hours after a major vascular event are reliable predictors of baseline lipid profiles, but after that time may become unreliable.

Y (Yes) LDL-c was measured within the first 48 hours or 30 days prior to hospital arrival.

N (No) LDL-c was not measured within the first 48 hours or 30 days prior to hospital arrival, OR unable to determine from medical record documentation (e.g., LDL-c testing was done within 48 hours but no values are available).

Notes for Abstraction: If there is documentation that LDL-c testing was done within the first 48 hours after hospital arrival or within 30 days prior to hospital arrival but no LDL-c values are available, select "No."

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Emergency department record
- History and physical
- Laboratory reports
- Progress notes

Guidelines for Abstraction:

Inclusion	Exclusion
LDL-cholesterol (LDL-c)	**LDL-cholesterol (LDL-c)**
• Low den lipoprotein	VLDL (very low density lipoprotein)
• Low density lipoprotein (LDL)	

REQUIRED FOR TJC: Was the patient's highest LDL-cholesterol (LDL-c) level greater than or equal to 100 mg/dL in the first 48 hours or within 30 days prior to hospital arrival?

Value of LDL-cholesterol (LDL-c) was greater than or equal to 100 mg/dL. LDL is a complex of lipids and proteins, with greater amounts of lipid than protein that transports cholesterol in the blood. High levels are associated with an increased risk of atherosclerosis and coronary heart disease.

Y (Yes) LDL-c greater than or equal to 100 mg/dL in the first 48 hours or within 30 days prior to hospital arrival.

N (No) LDL-c less than 100 mg/dL in the first 48 hours or within 30 days prior to hospital arrival, OR unable to determine from medical record documentation.

Notes for Abstraction:

- For this measurement, look for the highest level from testing done in the first 48 hours after hospital arrival or within 30 days prior to hospital arrival.
- Direct and calculated (indirect) LDL-c values are both acceptable.
- Fasting and non-fasting LDL-c values are both acceptable.
- The medical record must be abstracted as documented (taken at "face value"). When the LDL-c value documented is obviously in error (not a valid number) and no other documentation is found that provides this information, the abstractor should select "No."

- If all LDL-c value(s) from testing done within the first 48 hours after hospital arrival or within 30 days prior to hospital arrival are reported as not calculated (e.g., high triglycerides render the LDL-c calculation inaccurate), select “No”.
- If an LDL-c value on the laboratory report conflicts with that from another source of documentation for the same specimen, use the value from the laboratory report.
- If a laboratory report documents discrepant LDL-c values for the same specimen, use the highest value.
- If sources other than a laboratory report document discrepant LDL-c values for the same specimen, use the highest value.
- Disregard LDL-c values reported in units of mmol/L or any other unit of measurement other than mg/dL or mg/100 ml. If the unit of measurement is not documented, assume the unit of measurement is mg/dL.

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Emergency department record
- History and physical
- Laboratory reports
- Progress notes

Guidelines for Abstraction:

Inclusion	Exclusion
LDL-cholesterol (LDL-c)	**LDL-cholesterol (LDL-c)**
• Low den lipoprotein	VLDL (very low density lipoprotein)
• Low density lipoprotein (LDL)	

Discharge Information

REQUIRED FOR TJC & COMPREHENSIVE: Discharge Date/Time

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

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20XX)
- HH = Hour (00-23)
- MM = Minutes (00-59)
- UTD = Unable to Determine

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.
- For times that include seconds, remove the seconds and record the military time. Example: 15:00:35 would be recorded as 15:00.
- For patients who expire during the hospital stay, the time that the patient was pronounced / time of death should be used for the discharge time.
- If the patient was transferred, use the time the patient was actually transferred to another facility, not the time the order was written.
- If there are multiple times documented, use the latest time. The administrative time of discharge is acceptable if there is no documentation of a later time of discharge present in the medical record.
- If the time of discharge is unable to be determined from medical record documentation, select UTD.
- 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 format/range) 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."
Note: Transmission of a case with an invalid time as described above will be rejected from the Joint Commissions Data Warehouse. Use of UTD for Discharge Time allows the case to be accepted into the warehouse.

- 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, transferred out to another facility, or discharged to home, 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:

- 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

REQUIRED FOR TJC: Was antithrombotic therapy prescribed at hospital discharge?

Collected For: ASR-IP-3, STK-2

Documentation that antithrombotic therapy was prescribed at hospital discharge. Antithrombotics include both anticoagulant and antiplatelet drugs.

Y (Yes) Antithrombotic therapy was prescribed at hospital discharge.

N (No) Antithrombotic therapy was not prescribed at hospital discharge, OR unable to determine from medical record documentation.

Notes for Abstraction:

- In determining whether antithrombotic therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an antithrombotic that is not included in any of the other discharge medication 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 an antithrombotic in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - **Consider it a discharge medication in the absence of contradictory documentation.**
  - If documentation is contradictory (e.g., physician noted "d/c Plavix" in the discharge orders, but Plavix 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 "No").
  - Consider documentation of a hold on an antithrombotic after discharge in one location and a listing of that antithrombotic as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not **defined** (e.g., "Hold Plavix"). Examples of a hold with a defined timeframe include "Hold Plavix x2 days" and "Hold ASA until after stress test."
  - If an antithrombotic is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of antithrombotic therapy after discharge (e.g., "Hold Plavix x2 days," "Start Plavix as outpatient," "Hold Plavix"), select "No".
  - If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
    Examples:
    - Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.

        - Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
    - Disregard an antithrombotic medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on aspirin”). Documentation must be more clear that an antithrombotic was actually prescribed at discharge.
    - Disregard documentation of antithrombotic prescribed at discharge when noted only by medication class (e.g., “Antithrombotic Prescribed at Discharge: Yes” on a core measures form). The antithrombotic must be listed by name.

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Medication reconciliation form
- Physician orders
- Progress notes

Inclusion Guidelines for Abstraction:
Refer to Appendix C, Table 8.2 for a list of medications used for antithrombotic therapy.
Exclusion Guidelines for Abstraction:
• Heparin SQ
• Heparin Flush
• Hep-Lock

REQUIRED FOR TJC & ASR: Is there documentation by a physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist in the medical record of a reason for not prescribing antithrombotic therapy at hospital discharge?

Reason for not prescribing **antithrombotic** therapy at hospital discharge.

- Other reason documented by physician/APN/PA or pharmacist

Antithrombotic therapy is administered to reduce morbidity, mortality, and recurrence rate in stroke .

Y (Yes) There is documentation of a reason for not prescribing **antithrombotic** therapy at hospital discharge.

N (No) There is no documentation of a reason for not prescribing **antithrombotic** therapy at hospital discharge, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- Reasons for not prescribing antithrombotic therapy at hospital discharge must be documented by a physician/APN/PA or pharmacist with one exception: Patient/family refusal of any form of antithrombotic therapy (e.g., “ASA refused,” “Patient refusing antithrombotic therapy”) may be documented by a nurse.
- **If reasons are not mentioned in the context of antithrombotics, do not make inferences** (e.g., do not assume that antithrombotic therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
    - Reasons must be explicitly documented (e.g., Active GI bleed – antithrombotic therapy contraindicated”, “H/O bleeding disorder – anticoagulation therapy contraindicated”, “Low platelet count - do not give antiplatelet medications”,“No ASA” [no reason given]).
    - Consider the terms “anticoagulant”, “antiplatelet”, and “blood thinners” synonymous with antithrombotic therapy. Physician/APN/PA or pharmacist documentation, (e.g., “no blood thinners”, “no anticoagulant medications”, “no antiplatelet medications”), select “Yes”
    - Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs during the hospital stay constitutes a “clearly implied” reason for not prescribing antithrombotic therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral antithrombotic medication (e.g., Plavix) was on order at the time of the notation.
- **EXCEPTIONS:**
    - Documentation of a conditional hold or discontinuation of an antithrombotic medication does not count as a reason for not prescribing an antithrombotic medication at discharge (e.g., “Hold ASA if guaiac positive”, “Stop Plavix if rash persists", “No ASA for 24 hours following thrombolytic therapy”).
    - Discontinuation of a particular antithrombotic medication documented in combination with the start of a different antithrombotic medication (i.e., switch type of antithrombotic medication) does not count as a reason for not prescribing an antithrombotic medication at discharge.
      Examples:
        - “Stop Plavix” and “Start Plavix 75 mg po daily” in same physician order
        - “Change Plavix to aspirin” in progress note
        - “Do not continue after discharge” checked for Plavix and “Continue after discharge” checked for clopidogrel on a physician-signed discharge

medication reconciliation form
- Discontinuation of an antithrombotic medication at a particular dose documented in combination with the start of a different dose of that antithrombotic (i.e., change in dosage) does not count as a reason for not prescribing an antithrombotic medication at discharge.
  Examples:
  - "Stop Ecotrine 300 mg po daily" and "Start Ecotrin 325 mg po daily" in same physician order
  - "Increase Ecotrin 81 mg to 325 mg daily" in progress note
  - "Do not continue after discharge" checked for Ecotrin 300 mg and "Continue after discharge" checked for Ecotrin 325 mg on a physician-signed discharge medication reconciliation form
- Deferral of antithrombotic therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing antithrombotic therapy at discharge unless the problem underlying the deferral is also noted.
  Examples:
  - "Consulting neurologist to evaluate pt. for warfarin therapy." - select "No".
  - "Rule out GI bleed. Start ASA if OK with gastroenterology." - select "Yes".
- If there is documentation of a plan to initiate/restart antithrombotic therapy, and the reason/problem underlying the delay in starting/restarting antithrombotic therapy is also noted, this constitutes a "clearly implied" reason for not prescribing antithrombotic therapy at discharge.
  Acceptable examples (select "Yes"):
  - "Stool Occult Blood positive. May start Coumadin as outpatient."
  - "Start ASA if hematuria subsides."
- Unacceptable examples (select "No"):
  - "Consider starting Coumadin in a.m."
  - "May add Plavix when pt. can tolerate"
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no ASA due to rectal bleeding" - select "Yes," even if documentation indicates that the rectal bleeding has resolved by the time of discharge and ASA was restarted).
- Crossing out of an antithrombotic medication counts as a "clearly implied reason" for not prescribing antithrombotic therapy at discharge only if on a pre-printed form.

- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication can be ordered.
- When conflicting information is documented in a medical record, select "Yes".
- When the current record includes documentation of a pre-arrival reason for no antithrombotic threrapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the underlying reason/problem is also noted (e.g., "Coumadin held in transferring hospital due to possible GI bleed").
  - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No ASA") (e.g., "Hx GI bleeding with ASA" in transferring ED record).

Suggested Data Sources:

ONLY PHYSICIAN/APN/PA OR PHARMACIST DOCUMENTATION OF A REASON FOR NOT PRESCRIBING ANTITHROMBOTIC THERAPY AT HOSPITAL DISCHARGE:

- Consultation notes
- Discharge summary
- Emergency department record
- History and physical
- Medication administration record
- Medication reconciliation form
- Physician orders
- Progress Notes

Excluded Data Sources: Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
None	None

Refer to Appendix C, Table 8.2 for a comprehensive list of Antithrombotic Medications

REQUIRED FOR TJC: Was anticoagulation therapy prescribed at hospital discharge?

Note for Stroke Core Measures/TJC users: This field will be auto-populated based on data entry made to the element *If atrial fib/flutter or history of PAF documented, was patient discharged on*

anticoagulation? located on the Discharge Tab.

Abstractors should verify that the anticoagulant medication prescribed is acceptable for TJC stroke core measures by checking Appendix C Table 8.3 in the most current specifications manual. If the medication administered does not appear in Table 8.3, you must change the autopopulated response in order to be compliant with TJC standards.

Documentation that anticoagulation therapy was prescribed at hospital discharge. Anticoagulant medications prevent the clotting of blood.

Y (Yes) Anticoagulation therapy was prescribed at hospital discharge

N (No) Anticoagulation therapy was not prescribed at hospital discharge, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- In determining whether anticoagulation therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an anticoagulant that is not included in any of the other discharge medication 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 an anticoagulant in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge **- Consider it a discharge medication in the absence of contradictory documentation.**
    - If documentation is contradictory (e.g., physician noted "d/c Coumadin" or "hold Coumadin" in the discharge orders, but Coumadin 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 "No").
    - Consider documentation of a hold on an anticoagulant after discharge in one location and a listing of that anticoagulant as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not **defined** (e.g., “Hold Coumadin”). Examples of a hold with a defined timeframe include “Hold Coumadin x2 days” and “Hold warfarin until after stress test.”
    - If an anticoagulant is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of anticoagulation therapy after discharge (e.g., “Hold Coumadin x2 days,” “Start Coumadin as outpatient,” “Hold Coumadin”), select “No”.
    - If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
      Examples:
    - Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
    - Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
- Disregard an anticoagulant medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on dabigatran”). Documentation must be more clear that an anticoagulant was actually prescribed at discharge.
- Disregard documentation of anticoagulant prescribed at discharge when noted only by medication class (e.g., “Anticoagulant Prescribed at Discharge: Yes” on a core measures form). The anticoagulant must be listed by name.

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Medication reconciliation form
- Physician orders
- Progress notes

Inclusion Guidelines for Abstraction:
Refer to Appendix C, Table 8.3 for a list of medications used for anticoagulation therapy.

Exclusion Guidelines for Abstraction:

• Heparin SQ
• Heparin Flush
• Hep-Lock

REQUIRED FOR TJC: Is there documentation by a physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist in the medical record of a

reason for not prescribing anticoagulation therapy at hospital discharge?

Note for Stroke Core Measures/TJC users: This field will be auto-populated based on data entry made to the element *If atrial fib/flutter or history of PAF documented, was patient discharged on anticoagulation***?** located on the Discharge Tab.

Reason for not prescribing **anticoagulation** therapy at hospital discharge.

- Other reason documented by physician/APN/PA or pharmacist

The administration of anticoagulation therapy, unless there are contraindications, is an established effective strategy in preventing recurrent stroke in high stroke risk-atrial fibrillation patients with TIA or prior stroke.

Y (Yes) There is documentation of a reason for not prescribing **anticoagulation** therapy at hospital discharge.

N (No) There is no documentation of a reason for not prescribing **anticoagulation** therapy at hospital discharge, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- Reasons for not prescribing anticoagulation therapy at hospital discharge must be documented by a physician/APN/PA or pharmacist with one exception: Patient/family refusal of any form of anticoagulation therapy (e.g., “Coumadin refused,” “Patient refusing anticoagulation therapy”) may be documented by a nurse.
- **If reasons are not mentioned in the context of anticoagulation therapy, do not make inferences** (e.g., do not assume that anticoagulation therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
  - Reasons must be explicitly documented (e.g., “Active GI bleed – anticoagulation therapy contraindicated”, “No warfarin” [no reason given].).
  - Consider the term “blood thinners” synonymous with anticoagulant therapy. Physician/APN/PA or pharmacist documentation, e.g., “no blood thinners”, select “Yes”.
  - Physician/APN/PA or pharmacist documentation of a hold on an anticoagulant medication or discontinuation of an anticoagulant medication that occurs during the hospital stay constitutes a “clearly implied” reason for not prescribing anticoagulation therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral anticoagulant medication (e.g., warfarin) was on order at the time of the notation.
    EXCEPTIONS:
    - Documentation of a conditional hold or discontinuation of an anticoagulant medication does not count as a reason for not prescribing an anticoagulant medication at discharge (e.g., “Hold Coumadin if guaiac positive”, “Stop warfarin if rash persists”, “No warfarin for 24 hours following thrombolytic therapy”).
    - Discontinuation of a particular anticoagulant medication documented in combination with the start of a different anticoagulant medication (i.e., switch type of anticoagulant medication) does not count as a reason for not prescribing an anticoagulant medication at discharge.
      Examples:
      - “Stop warfarin” and “Start warfarin 2 mg po daily” in same physician order
      - “Change Coumadin to Pradaxa” in progress note
      - “Do not continue after discharge” checked for warfarin and “Continue after discharge” checked for Coumadin on a physician-signed discharge medication reconciliation form
    - Discontinuation of an anticoagulant medication at a particular dose documented in combination with the start of a different dose of that anticoagulant (i.e., change in dosage) does not count as a reason for not prescribing an anticoagulant medication at discharge.
      Examples:
      - “Stop warfarin 5 mg po daily” and “Start warfarin 2.5 mg po daily” in same physician order
      - “Decrease dabigatran 150 mg po BID to 75 mg po BID” in progress note
      - “Do not continue after discharge” checked for Coumadin 5 mg and “Continue after discharge” check for Coumadin 2.5 mg on a physician-signed discharge medication reconciliation form
  - Deferral of anticoagulation therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing anticoagulation therapy at discharge unless the problem underlying the deferral is also noted.
    Examples:
    - “Consulting neurologist to evaluate pt. for warfarin therapy.” - select “No”.
    - “Rule out GI bleed. Start Coumadin if OK with gastroenterology.” - select "Yes”.
  - If there is documentation of a plan to initiate/restart anticoagulation therapy, and the reason/problem underlying the delay in starting/restarting anticoagulation therapy is also noted, this constitutes a “clearly implied” reason for not

prescribing anticoagulation therapy at discharge.
Acceptable examples (select “Yes”):
    - “Stool Occult Blood positive. May start Coumadin as outpatient.”
    - “Start warfarin if hematuria subsides.”
- Unacceptable examples (select “No”):
    - “Consider starting Coumadin in a.m.”
    - “May add warfarin when pt. can tolerate”
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating “no warfarin due to rectal bleeding” - select “Yes,” even if documentation indicates that the rectal bleeding has resolved by the time of discharge and warfarin was restarted).
- Crossing out of an anticoagulant medication counts as a "clearly implied reason" for not prescribing anticoagulation therapy at discharge only if on a pre-printed form.

- An allergy or adverse reaction to one type of anticoagulant would NOT be a reason for not administering all anticoagulants. Another medication can be ordered.
- When conflicting information is documented in a medical record, select “Yes”.
- When the current record includes documentation of a pre-arrival reason for no anticoagulation threrapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
    - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the underlying reason/problem is also noted (e.g., “Coumadin held in transferring hospital due to possible GI bleed”).
    - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No warfarin") (e.g., "Hx GI bleeding with warfarin" in transferring ED record).
- See the inclusion list for acceptable reasons for not prescribing anticoagulation therapy. The list is not all-inclusive.
- An allergy or adverse reaction to one type of anticoagulant would NOT be a reason for not administering all anticoagulants. Another medication can be ordered.

Suggested Data Sources:

ONLY PHYSICIAN/APN/PA OR PHARMACIST DOCUMENTATION OF A REASON FOR NOT PRESCRIBING ANTICOAGULATION THERAPY AT HOSPITAL DISCHARGE:

- Consultation notes
- Discharge summary
- Emergency department record
- History and physical
- Medication administration record
- Medication reconciliation form
- Physician orders
- Progress Notes

Excluded Data Sources: Any documentation dated/timed after discharge, except discharge summary.

Guidelines for Abstraction:

Inclusion	Exclusion
None	None
Refer to Appendix C, Table 8.3 for a comprehensive list of Anticoagulant Medications.	

Refer to Appendix C, Table 8.3 for a comprehensive list of Anticoagulant Medications

REQUIRED FOR TJC: Was a statin medication prescribed at discharge?

Documentation that a statin medication was prescribed at hospital discharge. Statins are a class of pharmaceutical agents that modify LDL cholesterol by blocking the action of an enzyme in the liver which is needed to synthesize cholesterol thereby decreasing the level of cholesterol circulating in the blood.

Y (Yes) Statin medication prescribed at discharge.

N (No) Statin medication not prescribed at discharge, OR unable to determine from medical record documentation.

Notes for Abstraction:

- In determining whether a statin medication was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list a statin medication that is not included in any of the other discharge medication 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 statin medication in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - **Consider it a discharge medication in the absence of contradictory documentation.**
- If documentation is contradictory (e.g., physician noted "d/c lovastatin " in the discharge orders, but lovastatin 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 "No").
- Consider documentation of a hold on a statin medication after discharge in one location and a listing of that statin medication as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not defined (e.g., “Hold lovastatin”). Examples of a hold with a defined timeframe include “Hold Vytorin x2 days” and “Hold lovastatin until ALT/AST normalize.”
- If a statin medication is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of a statin medication after discharge (e.g., “Hold Vytorin x2 days,” “Start statins as outpatient,” “Hold lovastatin”), select “No”.
- If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
  Examples:
  - Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
  - Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
- Disregard a statin medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on lovastatin”). Documentation must be more clear that a statin was actually prescribed at discharge.
- Disregard documentation of statin prescribed at discharge when noted only by medication class (e.g., “Statin Prescribed at Discharge: Yes” on a core measures form). The statin must be listed by name.

Suggested Data Sources:

- Consultation notes
- Discharge summary
- Medication reconciliation form
- Physician orders
- Progress notes

Inclusion Guidelines for Abstraction:
Refer to Appendix C, Table 8.1 for a comprehensive list of Statin Medications.
Exclusion Guidelines for Abstraction:
None

Stroke Core Measure Additional Comments

Outpatient

- ***Encounter Date***
- ***E/M Code***
- ***What is the date/time the patient departed from the emergency department?***
- ***For discharges on or after 07/01/2012: What is the patient's discharge code from the outpatient setting?***

REQUIRED FOR TJC, ASR: Encounter Date

Collected For: ASR-OP-1, ASR-OP-2, STK-OP-1

Element definition from Specifications Manual for Joint Commission National Quality Measures

Definition: The documented month, day, and year the patient arrived in the outpatient setting.

Suggested Data Collection Question: What was the date the patient arrived in the outpatient setting?

Format:

Length: 10 - MM-DD-YYYY

Type: Date

Occurs: 1

Allowable Values:

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (2008-Current Year)

Notes for Abstraction:

- The intent of this data element is to determine the date the patient arrived in the outpatient setting.
- UTD is NOT an allowable value.
- Consider the outpatient encounter date as the earliest documented date the patient arrived in the applicable hospital outpatient setting. If the patient had preoperative laboratory or other screening tests performed prior to the date of surgery, use the date the patient arrived for surgery

Suggested Data Sources:

- Emergency department record
- Outpatient medical record

Guidelines for Abstraction:

Inclusion:

- None

Exclusion:

- * Preoperative tests or screening

REQUIRED FOR ASR: E/M Code

Collected For: ASR-OP-1, ASR-OP-2, STK-OP-1

Element definition from Specifications Manual for Joint Commission National Quality Measures

Suggested Data Collection Question: What was the E/M code documented for this outpatient encounter?

Format:

Length: 5

Type: Alphanumeric

Occurs: 1

Allowable Values:

- Select the E/M code from Appendix A, Table 1.0

Notes for Abstraction:

- None

Suggested Data Sources:

- Outpatient medical record

Guidelines for Abstraction:

Inclusion:

- Refer to Appendix A, Table 1.0 E/M Codes

Exclusion:

- None

REQUIRED FOR TJC, ASR: What is the date/time the patient departed from the emergency department?

Collected For: ASR-OP-1, STK-OP-1

Element definition from Specifications Manual for Joint Commission National Quality Measures

The month, day, year, and time (military time represented in hours and minutes) at which the patient departed from the emergency department.

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20xx)
- UTD = Unable to Determine

Time must be recorded in military 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
- 511:59 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 or 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- The medical record must be abstracted as documented (taken at "face value"). When the date is obviously an error (not a valid format/range or outside of the parameters of care [after the *Discharge Date*]) **and** no other doucmentation 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 12-12-20xx 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 QIO 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 you are able to determine the date from other documentation that is acceptable (e.g., you are able to identify from documentation the patient arrived and was transferred on the same day).
- If there is documentation the patient left against medical advice and it cannot be determined what time the patient left against medical advice, select "UTD".
- For patients who are placed into observation services, use the date of the physician/APN/PA order for observation services as the *ED Departure Date*.
- The intent of this guidance is to abstract the date that the patient is no longer under the care of the ED. When a patient is placed into observation, their clinical workflow may vary from patients who are not placed into observation prior to departure from the ED, so the observation order may be used instead of the actual *ED Departure Date*.
- If there is a discharge date listed on a disposition sheet this may be abstracted as *ED Departure Date*.
- The inclusion and exclusion lists are not to be considered comprehensive lists of inclusions and exclusions.

- 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, under the care of emergency department services, or awaiting transport to services/care.
- The medical record must be abstracted as documented (taken at "face value"). When the date is obviously an error (not a valid format/range) **and** no other doucmentation 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 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 QIO 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 documented time the patient physically left the emergency department.

  Examples:

  - *ED nursing notes documented the "ED Departure Time" as 1030, however, the vital signs are documented as 1040. There is no documentation to support that the patient was in the ED at 1040. Enter 1030 for ED Departure Time.*
  - *ED nursing notes document patient departed from the ED at 0730. ED nursing notes document medication administration at 0735. Enter 0730 for ED Departure Time.*
- *If the time the patient departed is unable to be determined from medical record documentation, select "UTD."*

  Example:

  - *ED nursing notes document the patient departed from the ED at 1225. Nursing notes document medication administration at 1245. Physician progress notes document assessment at 1310. There is substantial documentation to support that the patient was in the ED after documented departure and no additional documented time of ED departure. Enter UTD for ED Departure Time.*
- *When more than one emergency department departure/discharge time is documented abstract the latest time.*

  Example:

  - *ED nursing notes document patient was transferred to floor at 1800 and transport documentation states that patient left the ED via stretcher at 1815. There are multiple times documented for departure. Use the later time of 1815 as ED Departure Date.*
  - *ED nursing notes contain documentation that the patient departed the ED at 0500. ED record contains documentation of medication administration at 0510 and that the patient departed the ED at 0620. Physician notes contain documentation of an assessment at 0540. As there are multiple departure times documented, enter 0620 for ED Departure Time as it is the latest time documented*
- *If patient expired in the ED, use the time of death as the departure time.*
- *Do not use the time the discharge order was written because it may not represent the actual time of departure.*
- *If ED Departure Time is documented prior to arrival abstract UTD.*
- *For patients who are placed in observation services, use the time of the physician/APN/PA order for observation for ED Departure Time.*
- *The intent of this guidance is to abstract the time that the patient is no longer under the care of the ED. When a patient is placed into observation, their clinical workflow may vary from patients who are not placed into observation prior to departure from the ED, so the observation order may be used instead of the actual ED Departure Time.*
- *If there is a discharge time listed on a disposition sheet, this may be used for ED 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*

Guidelines for Abstraction:

Inclusion

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

Exclusion

- *Report Called Time*
- *Disposition Time*

REQUIRED FOR TJC, ASR: For discharges on or after 07/01/2012: What was the patient's discharge code from the outpatient setting?

Element definition from Specifications Manual for Joint Commission National Quality Measures

Data Element Name: Discharge Code

Collected For: ACHFOP, ASR-OP-2, STK-OP-1

Definition: The final place or setting to which the patient was discharged from the outpatient setting.

Data Collection Question: What was the patient's discharge code from the outpatient setting?

Format

Length: 2

Type: Alphanumeric

Occurs: 1

Allowable Values:

- *1 Home*
- *2 Hospice - Home*
- *3 Hospice - Health Care Facility*
- *4a Acute Care Facility - General Inpatient Care*
- *4b Acute Care Facility - Critical Access Hospital*
- *4a Acute Care Facility - Cancer Hospital or Children's Hospital*
- *4d Acute Care Facility - Department of Defense or VeteranƟs Administration*
- *5 Other Health Care Facility*
- *6 Expired*
- *7 Left Against Medical Advice/AMA*
- *8 Not Documented or Unable to Determine (UTD)*

Notes for Abstraction:

- *If documentation is contradictory, use the latest documentation. If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract.*

  Example:

  - *Nursing discharge note documentation reflects that the patient is being discharged to "XYZ" Hospital. The Social Service notes from the day before discharge further clarify that the patient will be transferred to the rehab unit of "XYZ" Hospital, select value "5".*
- *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 "4a".*
- *When determining whether to select value 7 ("Left Against Medical Advise"):*
  - *A signed AMA form is not required for this data element, but in the absence of a signed form, the medical record must contain physician or nurse documentation that the patient left against medical advice or AMA.*
  - *For this data element, a signed AMA form is not required.*
  - *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"?#8364;"Select value 7).
- *Physician order written to discharge to home. Nursing notes reflect that the patient left before discharge instructions could be given; select value 1.*

Suggested Data Sources:

- *Discharge instruction sheet*
- *Emergency Department Record*
- *Nursing discharge notes*
- *Physician orders*
- *Progress notes*
- *Transfer record*

Excluded Data Sources:

- *UB-04*

>Inclusion Guidelines for Abstraction:

- *Assisted Living Facilities (ALFs) ?#8364;" Includes ALFs and assisted living care at nursing home, intermediate care, and skilled nursing facilities*
- *Court/Law Enforcement ?#8364;" includes detention facilities, jails, and prison*
- *Home ?#8364;" includes board and care, foster or residential care, group or personal care homes, retirement communities and homeless shelters*
- *Home with Home Health Service*
- *Outpatient Services including outpatient procedures at another hospital, Outpatient Chemical Dependency Programs and Partial Hospitalization*

Hospice - Health Care Facility (Value 3):

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

Other Health Care Facility (Value 5):

- *Extended or Immediate 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 Inpatient Rehabilitation Facility/Hospital or Rehabilitation Unit of a Hospital*
- *Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed*
- *Transitional Care Unit (TCU)*

Exclusion Guidelines for Abstraction:

- *None*

PSC Optional Fields

These fields have been added to aid in the documentation needs for TJC Primary Stroke Center Certification. Documenting this information here within the Patient Management Tool is optional, but may be helpful if another system of documentation is not already being used in your hospital to keep track of this information. The following notes were taken from The Joint Commission's 2008 Disease-Specific Care Certification Manual: Disease-Specific Care Certification Requirements for Primary Stroke Center.

Date/Time Stroke Team Activated
Date/Time Stroke Team Arrived
N/A

> ***Requirements Specific to Primary Stroke Center Certification***
>
> ***Standard PR.8, EP 1a***
>
> > ***Physicians on the acute stroke team have knowledge and expertise in the diagnosis and treatment of cerebrovascular disease.***
>
> ***Standard PR.8, EP 5a***
>
> > ***Written documentation exists for stroke team notification system and expected response times.***

Optimally, a care provider experienced in the diagnosis and treatment of stroke will be available within 15 minutes by telephone and at the bedside (as per a referring physician's request) of an acute stroke patient within the time period designated in the protocol and/or as instructed by the stroke center director. Response time adherence may also be accomplished through telemedicine and/or with a resident or other care provider in contact with an experienced stroke care provider within the time designated by the protocol.

Standard CT.2, EP 3

Evidence of stroke team log that captures stroke team response time to acute stroke patients, treatment used, and patient disposition. The log can be captured by written or electronic means and/or may be done retrospectively through medical record audits.

Date/Time Neurosurgical Services Consulted
N/A

Requirements Specific to Primary Stroke Center Certification

Standard PR.8, EP 1b

Written documentation shows evidence of neurosurgical coverage or protocol for transfer to an appropriate facility.

Standard PR.8, EP 1c

For sites that do not transfer patients for neurosurgical emergencies, the stroke center has a fully functional operating room (OR) facility and staff for neurosurgical services within two hours of the recognized need for such services.

Date/Time Brain Imaging Ordered
Date/Time Brain Imaging Reported
N/A

Requirements Specific to Primary Stroke Center Certification

Standard PR.8, EP 1d

Documentation indicates that on a 24/7 basis, 80% of acute stroke patients have a diagnostic brain image completed (and results reported to or reviewed by a member of the stroke team) within 45 minutes of it being ordered, when clinically indicated (in acute hemorrhagic or ischemic stroke resuscitation candidates).

The brain image can be obtained by CT or MRI and needs to definitively rule out/detect intra-cranial hemorrhage, or other causes of the stroke syndrome. The imaging needs to be available on site 24 hours a day/365 days a year (barring short term failure, whereby the hospital should divert potential acute stroke patients). However, review of the images does not have to be done on site. Evaluation can be performed off site by telemedicine technology.

Date/Time Lab tests Ordered
Date/Time Lab tests Completed
N/A

Requirements Specific to Primary Stroke Center Certification

Standard PR.8, EP 1e

Documentation indicates the ability to complete initial lab tests and availability on site 24/7.

Lab tests include a complete blood cell count with platelet count, coagulation studies, (PT, INR), and

blood chemistries.

Standard PR.8, EP 1f

Documentation indicates the ability to complete and report lab tests in less than 45 minutes from being ordered.

Date/Time ECG Ordered
Date/Time ECG Completed
N/A

Date/Time Chest x-ray Ordered
Date/Time Chest x-ray Completed
N/A

Requirements Specific to Primary Stroke Center Certification

Standard PR.8, EP 1g

Documentation indicates the ability to perform an ECG and chest x-ray within the same time frame as laboratory testing.

Additional comments on PSC fields

Table 1

Table 1. Antihypertensive medications (return to Antihypertensive Tx)

Medication	Class
Accupril	ACE Inhibitor
Accuretic	ACE Inhibitor and Diuretic
Acebutolol	Beta Blocker
Aceon	ACE Inhibitor
Adalat	Ca++ Blockers
Adalat CC (extended release)	Ca++ Blockers
Afeditab CR	Ca++ Blockers
Aldactazide	Diuretic
Aldactone	Diuretic
Aldoclor	Diuretic & Other anti-hypertensive med
Aldomet	Other anti-hypertensive med
Aldoril	Diuretic & Other anti-hypertensive med
Altace	ACE Inhibitor
Amiloride, Amiloride HCl	Diuretic
Amiloride/hydrochlorothiazide	Diuretic
Amlodipine	Ca++ Blockers
Amlodipine/atorvastatin	Ca++ Blocker & Statin
Apresoline	Other anti-hypertensive med
Aquatensen	Diuretic
Atacand	ARB
Atacand HCT	ARB and Diuretic
Atenolol	Beta Blocker
Atenolol Inj	Beta Blocker

Atenolol/chlorthalidone	Beta Blocker and Diuretic
Avalide	ARB and Diuretic
Avapro	ARB
Azilsartan	ARB
Azor	ARB and Calcium Channel Blocker
Benazepril, Benazepril Hydrochloride	ACE Inhibitor
Benazepril/amlodipine	ACE Inhibitors and Ca++ Channel Blocker
Benazepril/hydrochlorothiazide	ACE Inhibitors and Diuretic
Bendroflumethiazide	Diuretic
Benicar	ARB
Benicar HCT	ARB and Diuretic
Benzthiazide	Diuretic
Bepridil	Ca++ Blockers
Betapace, Betapace AF	Beta Blocker
Betaxolol	Beta Blocker
Bisoprolol, Bisoprolol Fumarate	Beta Blocker
Bisoprolol/hydrochlorothiazide	Beta Blocker and Diuretic
Brevibloc	Beta Blocker
Bumetanide	Diuretic
Bumex	Diuretic
Bystolic	Beta Blocker
Caduet	Ca++ Blocker & Statin
Calan	Ca++ Blockers
Calan SR	Ca++ Blockers
Candesartan	ARB
Candesartan/hydrochlorothiazide	ARB and Diuretic
Capoten	ACE Inhibitor
Capozide	ACE Inhibitor and Diuretic
Captopril	ACE Inhibitor
Captopril HCT, Captopril/hydrochlorothiazide	ACE Inhibitor and Diuretic
Cardene	Ca++ Blockers
Cardizem	Ca++ Blockers
Cardizem CD	Ca++ Blockers
Cardizem Monovial	Ca++ Blockers
Cardura	Other anti-hypertensive med
Carvedilol	Beta Blocker
Catapress	Other anti-hypertensive med
Catapress-TTS	Other anti-hypertensive med
Chlorothiazide	Diuretic
Chlorothiazide/methyldopa	Diuretic & Other anti-hypertensive med
Chlorthalidone	Diuretic
Clevidipine	Ca++ Blockers
Cleviprex	Ca++ Blockers

Clonidine	Other anti-hypertensive med
Clonidine hydrochloride/Chlorthalidone	Diuretic & Other anti-hypertensive med
Clonidine/chlorthalidone	Diuretic & Other anti-hypertensive med
Clorpres	Diuretic & Other anti-hypertensive med
Combipress	Diuretic & Other anti-hypertensive med
Coreg	Beta Blocker
Corgard	Beta Blocker
Corlopam	Other anti-hypertensive med
Corzide 40/5, 80/5	Beta Blocker and Diuretic
Covera-HS	Ca++ Blockers
Cozzar	ARB
Delone	Diuretic
Demadex	Diuretic
Diazoxide	Other anti-hypertensive med
Dibenzyline	Other anti-hypertensive med
Dilatrate-SR	Other anti-hypertensive med
Diltiazem	Ca++ Blockers
Diovan	ARB
Diovan HCT	ARB and Diuretic
Diucardin	Diuretic
Diupres	Diuretic
Diurese	Diuretic
Diuril	Diuretic
Doxazosin	Other anti-hypertensive med
Dyazide	Diuretic
DynaCirc CR	Ca++ Blockers
Dyrenium	Diuretic
Edarbi	ARB
Edecrin	Diuretic
Enalapril	ACE Inhibitor
Enalapril/hydrochlorothiazide, enalapril maleate/ hydrochlorothiazide	ACE Inhibitors and Diuretic
Enalaprilat	ACE Inhibitor
Enduron	Diuretic
Eplerenone	Diuretic
Eprosartan	ARB
Eprosartan/hydrochlorothiazide	ARB and Diuretic
Esidrix	Diuretic
Esmolol	Beta Blocker
Ethacrynic acid	Diuretic
Exforge	ARB and Ca++ Channel Blocker

Exna	Diuretic
Felodipine	Ca++ Blockers
Fenoldopam	Other anti-hypertensive med
Fosinopril	ACE Inhibitor
Fosinopril sodium/hydrochlorothiazide	ACE Inhibitors and Diuretic
Furocot	Diuretic
Furosemide	Diuretic
Guanabenz	Other anti-hypertensive med
Guanadrel	Other anti-hypertensive med
Guanethidine	Other anti-hypertensive med
Guanfacine	Other anti-hypertensive med
Hydralazine	Other anti-hypertensive med
Hydrochlorothiazide (HCTZ)	Diuretic
Hydrochlorothiazide/triamterene	Diuretic
HydroDIURIL	Diuretic
Hydroflumethiazide	Diuretic
Hydromox	Diuretic
Hydro-Par	Diuretic
Hygroton	Diuretic
Hylorel	Other anti-hypertensive med
Hytrin	Other anti-hypertensive med
Hyzaar	ARB and Diuretic
Imdur	Other anti-hypertensive med
Indapamide	Diuretic
Inderal, Inderal LA Long-Acting	Beta Blocker
Inderide	Beta Blocker and Diuretic
InnoPran XL	Beta Blocker
Inspra	Diuretic
Irbesartan	ARB
Irbesartan/hydrochlorothiazide	ARB and Diuretic
Ismelin	Other anti-hypertensive med
Ismo	Other anti-hypertensive med
Isochron	Other anti-hypertensive med
Isoptin SR	Ca++ Blockers
Isordil	Other anti-hypertensive med
Isordil Titradose	Other anti-hypertensive med
Isosorbide dinitrate	Other anti-hypertensive med

Isosorbide mononitrate	Other anti-hypertensive med
Isradipine	Ca++ Blockers
Labetalol	Beta Blocker
Lasix	Diuretic
Levatol	Beta Blocker
Lisinopril	ACE Inhibitor
Lisinopril/hydrochlorothiazide	ACE Inhibitors and Diuretic
Lisinopril/hydrochlorothiazide	ACE Inhibitors and Diuretic
ModifiedLo-Aqua	Diuretic
Loniten	Other anti-hypertensive med
Lopressor	Beta Blocker
Lopressor HCT, Lopressor Hydrochlorothiazide	Beta Blocker and Diuretic
Losartan	ARB
Losartan and hydrochlorothiazide	ARB and Diuretic
Lotensin	ACE Inhibitor
Lotensin HCT	ACE Inhibitors and Diuretic
Lotrel	ACE Inhibitors and Ca++ Channel Blocker
Lozol	Diuretic
Mannitol	Diuretic
Mavik	ACE Inhibitor
Maxzide	Diuretic
Metahydrin	Diuretic
Methyclothiazide	Diuretic
ModifiedMethyldopa	Other anti-hypertensive med
Methyldopa/hydrochlorothiazide	Diuretic & Other anti-hypertensive med
Metolazone	Diuretic
Metoprolol succinate	Beta Blocker
Metoprolol Tartrate	Beta Blocker
Metoprolol tartrate and hydrochlorothiazide, Metoprolol/hydrochlorothiazide	Beta Blocker and Diuretic
Micardis	ARB
Micardis HCT	ARB and Diuretic
Microzide	Diuretic
Midamor	Diuretic
Minipress	Other anti-hypertensive med
Minizide	Diuretic & Other anti-hypertensive med
Minoxidil	Other anti-hypertensive med
Moduretic	Diuretic
Moexipril, Moexipril Hydrochloride	ACE Inhibitor
Moexipril/hydrochlorothiazide, moexipril hydrochloride/hydrochlorothiazide	ACE Inhibitors and Diuretic
Monopril	ACE Inhibitor

Mykrox	Diuretic
Nadolol	Beta Blocker
Nadolol/bendroflumethiazide	Beta Blocker and Diuretic
Naqua	Diuretic
Naturetin	Diuretic
Nebivolol, Nebivolol Hydrochloride, Nebivolol HCl	Beta Blocker
Nicardipine	Ca++ Blockers
Nicardipine	Ca++ Blockers
Nifediac	Ca++ Blockers
Nifedical	Ca++ Blockers
Nifedipine	Ca++ Blockers
Nifedipine	Ca++ Blockers
Nifedipine Extended release	Ca++ Blockers
Nimodipine	Ca++ Blockers
Nimotop	Ca++ Blockers
Nisoldipine	Ca++ Blockers
Nitro-Dur	Other anti-hypertensive med
nitroglycerin	Other anti-hypertensive med
Nitrolingual	Other anti-hypertensive med
Nitropress	Other anti-hypertensive med
Nitroprusside	Other anti-hypertensive med
Nitroquick	Other anti-hypertensive med
Nitrostat	Other anti-hypertensive med
Norvasc	Ca++ Blockers
Olmesartan medoxomil/Amlodipine/ Hydrochlorothiazide	ARB and Calcium Channel Blockers and Diuretic
Olmesartan, olmesartan medoxomil	ARB
Olmesartan/amlodipine, olmesartan medoxomil/amlodipine	ARB and Calcium Channel Blocker
Olmesartan/hydrochlorothiazide, olmesartan medoxomil/hydrochlorothiazide	ARB and Diuretic
Oretic	Diuretic
Osmitrol	Diuretic
Penbutolol	Beta Blocker
Perindopril, Perindopril Erbumine	ACE Inhibitor
Phenoxybenzamine	Other anti-hypertensive med
Pindolol	Beta Blocker
Plendil	Ca++ Blockers
Polythiazide	Diuretic
Prazosin	Other anti-hypertensive med
Prazosin hydrochloride/polythiazide	Diuretic & Other anti-

	hypertensive med
Prinivil	ACE Inhibitor
Prinzide	ACE Inhibitors and Diuretic
Procardia	Ca++ Blockers
Procardia XL Extended Release	Ca++ Blockers
Proglycem	Other anti-hypertensive med
Propranolol, propranolol hydrochloride, propranolol HCl	Beta Blocker
Propranolol/hydrochlorothiazide	Beta Blocker and Diuretic
Quinapril HCl/HCT, Quinapril hydrochloride/hydrochlorothiazide, Quinapril/Hydrochlorothiazide	ACE Inhibitor and Diuretic
Quinapril, Quinapril HCl	ACE Inhibitor
Quinapril/hydrochlorothiazide	ACE Inhibitors and Diuretic
Quinaretic	ACE Inhibitors and Diuretic
Quinethazone	Diuretic
Ramipril	ACE Inhibitor
Renese	Diuretic
Resectisol	Diuretic
Reserpine	Other anti-hypertensive med
Saluron	Diuretic
Sectral	Beta Blocker
SODIUM EDECRIN	Diuretic
Sorbitrate	Other anti-hypertensive med
Sorine	Beta Blocker
Sotalol, sotalol hydrochloride, Sotalol HCL	Beta Blocker
Spironolactone	Diuretic
Spironolactone/hydrochlorothiazide	Diuretic
Sular	Ca++ Blockers
Tarka	ACE Inhibitors and Ca++ Channel Blocker
Tasosarten	ARB
Telmisartan	ARB
Telmisartan/amlodipine	ARB and Calcium Channel Blocker
Telmisartan/hydrochlorothiazide	ARB and Diuretic
Tenex	Other anti-hypertensive med
Tenoretic	Beta Blocker and Diuretic
Tenormin	Beta Blocker
Tenormin IV	Beta Blocker
Terazosin	Other anti-hypertensive med
Teveten	ARB
Teveten HCT	ARB and Diuretic
Thalitone	Diuretic
Tiazac	Ca++ Blockers
Timolol	Beta Blocker

Toprol-XL	Beta Blocker
Torsemide	Diuretic
Trandate, Trandate HCL	Beta Blocker
Trandolapril	ACE Inhibitor
Trandolapril/verapamil, trandolapril/verapamil hydrochloride	ACE Inhibitors and Ca++ Channel Blocker
Triamterene	Diuretic
Tribenzor	ARB and Calcium Channel Blockers and Diuretic
Trichlormethiazide	Diuretic
Twynsta	ARB and Calcium Channel Blocker
Uniretic	ACE Inhibitors and Diuretic
Univasc	ACE Inhibitor
Valsartan	ARB
Valsartan/aliskiren	ARB and Other anti-hypertensive med
Valsartan/amlodipine	ARB and Ca++ Channel Blocker
Valsartan/hydrochlorothiazide	ARB and Diuretic
Valturna	ARB and Other anti-hypertensive med
Vascor	Ca++ Blockers
Vaseretic	ACE Inhibitors and Diuretic
Vastoec	ACE Inhibitor
Vastoec IV	ACE Inhibitor
Verapamil extended release	Ca++ Blockers
Veraparmil	Ca++ Blockers
Verdia	ARB
Verelan	Ca++ Blockers
Verelan PM	Ca++ Blockers
Visken	Beta Blocker
Wytensin	Other anti-hypertensive med
Zaroxolyn	Diuretic
Zebeta	Beta Blocker
Zestoretic	ACE Inhibitors and Diuretic
Zestril	ACE Inhibitor
Ziac	Beta Blocker and Diuretic

Return to Antihypertensive Tx

Summary of Changes

Table 2

Table 2. Cholesterol Reducing/Controlling medications (return to Cholesterol Reducing/Controlling Tx)

Generic Name	Brand Name	Drug Class
Atorvastatin	Lipitor	Statin
Alirocumab	Praluent	PCSK9 Inhibitor
Atorvastatin + amlodipine	Caduet	Statin + calcium chann blocker (blood pressure

Bempedoic acid	NEXLETOL	PCSK9 Inhibitor
Evolocumab	Repatha	PCSK9 Inhibitor
Cholestyramine, Cholestyramine Light	Prevalite, Prevalite Powder	Other Med
Choline Fenofibrate	Trilipix	Fibrate
Colesevelam	Welchol	Other Med
Colestipol	Colestid	Other Med
Ezetimibe	Zetia	Absorption Inhibitor
Fenofibrate	Antara, Fenoglide, Fibricor, Lipofen, Lofibra, Triglide	Fibrate
Fenofibric Acid	Trilipix	Fibrate
Fish Oil	Lovaza	Other Med
Fluvastatin, Fluvastatin XL	Lescol, Lescol XL	Statin
Gemfibrozil	Gemcor, Lopid	Fibrate
Icosapent ethyl*	Vascepa*	Other Med
Lomitapide*	Juxtapid*	Other Med
Lovastatin	Altocor, Altoprev, Mevacor	Statin
Lovastatin + extended release niacin	Advicor	Statin + niacin
Mipomersen sodium*	Kynamro*	Other Med
Niacin, Niacin Extended Release, Niacin ER, Niacin SR, Niacin TR	B-3-50, B3-500-Gr, Niacor, Niacor B3, Niaspan, Niaspan ER, Nico-400, Nicolar, Nicobid Tempules, Slo-Niacin	Niacin
Nicotinic Acid	Niacor, Niaspan, Nicotinex, Slo-Niacin	Niacin
Pitavastatin	Livalo	Statin
Pravastatin	Pravachol	Statin
Rosuvastatin	Crestor	Statin
Simvastatin	Zocor	Statin
Simvastatin + extended release niacin	Simcor	Statin + niacin
Simvastatin + ezetimibe	Vytorin	Statin + absorption inhibitor
(ALN-PCSsc)	Inclisiran	PCSK9 Inhibitor

Summary of Changes

Table 3

Table 3. Characteristics of Patients With Ischemic Stroke Who Could Be Treated With rtPA within 0-3 hours (return to Documented Reasons for not Administering IV alteplase)

- *Diagnosis of ischemic stroke causing measurable neurological deficit*
- *The neurological signs should not be clearing spontaneously.*
- *The neurological signs should not be minor and isolated.*
- *Caution should be exercised in treating a patient with major deficits.*
- *The symptoms of stroke should not be suggestive of subarachnoid hemorrhage.*
- *Onset of symptoms <3 hours before beginning treatment*
- *No head trauma or prior stroke in previous 3 months*
- *No myocardial infarction in the previous 3 months*
- *No gastrointestinal or urinary tract hemorrhage in previous 21 days*
- *No major surgery in the previous 14 days*
- *No arterial puncture at a noncompressible site in the previous 7 days*

- *No history of previous intracranial hemorrhage*
- *Blood pressure not elevated (systolic <185 mm Hg and diastolic <110 mm Hg)*
- *No evidence of active bleeding or acute trauma (fracture) on examination*
- *Not taking an oral anticoagulant or, if anticoagulant being taken, INR <= 1.7*
- *If receiving heparin in previous 48 hours, aPTT must be in normal range.*
- *Platelet count >= 100 000 mm3*
- *Blood glucose concentration >= 50 mg/dL (2.7 mmol/L)*
- *No seizure with postictal residual neurological impairments*
- *CT does not show a multilobar infarction (hypodensity >1/3 cerebral hemisphere).*
- *The patient or family members understand the potential risks and benefits from treatment.*

INR indicates international normalized ratio; aPTT, activated partial thromboplastin
time.

Table taken from "Guidelines for the Early Management of Adults With Ischemic Stroke: A Guideline From the American Heart Association/ American Stroke Association Stroke Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups".

Table 4

Table 4 Antiplatelet Medications

Generic Name	Brand Name	Drug Class
Aspirin, ASA	Acetylsalicylic Acid Acuprin 81 Alka-Seltzer Alka-Seltzer Morning Relief Anacin Arthritis Foundation Aspirin Arthritis Pain Ascriptin Arthritis Pain Formula ASA ASA Baby ASA Baby Chewable ASA Baby Coated ASA Bayer ASA Bayer Children's ASA Buffered ASA Children's ASA EC ASA Enteric Coated ASA/Maalox Ascriptin Aspergum Aspir-10 Aspir-Low Aspir-Lox Aspir-Mox Aspir-Trin Aspirbuf Aspircaf Aspirin Aspirin Baby Aspirin Bayer Aspirin Bayer Children's Aspirin Buffered Aspirin Child Aspirin Child Chewable Aspirin Children's Aspirin EC	Antiplatelet

		Aspirin Enteric Coated Aspirin Litecoat Aspirin Lo-Dose Aspirin Low Strength Aspirin Tri-Buffered Aspirin, Extended Release Aspirin/butalbital/caffeine Aspirin/caffeine Aspirtab Bayer Aspirin Bayer Aspirin PM Extra Strength Bayer Children’s Bayer EC Bayer Enteric Coated Bayer Low Strength Bayer Plus Buffered ASA Buffered Aspirin Buffered Baby ASA Bufferin Bufferin Arthritis Strength Bufferin Extra Strength Buffex Cama Arthritis Reliever Child’s Aspirin Coated Aspirin Cosprin CTD Aspirin Dasprin Doans Pills Easprin EC ASA Ecotrin Ecotrin Low Strength Adult Effervescent Pain & Antacid Empirin Entab Entaprin Entercote Enteric Coated Aspirin Enteric Coated Baby Aspirin Excedrin Excedrin Extra Strength Excedrin Geltab Excedrin Migraine Extra Strength Bayer Genacote Genprin Halfprin Lifecoat Aspirin Low Dose ASA Magnaprin Med Aspirin Norwich Aspirin Pain Relief (Effervescent) Pain Relief with Aspirin Sloprin St. Joseph Aspirin		

	Stanback Analgesic Therapy Bayer Tri Buffered Aspirin Uni-As Uni-Buff Uni-Tren Zorprin	
Aspirin/Dipyridamole	Aggrenox	Antiplatelet
Clopidogrel	Plavix	Antiplatelet
Ticlopidine	Ticlid	Antiplatelet
prasugrel*	Effient*	Antiplatelet
ticagrelor*	Brilinta*	Antiplatelet
Other Antiplatelet*	Example: Cilostazol*	Antiplatelet

Legend: * = Drug is not listed in Appendix C Table 8.2 or 8.3 in the Specifications Manual for National Hospital Inpatient Quality Measures

Summary of Changes

Table 5

Table 5. Anticoagulant Medications

Please see specific dosing information within the coding instructions to determine if anticoagulant dosing is sufficient to prevent recurrent ischemic stroke or TIA. If dosing is not appropriate as antithrombotic therapy, and that is the only antithrombotic medication that the patient has received, you should select "No" to the antithrombotic medication data elements of: "Was antithrombotic therapy administered by the end of hospital day 2" and "Antithrombotic Medication(s) at Discharge" on the Hospitalization and Discharge Tabs.

For Stroke Core Measure/TJC Users: respond to the Core Measures tab data elements by verifying that the medication is acceptable. You would do this by checking the most current Specifications Manual. You may need to change the auto-populated response on the Core Measures tab to meet those specifications.

Generic Name	Brand Name	Drug Class
apixaban	Eliquis	Oral Factor Xa Inhibitor
argatroban	N/A	Direct Thrombin Inhibit
dabigatran, dabigatran etexilate	Pradaxa	Direct Thrombin Inhibit
dalteparin	Fragmin	LMWH
desirudin*	Iprivask*	Direct Thrombin Inhibit
edoxaban	Savaysa	Oral Factor Xa Inhibitor
enoxaparin	Lovenox	LMWH (Note: Lovenox mg sc qd is for DVT prevention and not of proven benefit for strok prevention and is insufficient as antithrombotic therapy this dose)
fondaparinux	Arixtra	Factor Xa Inhibitor
Heparin IV (heparin, heparin sodium, heparin Na, heparin sod, heparin sodium inj, heparin sodium inj pork, unfractionated	N/A	Unfractionated Heparin

heparin [NOT hep-lock, heparin flush])		
lepirudin	Refludan	Direct Thrombin Inhibit
rivaroxaban	Xarelto	Oral Factor Xa Inhibitor
tinzaparin	Innohep	LMWH
Warfarin, Warfarin Sodium	Coumadin, Jantoven	

Legend: * = Drug is not listed in Appendix C Table 8.2 or 8.3 in the Specifications Manual for National Hospital Inpatient Quality Measures

Summary of Changes

Table 6

Table 6. Statin Dose and Intensity (return to Cholesterol Reducing/Controlling TX)

Generic Name	Brand Name	Options GWTG-Stroke (mg)	Level of Intensit
Atorvastatin	Lipitor	10	Moderate
Atorvastatin	Lipitor	20	Moderate
Atorvastatin	Lipitor	≥ 40	High
Atorvastatin	Lipitor	Unknown	n/a
Fluvastatin	Lescol	20	Low
Fluvastatin	Lescol	40	Low
Fluvastatin	Lescol	80	Moderate
Fluvastatin	Lescol	Unknown	n/a
Pravastatin	Pravachol	10	Low
Pravastatin	Pravachol	20	Low
Pravastatin	Pravachol	40	Moderate
Pravastatin	Pravachol	80	Moderate
Pravastatin	Pravachol	Unknown	n/a
Rosuvastatin	Crestor	5	Moderate
Rosuvastatin	Crestor	10	Moderate
Rosuvastatin	Crestor	≥ 20	High
Rosuvastatin	Crestor	Unknown	n/a
Amlodipine + Atorvastatin	Caduet	2.5/10	Moderate
Amlodipine + Atorvastatin	Caduet	2.5/20	Moderate
Amlodipine + Atorvastatin	Caduet	2.5/40	High
Amlodipine + Atorvastatin	Caduet	5/10	Moderate
Amlodipine + Atorvastatin	Caduet	5/20	Moderate
Amlodipine + Atorvastatin	Caduet	5/40	High
Amlodipine + Atorvastatin	Caduet	5/80	High
Amlodipine + Atorvastatin	Caduet	10/10	Moderate
Amlodipine + Atorvastatin	Caduet	10/20	Moderate

Amlodipine + Atorvastatin	Caduet	10/40	High
Amlodipine + Atorvastatin	Caduet	10/80	High
Amlodipine + Atorvastatin	Caduet	Unknown	n/a
Ezetimibe + Simvastatin	Vytorin	10/10	Low
Ezetimibe + Simvastatin	Vytorin	10/20	Moderate
Ezetimibe + Simvastatin	Vytorin	10/40	Moderate
Ezetimibe + Simvastatin	Vytorin	10/80	High
Ezetimibe + Simvastatin	Vytorin	Unknown	n/a
Lovastatin	Altoprev	20	Low
Lovastatin	Altoprev	40	Moderate
Lovastatin	Altoprev	60	Moderate
Lovastatin	Altoprev	Unknown	n/a
Lovastatin	Mevacor	10	Low
Lovastatin	Mevacor	20	Low
Lovastatin	Mevacor	40	Moderate
Lovastatin	Mevacor	Unknown	n/a
Lovastatin + Niacin	Advicor	20/500	Low
Lovastatin + Niacin	Advicor	20/750	Low
Lovastatin + Niacin	Advicor	20/1000	Low
Lovastatin + Niacin	Advicor	40/1000	Moderate
Lovastatin + Niacin	Advicor	Unknown	n/a
Pitavastatin	Livalo	1	Low
Pitavastatin	Livalo	2	Moderate
Pitavastatin	Livalo	4	Moderate
Pitavastatin	Livalo	Unknown	n/a
Simvastatin	Zocor	5	Low
Simvastatin	Zocor	10	Low
Simvastatin	Zocor	20	Moderate
Simvastatin	Zocor	40	Moderate
Simvastatin	Zocor	80	High
Simvastatin	Zocor	Unknown	n/a
Simvastatin + niacin	Simcor	20/500	Moderate
Simvastatin + niacin	Simcor	20/750	Moderate
Simvastatin + niacin	Simcor	20/1000	Moderate
Simvastatin + niacin	Simcor	40/500	Moderate
Simvastatin + niacin	Simcor	40/1000	Moderate
Simvastatin + niacin	Simcor	40/2000 (2 x 20/1000)	Moderate
Simvastatin + niacin	Simcor	Unknown	n/a
Fluvastatin XL	Lescol XL	80	Moderate

Summary of Changes

Table 7

Table 7. Anti-Hyperglycemic medications

Generic Name	Brand Name	Class
Metformin	Glucophage, Riomet, Glucophage XR	Biguanide
alogliptin	Nesina, Vipidia	DPP-4 Inhibitor
linagliptin	Tradjenta	DPP-4 Inhibitor
saxagliptin	Onglyza	DPP-4 Inhibitor
sitagliptin	Januvia	DPP-4 Inhibitor
dulaglutide	Trulicity	GLP-1 receptor agonist
exenatide	Byetta, Bydureon	GLP-1 receptor agonist
exenatide extended release	Bydureon BCise	GLP-1 receptor agonist
liraglutide	Victoza 3-Pak, Victoza 2-Pak, Saxenda	GLP-1 receptor agonist
lixisenatide	Adlyxin	GLP-1 receptor agonist
semaglutide	Ozempic	GLP-1 receptor agonist
Insulin	Humalog, Admelog, Fiasp, Novolog, Apidra	Insulin
canagliflozin	Invokana, Sulisent, Prominad	SGLT2 Inhibitor
dapagliflozin	Forxiga, Farxiga	SGLT2 Inhibitor
empagliflozin	Jardiance	SGLT2 Inhibitor
ertugliflozin	Steglatro	SGLT2 Inhibitor
glimepiride	Amaryl	Sulfonylurea
glipizide	Glucotrol XL, Glucotrol	Sulfonylurea
glyburide	Glynase	Sulfonylurea
pioglitazone	Actos	Thiazolidinedione
rosiglitazone	Avandia	Thiazolidinedione

Other oral agents

Generic Name	Brand Name	Class
colesevalam	Welchol	Bile acid sequestrants
bromocriptine	Parlodel, Cycloset	Dopamine-2 agonists
acarbose	Precose	Alpha-glucosidase inhibitor
miglitol	Glyset	Alpha-glucosidase inhibitor
pramlintide	SymlinPen 120, SymlinPen 60	Amylin mimetics
nateglinide	Starlix	meglitinides
repaglinide	Prandin	meglitinides

Summary of Changes

Summary of Changes

Section	Title	Change
Entry Criteria		Update 10/10/2008: Added the fourth item in the inclusion list: "Patients evaluated and treated in the ED with the intention of being admitted, even if they expire or are subsequently transferred."

		Updated the first item in the exclusion list from: "Patients initially admitted to the hospital for one of the diagnoses even if they later transfer or expire" to "Those who die in the ED without meeting any of the inclusion criteria", and added the next three exclusion items: patients who are not diagnosed with stroke or TIA, are < 18 years of age, or admitted solely for elective carotid endarterectomy or revascularization. Update 1/31/2009: Added "Note: You are not required to enter patients only seen in observation unit, but if you do enter them, these patients will be accountable to all measures." Update 3/19/2009: Added "Note for Coverdell users: At this point in time, based upon the recommendations of PCNASR clinical consultants, **PCNASR encourages but does not require hospitals to include patients who are observation patients in the registry.**" Update 7/20/2010: Added a link for "LA County EMS Additional Data Elements" Update 4/2012: Added more patient inclusions and optional inclusions Update 10/1/2012: Add a note for core and TJC users. Add a bullet point to include for patients evaluated and treated in the ED with the intention of being admitted. Add exclude options for patient evaluation, patients discharged and patients admitted.. Add a link to EMS additional data elements. Update 09/2015: Updated for ICD-10 transition. Update 07/2018: Updated TJC table version numbers. Added new link for "Arkansas Additional Data Elements" document Update 08/2018: Added a link for "Mission: Lifeline Stroke in North Dakota" and updated the links to appear in alphabetical order. Update 04/2019: Updated Table 8.1 and Table 8.2 versions to most current version (2018B1). Added codes I16381 and I16389 to Table 8.1. Update 11/2019: Updated Arkansas Additional Data Elements document. Update 12/2019: Removed Tables 8.1 and 8.2 and replaced them with the links to the TJC Manual Update 06/2022: Updated links to the TJC Specifications Manual
Abstraction Guidelines		Update 10/10/2008: Added clarification on discrepancies: "When there is a discrepancy in

		documentation status or a patient's specific variable, refer to the source of medical higher authority relevant to that variable."
Admin	Final clinical diagnosis related to stroke	Update 10/10/2008: Updated title from: "Clinical hospital diagnosis related to stroke" to "Final clinical diagnosis related to stroke". Added Patients admitted for non-stroke illness and Patients who present neurological symptoms to the Notes for Abstraction and added examples. Update 1/31/2009: Updated the third item in Notes for Abstraction from: "Patients with transient symptoms but infarction on the brain imaging should also be classified as ischemic stroke (not TIA)." to "Patients with transient symptoms but infarction on the brain imaging are routinely diagnosed as ischemic stroke (not TIA) by treating physicians. You should enter the final clinical diagnosis as documented by the physician, even if ischemic stroke is selected in a patient with transient symptoms." Update 7/1/2009: Updated the definitions and notes for abstraction. Update 10/1/2012: Added elective Carotid intervention only. Updated definitions and notes for abstraction for patients transferred for management of hemorrhagic complications. Also, directions to select "Elective Carotid Intervention only" for patients demonstrating admission solely for elective carotid intervention. Update 4/2013: Removed sentence that states: Note for Coverdell users, this may be different from the presumptive hospital admission diagnosis. Update 10/2013: Added following: "Hemorrhagic infarctions should be considered cerebral infarctions." "Patients who are found to have incidentally discovered infarcts (silent, subclinical, or prior CNS infarction) are not required to be entered into the tool. You can choose to enter these patients if they are assigned a Principal ICD-9 code of stroke or if you are tracking these patients for an alternative initiative." Update 09/2015: Updated definition and notes for abstraction for ICD-10
	If No Stroke Related Diagnosis	Update 10/1/2011: Optional.
	What was the ICD-9-CM diagnosis code selected as the admitting diagnosis for this patient?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Moved to Clinical codes tab

Was an etiology documented in the patient medical records as the most likely cause of stroke?	Update 10/2015: Added for Crytogenic stroke only Update 03/2016: Updated to Required for Stroke Standard, added examples Update 04/2016: Minor updates to instructions Update 10/2016: Changed from multi-select to single-select field; allowable values and notes for abstraction updated. Update 11/2016: Updated 4th bullet under Examples for "5: Cryptogenic Stroke"
When is the documentation of comfort measures only?	Updated 10/10/2008: Updated Title and what constitutes Day 1. Updated 8/6/2009: Changed field name from "Was patient Comfort Measures Only anytime prior to the end of Hospital Day 2? (Is there any evidence that the patient's care was restricted to CMO anytime prior to the end of Hospital Day 2?)" to "When is the earliest APN/PA documentation of comfort measures only?" Updated answer options. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Added an example Update: 10/1/2012: Added bullet point for POLST. Added the word comfort. Also added section for pre-printed order forms and DNRCCA, CMO instructions. Update 4/2013: Removed all references to “palliative care.” Update 10/2013: Response options changed *from* Day 1 or 2, Day 3 or after *to* Day 0 or 1, Day 2 or after. Coding updated to reflect new response options.
Arrival Date/Time (Date & time of arrival to this hospital)	Update 10/10/2008:Updated title from: "Date & time of arrival to this Hospital" to "Arrival Date/Time" Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 1/1/2014: Abstraction guidelines are being revised to not allow reference to non-Only Acceptable Sources and to disregard a date when unable to identify if it was documented in an Only Acceptable Source, in order to simplify abstraction. Additionally, changes are being made to abstraction guidelines to encourage an abstractor to carefully examine Only Acceptable Source documentation and to not use a date when it is obviously an error. Additional examples are being provided for clarification. Lastly, the abstraction guideline directing the abstractor to not use pre-printed dates on a vital signs graphic sheet is being

	deleted due to its difficulty in applying to EHRs. Update 5/30/2015: Moved to Admin tab from Admission tab. Update 06/2016: Updated notes for abstraction
Admit Date	Update 10/10/2008: Added form control information for inpatients. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 1/1/2014: Reorder of the notes for abstraction with the addition of a note in the suggested data sources for clarification. Update 12/2014: Removed " (Form Locator 12)" from first bullet and "in Form Locator 6" from second bullet of Notes for Abstraction; updated the Excluded Data Sources. Update 5/30/2015: Moved to Admin tab from Admission tab.
Not Admitted?	Update 10/10/2008: New field. Update 1/31/2009: Updated title to "Not admitted, Transferred from your ED...". Update 4/2012: Updated data element question. Update 10/1/2012: Add a note for response "Yes, not admitted". Update 5/30/2015: Moved to Admin tab from Admission tab.
Select Reason(s) for why patient transferred	Update 04/2019: Updated element description. Updated to not be an optional field and removed the bullet point related to this in Notes for Abstraction. Updated note.
Discharge Date and Time (Date and time of discharge from hospital)	Update 10/10/2008: Updated title from: "Date of discharge from hospital" to "Discharge Date". Update 10/1/2012: Updated note. Update 4/2013: Updated to date & time field Update 5/30/2015: Moved to Admin tab from Admission tab.
Documented reason for delay in transfer to referral facility?	Update 04/2019: Added new element.
Specific reason for delay documented in transfer patient	Update 04/2019: Added new element.
Discharge Disposition	Update 1/1/2013: Updated notes for abstraction. Update 1/1/2014: Clarifications to assist abstractors in handling discharges to a Veterans Home and use of post-discharge dated documentation are being added.
If Other Health Care	Update 10/1/2011: Added.

	Facility	Update 10/1/2012: required if discharged to Other Healthcare Facility.
	For patients discharged prior to 04/01/2011: Discharge Status	Update 10/10/2008: Removed code "41 Expired in medical facility" and added code "77 Discharged/transferred to another Type of Health Care Institution not Defined Elsewhere in this Code List (See Code 05)" as these are JC/CMS updates. Update 1/31/2009: Updated code 05 to: "Discharged/transferred to a Designated Cancer Center or Childrens Hospital". Removed example 300b. Update 8/6/2009: Changed field name from "Discharge Destination" from "Discharge Status". Update 4/9/2011: Added "For patients discharged prior to 04/01/2011" to element label. Update 4/2013: Removed from coding instructions Update 11/2020: Removed link from Discharge Information section.
Clinical Codes	ICD-10-CM Principal Diagnosis Code	Update 09/2015: Created for ICD-10 transition Update 10/2016: Changed the Allowable Values text
	ICD-10-CM Other Diagnosis Codes	Update 09/2015: Created for ICD-10 transition Update 10/2016: Changed the Allowable Values text
	ICD-10-PCS Principal Procedure Code	Update 09/2015: Created for ICD-10 transition Update 10/2016: Changed the Allowable Values text Update 06/2022: Made required for TJC and Comprehensive (new for TJC PSC for discharges on or after 7/1/2022) Update 07/2022: Made required for TJC & Comprehensive
	No ICD-10-PCS Procedure Code Documented	Update 07/2022: Added new element
	ICD-10-PCS Principal Procedure Date	Update 09/2015: Created for ICD-10 transition.
	ICD-10-PCS Principal Procedure Time	Updated 09/2015: Created for ICD-10 transition. Updated abstraction notes, included new data sources and inclusion criteria.
	ICD-10-PCS Other Procedure Codes	Update 09/2015: Created for ICD-10 transition Update 10/2016: Changed the Allowable Values text Update 06/2022: Made required for TJC and Comprehensive (new for TJC PSC for discharges on or after 7/1/2022) Update 07/2022: Made required for TJC & Comprehensive
	ICD-10-PCS Other Procedure Dates	Update 09/2015: Created for ICD-10 transition.

	ICD-10-PCS Other Procedure Dates	Update 09/2015: Created for ICD-10 transition.
	ICD-10-PCS Other Procedure Times	Update 09/2015: Created for ICD-10 transition. Updated abstraction notes, included new data sources and inclusion criteria.
	What was the ICD-10-CM diagnosis code selected as the admitting diagnosis for this patient?	Updated 09/2015: Created for ICD-10 transition and updated coding format
	Discharge Diagnosis	Update 09/2015: Moved to Clinical Codes tab
	ICD-9-CM discharge diagnosis related to stroke	Update 09/2015: Updated requirements for Stroke, Coverdell and MaRISS
	No stroke or TIA related ICD-9-CM code present	Update 09/2015: Updated requirements for Stroke, Coverdell and MaRISS
	ICD-10-CM discharge diagnosis related to stroke	Update 09/2015: Created for ICD-10 transition. Included new codes and inclusion/exclusion criteria.
No Stroke or TIA related ICD-10-CM code present	Update 09/2015: Created for ICD-10 transition	
Arrival and Admission Information	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. AMI, CAC, HF, PN, PR, SCIP, STK,VTE)?	8/6/2009: Added field (Stroke Core Measure). Update 4/2012: Added TJC/CMS data element note. Update 12/2014: Made data element required for Comprehensive. Update 06/2016: Updated mention of meaure inclusion (STK, VTE)
	Was this patient admitted for the sole purpose of performance of elective carotid intervention?	Update 10/30/2008: Updated title from: "Was this patient admitted for the sole purpose of performance of elective carotid endarterectomy surgery?" to "Was this patient admitted for the sole purpose of performance of elective carotid intervention?"; changed "carotid endarterectomy" to "carotid intervention." This wording was also changed in the description after "Yes" and "No". Update 8/6/2009: Updated definition, notes for abstraction, and guidelines for abstraction. Update 12/2014: Made data element required for Comprehensive. Update 09/2015: Updated with ICD-10-PCS code Update 06:2016: Updates notes for abstraction
	Patient location when stroke symptoms discovered (Where was the patient when stroke was detected or when symptoms were discovered?)	Update 10/10/2008: Updated title from: "Where was the patient when stroke was detected or when symptoms were discovered?" to "Patient location when stroke symptoms discovered". Removed second note for abstraction: "If the patient was admitted to an ED of another hospital and the case of a patient transferred to your hospital where they were an inpatient."

	Added: "A Chronic care facility..." and "The answer to this question...Point of Origin..." to the notes for abstraction. Update 10/23/2008: Added new choice for "Outpatient health care setting". Update 10/1/2012: Notes for abstraction - added chronic care and assisted living bullet points. Update 04/2014: Label update: Response of "Stroke occurred while patient was an inpatient in your hospital" updated to read "Stroke occurred after hospital arrival (in ED/Obs/inpatient)."
How patient arrived at your hospital	Update 10/10/2008: Updated title from: "How did the patient get to your hospital for treatment of their stroke" to "How patient arrived at your hospital" Added another type of transport: "Transfer from other hospital". Update 10/23/2008: Clarified and updated notes about when to choose "EMS from home/scene", "Transfer from other hospital", and "Private transportation/taxi/other from home/scene". Update: 10/1/2012: Notes for abstraction - add a bullet for patients transported by EMS from home/scene. Update 10/2013: Changed to Required status for all versions of the PMT (previously had been required for Coverdell enhanced users only). Update 12/2019: Updated allowable values and abstraction notes.
Select reason(s) for why patient transferred	Update 01/2021: Updated element name, definition, allowable values, and notes for abstraction.
Was the patient an ED patient at the facility?	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Made data element required for Comprehensive.
Was the patient a direct admission to the hospital?	Update 12/2014: Added new data element required for Comprehensive Update 11/2020: Removed "REQUIRED FOR TJC COMPREHENSIVE" from the data element since this is retired in the 2020A1 version of the TJC manual.
Where patient first received care at your hospital	Update 10/1/2012: Made optional Coverdell.
Date & Time Call Received by EMS	Update 10/10/2008: Added further clarification to the definition. Update 10/16/2009: Removed the following statement from the instructions: If a patient is transported by EMS from the

		scene of the stroke to an outside hospital and is then transferred by EMS to your hospital, enter the time when the first call was received by the EMS dispatcher from the scene. 11/13/2010: Removed element from coding instructions as is no longer a GWTG data element.
	Advanced Notification by EMS?	Update 10/10/2008: Updated title from: "EMS to your hospital pre-notification?" to "Advanced Notification by EMS?". Added details on "In order to select "Yes" as an answer. Update 10/2013: Changed to Required. Update 01/2021: Updated notes for abstraction.
	If patient not admitted, select reason why	Added 4/2012: New data element Update 10/1/2012: Changed to say "required for patients that are not admitted only".
	Initial Admitting Service	Updated 01/2021: Added new element
	In which settings were care delivered? Select all that apply.	Updated 01/2021: Added new element
	If the patient was not cared for in a dedicated stroke unit, was a formal inpatient consultation from a stroke expert obtained?	Updated 01/2021: Added new element
	Where was the patient cared for and by whom?	Updated 10/10/2008: Updated title from: "Where was the patient cared for and by what service?" to "Where was the patient cared for and by whom? Check all that apply." Updated 01/22/2021: Removed section
	Physician/Provider NPI (Physician/Service)	Updated 10/10/2008: Updated title from: "Physician/Service" to "Physician/Provider NPI".
Demographics	Birth Date	Update 4/2013: Added following sentence For Get With The Guidelines, if entering a “Not Admitted” patient, patient’s age is calculated by Arrival Date minus Birthdate Update 12/2014: Removed "Field Location: 10" from last bullet under Suggested Data Sources
	Gender	Update 12/2014: changed last bullet under suggested data sources to "UB-04" Update 5/2021: changed Gender Label to Sex, added sections for Patient Gender Identity and Patient Identified Sexual Orientation
	Race and Hispanic Ethnicity	Update 10/10/2008: Added further clarification on assessment of ethnicity. Update 8/6/2009: Change answer criteria from 3 options to 2, Yes and No/UTD. (UTD use to be the third answer choice)

		Update 10/1/2012: Updated Hispanic ethnicity and race information with optional sub choices for Hispanic ethnicity , Asian, and Native Hawaiian or Pacific Islander. Update 4/2013: Added following note: **Note for TJC/CM Users**: If multiple options are selected for Race on the *Hospitalization* tab, then the *Core Measures* tab data element of “Race” will not auto-populate. Please complete the *Core Measures* tab data element of “Race” in accordance with the Specifications Manual for National Hospital Inpatient Quality Measures which states: If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race. Update 12/2020: Updated Allowable Values, Notes for Abstraction, and Additional Notes / Guidelines for Abstraction for "Race" element. Updated definition, question, allowable values, and additional notes / guidelines for abstraction for "Hispanic Ethnicity" element.
	Zip Code	Update 4/2013: Added as new element Update 7/2014: Added the following abstraction notes: *For submission to The Joint Commission/CMS, if the patient is not a resident of the United States, use Ã¢€œNONUS.Ã¢ €Â Thus, if you have entered a Canadian postal code in the GWTG field which pre-populates on the Core Measures tab you must overwrite the value in this field on the Core Measures tab with Ã¢€œNONUSÃ¢€Â .*
	Payment Source	Update 02/2020: Updated "Health Insurance Status" to "Payment Source". Updated definition, allowable values, notes for abstraction, and suggested data sources. Update 03/2020: Updated notes for abstraction
Telestroke		Update 01/2019: Updated description of what users will see when they enable the Telestroke layer Update 10/2020: Updated entire Telestroke section
	TeleStroke Consultation Performed	Update 11/2021: Added "REQUIRED FOR COVERDELL ONLY:" to element name.
Telestroke Time Tracker		Update 10/2020: Added new section
Medical History	Previously known medical hx (history) of: (Check all that apply)	Update 10/10/2008: Updated/Added codes: Atrial Fib/Flutter, Hypertension, Smoker, Dyslipidemia. Update 1/31/2009: Separated code Previous Stroke/TIA to two separate codes; Previous Stroke and Previous TIA. Update 10/1/2012: Added drug/alcohol abuse, family

		history of stroke, HRT , migraine, obesity/overweight, renal insufficiency - chronic. Added Notes for abstraction for those options. Update 4/2013: Added under Atrial Fib/Flutter notes for abstraction the word “ANY” and the following example: Example: Documented history of ablation procedure, select Atrial Fib/Flutter here. Update 04/2014: Added response options of: Depression and Sleep Apnea. Update 02/2020: Added new response option "ND" for Diabetes Type. Update 04/2020: Added new response option "E-Cigarette Use (Vaping)". Update 05/2020: Added new response option "Hx of Emerging Infectious Disease". Update 07/2020: Added new response option "Dementia". Update 01/2021: Updated "Depression" notes for abstraction.
	Ambulatory Status prior to the current event?	Update 10/10/2008: Updated title from: "What was patient's ambulatory status prior to the current event?" to "Ambulatory status prior to the current event?" Updated definition of "Ambulatory" for patients within a healthcare environment and patients not in a healthcare environment. Examples were also added to these definitions.
	Pre-Stroke Modified Rankin Score (mRS)	Update 06/2020: Updated definition, allowable values, notes for abstraction, suggested data sources, additional notes / guidelines for abstraction. Added table of scores. Update 12/2020: Updated notes for abstraction
Diagnosis and Evaluation	Symptom Duration if diagnosis of Transient Ischemic Attack (<24 hours) *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field.
	Had stroke symptoms resolved at time of presentation?	Update 10/10/2008: Updated title from: "Did symptoms already resolve upon arrival?" to "Had stroke symptoms resolved at time of presentation?" Updated definition to be appropriate for any diagnosis;

	from: "If Clinical hospital diagnosis related to stroke was a TIA, indicate if symptoms already resolved upon hospital arrival." to "Indicate if symptoms already resolved upon hospital arrival." Update 4/2012: Added notes for abstraction. Updated 10/1/2012: Made optional for Coverdell. Update 06/2022: Made required for Coverdell only.
Initial Exam Findings *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2011: Updated descriptions for data elements and added 3 new answer choices. Added notes for abstraction.
Initial NIH Stroke scale	Update 10/10/2008: Added "When to answer Yes" details. Update 1/31/2009: Added "closest to presentation within 48 hours" into definition after "Only respond Yes if the complete NIH Stroke Scale has been performed..." Update 4/2012: Added notes for abstraction regarding inpatient strokes. Added example. Update 10/1/2011: Added descriptions for answer choices, added notes for abstraction. Update 10/1/2012: updated notes for abstraction for NIHSS calculations, NIHSS performed by a certified examiner, neurology consultation notes. Update 4/2013: updated notes for abstraction to replace admission with “arrival” and added the following: For patients that receive thrombolytic therapy at an outside hospital prior to transfer to your facility, answer this data element based off of the first NIHSS performed at your own hospital. For patients received in transfer that undergo additional treatment such as IA catheter based reperfusion or mechanical recanalization at your facility, answer “Yes” only in those patients in whom an NIHSS is performed prior to this treatment. For patients received in transfer that do not undergo additional treatment, answer “Yes” only if the first NIHSS was performed at your facility within 48 hours of arrival. The initial NIH Stroke Scale may be documented by a member of the "stroke team" (including the physician/APN/PA or nurse (RN)).
If Yes (NIHSS)	Update 10/10/2008: New field.

	Update 10/1/2011: Updated definition.
NIHSS Score Obtained from Transferring Facility	Update 10/1/2011: Added
Total Score	Update 10/10/2008: Updated title from: "If performed, what is the first NIH Stroke Scale total score recorded by hospital personnel" to "Total Score". Update 10/1/2011: Updated coding, added notes for abstraction. Update 4/2013: Updated notes for abstraction.
Initial NIHSS <6	Update 12/2020: Added new element.
What is the first NIHSS score obtained prior to or after hospital arrival?	Update 12/2014: Added new data element required for Comprehensive
Is there documentation that an initial NIHSS score was done at this hospital?	Update 12/2014: Added new data element required for Comprehensive
What is the date and time that the NIHSS score was first performed at this hospital?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated abstraction notes Update 06/2016: Updated notes for abstraction
Ambulatory status on admission *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: New field. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2012: Update bullet points to add example for patient 100d.
COMPREHENSIVE: Was the NIH Stroke Scale performed prior to the initiation of thrombolytic therapy or performance of endovascular procedure or within 12 hours of arrival?	Update 4/2013: Added Update 12/2014: Removed data element
COVERDELL ONLY: First Glasgow Coma Scale (GCS) in ICH patients	Update 4/2013: Removed
COMPREHENSIVE: First Glasgow Coma Scale (GCS) in ICH patients	Update 4/2013: Added Update 10/2013: Changed word "Voice" to "Verbal."
Was an initial ICH score done at this hospital?	Update 4/2013: Added Update 4/2014: Added the following note for abstraction: Select NC for patients with Primary Intraventricular Hemorrhage. Update 12/2014: Changed data element display label and made required for Comprehensive

		Update 1/2015: Added the following instructions: *To enable a response, abstractors may first need to answer 'No' for the question Was an initial Hunt and Hess scale done at this Hospital?* Update 09/2015: Updated abstraction notes
	If yes,(ICH) Score	Update 4/2013: Added
	What is the date and time that the ICH score was first performed at this hospital?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated abstraciton notes Update 06/2016: Updated notes for abstraction
	FUNC Score (ICH)	Update 12/2014: Added new optional data element for Comprehensive
	Was an initial Hunt and Hess scale done at this hospital?	Update 4/2013: Added Update 12/2014: Changed data element display label and made required for Comprehensive
	If yes,(Hunt and Hess) Score	Update 4/2013: Added
	What is the date and time that the Hunt and Hess Scale was first performed at this hospital?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated abstraction notes. Update 06/2016: Updated notes for abstraction
	WFNS SAH Grading Scale	Update 12/2014: Added new optional data element for Comprehensive
Medications Prior to Admission	Antithrombotic (antiplatelet or anticoagulation) (Was patient taking antithrombotic medication prior to admission?)	Update 10/10/2008: Updated title, definition for ND, and medications. Update 1/31/2009: Removed this field. Update 10/1/2012: Reinstated as Antithrombotic medication(s) with specific antiplatelet and anticoagulant choices and medications. Changed to required. Update 4/2013: Updated “admission” to “arrival” Update 10/2013: Added the following antiplatelet medications: prasugrel (Effient) and ticagrelor (Brilinta) Added the following anticoagulant medication: apixaban (Eliquis)
	Antiplatelet	Update 10/10/2008: New field. Update 8/6/2009: Combined No and ND into No/ND. Update 10/1/2011: Added descriptions to answer choices, update notes for abstraction Update 10/1/2012: Changes to sub choices to antithrombotic medication.

Anticoagulation	Update 10/10/2008: New field. Update 8/6/2009: Combined No and ND into No/ND. Update 10/1/2011: Added descriptions to answer choices, update notes for abstraction. Update 10/1/2012: Changes to sub choices to antithrombotic medication. Update 4/2013: Updated “admission” to “arrival” Update 09/2015: Added Edoxaban (Savaysa)
Antihypertensive (Was patient on antihypertensive medication prior to admission?)	Update 10/10/2008: Updated Title from: "Was patient on antihypertensive medication prior to admission?" to "Antihypertensive". Update definition of ND. Update 8/6/2009: Combined No and ND into No/ND.
Cholesterol-Reducer (Was patient on cholesterol-reducing/controlling medication prior to this hospitalization?)	Update 10/10/2008: Updated Title from: "Was patient on cholesterol-reducing/controlling medication prior to this hospitalization?" to "Cholesterol-Reducer". Update definition of ND and example. Update 1/31/2009: Removed "Cholesterol-reducing therapy works by blocking the action of an enzyme in the liver which is needed to make cholesterol, thereby decreasing the level of cholesterol circulating in the blood" from the definition. Update 8/6/2009: Combined No and ND into No/ND. Update 4/2012: Added notes for abstraction regarding fish oil. Update 10/1/2012: The following note was removed: Exception: if the patient is on Lovaza (fish oil) as the ONLY Cholesterol reducing medication prior to admission, select NO/ND". Added a TJC/CM user note. Update 4/2013: Updated to remove “within the past week.” Added: If there is documentation that the patient was on a lipid-lowering medication at home but there is indication it was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost), select “Yes”. When conflicting information is documented in a medical record, select “Yes”. Removed adjustment needed for Core Measures Tab.
Diabetic medication (Taking any diabetic medication prior to admission?)	Update 10/10/2008: Updated Title from: "Taking any diabetic medication prior to admission?" to "Diabetic medication".

		Added more instructions for each answer. Added the Notes for Abstraction and updated the example. Update 8/6/2009: Combined No and ND into No/ND. Update 4/2013: Changed “admission” to “arrival.”
	Anti-Hyperglycemic Medications	04/2020: Added element
	If yes (Antihyperglycemic), select medications	09/2019: Added element 03/2020: Updated data element definition, question, and notes for abstraction
	Antidepressant medication	04/2014: Added
Vaccinations & Testing	COVID-19 Vaccination	Update 01/2021: Added new element.
	COVID-19 Vaccination Date	Update 01/2021: Added new element. Update 06/2021: Updated allowable values and notes for abstraction.
	COVID-19 Vaccination Manufacturer	Update 06/2021: Added new element.
	Did the patient receive both doses of vaccine? (if applicable)	Update 06/2021: Added new element.
	Is there documentation that this patient was included in a COVID-19 vaccine trial?	Update 01/2021: Added new element.
	Influenza Vaccination	Update 01/2021: Added new element.
Symptom Timeline	Date/Time patient last known to be well? (When was the patient last known to be well (i.e., in their usual state of health or at their baseline), prior to the beginning of the current stroke/TIA?	Update 10/10/2008: Updated Title from: "When was the patient last known to be well (i.e., in their usual state of health or at their baseline), prior to the beginning of the current stroke/TIA? (To within 15 minutes of exact time is acceptable.)" to "Date/Time patient last known to be well?" Added last note about transient symptoms which resolve. Also added Example #7. Update 10/1/2012: Update neurology in hierarchy and add a user note for bullet point on TJC/CM for adjustments on the Core Measure tab.Removed from title: To within 15 minutes of exact time is acceptable. Update 4/2013: Added more specific information around abstraction of patients with transient symptoms and documentation of symptom resolution between episodes. Update 10/2013: Added following sentence: "If multiple date/times of last known well are documented by the same provider, use the earliest date recorded by that provider." Updated dates to generic version (e.g. 20XX)
	Date/Time of discovery of stroke symptoms? (When was the patient	Update 10/10/2008: Updated Title from: "When was the patient first discovered to have the current stroke symptoms? (To

	first discovered to have the current stroke symptoms?	within 15 minutes of exact time of discovery is acceptable.)" to "Date/Time of discovery of stroke symptoms?". Update 10/1/2012: Removed from title: To within 15 minutes of exact time is acceptable.
Brain Imaging	Brain imaging completed at your hospital for this episode of care? (Was Brain Imaging Performed at your hospital after arrival as part of the initial evaluation for this episode of care or this event?)	Update 10/10/2008: Updated Title from: "Was Brain Imaging Performed at your hospital after arrival as part of the initial evaluation for this episode of care or this event?" to "Brain imaging completed at your hospital for this episode of care?" Added data element information and the example. Update 4/2012: Added notes for abstraction regarding inpatient strokes.
	Date/Time Brain Imaging Completed Update 10/5/2013: Data element name changed to: Date/Time Brain Imaging Initiated	Update 10/10/2008: Added "Please note, use the time indicated on the radiology report..." to the definition. Removed "If an exact time is not available..." information from the definition. Update 1/31/2009: Updated title from: "Date/Time Initial Brain Imaging Completed at your hospital" to Date/Time Brain Imaging Completed". Update 10/1/2012: Update wording for the date-time stamp on the non-contrast CT.
	Was vascular imaging (CTA, MRI, MRA) performed	Update 2/2017: New element added Update 09/2021: Changed "REQUIRED" to "REQUIRED and REQUIRED FOR COVERDELL"
	Was target lesion identified	Update 2/2017: New element added
	Was target lesion (large vessel occlusion) visualized?	Update 04/2019: Updated Notes for Abstraction
Additional Time Tracker		Update 10/5/2013: Section Added. Data Elements include: Date/Time Stroke Team Activated Date/Time Stroke Team Arrived Date/Time Neurosurgical Services Consulted Date/Time Neurosurgical Services Consulted Date/Time Brain Imaging Ordered Date/Time Brain Imaging Interpreted Date/Time IV tpa ordered Date/Time Lab Tests Ordered Date/Time Lab Tests Completed Date/Time ECG Ordered Date/Time ECG Completed Date/Time Chest X-ray Ordered Date/Time Chest X-ray Completed *The PSC Optional Tab was removed for Joint Commission Enhanced users on 10/5/2013. The Additional Time Tracker section replaced this tab.

		Update 7/2014: Added new field for Date/Time of ED Physician Assessment
IV Thrombolytic Therapy	Was IV Thrombolytic Initiated at this Hospital	Update 10/10/2008: Added information on if treatment started but full dose not received. Update 1/31/2009: Added instructions and definitions for each answer; Yes, No, NC. Update 8/6/2009: Changed field name from "Was IV tPA initiated for this patient at this hospital?" to "IV thrombolytic therapy initiated at this hospital?" Removed NC as an answer option, updated instructions and notes. Added Joint Commission coding instructions. Update 4/2013: Updated notes for abstraction to include medications and clarifying statements. Updated link to 2013 Guideline statement. Update 10/2013: Spelling error corrected for Alteplase. Update 06/2020: Replaced instances of "Alteplase" with "Thrombolytic". Updated additional notes and added guidelines of abstraction.
	Was Delay in Patient Arrival the reason for no tPA?	Update 1/31/2009: Added new field. Update 8/6/2009: Removed field.
	Date/Time of IV tPA initiated (at this hospital or ED)	Update 10/10/2008: Added information on bolus administration and added example. Update 8/6/2009: Added a note about skip logic. Added Joint Commission coding instructions. Update 12/2014: Added data element coding instructions from TJC CSTK Performance Measurement Implementation Guide
	Thrombolytic Used	Update 06/2020: Added new element.
	Reason for Selecting Tenecteplase Instead of Alteplase	Update 06/2020: Added new element.
	If IV Thrombolytic administered beyond 4.5 Hours, was imaging used to identify eligibility?	Update 06/2020: Added new element.
	Documented Contraindications or Warnings for not initiating IV thrombolytic	Update 4/2013: Added Notes for abstraction
	Contraindications and/or Warnings (0-3 hr treatment window). Select all that apply." and "Contraindications and/or Warnings (3-4.5 hr treatment window). Select all that apply. "	Update 10/10/2008: Updated title and clarified SBE. Updated Notes for Abstraction and "Hospital-Related or Other Factors". Added examples. Update 1/31/2009: Removed "Delay in Patient Arrival" code from Hospital Related or other Factors list.

			Update 3/19/2009: Corrected text of "Failure to diagnose in 3 hour time frame" to be "Delay in Stroke diagnosis". Update 8/6/2009: Updated the notes for abstraction and definitions. Update 11/13/2010: Updated item under "The following should help abstractors in classifying reasons:" that started with "If the physician documents..." into 3 bullets: ▪ If the physician documents "no IV tPA due to low NIHSS or NIHSS = 3," then this would appropriately be categorized as stroke severity too mild. ▪ **If documentation indicates an NIHSS score of zero, then this may be considered the equivalent of documentation that the stroke was too mild, and an explicit statement is not required.** ▪ Select "Rapid improvement" or "Stroke severity too mild" when symptoms are rapidly improving or there is minimal to no disability associated with the stroke symptoms (e.g. numbness, mild weakness, lack of gait impairment). Note that there is no lower limit to NIHSS score that prohibits the use of IV tPA. Update 6/14/2011: Added warning "MI in previous 3 months". Updated description for "Increased risk of bleeding..." warning. Also updated notes of abstraction for " Increased risk of bleeding". Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2011: Combined instructions for 0-3hr and 3-4.5hr and updated notes for abstraction. Renamed to follow data element naming in PMT. Changed from "Documented Reasons in the medical record for no IV t-PA started at your hospital..." to "Contraindications and/or Warnings (0-3 hr treatment window). Select all that apply." and "Contraindications and/or Warnings (3-4.5 hr treatment window). Select all that apply. " Also, split out Additional Warning and Hospital related and other factors sections.

	Update 4/2013: Removed following sentence: This should be done only when the documentation is written by an appropriate provider who was involved in the IV tPA decision, but was unable to document it at the time. This documentation needs to be made prior to patient discharge. For example the neurologist who was called by telephone puts a note in the medical record the next day which documents the reason for non-treatment. Replaced it with: It is permissible to abstract reasons for non-treatment from the medical record that are entered after the IV tPA treatment decision has occurred as long as the documentation is made prior to patient discharge (addendums cannot be made after discharge). Reason documentation must refer to the timeframe for thrombolytic therapy. Suggested data sources: consultation notes, ED records, H&P, MAR, progress notes (exclusion: discharge summary). Added: Limited life expectancy, severe co-morbid conditions, and CMO status all need to be explicitly documented as the reason for no IV tPA. **Do not make inferences.** Update 03/2016: Updated to reflect Exclusion and Relative exclusion Criteria notes, list and examples
Optional: Additional Warnings 3-4.5 hrs. Select all that apply	Update 03/2016: Updated to reflect Exclusion and Relative exclusion Criteria notes and examples
Optional: Hospital-related or other factors (0-3 hr and 3-4.5hr treatment windows) Select all that apply	Update 03/2016: Updated to reflect Exclusion and Rexclusion Criteria notes and examples
If IV tPA was initiated greater than 60 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay	Update 10/1/2012: Added link and section. Update 04/2019: Moved Notes for Abstraction section below the 30 minute reason for delay question and added a note that the Notes for Abstraction apply to the 60, 45, and 30 minute reason for delay questions.
If IV tPA was initiated greater than 45 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay	Update 04/2019: Added link and section.
If IV tPA was initiated greater than 30 minutes after hospital arrival, were Eligibility or Medical reason(s) documented as the cause for delay	Update 04/2019: Added link and section.
If no documented eligibility or medical reason(s), Hospital related or Other Reasons	Update 10/1/2012: Added link and section. Update 06/2020: Added new allowable value.
IV tPA at an outside hospital	Update 4/2013: Added Notes for Abstraction

	Select the specific reason(s) documented in the medical record for the delay in administration of IV alteplase at this hospital	Update 04/2020: Added new allowable value under "Medical Reasons".
Was other thrombolytic/reperfusion therapy administered?	IV Thrombolytic Administered at Outside Hospital or Mobile Stroke Unit	Update 06/2020: Updated instances of "Alteplase" to "Tenecteplase".
	If yes, select thrombolytic administered at outside hospital or Mobile Stroke Unit	Update 06/2020: Added new element.
	IA catheter-based reperfusion at this hospital?	Update 10/5/2013: Element name changed to IA catheter-based treatment at this hospital? Update 10/10/2008: Added note about attempted treatment. Update 4/2013: Notes for abstraction updated and Inclusion and Exclusion guidelines added. Update 10/2013: Response option added: Attempted but unable to access target occlusion Update 4/2014: Added not that this element applies to acute ischemic stroke patients only. Update 12/2014: Removed the response option "Attempted but unable to access target occlusion"
	IA t-PA or MER Initiation Date/Time	Update 10/1/2012: Made optional for Coverdell. Update 4/2013: Notes for abstraction added Update 12/2014: Updated data element display label from "Date/Time of IA catheter-based reperfusion at this hospital" and made required for Comprehensive Update 12/2016: Updated Guidelines for Abstraction Inclusion for Joint Commission coding guidelines.
	Is there documentation that the route of thrombolytic (t-PA) administration was intra-arterial (IA)?	Update 12/2014: Added new data element required for Comprehensive
	Is there documentation that IA thrombolytic therapy was initiated at this hospital?	Update 12/2014: Added new data element required for Comprehensive
	What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?	Update 12/2014: Added new data element required for Comprehensive
	Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated inclusion criteria

	a cerebral artery at this hospital?	
	What is the date and time of the first pass of a clot retrieval device at this hospital?	Update 12/2014: Added new data element required for Comprehensive
	What is the location of the clot in the cerebral circulation?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated definition, allowable values, abstraction, and inclusion/exclusion criteria
	What cerebral artery is occluded?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated length and allowable values
	Is there documentation in the medical record that the first endovascular treatment procedure was initiated greater than 24 hours after arrival at this hospital?	Update 12/2016: Added new data element required for Comprehensive
	Is there documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?	Update 12/2016: Added new data element required for Comprehensive
	Did the patient receive intravenous (IV) thrombolytic (t-PA) therapy at this hospital or a transferring hospital prior to receiving intra-arterial (IA) thrombolytic therapy or mechanical reperfusion therapy at this hospital?	Update 12/2014: Added new data element required for Comprehensive
In-Hospital Treatment and Complications	If MER treatment at this hospital, type of treatment	Update 4/2013: New Comprehensive data element added Update 10/5/2013: Element name changed to If IA catheter-based treatment at this hospital, type of treatment Update 12/2014: Updated data element name from "If IA catheter-based treatment at this hospital, type of treatment" and removed response option of "IA Thrombolytic"
	Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade	Update 4/2013: New Comprehensive data element added Update 12/2014: Made data element optional for Comprehensive Update 09/2015: Grading system and acknowledgements updated
	Is there a documented TICI reperfusion gradepost-treatment?	Update 12/2014: Added new data element required for Comprehensive Update 09/2015: Updated abstraction notes
	Surgical treatment for ICH at this hospital	Update 10/2013: New Comprehensive data element

	added Update 12/2014: Made data element optional for Comprehensive
If surgical treatment for ICH at this hospital, type	Update 10/2013: New Comprehensive data element added Update 12/2014: Made data element optional for Comprehensive
If ICH was evacuated, time from ictus to evacuation procedure start was	Update 10/2013: New Comprehensive data element added Update 12/2014: Made data element optional for Comprehensive
Complications of Reperfusion therapy (Thrombolytic or MER)	Update 1/31/2009: Added code: "Other serious complications" Update 10/2013: Added clarification for Other Serious Complication and UTD response options. Update 01/2019: Updated element name to "Complications of Reperfusion therayp (Thrombolytic or MER)". Updated notes for abstraction.
What is the last NIHSS score documented prior to initiation of IV thrombolytic therapy at this hospital?	Update 12/2014: Added new data element required for Comprehensive
What is the last NIHSS score documented prior to initiation of IA t-PA or MER at this hospital?	Update 12/2014: Added new data element required for Comprehensive
What is the highest NIHSS score documented within 36 hours following initiation of IV (t-PA) thrombolytic therapy?	Update 12/2014: Added new data element required for Comprehensive
What is the highest NIHSS score documented within 36 hours following IA t-PA or MER initiation?	Update 12/2014: Added new data element required for Comprehensive
Was there a positive finding on brain imaging of parenchymal hematoma, SAH, and/or IVH following IV or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy initiation?	Update 12/2014: Added new data element required for Comprehensive Update 06/2016: Updated inclusion guidelines- removal of Petechial hemorrhage Update 12/2016: Added fourth bullet in Notes For Abstraction. Updated for Joint Commission coding instructions.
Was there a clinical deterioration within 36 hours of the onset of treatment with IV or IA pharmacologic thrombolytic therapy, or endovascular reperfusion procedure	Update 4/2013: New Comprehensive data element added Update 12/2014: Removed data element
If patient died, was there documentation that the patient's death was due to an intracranial hemorrhagic complication within 36 hours of the onset of treatment with IV or IA pharmacologic	Update 4/2013: New Comprehensive data element added Update 12/2014: Removed data element

thrombolytic therapy, or endovascular procedure	
Highest NIHSS within 36 hours of IV or IA pharmacologic thrombolytic therapy, or endovascular reperfusion procedure	Update 4/2013: New Comprehensive data element added Update 12/2014: Removed data element
NIHSS that most closely preceded treatment with IV or IA pharmacologic thrombolytic therapy, or endovascular reperfusion procedure	Update 4/2013: New Comprehensive data element added Update 12/2014: Removed data element
Neuroimaging evidence of hemorrhagic complication within 36 hours	Update 4/2013: New Comprehensive data element added Update 12/2014: Removed data element
Date/Time of positive brain image	Update 4/2013: New Comprehensive data element added Update 12/2014: Made data element required for Comprehensive
Results of positive brain image	Update 4/2013: New Comprehensive data element added Update 12/2014: Made data element optional for Comprehensive and added new response option "Other positive finding not listed"
Is there documentation that a procoagulant reversal agent was initiated at this hospital? & Date/Time procoagulant initiated	Update 4/2013: New Comprehensive data element added Update 12/2014: Updated display label for data element "Procoagulant treatment initiated in ICH at this hospital" and made required for Comprehensive. Made "Date/Time" element optional for Comprehensive Update 06/2016: Updated inclusion guidelines- added Pradaxa
Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not administering a procoagulant reversal agent?	Update 12/2014: Added new data element required for Comprehensive
Is there documentation that nimodipine was administered at this hospital?	Update 4/2013: New Comprehensive data element added Update 12/2014: Updated display label for data element "Nimodipine treatment initiated in SAH at this hospital" and made required for Comprehensive. Removed data element "If yes, was nimodipine treatment initiated within 24 hours of arrival?" Update 09/2015: Updated abstraction notes and inclusion criteria
Is there documentation by a physician/APN/PA or pharmacist in the medical record of a reason for not	Update 12/2014: Added new data element required for Comprehensive

administering nimodipine treatment?	Update 09/2015: Definition and abstraction notes updated
What is the date and time that nimodipine was first administered to this patient at this hospital?	Update 12/2014: Added new data element required for Comprehensive
Patient NPO throughout the entire hospital stay? (Was the patient NPO throughout the entire hospital stay?)	Update 10/10/2008: Updated title from: "Was the patient NPO throughout the entire hospital stay?" to "Patient NPO throughout the entire hospital stay?" Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2012: changed text on patient not transferred bullet point.
Was patient screened for dysphagia prior to any oral intake including water or medications?	Update 10/10/2008: Added notes on patients who are made CMO. Removed the phrase "clearly implied". Update 1/31/2009: Added instructions and definitions for the answers; Yes, No/ND, NC. Update 6/16/2010: Added section that begins with " Select “Yes” if the patient was given sublingual (SL) medication specifically formulated..." Update 4/2012: Made updates to notes for abstraction and added examples.
If yes, Dysphagia screening results:	Update 10/10/2008: Added new field. Update 10/1/2012: Made optional for Coverdell.
Treatment for Hospital-Acquired Pneumonia (Was the patient treated for pneumonia during this admission?)	Update 10/10/2008: Updated Title and removed "aspiration" from nosocomial PN. Updated last choice from "ND" to "NC". Update 4/2012: Added notes for abstraction. Update 12/2014: Changed "REQURED FOR COVERDELL ONLY" to "OPTIONAL"
Was patient ambulating at the end of hospital day 2?	Update 10/10/2008: Added examples. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 12/2014: Removed – data element moved to Historic
Was DVT prophylaxis initiated by the end of hospital day 2?	Update 10/10/2008: Added fondaparinux to inclusion criteria. Update 1/31/2009: Clarified "TED Hose" with "Antiembolic stockings, TED hose or vascular compression stockings" in the example. Update 4/2012: Added DVT and therapeutic doses and updated notes for abstraction, additional example. Update 4/2013: Removed – data element moved to historic

Is there documentation why prophylaxis was not administered at hospital admission	Update 10/1/2012: Notes for abstraction - for administration of VTE Prophylaxis, for patients determined at low risk, for patients determined to be at risk, for patients receiving anticoagulant therapy. Update 1/1/2013: Updated notes for abstraction.
VTE Interventions:	Update 10/30/2008: Added new field. Update 8/6/2009: Updated field name from "If yes, DVT Therapy" to "If yes". Added the Joint Commission coding instructions. Update 4/5/2010: Changed field title from "If yes" to "VTE Interventions" Update 4/2012: Added code Oral Factor Xa Inhibitor, added note about TJC/CMS data element, updated notes for abstraction. Update 1/1/2013: Updated notes for abstraction. Update 1/1/2014: Added 9-Aspirin as an allowable value with corresponding notes for abstraction. Update 12/2014: Updated Notes for Abstraction based on the latest Specifications Manual for National Hospital Inpatient Quality Measures Update 09/2015: Updated numeration of VTE types Update 06/2016: Allowable values updated to remove 4(GCS) and 9 (Aspirin), will still be available in PMT. Notes for abstraction and Suggested data sources updated
What date was the VTE prophylaxis administered?	8/6/2009: Added new field (Stroke Core Measure) Update 1/1/2013: Updated notes for abstraction. Update 12/2014: Removed the word "initial" from data element name and definition. Updated the notes for abstraction. Update 06/2016:Updated notes for abstraction and suggest data sources Update 12/2016: Updated Guidelines for Abstraction Inclusion for Joint Commission coding guidelines. Update 03/2016: Updated example to indicate correct dates Update 04/2017: Corrected dates in example for STK
Is there physician/APN/PA or pharmacist documentation why VTE prophylaxis was not	Update 12/2014: Updated the data element name, definition, and notes for abstraction based on the latest Specifications

administered at hospital admission?	Manual for National Hospital Inpatient Quality Measures Update 12/2016: Updated Guidelines for Abstraction Inclusion for Joint Commission coding guidelines.
Reason for Oral Factor Xa Inhibitor	Added 1/1/2013: New data element. Update 06/2016:Updated notes for abstraction and inclusion guidelines
Other Therapeutic Anticoagulation	Added 4/2012: New data element. Update 10/2013: Added apixaban (Eliquis) to medication list. Removed sentence: "if the patient receives apixaban (Eliquis) select "other Anticoagulant"
Was DVT or PE documented? (Was evidence of DVT or PE (pulmonary embolus) documented?)	Update 10/10/2008: Updated title. Removed choice for "ND" and combined into "No/ND". Added Example 4. Update 12/2014: Changed "REQURED FOR COVERDELL ONLY" to "OPTIONAL" Update 09/2021: Changed "OPTIONAL" to "REQUIRED FOR COVERDELL"
Was antithrombotic therapy administered by the end of hospital day 2?	Update 10/10/2008: Added note about status post IV tPA. Update 1/31/2009: Removed "While the abstractors may make reasonable inferences from available doctors' notes, they should not actively search in the patient's record for contraindications" in the definition section. Update 10/1/2011: Added descriptions to answer choice and updated notes for abstraction. Update 4/2012: Added note about TJC/CMS data element. Added notes for abstraction about inpatient strokes and added DVT and Therapeutic doses Update 10/1/2012: Added new note and bullet points. Update 4/2013: Added Specifications Manual wording to notes for abstraction
If yes, select all that apply	8/6/2009: Added new field. Update 10/1/2011: Updated information that provides links to table 4 and 5
Was patient treated for a urinary tract infection (UTI) during this admission?	Update 10/10/2008: Added "hospital-acquired" to definition. Updated choice of "ND" to "Urinary tract infection was not documented". Update 10/1/2012: Made optional for Coverdell.
If patient was treated for a UTI, did the patient have a Foley catheter during this admission	Update 10/1/2012: Made optional for Coverdell.
	Update 04/2020: Added new

	Active bacterial or viral infection at admission during hospitalization	element. Removed "or suspected" from the Question. Update 07/2020: Updated definition, allowable values, and notes for abstraction. Update 10/2020: Indented details to appear under the element name.
MER	~~Was a mechanical~~ endovascular reperfusion procedure attempted during this episode of care (at this hospital)?	Update 2/2017: Added new field.
	Are reasons for not performing mechanical endovascular reperfusion therapy documented?	Update 2/2017: Added new field.
	Reasons for not performing mechanical endovascular reperfusion therapy (select all that apply)	Update 2/2017: Added new field.
	If MER treatment at this hospital, type of treatment	Update 2/2017: Added new field.
	Skin Puncture Date and Time	Update 2/2017: Added new field.
	Date/Time of first pass of clot retrieval device at this hospital	Update 2/2017: Added new field.
	Is a cause(s) for delay in performing mechanical endovascular reperfusion therapy documented?	Update 2/2017: Added new field.
	Reasons for delay (select all that apply)	Update 2/2017: Added new field.
	What is the last NIHSS score documented prior to initiation of MER procedure (at this hospital)?	Update 2/2017: Added new field.
	Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade:	Update 2/2017: Added new field.
	Date/time of first post-reperfusion TICI grade that was 2b or 3	Update 2/2017: Added new field.
Measurements (first measurement upon presentation to your hospital)	Lipids, A1C, and Blood Glucose	Update 10/10/2008: Added Triglycerides and Blood Glucose details and Footnote information. Update 1/31/2009: Added "Do not enter values obtained after 48 hours" to the instructions for entering in the measurements. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2012: Changed all values from "on admission" to "on arrival". Updated Blood Glucose to allow for glucometer readings of "Too Low" and "Too High". Changed Blood Glucose to required for patients that receive IV tPA. Update 10/2013: Replaced the following sentence: "or if

		available as a fasting sample in the outpatient record" with "or within 30 days prior to hospital arrival. Fasting and non-fasting LDL-c values are both acceptable." Update 12/2014: Blood Glucose display label updated and data element made required for Comprehensive. Added data element definition and coding instructions from TJC CSTK Performance Measurement Implementation Guide
	Serum Creatinine *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field. Update 7/1/2009: Added additional instructions for abstraction. Update 4/2012: Added notes for abstraction regarding inpatient strokes.
	What is the first platelet count obtained prior to or after hospital arrival?	Update 12/2014: Added new data element required for Comprehensive
	INR	Update 10/10/2008: Added new field. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2012: Added notes for abstraction.
	Is there documentation in the medical record that the INR value performed closest to hospital arrival was greater than 1.4?	Update 12/2014: Added new data element required for Comprehensive
	If initial INR ≥ 1.4 and treated with procoagulant, Date/Time INR < 1.4	Update 4/2013: Added new Comprehensive element Update 12/2014: Updated data element display label from "If initial INR ≥ 1.4 and treated with procoagulant, Date/Time INR < 1.4" and made optional for Comprehensive.
	Vital Signs: Heart Rate and Blood Pressure *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field. Update 4/2012: Added notes for abstraction regarding inpatient strokes. Update 10/1/2012: Changed Blood pressure to required for patients that receive IV tPA. Update 12/2014: Blood Pressure display label updated and data element made required for Comprehensive. Added data element definition and coding instructions from TJC CSTK Performance Measurement Implementation Guide
Advanced Stroke Care	What is the date and	04/2019: Moved order of

		time that IA thrombolytic therapy was initiated for this patient at this hospital?	field.
		Is there documentation that the route of thrombolytic (alteplase) administration was intra-arterial (IA)?	04/2019: Added CSTK-09 to the Collected For section.
		What is the date and time that IA thrombolytic therapy was initiated for this patient at this hospital?	04/2019: Updated element name, definition, data collection question, and suggested data sources.
		Is there documentation in the medical record that the first endovascular treatment procedure was initiated greater than 8 hours after arrival at this hospital?	04/2019: Updated element name and collected for section. Added procedure reprot to suggested data sources. Removed anesthesia start time, groin puncture time, and procedure start date from Guidelines for Abstraction.
		Table 8.1a	04/2019: Updated version number. 12/2019: Removed table and replaced it with the link to the TJC Manual.
		Table 8.1b	04/2019: Updated version number. Added new ICD-10 codes. 12/2019: Removed table and replaced it with the link to the TJC Manual.
		Is there documentation of skin puncture at this hospital to access the arterial site selected for endovascular treatment of a cerebral artery occlusion?	04/2019: Updated element name. Added CSTK-09 and CSTK-12 to the Collected For section. Added arterial access to the inclusion section.
		What is the date and time associated with the time of skin puncture at this hospital to access arterial site selected for endovascular treatment of a cerebral artery occlusion?	04/2019: Updated element to note that it is required for Comprehensive. Updated data element name. Added CSTK-12 to the Collected For section.
		Did the patient receive intravenous (IV) alteplase at this hospital or a transferring hospital prior to receiving intra-arterial (IA) alteplase or mechanical reperfusion therapy at this hospital?	04/2019: Updated element name. Added CSTK-10 to the Collected For section. Updated definition. Updated suggested data collection question. Updated descriptions for allowable values. Added tissue plasminogen activator (t-PA) to the inclusion section.
		Was a mechanical endovascular reperfusion procedure attempted during this episode of care (at this hospital)?	04/2019: Fixed spelling error of "distruption"
		Was a mechanical throbectomy procedure attempted but unsuccessful or aborted before removal of the LVO?	04/2019: Updated element to note that it is required for Comprehensive. Fixed typos in the Collected For section. Updated Notes for Abstraction.
		Was a mechanical thrombectomy procedure	09/2020: Updated allowable values, note for abstraction,

	attempted but unsuccessful or aborted before removal of the LVO?	additional notes/guidelines for abstraction. Removed Table 8.1c.
	Are reasons for not performing mechanical endovascular reperfusion therapy documented?	04/2019: Updated definition.
	Reasons for not performing mechanical endovascular reperfusion therapy	04/2019: Updated definition.
	If MER Treatment at this hospital, type of device	04/2019: Updated element name.
	Is there documentation in the medical record of the first pass of a mechanical reperfusion device to remove a clot occluding a cerebral artery at this hospital?	04/2019: Updated element to note that it is required for Comprehensive. Added GWTG - EVT Measures to the Collected For section.
	What is the date and time of the first pass of a clot retrieval device at this hospital?	04/2019: Updated element to note that it is required for Comprehensive. Added CSTK-07 to the Collected For section.
	^^ Thombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade	01/2020: Updated data element format, allowable values, notes for abstraction, and additional notes/guidelines for abstraction
	Reasons for delay	04/2020: Added new allowable value and updated Notes for Abstraction.
	Post TICI Reperfusion Grade Date/Time	12/2020: Updated element label, notes for abstraction and additional notes / guidelines for abstraction.
	Site of Primary Vessel Occlusion	5/2021: Updated to align with current TJC specifications manual definition
Complications	Was there a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrage following IV or IA alteplase therapy, or mechanical endovascular reperfusion therapy initiation?	06/2020: Updated additional notes/guidelines from abstraction.
Complications of Thrombolytic Therapy	Is there documentation that a procoagulant reversal agent was initiated at this hospital?	01/2020: Updated inclusion criteria.
	Is there physician/APN/PA documentation why Oral Factor Xa was administered for VTE prophylaxis?	03/2020: Updated all data element content
Discharge Information	Get With The Guidelines® Ischemic Stroke-Only Estimated Mortality Rate	8/6/2009: Added new field. Update 5/11/2011: Added exclusion criteria.
	Get With The Guidelines® Global Stroke Estimated Mortality Rate (Ischemic	8/6/2009: Added new field. Update 5/11/2011: Added exclusion criteria.

	Stroke, SAH, ICH, Stroke not otherwise specified)	
	In-hospital Death *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field. REMOVED 7/30/2010
	Was patient Comfort Measures Only at the time of discharge? (Is there evidence that the patient's care was restricted to CMO (comfort measures only) at the time of discharge?)	Update 10/10/2008: Updated title from: "Is there evidence that the patient's care was restricted to comfort measures only at the time of discharge?" to "Was patient Comfort Measures Only at the time of discharge?" Update 8/6/2009: Removed field.
	Ambulatory status at discharge? (What was patient's ambulatory status at discharge?)	Update 10/10/2008: Updated title from: "What was patient's ambulatory status at discharge?" to "Ambulatory status at discharge?" Added additional Non-ambulatory information and added Examples. Update 10/2020: Updated from an optional field to "Required for Coverdell".
	Modified Rankin Scale at discharge	Added 4/2012: New data element Update 10/1/2012: Changed to Required. Changed response to Yes/No format and added "if yes" and "Total Score" elements.
	. Discharge Blood Pressure (Measurement closest to discharge) *These variables are necessary for a reliable risk adjustment model to help you understand about how the mortality and the patient outcome you observe at your hospital compare to other hospitals. Or between patients at your hospital with different risk factor profiles.*	Update 10/10/2008: Added new field.
Discharge Diagnosis		Update 09/2015: Moved to new Clinical Codes tab
	ICD-9-CM Principal Diagnosis Code	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Replaced the data element definition, allowable values, and inclusion/exclusion guidelines. Updated the suggested data sources. Made required for Comprehensive.
	ICD-9-CM Other Diagnosis Code	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Replaced the data element definition and allowable values;

		updated the suggested data sources. Moved data element to Admin section and made required for Comprehensive.
	ICD-9-CM Principal Procedure Code	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Replaced the data element definition, allowable values, and notes for abstraction; updated the suggested data sources. Moved data element to Admin section and made required for Comprehensive.
	ICD-9-CM Principal Procedure Date	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Updated last bullet under suggested data sources. Moved data element to Admin section and made required for Comprehensive
	ICD-9-CM Principal Procedure Time	Update 12/2014: Added new data element required for Comprehensive
	ICD-9-CM Other Procedure Codes	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Replaced the data element definition and allowable values; updated the suggested data sources. Moved data element to Admin section and made required for Comprehensive
	ICD-9-CM Other Procedure Dates	8/6/2009: Added new field (Stroke Core Measure). Update 12/2014: Updated last bullet under suggested data sources. Moved data element to Admin section and made required for Comprehensive
	ICD-9-CM Other Procedure Times	Update 12/2014: Added new data element required for Comprehensive
	ICD-9-CM discharge diagnosis related to stroke	Update 8/6/2009: Removed codes 432 and 435. Update 10/1/2012: Made optional for Coverdell.
	No stroke or TIA related ICD-9 code present	Update 10/1/2012: Made optional for Coverdell..
Discharge Treatments	Antithrombotic Therapy approved in stroke	Update 09/2015: Added Edoxaban (Savaysa)
	Smoking Cessation Therapies Prescribed	10/2018: Updated notes for abstraction section. 12/2018: Updated notes for abstraction section.
	Antithrombotic Therapy approved in stroke	Update 09/2015: Added Edoxaban (Savaysa)
	Antithrombotic Medication(s) at Discharge (Was antithrombotic medication prescribed at discharge?) Update 10/2013: Element changed to:	Update 10/10/2008: Updated title from: "Was antithrombotic medication prescribed at discharge?" to "Antithrombotic Medication(s) at Discharge". Updated the list of Antiplatelets and Anticoagulants. Added requirement for class and

Antithrombotic Therapy approved in stroke - Prescribed	medication when Yes is selected. Updated examples. Update 4/2012: Added note about TJC/CMS data element. Added DVT and Therapeutic doses Update 10/1/2011: Updated notes for abstraction section. Update 4/2013: Added Specifications Manual wording to notes for abstraction Update 10/2013: Removed Note for Stroke Core Measure/TJC users. Antiplatelet and Anticoagulant inclusion lists added along with the following sentence: "Select "Yes" only if one of the following antithrombotic medications approved in stroke was prescribed at discharge."
Antiplatelet/Anticoagulant Medication	Update 10/1/2011: Added Antiplatelet, Antiplatelet Medication, Anticoagulant, and Anticoagulant Medication beneath Antithrombotic Medications at Discharge section Update 10/2013: Removed from medication listing: Other antiplatelet, desirudin (iprivask), and other anticoagulant. Added apixaban (Eliquis) to anticoagulant list.
If NC, documented reasons for no antithrombotic therapy at discharge Update 10/2013: Element name changed to If NC, documented contraindications	Update 10/27/2008: Updated title from: "If no antithrombotic therapy at discharge, give reason(s)" to " If no, documented reasons for no antithrombotic therapy at discharge." Update 10/1/2011: Added notes for abstraction section. Update 10/2013: Added response of Other
Other Antithrombotic(s) - Prescribed	10/2013: Added
If yes, Medication	10/2013: Added
Persistent or Paroxysmal Atrial Fibrillation/Flutter (Was atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF), documented during this admission?)	Update 10/10/2008: Updated title from: "Was atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF), documented during this admission?" to "Persistent or Paroxysmal Atrial Fibrillation/Flutter". Updated definition and added examples. Update 4/2013: Added Specifications Manual wording to notes for abstraction
If atrial fib/flutter or history of PAF documented, was patient discharged on anticoagulation?	Update 1/31/2009: Updated the definition to: "Patients with Atrial fib or flutter are at increased risk for stroke. This includes patients who have afib or flutter during

	the hospital stay or patients who have a history of any Afib/Flutter including PAF documented in the medical record, even without evidence of afib or flutter during the current hospitalization. Select the appropriate answer for this population of patients as to whether or not they were discharged on anticoagulation." Update 4/2012: Added note about TJC/CMS data element. Update 4/2013: Added Specifications Manual wording to notes for abstraction
If NC, documented reasons for no anticoagulation	Update 10/10/2008: Updated Title from: " If no atrial fibrillation/flutter therapy at discharge, give reason(s)" to "If no, documented reasons for no anticoagulation." Update 6/16/2010: Corrected typo in title from "If no" to "If NC". Update 10/1/2011: Updated title, definition, and added notes for abstraction.
Antihyperintensive Tx	Update 10/2014: Added the following note: "Select the class of medication regardless of the indication for this medication. Medications in these classes may be used to treat alternate conditions beyond hypertension."
Cholesterol-Reducing Tx	Update 10/10/2008: Updated Title from: "Cholesterol-Reducing/Controlling Tx" to "Cholesterol-Reducing Tx." Updated notes regarding ATP III criteria and added reference to ATP III. Update 10/23/2008: Added new choices of "Niacin" and "Absorption Inhibitor". Added note about combination agents. Update 01/2019: Added new choice of "PCSK9 Inhibitor". Removed notes regarding ATP III criteria and removed reference to ATP III.
Statin Medication and Dose	Update 10/1/2011: Added drop down list. Update 10/1/2012: Added Juvisync to drop down list. Update 01/2019: Updated field name. Updated notes for abstraction.
Documented Reason for Not Prescribing Guideline Recommended Dose	Update 01/2019: Added new field
Documented reason for not prescribing a statin medication at discharge	Update 09/2015: Added additional reason and abstraction note Update 06/2016: Update to notes for abstraction and inclusion guidelines Update 01/2019: Updated element definition

	Update 03/2020: Updated all data element content Update 06/2020: Removed "Statin medication allergy described using one of the negative modifiers or qualifiers listed in Appendix H, Table 2.6, Qualifiers and Modifiers Table." from Exclusions.
Contraindication to Statin	Update 1/31/2009: Added new field. Update 8/6/2009: Updated field with Joint Commission coding instructions.
Ischemic stroke/TIA due to atherosclerosis	Update 10/10/2008: Added new field. Update 8/6/2009: Removed field.
Documentation that the patient has evidence of atherosclerosis?	8/6/2009: Added new field (Stroke Core Measure). Update 5/20/2011: Removed field from coding instructions, element retired.
Intensive Statin Therapy	Update 10/10/2008: Added new field. Update 3/19/2009: Updated how intensive lipid lowering effects with statin agents of particular doses are defined, including a list of meds and doses. Also noted which meds are not considered intensive statin therapy. Update 6/14/2011: Added warning for simvastatin 80 mg Update 01/2019: Removed field from coding instructions, element retired.
Anti-hyperglycemic medications	Update 04/2020: Moved data element from "Medications Prior to Arrival" to "Discharge Treatments"
If yes (Anti-Hyperglycemic), select medications	Update 03/2022: Updated Definition, Question, Notes for Abstraction, and Suggested Data Sources. Added link to Discharge Treatments section.
Was there a documented reason for not prescribing medication with proven CVD benefit?	Update 04/2020: Moved data element from "Medications Prior to Arrival" to "Discharge Treatments" Update 07/2020: Updated Notes for Abstraction and Suggested Data Sources. Added Additional Notes/Guidelines for Abstraction. Update 11/2021: Updated Notes for Abstraction.
Follow-up Appointment Scheduled for Diabetes Management	Update 04/2020: Updated definition and Notes for Abstraction. Update 01/2021: Updated definition, allowable values, and Notes for Abstraction.
Date of Diabetes Management Follow-Up Appointment	Update 04/2020: Updated Notes for Abstraction. Update 01/2021: Updated element name, format, and notes for abstraction.
Anti-Smoking Tx	10/2018: Updated notes

		for abstraction section.
	Smoking Cessation Therapies Prescribed	Update 08/2018: Added new field.
	New Diagnosis of Diabetes	Update 10/10/2008: Added answer option details, clinical mention of diabetes note, and evidence of hyperglycemia note. Update 7/1/2009: Updated answer descriptions.
	Diabetes Tx	Update 10/10/2008: Included subcutaneous agents and when to select NC. Added second example.
	Antidepressant Medication	Update 04/2014: Added Update 12/2014: Removed – data element moved to Historic
	Was the patient prescribed any antidepressant class of medication at discharge?	Update 12/2014: Data element added
Other Lifestyle Interventions	Reducing weight and/or increasing activity recommendations	Update 10/10/2008: Added "at discharge" to the end of first sentence.
	TLC Diet or Equivalent	Update 10/10/2008: Added "at discharge" to the end of the first sentence. Added TLC Diet features and Equivalent diet information. Update 1/31/2009: Added "Select "NC" for patients who are at their appropriate body weight, do not require cholesterol-reduction, currently exercise at or in excess of 30 minutes per day, 3 days a week" to the definitions sections. Removed " Increased Physical activity".
	Antihypertensive Diet	Update 10/10/2008: Added "at discharge" to first sentence. Update 1/31/2009: Added "Select "NC" if the treatment is not provided and the patient has no evidence for hypertension" to the definitions section.
	Was diabetes teaching provided?	Update 10/27/2008: Field moved from next section, *Stroke Education.* Changed/Added No/ND, NC bullets.
Stroke Education	Personal Modifiable Risk Factors for Stroke	Update 8/6/2009: Removed ND from No/ND and NC for answer choices. Updated for Joint Commission coding instructions. Update 12/2014: Updated field label from "Personal Modifiable Risk Factors for Stroke" to "Risk Factors Factors for Stroke" Update 12/2016: Updated Notes for Abstraction, and added Excluded Data Sources for Joint Commission coding instructions.
	Stroke Warning Signs and Symptoms	Update 8/6/2009: Removed ND from No/ND and NC for

		answer choices. Updated for Joint Commission coding instructions. Update 12/2016: Updated Notes for Abstraction, added Excluded Data Sources, Updated Guideline for Abstraction Inclusion for Joint Commission coding instructions.
	How to Activate EMS for Stroke	Update 8/6/2009: Removed ND from No/ND and NC for answer choices. Updated for Joint Commission coding instructions. Update 12/2016: Updated Notes for Abstraction, added Excluded Data Sources, and updated Inclusion Guidelines for Abstraction for clarification per Joint Commission coding instructions.
	Need for follow-up after discharge	Update 10/10/2008: Added "Making an actual appointment is not required." Update 8/6/2009: Removed ND from No/ND and NC for answer choices. Updated for Joint Commission coding instructions. Update 12/2016: Updated Notes for Abstraction, added Excluded Data Sources, and updated Inclusion Guidelines for Abstraction for clarification per Joint Commission coding instructions.
	Their Prescribed Medications	Update 8/6/2009: Removed ND from No/ND and NC for answer choices. Updated for Joint Commission coding instructions. Update 6/16/2010: Added Note section. Update 12/2016: Updated Notes for Abstraction, added Excluded Data Sources, and updated Inclusion Guidelines for Abstraction for clarification per Joint Commission coding instrcutions.
	Was Diabetes Teaching Provided?	Update 09/2020: Removed link from Stroke Education section.
Stroke Rehabilitation	Patient assessed for and/or received rehabilitation services during this hospitalization?	Update 10/10/2008: Updated Title from: "Is there documentation in the record that the patient was assessed for or received rehabilitation services?" to "Patient was assessed for or received rehabilitation services?" Updated note to include "any one or more of the following." Added example. Update 8/6/2009: Updated for Joint Commission coding instructions. Changed field name from "Patient was assessed for or received rehabilitation services? (Is there documentation in the record that the patient was assessed for or received rehabilitation services?)" to

		"Patient assessed for and/or received rehabilitation services during this hospitalization?" Update 12/2014: Updated Notes for Abstraction, Suggested Data Sources, and removed several Suggested Data Sources, Excluded Data Sources, and Inclusion Guidelines for Abstraction
	Check all rehab services that patient received or was assessed for:	Update 10/27/2008: Changed color from being Coverdell-only (blue) to Stroke PMT (black) Update 1/31/2009: Updated 4th item and added 5th item: 4. Patient ineligible to receive rehabilitation services 5. Patient ineligible to receive rehabilitation services due to impairment (i.e. poor prognosis, patient unable to tolerate rehabilitation therapeutic regiment
	Stroke Diagnostic Tests and Intervention	Update 10/2015: Added as optional for Cryptogenic stroke Update 03/2016: Updated as optional Stroke Standard elements Updated 04/2016: Minor instructions update Update 10/2016: Changed from multi-select to single-select fields. Revised labels for Extended surface and Short-term cardiac rhythm monitoring, and allowable values 'Performed during this admission' and 'Not performed or planned' Update 11/2016: Added note to indicate when elements are required Update 03/2020: Updated all data element content
Health Related Social Needs Assessment	During this admission, was a standardized health related social needs form or assessment completed?	Update 01/2021: Added new data element
	If yes, identify the areas of unmet social need (select all that apply)	Update 01/2021: Added new data element Update 09/2021: Removed redundant notes for abstraction, suggested data sources, excluded data sources, and guidelines for abstraction
Comprehensive: Post Discharge Follow-Up Form	What is the patient's Modified Rankin Score (mRS) at 90 days post discharge?	Update 1/2015: Added new data element for Comprehensive Update 06/2016: Update to allowsable value 6 and notes for abstraction
	Post discharge Modified Rankin Scale (mRS) performed (via telephone or in person)	Update 1/2015: Removed
	If yes, Total Score	Update 1/2015: Removed
	What is the date that the Modified Rankin Score	Update 1/2015: Display label changed from "Date post

	(mRS) was obtained post discharge?	discharge Modified Rankin Scale performed" Update 06/2016: Update to notes for abstraction
	If no post discharge Modified Rankin Scale was performed, documented reason for lack of follow up	Update 1/2015: Removed
	Reasons for lack of follow up	Update 1/2015: Removed
Additional TJC Stroke Core Measure Fields		Update 4/5/2010: Updated section title from "Addition Core Measure Fields" to "Additional TJC PSC Core Mreasure Fields" Update 11/13/2010: Moved "Is there documentation why prophylaxis was not administered at hospital admission?" from this tab to Hospitalization tab under In-Hospital Treatment and Complications. Update 1/1/2013: Made various updates to notes for abstraction for most of the data elements in thsi section. Updates 1/1/2014: IV OR IA Thrombolytic (t-PA) Therapy Administered at This Hospital or Within 24 Hours Prior to Arrival, LDL-c Greater Than or Equal to 100 mg/dL, LDL-c Measured Within the First 48 Hours or 30 Days Prior to Hospital Arrival, Reason for No VTE Prophylaxis – Hospital Admission, Reason for Not Administering Antithrombotic Therapy by End of Hospital Day 2, Reason for Not Prescribing Anticoagulation Therapy at Discharge, Reason for Not Prescribing Antithrombotic Therapy at Discharge - provided clarification within notes for abstraction. Update 12/2014: *Postal Code*: changed last bullet under suggested data sources to "UB-04" *Payment Source*: changed last bullet under suggested data sources to "UB-04" and made data element required for Comprehensive. *HIC Number*: changed last bullet under suggested data sources to "UB-04" *Atrial Fibrillation/Flutter*: updated data element name, definition, and notes for abstraction *IV Thrombolytic Initiation*: Removed last bullet of notes for abstraction, added new suggested data source and exclusion

			Reason for Extending the Initiation of IV Thrombolytic: added new data element. *Reason for Not Initiating IV Thrombolytic*: updated data element name, definition, and notes for abstraction. *Comfort Measures Only*: updated the notes for abstraction, suggested data sources, and inclusion guidelines. Made data element required for Comprehensive. *Last Known Well*: added new notes for abstraction and suggested data sources, and removed the excluded data sources. *Date/Time Last Known Well*: updated notes for abstraction, added new suggested data source and inclusion guidelines. *Discharge Date*: removed "Field Location: 6" from last bullet under Suggested Data Sources and made data element required for Comprehensive. *Race*: Made data element required for Comprehensive. Update 06/2016: Update to notes for abstraction for Atrial Fibrillation/Flutter, Date Last Known Well, Time Last Known Well, Reason for Not Initiating IV Thrombolytic, Reason for Not Administering Antithrombotic Therapy by End of Hospital Day 2 Update 12/2016: Updated Notes for Abstraction for Antithrombotic Therapy Administered by End of Hospital Day 2, Is there documentation on the day of or day after hospital arrival of a reason for not initiating IV thrombolytic? Update 06/2020: Updated Notes for Abstraction and additional notes / guidelines for "Is there documentation that IV alteplase was initiated at this hospital?" and "Did the patient receive IV or IA alteplase at this hospital within 24 hours prior to arrival". Removed "Antithrombotic medication allergy described using one of the negative modifiers or qualifiers listed in Appendix H, Table 2.6, Qualifiers and Modifiers Table" from Exclusions for element "Reason for not administering antithrombotic therapy by end of hospital day 2". Removed "Antithrombotic medication allergy described using one of the negative modifiers or qualifiers listed in Appendix H,

		Table 2.6, Qualifiers and Modifiers Table" from Exclusions for element "Reason for not prescribing antithrombotic therapy at discharge". Removed "Anticoagulant medication allergy described using one of the negative modifiers or qualifiers listed in Appendix H, Table 2.6, Qualifiers and Modifiers Table." from Exclusions for element "Reason for not prescribing anticoagulant at discharge". Update 12/2020: Updated Notes for Abstraction and additional notes / guidelines for "Source of Payment". Updated Allowable Values, Notes for Abstraction, and Additional Notes / Guidelines for Abstraction for "Race" element.
Optional Fields		Update 04/2014: Added sentence stating: Do not enter any personal health information/protected health information (PHI) in any free text "Comments" fields or Optional Fields 1-10, 11, & 12. Please do not enter any patient identifiers in this section
Administrative	Indicate if the care team used a patient adherence contract/compact, as evident by documentation or a copy in the medical record	Update 4/29/2009: Changed question from "Patient adherence contract/compact used?" to "Indicate if the care team used a patient adherence contract/compact, as evident by documentation or a copy in the medical record"
Special Initiatives		Update 09/2018: Corrected typo for "dispatch". Update 09/2019: Updated General Information.
	Patient care record available at time of patient arrival	Update 08/2018: Corrected typos.
	Patient care record available later during hospitalization	Update 08/2018: Corrected typos.
	EMS agency name or number	Update 09/2018: Corrected typos and formatting. Update 09/2019: Updated data element name and allowable values.
	Run/Sequence number	Update 09/2018: Corrected formatting.
	Date/Time Brain Imaging Initiated by MSU	Update 08/2018: Updated data collection question.
	Date/Time IV tPA Administered by MSU	Update 08/2018: Added new note.
	Initial 911 Call for Help	Update 02/2020: Added new element.
	EMS Unit Notified by Dispatch	Update 08/2018: Updated diplay label. Update 09/2018: Corrected formatting.
	EMS Unit Arrived on Scene	Update 08/2018: Updated diplay label. Update 09/2018: Corrected formatting.
	EMS Arrived at Patient	Update 08/2018: Updated diplay label.
	EMS Unit Left Scene	Update 08/2018: Updated diplay

		label.
	Blood Glucose level	Update 09/2018: Updated allowable values and notes for abstraction. Update 09/2018: Corrected formatting.
	Initial Blood Pressure by EMS	Update 08/2018: Added new element.
	Last Known Well as Documented by EMS	Update 09/2018: Updated notes for abstraction. Update 09/2018: Corrected formatting. Update 07/2019: Updated Collected For section.
	Discovery of Stroke Symptoms as Documented by EMS	Update 08/2018: Updated suggested data sources. Update 09/2018: Updated notes for abstraction. Update 07/2019: Updated Collected For section.
	Additional Information provided as part of pre-notification?	Update 08/2018: Updated note. Removed response code for O2 < 94%
	Indicate the stroke screen tool used	Update 08/2018: Added new codes "BE FAST" and "MEND". Rearranged codes in alphabetical order. Updated notes for abstraction.
	Stroke Screen Outcome	Update 08/2018: Corrected typos.
	Suspected stroke	Update 09/2018: Updated notes for abstraction.
	Indicate the severity scale used	Update 08/2018: Corrected typos. Removed code "MEND", and the associated notes for abstraction. Update 09/2018: Corrected typo. Update 04/2020: Added response response options "MPSS" and "VAN" and the associated notes for abstraction.
	Positive for LVO	Update 08/2018: Corrected typos.
	If severity scale assessment completed, enter total score	Update 08/2018: Corrected typos. Removed code "MEND" from allowable values
	How as destination made?	Update 08/2018: Moved the question up to align with the order displayed in the PMT. Update 09/2018: Updated notes for abstraction.
	Was a Thrombolytic Checklist used?	Update 08/2018: Moved the question up to align with the order displayed in the PMT. Update 08/2018: Updated formatting.
	Source Used to Obtain Prehospital Care Data	Update 09/2018: Updated to an optional field.
	Comments: (EMS Feedback form)	Update 07/2019: Added new data element.
	Interfacility Transfer Layer Elements	Update 5/2021: Added new elements for interfacility transfers.
Table 1	Antihypertensive Medications	Update 4/2012: Changed formatting of table and replaced with updated list.
Table 2	Cholesterol	Update 9/23/2009: Updated table

	Reducing/Controlling medications	- new format and categorization. Update 10/1/2011: Added Pitavastatin Update 4/2012: Added simvastatin+sitagliptin Update 4/2013: Updated medication lists to match Specifications Manual Update 10/2013: Added following Meds: Atorvastatin+ezetimibe (Litruzet), Icosapent ethyl (Vascepa), Lomitapide (Juxtapid), Mipomersen sodium (Kynamro) Update 1/1/2014: Removed LeCholest, LeCholest Light, Questran, Questran Light, Abistrate, Choloxin, Tricor. Update 10/2016: Removed "Omega 3 acid ethyl esters" and "Omega 3 fatty acids" Update 1/2019: Added Alirocumab and Evolcumab Update 01/2021: Added Bempedoic acid and (ALN-PCSsc)
Table 4	Antiplatelet Medications	Update 10/1/2012: Added table with Other antiplatelet row. Update 4/2013: Updated list to provide names of specific Aspirin medications. Added notes about prasugrel and ticagrelor Update 10/2013: Removed following sentences: "if patient is on prasugrel alone, select No/ND to antithrombotic data elements" "if patient is on ticagrelor alone, select No/ND to antithrombotic data elements"
Table 5	Anticoagulant Medications	Update 10/1/2011: Added table Update 4/2013: Updated to add apixaban, updated note for Lovenox, added notes to refer to Specifications Manual Update 092015: Added Edoxaban (Savaysa)
Table 6	Statin Dose and Intensity	Update 1/2019: Added table Update 02/2022: Added Amlodipine + Atorvastatin (Caduet) 10/80 Update 03/2022: Corrected Amlodipine + Atorvastatin (Caduet) High dose from 10/20 to 10/80
Formatting Updates	Throughout the document	Removed symbols for elements that are no longer required. 11/13/2010 Added "REQUIRED", "REQUIRED FOR TJC", "REQUIRED FOR COVERDELL ONLY" and "OPTIONAL" to the beginning of field labels. 09/2015: Changed QIO Clinical Warehouse to CMS

		Clinical Warehouse 07/2018: Updated Admission Tab: alignment for 4 fields,Discharge Tab:Stroke Education-Risk Factor stroke updated Notes for abstraction,Special Initiative Tab:Removed Date fields in Allowable values. 06/2019: Removed references to CMS. 07/2020: Adjusted table alignments so they are all left-aligned. Adjusted table widths.