Comprehensive Stroke (CSTK)

Set Measures

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<tr>
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<td>Clinical Trial</td>
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<tr>
<td>Discharge Date</td>
<td>All Records, Not collected for HBIPS-2 and HBIPS-3</td>
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<td>ICD-9-CM Principal Diagnosis Code</td>
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<td>ICD-9-CM Principal Procedure Code</td>
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<td>IV Thrombolytic Therapy Prior to IA or Mechanical</td>
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<td>Reperfusion Therapy</td>
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<td>ABC/2 Estimate</td>
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<td>CSTK-01, CSTK-05, CSTK-07, CSTK-07a.</td>
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<td>First Radiographic Image</td>
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<td>Highest NIHSS Score Documented Prior to IV Thrombolytic Initiation</td>
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<td>Highest NIHSS Score Documented Prior to Therapy Initiation</td>
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<tr>
<td>Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation</td>
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<td>Initial Hunt and Hess Scale Time</td>
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<td>Modified Rankin Score (mRS) Date</td>
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<td>Nimodipine Administration</td>
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<td>Nimodipine Administration Date</td>
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<td>Positive Brain Image</td>
<td>CSTK-05</td>
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<td>Positive Brain Image Time</td>
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<td>Post-Treatment Thrombolysis in Cerebral Infarction (TICI)</td>
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<td>Reperfusion Grade</td>
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<td>Procoagulant Reversal Agent Initiation</td>
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<tr>
<td>Procoagulant Reversal Agent Initiation Date</td>
<td>CSTK-04a, CSTK-04b</td>
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<tr>
<td>Procoagulant Reversal Agent Initiation Time</td>
<td>CSTK-04a, CSTK-04b</td>
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<tr>
<td>Proximal or Distal to the Primary Arterial Occlusion</td>
<td>CSTK-07a</td>
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<tr>
<td>Reason for Not Achieving an INR Value &lt; 1.4</td>
<td>CSTK-04</td>
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<tr>
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<td>Therapy Initiation Time</td>
<td>CSTK-05</td>
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<tr>
<td>Warning Signs and Symptoms of Stroke</td>
<td>CSTK-01</td>
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**Test**

Measure Information Form

**Measure Set:** Comprehensive Stroke (CSTK)

**Set Measure ID:** CSTK-01

**Performance Measure Name:** National Institutes of Health Stroke Scale (NIHSS) Score Performed for Ischemic Stroke Patients

**Description:** Ischemic stroke patients for whom an initial NIHSS score is performed prior to any acute recanalization therapy (i.e., IV thrombolytic (t-PA) therapy, or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy) in patients undergoing recanalization therapy and documented in the medical record, OR documented within 12 hours of arrival at the hospital emergency department for patients who do not undergo recanalization therapy.

**Rationale:** A neurological examination of all patients presenting to the hospital emergency department with warning signs and symptoms of stroke should be a top priority and performed in a timely fashion. Use of a standardized stroke scale or scoring tool ensures that the major components of the neurological examination are evaluated. Clinical practice guidelines from the American Heart Association/American Stroke Association recommend The National Institutes of Health Stroke Scale (NIHSS) as the preferred scoring tool for this purpose. Scores obtained aid in the initial diagnosis of the patient, facilitate communication among healthcare professionals, and identify patient eligibility for various interventions and the potential for complications.

**Type of Measure:** Process

**Improvement Noted As:** Increase in the rate

**Numerator Statement:** Ischemic stroke patients for whom a NIHSS score is performed prior to any acute recanalization therapy in patients undergoing recanalization therapy and documented in the medical record, OR documented within 12 hours of hospital arrival for patients who do not undergo recanalization therapy.

**Included Populations:**
- Patients with documented IA thrombolytic (t-PA) therapy (ICD-9 CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1a AND Table 8.1b), OR
- Patients with documented IV thrombolytic (t-PA) therapy (ICD-9-CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1a ), OR
- Patients with documented Mechanical Endovascular Reperfusion Therapy (ICD-9 CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1c)

**Excluded Populations:** None

**Data Elements:**
- *Arrival Date*
- *Arrival Time*
Denominator Statement: Ischemic stroke patients who arrive at this hospital emergency department (ED)

Included Populations:

- Discharges with *ICD-9-CM Principal Diagnosis Code* for ischemic stroke as defined in Appendix A, Table 8.1

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients admitted for Elective Carotid Intervention
- Patients who do not undergo recanalization therapy and are discharged within 12 hours of arrival at this hospital
- Patients without warning signs and symptoms of stroke on arrival at this hospital

Data Elements:

- *Admission Date*
- *Birthdate*
- *Discharge Date*
- *Discharge Time*
- *Elective Carotid Intervention*
- *ICD-9-CM Other Procedure Codes*
- *ICD-9-CM Other Procedure Dates*
- *ICD-9-CM Other Procedure Times*
- *ICD-9-CM Principal Diagnosis Code*
- *ICD-9-CM Principal Procedure Code*
- *ICD-9-CM Principal Procedure Date*
- *ICD-9-CM Principal Procedure Time*
- *Warning Signs and Symptoms of Stroke*

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: None

Sampling: Yes. Please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:


**Measure Algorithm:**
CSTK-01: National Institutes of Health Stroke Scale (NIHSS) Score Performed for Ischemic Stroke Patient

Numerator: Ischemic stroke patients for whom a NIHSS score is performed prior to any acute recanalization therapy in patients undergoing recanalization therapy and documented in the medical record, OR documented within 12 hours of hospital arrival for patients who do not undergo recanalization therapy

Denominator: Ischemic stroke patients who arrive at this hospital emergency department (ED)
CSTK-01 K

ICD-9-CM Principal or Other Procedure Date

= UTD

= Non-UTD Value

CSTK-01 X

ICD-9-CM Principal or Other Procedure Time

= UTD

= Non-UTD Value

Timing I (in minutes) =
ICD-9-CM Principal or Other Procedure Date and ICD-9-CM Principal or Other Procedure Time minus Initial NIHSS Score Date and Initial NIHSS Score Time

Timing I

< 0 minutes

CSTK-01 D

≥ 0 minutes

CSTK-01 E
CSTK-01
NR

Discharge Date
= Non-UTD Value

Discharge Time
= Non-UTD Value

Arrival Date
= Non-UTD Value

Arrival Time
= Non-UTD Value

Timing II (in minute) = Discharge Date and Discharge Time minus Arrival Date and Arrival Time

< 0 minutes
≥ 0 and < 720 minutes
≥ 720 minutes

CSTK-01 B

Timing III (in minute) = Initial NIHSS Score Date and Initial NIHSS Score Time minus Arrival Date and Arrival Time

< 0 minutes
> 720 minutes

CSTK-01 X

Case Will Be Rejected

CSTK-01 E
In Numerator Population

CSTK-01 B
Not In Measure Population

CSTK-01 D
In Measure Population

STOP
**Test**

Measure Information Form

Measure Set: Comprehensive Stroke (CSTK)

Set Measure ID: CSTK-02

Performance Measure Name: Modified Rankin Score (mRS) at 90 Days

Description: Ischemic stroke patients treated with intra-venous (IV) or intra-arterial (IA) thrombolytic (t-PA) therapy or who undergo mechanical endovascular reperfusion therapy for whom a 90 day (> 75 days and < 105 days) mRS is obtained via telephone or in-person

Rationale: The Modified Rankin Scale (mRS) is the accepted standard for assessing recovery post-stroke. As such, it has become the most widely used clinical outcome measure for stroke clinical trials. Scores are used to measure the degree of disability or dependence in activities of daily living. Score reliability and reproducibility are improved through use of a structured interview by a trained evaluator. Interviews may be conducted in-person or over the phone. According to guideline recommendations from the American Heart Association/American Stroke Association, standardized interviews to obtain a mRS score should be conducted for acute ischemic stroke patients treated with IV or IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy at 3 months (90 days); however, recovery may continue well beyond 3 months for many ischemic stroke patients.

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement: Ischemic stroke patients for whom a 90 day (> 75 days and < 105 days) mRS is obtained via telephone or in-person

Included Populations: As above

Excluded Populations: None

Data Elements:

- Modified Rankin Score (mRS)
- Modified Rankin Score (mRS) Date

Denominator Statement: Ischemic stroke patients treated with IV or IA thrombolytic (t-PA) therapy or who undergo mechanical endovascular reperfusion therapy

Included Populations:

- Discharges with ICD-9-CM Principal Diagnosis Code for ischemic stroke as defined in Appendix A, Table 8.1, AND
- Patients with documented IA thrombolytic (t-PA) therapy (ICD-9 CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1a AND Table 8.1b)), OR
• Patients with documented IV thrombolytic (t-PA) therapy (ICD-9-CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1a), OR
• Patients with documented Mechanical Endovascular Reperfusion Therapy (ICD-9 CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1c)

Excluded Populations:

• Patients less than 18 years of age
• Patients who have a Length of Stay > 120 days
• Patients who expire during the hospital stay

Data Elements:

• Admission Date
• Birthdate
• Discharge Date
• Discharge Disposition
• ICD-9-CM Other Procedure Codes
• ICD-9-CM Other Procedure Dates
• ICD-9-CM Principal Diagnosis Code
• ICD-9-CM Principal Procedure Code
• ICD-9-CM Principal Procedure Date

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: None

Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.


**Measure Algorithm:**
CSTK-02: Modified Rankin Score (mRS) at 90 Days

Numerator Statement: Ischemic stroke patients for whom a 90 day (≥ 75 days and ≤ 105 days) mRS is obtained via telephone or in-person

Denominator Statement: Ischemic stroke patients treated with IV or IA thrombolytic (t-PA) therapy or who undergo mechanical endovascular reperfusion therapy

Variable key: days

Comprehensive Stroke Pilot Project
Draft Measure Specifications
**Test**

# Measure Information Form

**Measure Set:** Comprehensive Stroke (CSTK)

**Set Measure ID:** CSTK-03

<table>
<thead>
<tr>
<th>Set Measure ID</th>
<th>Performance Measure Name</th>
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<tbody>
<tr>
<td>CSTK-03a</td>
<td>Hunt and Hess Scale Performed for SAH Patients</td>
</tr>
<tr>
<td>CSTK-03b</td>
<td>ICH Score Performed for ICH Patients</td>
</tr>
</tbody>
</table>

**Performance Measure Name:** Severity Measurement Performed for SAH and ICH Patients (Overall Rate)

**Description:** Subarachnoid hemorrhage (SAH) and intracerebral hemorrhage (ICH) stroke patients for whom a severity measurement (i.e., Hunt and Hess Scale for SAH patients or ICH Score for ICH patients) is performed prior to surgical intervention (e.g. clipping, coiling, or any surgical intervention) in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of arrival at the hospital emergency department for patients who do not undergo surgical intervention.

CSTK-03 SAH and ICH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

CSTK-03a SAH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

CSTK-03b ICH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

The CSTK-03 measure is reported as an overall rate which includes SAH and ICH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention; CSTK-03a and CSTK-03b are subsets of the overall rate, and stratified by the type of stroke patient.

**Rationale:** Subarachnoid hemorrhage (SAH) and intracerebral hemorrhage (ICH) are medical emergencies requiring rapid diagnosis and assessment. Early deterioration is common in the first few hours after onset, and associated with increased mortality rates of > 75% compared to 30-day mortality rates of 35%-52%. More than half of all deaths from these conditions occur within the first two days. According to the American Heart Association/American Stroke Association, the severity of SAHs should be documented with the Hunt and Hess Scale, and the severity of ICHs should be documented with ICH score to capture the clinical state of the patient. The severity of initial neurological injury should be determined and documented in the emergency department because it is a useful predictor of outcome and helpful in planning future care with family and physicians.
Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement:
CSTK-03: The number of SAH and ICH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

CSTK-03a: The number of SAH patients for whom a Hunt and Hess Scale is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

CSTK-03b: The number of ICH stroke patients for whom an ICH Score is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

Included Populations: As above

Excluded Populations: None

Data Elements:

- Arrival Date
- Arrival Time
- Initial Hunt and Hess Scale Date
- Initial Hunt and Hess Scale Performed
- Initial Hunt and Hess Scale Time
- Initial ICH Score Date
- Initial ICH Score Performed
- Initial ICH Score Time

Data Elements By Measure

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<td>Initial ICH Score Time</td>
<td>Initial ICH Score Time</td>
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</table>

Denominator Statement: SAH and ICH stroke patients who arrive at this hospital emergency department (ED)

Included Populations: Discharges with ICD-9-CM Principal Diagnosis Code for hemorrhagic stroke as defined in Appendix A, Table 8.2 (i.e., Table 8.2a and Table 8.2b) with or without aneurysm repair procedure (ICD-9-CM Principal or Other Procedure Code as defined in Appendix A, Table 8.2d) or surgical intervention
procedure (ICD-9-CM Principal or Other Procedure Code as defined in Appendix A, Table 8.2e)

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Non-surgical patients discharged within 6 hours of arrival at this hospital
- Patients with admitting diagnosis of traumatic brain injury (TBI), unruptured arteriovenous malformation (AVM), and non-traumatic subdural hematoma (ICD-9-CM Other Diagnosis Codes as defined in Appendix A, Table 8.2f)

Data Elements:

- Admission Date
- Birthdate
- Discharge Date
- Discharge Time
- ICD-9-CM Other Procedure Codes
- ICD-9-CM Other Procedure Dates
- ICD-9-CM Other Procedure Times
- ICD-9-CM Principal Diagnosis Code
- ICD-9-CM Principal Procedure Code
- ICD-9-CM Principal Procedure Date
- ICD-9-CM Principal Procedure Time

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: Hospitals may wish to identify those patients that did not receive a severity assessment within the specified timeframe(s), or received a severity assessment that did not match their diagnosis, or both, so that efforts can be directed toward improving care.

Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:


**Measure Algorithm:**
CSTK-03: Severity Measurement Performed for SAH and ICH Patients (Overall Rate)

Numerator: The number of SAH and ICH stroke patients for whom a severity measurement is performed prior to surgical intervention in patients undergoing surgical intervention and documented in the medical record; OR documented within 6 hours of hospital arrival for patients who do not undergo surgical intervention.

Denominator: SAH and ICH stroke patients who arrive at this hospital emergency department (ED).

Variable Key
Timing I, Timing III, Timing V

Stratification Table:

<table>
<thead>
<tr>
<th>Code</th>
<th>Stratified By <em>Principal Diagnosis Code</em></th>
<th>Allowable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTK03</td>
<td>Severity Measurement Performed for SAH and ICH Patients (Overall Rate)</td>
<td>**</td>
</tr>
<tr>
<td>CSTK-03a</td>
<td>Hunt and Hess Scale Performed for SAH Patients</td>
<td>Table 8.2a</td>
</tr>
<tr>
<td>CSTK-03b</td>
<td>ICH Score Performed for ICH Patients</td>
<td>Table 8.2b</td>
</tr>
</tbody>
</table>

* This refers to the data element "ICD-9-CM Principal Diagnosis Code". Each case will be stratified according to the principal diagnosis code after the Category Assignments are completed and the overall rate is calculated.
** No allowable value exists for the overall rate. It includes all diagnosis on Tables 8.2a to 8.2b.

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

START

ICD-9-CM Principal Diagnosis Code

On Table 8.2

ICD-9-CM Other Diagnosis Code

Any on Table 8.2f

All Missing or None on Table 8.2f

CSTK-03 X

ED Patient

= N

CSTK-03 Y

ICD-9-CM Principal or Other Procedure Code

None on Table 8.2d or Table 8.2e

CSTK-03 NS

= Y

On Table 8.2d or Table 8.2e

CSTK-03 SD
Initialize the Measure Category Assignment for each strata measure (CSTK-03a and CSTK-03b) = 'B'.

Do not change the Measure Category Assignment that was already calculated for the overall measure (CSTK-03).

The rest of the algorithm will reset the appropriate Measure Category Assignment to each strata measure.

Set the Measure Category Assignment for strata measures CSTK-03a and CSTK-03b = 'B'

Set Measure Category Assignment for strata measure CSTK-03a = Measure Category Assignment for measure CSTK-03

Set Measure Category Assignment for strata measure CSTK-03b = Measure Category Assignment for measure CSTK-03

STOP
**Test**

## Measure Information Form

**Measure Set:** Comprehensive Stroke (CSTK)

**Set Measure ID:** CSTK-04

**Performance Measure Name:** INR Reversal Achieved

**Description:** Intracerebral hemorrhage (ICH) stroke patients who achieve an INR value less than (<=) 1.4 following initiation of treatment with a procoagulant reversal agent (i.e., fresh frozen plasma, recombinant factor VIIa, prothrombin complex concentrates)

**Rationale:** Intracerebral hemorrhage (ICH) is a life-threatening disorder. Patients receiving oral anticoagulants (OACs), as well as those with an acquired or congenital coagulopathy, are at increased risk for ICH and hemorrhagic expansion with warfarin-associated bleeds comprising 12% to 15% of all spontaneous hemorrhages. Prompt INR reversal with intravenous infusions of vitamin K and fresh-frozen plasma (FFP) has been historically recommended; however, normalization with prothrombin complex concentrates (PCCs) is increasingly recommended because several studies have shown that these agents can rapidly normalize the INR within minutes.

**Type of Measure:** Process

**Improvement Noted As:** Increase in the rate

**Numerator Statement:** ICH stroke patients who achieve an INR value < 1.4 post-treatment

- **Included Populations:** As above
- **Excluded Populations:** None

**Data Elements:**
- *INR Value < 1.4*

**Denominator Statement:** ICH stroke patients treated with a procoagulant reversal agent at this hospital

- **Included Populations:**
  - Discharges with ICD-9-CM Principal Diagnosis Code for hemorrhagic stroke as defined in Appendix A, Table 8.2.
  - Patients who have an Admitting Diagnosis of primary parenchymal ICH
  - INR ≥ 1.4 performed closest to hospital arrival

- **Excluded Populations:**
  - Patients less than 18 years of age
  - Patients who have a Length of Stay > 120 days
Patients with Comfort Measures Only documented on day of or after hospital arrival
Patients enrolled in clinical trials
Patients with a documented Reason for Not Achieving an INR Value < 1.4

Data Elements:

- Admission Date
- Admitting Diagnosis
- Birthdate
- Clinical Trial
- Comfort Measures Only
- Discharge Date
- ICD-9-CM Principal Diagnosis Code
- Initial INR Value $\geq 1.4$
- Procoagulant Reversal Agent Initiation
- Reason for Not Achieving an INR Value < 1.4

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: The rate for INR reversal achieved should be analyzed in conjunction with the median time to treatment with a procoagulant reversal agent (CSTK-4a) and the median time to INR reversal (CSTK-4b). These measures, used together, will assist in understanding the median time to control intracerebral bleeding (CSTK-04a plus CSTK-04b) in patients with warfarin-related intracerebral hemorrhage and will identify potential opportunities for improvement.

Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:


**Measure Algorithm:**

---

**Comprehensive Stroke Pilot Project**

**Draft Measure Specifications**

---

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CSTK-04: INR Reversal Achieved
Numerator Statement: ICH stroke patients who achieve an INR value < 1.4 post-treatment
Denominator Statement: ICH stroke patients treated with a procoagulant agent

START

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

ICD-9-CM Principal Diagnostic Code
On Table 6.2

Missing

ICD9 INR Value ≥ 1.4

Missing

Clinical Trial

= Y

Missing

Comfort Measures Only

= N

Missing

Admitting Diagnosis

On Table 6.2c

Missing

Proceed with Reversal Agent Inflation

CSTK-03 X

Missing

Reason for Not Achieving an INR Value < 1.4

= Y

Missing

INR Value < 1.4

= Y

Case Will Be Rejected

In Numerator Population

CSTK-04 A

In Measure Population

Not In Measure Population

STOP
Measure Information Form

Measure Set: Comprehensive Stroke (CSTK)

Set Measure ID: CSTK-04a

Performance Measure Name: Median Time to Treatment with a Procoagulant Reversal Agent

Description: Median time from hospital arrival to initiation of treatment with a procoagulant reversal agent (i.e., fresh frozen plasma, recombinant factor VIIa, prothrombin complex concentrates) in patients with an admitting diagnosis of primary parenchymal ICH and an initial international normalized ratio (INR) greater than or equal to (≥) 1.4.

Rationale: Intracerebral hemorrhage (ICH) is a life-threatening disorder. Patients receiving oral anticoagulants (OACs), as well as those with an acquired or congenital coagulopathy, are at increased risk for ICH and hemorrhagic expansion with warfarin-associated bleeds comprising 12% to 15% of all spontaneous hemorrhages. Prompt INR reversal with intravenous infusions of vitamin K and fresh-frozen plasma (FFP) has been historically recommended; however, normalization with prothrombin complex concentrates (PCCs) is increasingly recommended because several studies have shown that these agents can rapidly normalize the INR within minutes.

Type of Measure: Process

Improvement Noted As: Decrease in the median value

Continuous Variable Statement: Time (in minutes) from hospital arrival to initiation of treatment with a procoagulant reversal agent in patients with an admitting diagnosis of primary parenchymal ICH and an initial INR ≥ 1.4.

Included Populations:

- Discharges with ICD-9-CM Principal Diagnosis Code for hemorrhagic stroke as defined in Appendix A, Table 8.2.
- Patients who have an Admitting Diagnosis of primary parenchymal ICH
- INR ≥ 1.4 performed closest to hospital arrival
- Procoagulant Reversal Agent Initiation performed at this hospital

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients with Comfort Measures Only documented on day of or after hospital arrival
- Patients enrolled in clinical trials

Data Elements:
• Admission Date
• Admitting Diagnosis
• Arrival Date
• Arrival Time
• Birthdate
• Clinical Trial
• Comfort Measures Only
• Discharge Date
• ICD-9-CM Principal Diagnosis Code
• Initial INR Value ≥ 1.4
• Procoagulant Reversal Agent Initiation
• Procoagulant Reversal Agent Initiation Date
• Procoagulant Reversal Agent Initiation Time

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: The median time to treatment with a procoagulant reversal agent should be analyzed in conjunction with the median time to INR reversal (CSTK-4b) and the rate for INR reversal achieved (CSTK-04). These measures, used together, will assist in understanding the median time to control intracerebral bleeding (CSTK-04a plus CSTK-04b) in patients with warfarin-related intracerebral hemorrhage and will identify potential opportunities for improvement.

Sampling: No.

Data Reported As: Aggregate measure of central tendency.


**Measure Algorithm:**
CSTK-04a: Median Time to Treatment with a Procoagulant Reversal Agent

Continuous Variable Statement: Time (in minutes) from hospital arrival to initiation of treatment with a procoagulant reversal agent in patients with an admitting diagnosis of primary parenchymal ICH and INR ≥ 1.4

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Draft Measure Specifications
Measurement Value (in minute) =
Procoagulant Reversal Agent Initiation Date and Procoagulant Reversal Agent Initiation Time minus
Arrival Date and Arrival Time

Note: There will be no category assignment E for this measure because it is a continuous variable.
**Test**

Measure Information Form

Measure Set: Comprehensive Stroke(CSTK)

Set Measure ID: CSTK-04b

Performance Measure Name: Median Time to INR Reversal

Description: Median time from procoagulant reversal agent (i.e., fresh frozen plasma, recombinant factor VIIa, prothrombin complex concentrates) initiation at this hospital to first international normalized ratio (INR) value less than (<) 1.4 for patients with an admitting diagnosis of primary parenchymal ICH

Rationale: Intracerebral hemorrhage (ICH) is a life-threatening disorder. Patients receiving oral anticoagulants (OACs), as well as those with an acquired or congenital coagulopathy, are at increased risk for ICH and hemorrhagic expansion with warfarin-associated bleeds comprising 12% to 15% of all spontaneous hemorrhages. Prompt INR reversal with intravenous infusions of vitamin K and fresh-frozen plasma (FFP) has been historically recommended; however, normalization with prothrombin complex concentrates (PCCs) is increasingly recommended because several studies have shown that these agents can rapidly normalize the INR within minutes.

Type of Measure: Process

Improvement Noted As: Decrease in the median value

Continuous Variable Statement: Time (in minutes) from procoagulant reversal initiation at this hospital to first INR value < 1.4 in patients with an admitting diagnosis of primary parenchymal ICH

Included Populations:

- Discharges with ICD-9-CM Principal Diagnosis Code for hemorrhagic stroke as defined in Appendix A, Table 8.2.
  AND
- Patients who have an Admitting Diagnosis of primary parenchymal ICH
  AND
- INR < 1.4 following initiation of a procoagulant reversal agent
  AND
- Procoagulant Reversal Agent Initiation performed at this hospital

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients with Comfort Measures Only documented on day of or after hospital arrival
- Patients enrolled in clinical trials

Data Elements:
- Admission Date
- Admitting Diagnosis
- Birthdate
- Clinical Trial
- Comfort Measures Only
- Discharge Date
- ICD-9-CM Principal Diagnosis Code
- INR Value < 1.4
- INR Value < 1.4 Date
- INR Value < 1.4 Time
- Procoagulant Reversal Agent Initiation
- Procoagulant Reversal Agent Initiation Date
- Procoagulant Reversal Agent Initiation Time

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: The median time to INR reversal should be analyzed in conjunction with the median time to treatment with a procoagulant reversal agent (CSTK-4a) and the rate for INR reversal achieved (CSTK-04). These measures, used together, will assist in understanding the median time to control intracerebral bleeding (CSTK-04a plus CSTK-04b) in patients with warfarin-related intracerebral hemorrhage and will identify potential opportunities for improvement.

Sampling: No.

Data Reported As: Aggregate measure of central tendency.


**Measure Algorithm:**
Measure Information Form

Measure Set: Comprehensive Stroke (CSTK)

Set Measure ID: CSTK-05

<table>
<thead>
<tr>
<th>Set Measure ID</th>
<th>Performance Measure Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTK-05a</td>
<td>Hemorrhagic Complication for Patients Treated with Intra-Venous (IV) Thrombolytic (t-PA) Therapy Only</td>
</tr>
<tr>
<td>CSTK-05b</td>
<td>Hemorrhagic Complication for Patients Treated with Intra-Arterial (IA) Thrombolytic (t-PA) Therapy or Mechanical Endovascular Reperfusion Therapy</td>
</tr>
</tbody>
</table>

Performance Measure Name: Hemorrhagic Complications (Overall Rate)

Description:
CSTK-05 Ischemic stroke patients who develop a symptomatic intracranial hemorrhage (i.e., clinical deterioration ≥ 4 point increase on NIHSS and brain image finding of parenchymal hematoma, or subarachnoid hemorrhage, or intraventricular hemorrhage) within (≤) 36 hours after the onset of treatment with intra-venous (IV) or intra-arterial (IA) thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion procedure.

CSTK-05a Ischemic stroke patients who develop a symptomatic intracranial hemorrhage (i.e., clinical deterioration ≥ 4 point increase on NIHSS and brain image finding of parenchymal hematoma, or subarachnoid hemorrhage, or intraventricular hemorrhage) within (≤) 36 hours after the onset of treatment with intra-venous (IV) thrombolytic (t-PA) therapy only.

CSTK-05b Ischemic stroke patients who develop a symptomatic intracranial hemorrhage (i.e., clinical deterioration ≥ 4 point increase on NIHSS and brain image finding of parenchymal hematoma, or subarachnoid hemorrhage, or intraventricular hemorrhage) within (≤) 36 hours after the onset of treatment with IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy.

The CSTK-05 measure is reported as an overall rate which includes ischemic stroke patients who develop a symptomatic hemorrhage after reperfusion therapy. CSTK-05a and CSTK-05b are subsets of the overall rate, and stratified by the type of therapy.

Rationale: Intravenous (IV) thrombolytic (t-PA) therapy for acute ischemic stroke was approved by the US Food and Drug Administration in 1996, following findings from the National Institute of Neurological Disorders and Stroke (NINDS) trial which demonstrated favorable outcomes in 31% to 50% of patients treated with recombinant tissue plasminogen activator (r-tPA), as compared to 20% to 38% of patients treated with placebo. Intra-arterial (IA) thrombolytic therapy (t-PA) has since been used to improve recanalization and clinical outcomes for select patients nonresponsive to IV therapy. Intracranial hemorrhage is the major risk of thrombolytic therapy with similar rates reported for both IV and IA routes. The NINDS trial found that 6.4% of patients treated with IV t-PA experienced symptomatic bleeding. Findings from the Prolyse in Acute Cerebral Thromboembolism (PROACT II) study found the intracranial hemorrhage with neurological deterioration within 24 hours occurred in 10% of patients treated with IA recombinant prourokinase. In addition to these
agents, other available thrombolytic drugs include: streptokinase, p-anisoylated lys-plasminogen-streptokinase activator, and urokinase.

Endovascular reperfusion therapy in acute ischemic stroke comprises a number of pharmacological and mechanical procedures. Mechanical embolectomy is a treatment option for patients in whom pharmacological thrombolysis is contraindicated or might be ineffective. Devices like the Merci Retriever and other endovascular microcatheters are intended to improve tissue rescue and diminish reperfusion hemorrhage while broadening the population eligible for therapy. These devices may be used alone or in conjunction with chemical thrombolysis.

**Type of Measure:** Outcome

**Improvement Noted As:** Decrease in the rate

**Numerator Statement:**

**CSTK-05** Ischemic stroke patients who develop a symptomatic intracranial hemorrhage ≤ 36 hours after the onset of treatment with IV thrombolytic (t-PA) therapy, or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy

**CSTK-05a** Ischemic stroke patients who develop a symptomatic intracranial hemorrhage ≤ 36 hours after the onset of treatment with IV thrombolytic (t-PA) therapy

**CSTK-05b** Ischemic stroke patients who develop a symptomatic intracranial hemorrhage ≤ 36 hours after the onset of treatment with IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy

**Included Populations:** As above

**Excluded Populations:** None

**Data Elements:**

- Arrival Date
- Arrival Time
- Highest NIHSS Score Documented Prior to IV Thrombolytic Initiation
- Highest NIHSS Score Documented Prior to Therapy Initiation
- Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation
- Highest NIHSS Score Documented Within 36 Hours Following Therapy Initiation
- IV Thrombolytic Initiation Date
- IV Thrombolytic Initiation Time
- Positive Brain Image
- Positive Brain Image Date
- Positive Brain Image Time
- Therapy Initiation Date
- Therapy Initiation Time

**Data Elements By Measure**

<table>
<thead>
<tr>
<th>CSTK-05</th>
<th>CSTK-05a</th>
<th>CSTK-05b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival Date</td>
<td>Arrival Date</td>
<td>Arrival Date</td>
</tr>
<tr>
<td>Arrival Time</td>
<td>Arrival Time</td>
<td>Arrival Time</td>
</tr>
<tr>
<td>Highest NIHSS Score Documented Prior to IV Thrombolytic Initiation</td>
<td>Highest NIHSS Score Documented Prior to Therapy Initiation</td>
<td>Highest NIHSS Score Documented Prior to Therapy Initiation</td>
</tr>
<tr>
<td>Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation</td>
<td>Highest NIHSS Score Documented Within 36 Hours Following Therapy Initiation</td>
<td>Highest NIHSS Score Documented Within 36 Hours Following Therapy Initiation</td>
</tr>
<tr>
<td>IV Thrombolytic Initiation Date</td>
<td>IV Thrombolytic Initiation Time</td>
<td>Therapy Initiation Date</td>
</tr>
<tr>
<td>Positive Brain Image</td>
<td>Positive Brain Image Date</td>
<td>Therapy Initiation Date</td>
</tr>
<tr>
<td>Positive Brain Image Time</td>
<td>Therapy Initiation Time</td>
<td>Therapy Initiation Initiation</td>
</tr>
<tr>
<td>Therapy Initiation Date</td>
<td>Therapy Initiation Time</td>
<td>Therapy Initiation Initiation</td>
</tr>
<tr>
<td>Highest NIHSS Score Documented Prior to Therapy Initiation</td>
<td>Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation</td>
<td>Highest NIHSS Score Documented Within 36 Hours Following Therapy Initiation</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Highest NIHSS Score Documented Within 36 Hours Following IV Thrombolytic Initiation</td>
<td>Positive Brain Image</td>
<td>Positive Brain Image</td>
</tr>
<tr>
<td>Positive Brain Image Documented Within 36 Hours Following Therapy Initiation</td>
<td>Positive Brain Image Date</td>
<td>Positive Brain Image Date</td>
</tr>
<tr>
<td>Positive Brain Image Documented Within 36 Hours Following Therapy Initiation</td>
<td>Positive Brain Image Time</td>
<td>Positive Brain Image Time</td>
</tr>
<tr>
<td>Positive Brain Image Documented Within 36 Hours Following Therapy Initiation</td>
<td>IV Thrombolytic Initiation Date</td>
<td>Therapy Initiation Date</td>
</tr>
<tr>
<td>Positive Brain Image Documented Within 36 Hours Following Therapy Initiation</td>
<td>IV Thrombolytic Initiation Time</td>
<td>Therapy Initiation Time</td>
</tr>
</tbody>
</table>
| IV Thrombolytic Initiation Date | Therapy Initiation Date
| Therapy Initiation Time

**Denominator Statement:** Ischemic stroke patients treated with IV or IA thrombolytic (t-PA) therapy, or who undergo mechanical endovascular reperfusion therapy

**Included Populations:**

- Discharges with *ICD-9-CM Principal Diagnosis Code* for ischemic stroke as defined in Appendix A, Table 8.1,
  **AND**
- Patients with documented IV thrombolytic (t-PA) therapy (*ICD-9-CM Principal or Other Procedure Codes* as defined in Appendix A, Table 8.1a ),
  **OR**
- Patients with documented IA thrombolytic (t-PA) therapy (*ICD-9 CM Principal or Other Procedure Codes* as defined in Appendix A, Table 8.1a AND Table 8.1b),
  **OR**
- Patients with documented Mechanical Endovascular Reperfusion Therapy (*ICD-9 CM Principal or Other Procedure Codes* as defined in Appendix A, Table 8.1c)

**Excluded Populations:**

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients admitted for Elective Carotid Intervention
- Patients transferred to this hospital following treatment with IV thrombolytic (t-PA) therapy or IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy initiated prior to arrival at this hospital
- Patients who hemorrhage prior to the onset of treatment with IV thrombolytic (t-PA) therapy or IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy
- Patients who hemorrhage after 36 hours of the onset of treatment with IV thrombolytic (t-PA) therapy or IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy

**Data Elements:**
Risk Adjustment: Yes.

Data Elements:

- IV Thrombolytic Therapy Prior to IA or Mechanical Reperfusion Therapy
- Admission Date
- Birthdate
- Hispanic Ethnicity
- ICD-9-CM Other Diagnosis Codes
- Initial Blood Glucose Value at Hospital Arrival
- Initial NIHSS Score at Hospital Arrival
- Initial Platelet Count at Hospital Arrival
- Initial Systolic Blood Pressure at Hospital Arrival
- Race
- Sex

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy:

Measure Analysis Suggestions: Hospitals may wish to identify those patients who are at higher risk for hemorrhage following specific therapies, so that efforts can be directed toward improving care.

Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.


**Measure Algorithm:**
CSTK-05: Hemorrhagic Complications (Overall Rate)
Numerator Statement: Ischemic stroke patients who develop a symptomatic intracranial hemorrhage ≤ 36 hours after the onset of treatment with IV thrombolytic (t-PA) therapy, IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy
Denominator Statement: Ischemic stroke patients treated with IV or IA thrombolytic (t-PA) therapy or who undergo a mechanical endovascular reperfusion therapy

Variable Key:
Timing I, Timing II, Timing III, Timing IV, Deterioration1, Deterioration2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTE05</td>
<td>Hemorrhagic Complications</td>
</tr>
<tr>
<td>CSTI-05a</td>
<td>Hemorrhagic Complication for Patients Treated with Intra-Arterial (IA) Thrombolytic (t-PA) Therapy only</td>
</tr>
<tr>
<td>CSTI-05b</td>
<td>Hemorrhagic Complication for Patients Treated with Intra-Arterial (IA) Or Thrombolytic (t-PA) Therapy or Mechanical Endovascular Reperfusion Therapy</td>
</tr>
</tbody>
</table>

Notes:
* This refers to the data element 'ICD-9-CM Principal or Other Procedure Code'. Each case will be stratified according to the principal or other procedure code, after the Category Assignments are completed and the overall rate is calculated.
** No allowable value exists for the overall rate. It includes all procedures on Tables 8.1a to 8.1b.
CSTK-05 IAMER

Therapy Initiation Date

=Non-UTD Value

Therapy Initiation Time

=Non-UTD Value

Arrival Date

=Non-UTD Value

Arrival Time

=Non-UTD Value

Timing 1 (in minutes) =
Therapy Initiation Date and Therapy Initiation Time
minus
Arrival Date and Arrival Time

Timing 1 < 0

CSTK-05 B

Timing 1 ≥ 0

CSTK-05 IAMER1
CSTK-05
IAMER1

Positive Brain Image

= Y

Positive Brain Image Date

= UTD

= Non-UTD Value

Positive Brain Image Time

= UTD

= Non-UTD Value

Timing II (in minutes) =
Positive Brain Image Date and Positive Brain Image Time minus Therapy Initiation Date and Therapy Initiation Time

< 0 or > 2160 minutes

CSTK-05
IAMER2

≥ 0 and ≤ 2160 minutes

CSTK-05
IAMER1

Missing

= N

Missing

= Non-UTD Value
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46
Initialize the Measure Category Assignment for each strata measure (CSTK-05a and CSTK05b) = ′B′.
Do not change the Measure Category Assignment that was already calculated for the overall measure (CSTK-05).
The rest of the algorithm will reset the appropriate Measure Category Assignment to each strata measure.

Overall Rate Category Assignment

ICD-9-CM Principal or Other Procedure Code

On Table 8.1a AND Table 8.1b

Set Measure Category Assignment for strata measure CSTK-05b = Measure Category Assignment for measure CSTK-05

Set Measure Category Assignment for strata measure CSTK-05a = Measure Category Assignment for measure CSTK-05

Not on Table 8.1c

Not on Table 8.2a

STOP
Measure Information Form

Measure Set: Comprehensive Stroke(CSTK)

Set Measure ID: CSTK-06

Performance Measure Name: Nimodipine Treatment Administered

Description: Subarachnoid hemorrhage (SAH) patients for whom nimodipine treatment was administered within 24 hours of arrival at this hospital

Rationale: Cerebral vasospasm is a serious complication following SAH, occurring in 30% to 70% of patients and accounting for nearly 50% of the deaths in patients surviving to treatment. Constriction of the arterial lumen results in diminished cerebral perfusion distal to the affected artery, which produces a delayed neurological deficit that may progress to cerebral infarction without early management of the ruptured aneurysm. The arterial narrowing that occurs in cerebral vasospasm is typically a transient or temporary event, lasting from a few days up to 3 weeks.

The main goal of current treatment is to prevent or limit the severity of cerebral vasospasm. Only two treatments are generally accepted as proven and valuable for the prevention of ischemic stroke and reduction of ischemic complications:

- Treatment with cerebroselective calcium channel blocker nimodipine-Nimotop (60mg po q4h for 21 days after hemorrhage or after hospital discharge if discharged within 21 days);
- Aggressive hypervolemic, hypertensive, hemodilution therapy (i.e., triple-H therapy) with pressor agents and volume expansion (colloids) while monitoring the central venous pressure (CVP) or pulmonary capillary wedge pressure (PCWP), following early clipping of the aneurysm.

Type of Measure: Process

Improvement Noted As: Increase in the rate

Numerator Statement: SAH patients for whom nimodipine treatment was administered within 24 hours of arrival at this hospital.

Included Populations: As above

Excluded Populations: None

Data Elements:

- Arrival Date
- Arrival Time
- Nimodipine Administration
- Nimodipine Administration Date
- Nimodipine Administration Time
- Reason for Not Administering Nimodipine Treatment
Denominator Statement: SAH patients

Included Populations: Discharges with ICD-9-CM Principal Diagnosis Code for subarachnoid hemorrhage as defined in Appendix A, Table 8.2a.

Excluded Populations:
- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients with Comfort Measures Only documented on day of or after hospital arrival
- Patients enrolled in clinical trials
- Patients discharged within 24 hours of arrival at this hospital

Data Elements:
- Admission Date
- Birthdate
- Clinical Trial
- Comfort Measures Only
- Discharge Date
- Discharge Time
- ICD-9-CM Principal Diagnosis Code

Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: None

Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:


**Measure Algorithm:**
CSTR-06: Nimodipine Treatment Administered
Numerator: SAH patients for whom nimodipine treatment was administered within 24 hours of arrival at this hospital
Denominator: SAH patients
Measure Information Form

Measure Set: Comprehensive Stroke (CSTK)

Set Measure ID: CSTK-07

Performance Measure Name: Median Time to Recanalization Therapy

Description: Median time from arrival to first radiographic image showing access of the occluded arterial segment with a microcatheter in acute ischemic stroke patients who undergo recanalization therapy.

Rationale: Timely recanalization of an occluded intracerebral artery is a strong predictor of improved functional outcome and reduced mortality in patients with an acute ischemic stroke. At this time, administration of intra-venous (IV) tissue plasminogen activator (t-PA) within three hours of time last known well remains the recommended first-line approach. However, the short therapeutic window and low rates of recanalization with IV thrombolytic (t-PA) therapy has prompted the investigation of alternative approaches via intra-arterial infusion of a thrombolytic drug or mechanical recanalization with a device such as a Merci or Penumbra catheter. Since “time is brain”, the overall speed of the recanalization process is an important and appropriate measure. In multicenter clinical trials of catheter therapies, the probability of good outcome decreased as time to angiographic reperfusion increased.

Type of Measure: Process

Improvement Noted As: Decrease in the median value

Continuous Variable Statement: Time (in minutes) from hospital arrival to first radiographic image showing access of the occluded arterial segment with a microcatheter in patients with acute ischemic stroke who undergo recanalization therapy.

Included Populations:

- Discharges with ICD-9-CM Principal Diagnosis Code for ischemic stroke as defined in Appendix A, Table 8.1,
  AND
- Patients with documented Mechanical Endovascular Reperfusion Therapy (ICD-9 CM Principal or Other Procedure Codes as defined in Appendix A, Table 8.1c),
  AND
- First radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter

Excluded Populations:

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients admitted for Elective Carotid Intervention

Data Elements:
Risk Adjustment: No.

Data Collection Approach: Retrospective data sources for required data elements include administrative data and medical records.

Data Accuracy: Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

Measure Analysis Suggestions: The median time to recanalization therapy should be analyzed in conjunction with the measure rate for Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade (CSTK-7a). These measures, used together, will assist in understanding the median time to recanalization therapy and will identify the number of ischemic stroke patients for whom successful reperfusion therapy is achieved and potential opportunities for improvement to decrease the median time to recanalization therapy. In lieu of an established benchmark, comprehensive stroke centers are encouraged to strive for a goal of 90 minutes, similar to recommendations in current cardiology guidelines for door-to-angioplasty time for acute myocardial infarction.

Sampling: No.

Data Reported As: Aggregate measure of central tendency.


**Measure Algorithm:**
CSTK-07: Median Time to Recanalization Therapy

Continuous Variable Statement: Time (in minutes) from hospital arrival to first radiographic image showing access of the occluded arterial segment with a microcatheter in patients with acute ischemic stroke who undergo recanalization therapy.
Comprehensive Stroke Pilot Project
Draft Measure Specifications

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Measurement Value (in minute) =
First Radiographic Image Date and First Radiographic Image Time
minus
Arrival Date and Arrival Time

< 0

CSTK-07 X

Case Will Be Rejected

CSTK-07 B

Not In Measure Population

In Measure Population

STOP

Note: There will be no category assignment E for this measure because it is a continuous variable.
Measure Information Form

Measure Set: Comprehensive Stroke (CSTK)

Set Measure ID: CSTK-07a

Performance Measure Name: Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

Description: Ischemic stroke patients with a post-treatment reperfusion grade of TICI 2B or higher in the vascular territory beyond the target arterial occlusion at the end of treatment with intra-arterial (IA) thrombolytic (t-PA) therapy and/or mechanical endovascular reperfusion therapy

Rationale: The Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade is used to measure cerebral reperfusion. Four results are possible with this scoring system: 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.

The Interventional Management of Stroke (IMS) I trial suggested that the combined use of reduced-dose intravenous (IV) thrombolytic (t-PA) therapy, followed by microcatheter delivered intra-arterial (IA) thrombolytic (t-PA) therapy, was safe and effective in selected ischemic stroke patients, as compared to patients treated with full dose IV t-PA in the National Institute of Neurologic disease and Stroke (NINDS) rt-PA trial. In IMS I, a final TICI 2/3 reperfusion was achieved in 62% of ischemic stroke patients treated.

Type of Measure: Outcome

Improvement Noted As: Increase in the rate

Numerator Statement: Ischemic stroke patients with a post-treatment reperfusion grade of TICI 2B or higher

  Included Populations: As above

  Excluded Populations: None

Data Elements:

  • Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade

Denominator Statement: Ischemic stroke patients treated with IA thrombolytic (t-PA) therapy and/or mechanical endovascular reperfusion therapy

  Included Populations:
Discharges with *ICD-9-CM Principal Diagnosis Code* for ischemic stroke as defined in Appendix A, Table 8.1, AND

- Patients with documented IA thrombolytic (t-PA) therapy (*ICD-9 CM Principal or Other Procedure Codes* as defined in Appendix A, Table 8.1a AND Table 8.1b), OR
- Patients with documented *Mechanical Endovascular Reperfusion Therapy* (*ICD-9 CM Principal or Other Procedure Codes* as defined in Appendix A, Table 8.1c)

**Excluded Populations:**

- Patients less than 18 years of age
- Patients who have a Length of Stay > 120 days
- Patients admitted for Elective Carotid Intervention

**Data Elements:**

- *Admission Date*
- *Birthdate*
- *Discharge Date*
- *Elective Carotid Intervention*
- *ICD-9-CM Other Procedure Codes*
- *ICD-9-CM Other Procedure Dates*
- *ICD-9-CM Principal Diagnosis Code*
- *ICD-9-CM Principal Procedure Code*
- *ICD-9-CM Principal Procedure Date*

**Risk Adjustment:** Yes.

**Data Elements:**

- *IV Thrombolytic Therapy Prior to IA or Mechanical Reperfusion Therapy*
- *ABC/2 Estimate*
- *Admission Date*
- *Birthdate*
- *Hispanic Ethnicity*
- *ICD-9-CM Other Diagnosis Codes*
- *Initial Blood Glucose Value at Hospital Arrival*
- *Initial NIHSS Score at Hospital Arrival*
- *Initial Platelet Count at Hospital Arrival*
- *Initial Systolic Blood Pressure at Hospital Arrival*
- *Proximal or Distal to the Primary Arterial Occlusion*
- *Race*
- *Sex*
- *Site of Primary Vessel Occlusion*

**Data Collection Approach:** Retrospective data sources for required data elements include administrative data and medical records.

**Data Accuracy:** Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

**Measure Analysis Suggestions:** None
Sampling: No.

Data Reported As: Aggregate rate generated from count data reported as a proportion.

Selected References:


**Measure Algorithm:**
CSTK-07a: Thrombolysis in Cerebral Infarction (TICI) Post-Treatment Reperfusion Grade

**Numerator Statement:** Ischemic stroke patients with a post-treatment reperfusion grade of TICI 2B or higher

**Denominator Statement:** Ischemic stroke patients treated with IA thrombolytic (t-PA) therapy and/or mechanical endovascular reperfusion therapy
Data Elements
Data Element Name: IV Thrombolytic Therapy Prior to IA or Mechanical Reperfusion Therapy

Collected For: CSTK-05, CSTK-07a.

Definition: There is documentation in the record that the patient received 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.

Suggested Data Collection Question: 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?

Format: Length: 1  
Type: Alphanumeric  
Occurs: 1

Allowable Values:  
Y (Yes) Patient received IV thrombolytic (t-PA) therapy prior to IA thrombolytic therapy or mechanical reperfusion therapy.

N (No) Patient did not receive IV thrombolytic (t-PA) therapy 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 (t-PA) 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

Additional Notes:

Guidelines for Abstraction:

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<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Acceptable Thrombolytic Therapy for Stroke:</td>
<td>None</td>
</tr>
<tr>
<td>• Activase</td>
<td></td>
</tr>
<tr>
<td>• Alteplase</td>
<td></td>
</tr>
<tr>
<td>• IV t-PA</td>
<td></td>
</tr>
<tr>
<td>• Recombinant Tissue plasminogen activator (rt-PA)</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: ABC/2 Estimate

Collected For: CSTK-07a.

Definition: Documentation of an ABC/2 estimated value. A simple geometric estimate of infarction and mean transit time volumes. A rapid, easy, and accurate means to assess stroke volume.

Suggested Data Collection Question: What is the ABC/2 estimated value?

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

Allowable Values:
- ABC/2 = estimated value (one decimal place)
- UTD = Unable to Determine

Notes for Abstraction: To determine the value for this data element, look for an ABC/2 estimated value documented in the medical record.

Suggested Data Sources:
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Discharge summary
- Admitting note
- Consultation form/note
- Nursing assessment

Additional Notes:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>Admission Date</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Collected For:</td>
<td>ACHF-01, ACHF-02, ACHF-03, ACHF-07, ACHF-08, CAH-01.1, CAH-02.1, CAH-03, CAH-04, CAH-05, CAH-06, CAH-08.1, CAH-09.1, CAH-10.1, CSTK, HBIPS, Osteo, PBM, PC, SCA-03, SUB, TOB</td>
</tr>
<tr>
<td>Definition:</td>
<td>The month, day, and year of admission to acute inpatient care.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>What is the date the patient was admitted to acute inpatient care?</td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 10 – MM-DD-YYYY (includes dashes)</td>
</tr>
<tr>
<td></td>
<td>Type: Date</td>
</tr>
<tr>
<td></td>
<td>Occurs: 1</td>
</tr>
</tbody>
</table>

**Allowable Values:**

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 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 (Form Locator 12) is purely the date the patient was admitted as an inpatient to the facility.
  - The Statement Covers Period (“From” and “Through” dates in Form Locator 6) identifies the span of service dates included in a particular claim. The “From” Date is the earliest date of service on the claim.

- A patient of a hospital is considered an inpatient upon issuance of written doctor’s orders to that effect. (Refer to the Medicare Claims Processing Manual, Chapter 3, Section 40.2.2.)
- 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.
- For patients that are admitted for surgery and/or a procedure, if the admission order states the date the orders were written and they are effective for the surgery/procedure date, then the date of the surgery/procedure would be the admission date. If the medical record reflects that the admission order was written prior to the actual date...
the patient was admitted and there is no reference to the date of the surgery/procedure, then the date the order was written would be the admission date.

- For patients for whom there is no admission to inpatient status, enter 00-00-0000.
- For newborns that are born within this hospital, the admission date is the date the baby was born.

**Suggested Data Sources:**

**ONLY ALLOWABLE SOURCES**

- Physician orders
- Face sheet
- UB-04, Field Location: 12

**Excluded Data Sources**

- UB-04, Field Location: 06

**Additional Notes:**

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• None</td>
<td>• Admit to observation</td>
</tr>
<tr>
<td></td>
<td>• Arrival date</td>
</tr>
</tbody>
</table>
Data Element Name: Admitting Diagnosis

Collected For: CSTK-04, CSTK-04a, CSTK-04b.

Definition: The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code associated with the diagnosis established at the time of the patient’s admission to the hospital.

Suggested Data Collection Question: What was the ICD-9-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 ICD-9-CM diagnosis code

Notes for Abstraction: The admitting diagnosis is defined as the initial working diagnosis documented by the patient’s admitting or attending physician who determined that inpatient care was necessary.

Suggested Data Sources:
- Face sheet
- Admission form
- Code List
- Problem List

Additional Notes:

Guidelines for Abstraction:

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<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Data Element Name</td>
<td>Arrival Date</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Collected For</td>
<td>CAH-01, CAH-02, CAH-04, CAH-07, CAH-08, CAH-09, CAH-10, CSTK-01, CSTK-03, CSTK-04a, CSTK-04b, CSTK-05, CSTK-06, CSTK-07,</td>
</tr>
<tr>
<td>Definition</td>
<td>The earliest documented month, day, and year the patient arrived at the hospital.</td>
</tr>
<tr>
<td>Suggested Data Collection Question</td>
<td>What was the earliest documented date the patient arrived at the hospital?</td>
</tr>
<tr>
<td>Format</td>
<td>Length: 10 – MM-DD-YYYY (includes dashes) or UTD</td>
</tr>
<tr>
<td></td>
<td>Type: Date</td>
</tr>
<tr>
<td></td>
<td>Occurs: 1</td>
</tr>
<tr>
<td>Allowable Values</td>
<td>Enter the earliest documented date</td>
</tr>
<tr>
<td></td>
<td>MM = Month (01-12)</td>
</tr>
<tr>
<td></td>
<td>DD = Day (01-31)</td>
</tr>
<tr>
<td></td>
<td>YYYY = Year (2000-9999)</td>
</tr>
<tr>
<td></td>
<td>UTD = Unable to Determine</td>
</tr>
<tr>
<td>Notes for Abstraction</td>
<td>• If the date of arrival is unable to be determined from medical record documentation, select “UTD.”</td>
</tr>
<tr>
<td></td>
<td>• The medical record must be abstracted as documented (taken at “face value”). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after the Discharge Date] and no other documentation is found that provides this information, the abstractor should select “UTD.”</td>
</tr>
<tr>
<td></td>
<td>Examples:</td>
</tr>
<tr>
<td></td>
<td>◦ 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.”</td>
</tr>
<tr>
<td></td>
<td>◦ 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.”</td>
</tr>
</tbody>
</table>

**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 Arrival Date allows the case to be accepted into the warehouse.

• Review the ONLY ACCEPTABLE SOURCES to determine the earliest date the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. Use the earliest date
documented unless other documentation suggests the patient was not in the hospital on that date. The intent is to utilize any documentation which reflects processes that occurred in the ED or hospital.

- 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.

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 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 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.

- 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, triage record, ED physician orders, ECG reports, telemetry/rhythm strips, laboratory reports, x-ray reports.
- Do not use preprinted dates on a vital sign graphic record.
- 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 may differ from the admission date.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the date the patient arrived at the ED or on the floor for acute inpatient care as the arrival date.

**Observation status:**

- If the patient was admitted to observation from an outpatient setting of the hospital, use the date the patient arrived at the ED or on the floor for observation care as the arrival date.
- If the patient was admitted to observation from the ED of the hospital, use the date the patient arrived at the ED as the arrival date.

**Direct Admits:**

- If the patient is a “Direct Admit” to the cath lab, use the earliest date the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date.
- For “Direct Admits” to acute inpatient or observation, use the earliest date the patient arrived at the nursing floor or in
observation (as documented in the ONLY ACCEPTABLE SOURCES) as the arrival date.

• If the patient was transferred from your hospital’s satellite/free-standing ED or from another hospital within your hospital’s system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival date at the first facility.

Suggested Data Sources: ONLY ACCEPTABLE SOURCES

• Emergency department record
• Nursing admission assessment/admitting note
• Observation record
• Procedure notes
• Vital signs graphic record

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>• Addressographs/stamps</td>
</tr>
</tbody>
</table>
### Data Element

**Name:** Arrival Time

**Collected For:** CAH-02, CAH-04, CAH-07, CAH-08, CAH-09, CAH-10, CSTK-01, CSTK-03, CSTK-04a, CSTK-04b, CSTK-05, CSTK-06, CSTK-07.

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

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

**Format:**
- **Length:** 5 - HH:MM (with or without colon) or UTD
- **Type:** Time
- **Occurs:** 1

**Allowable Values:**

Enter the earliest documented time of arrival

<table>
<thead>
<tr>
<th>HH</th>
<th>MM</th>
<th>UTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>00</td>
<td>01</td>
<td></td>
</tr>
<tr>
<td>00</td>
<td>59</td>
<td></td>
</tr>
</tbody>
</table>

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 your electronic system documents time as 00:00 11-24-2007, review supporting documentation to determine if the Arrival Date should remain 11-24-2007 or if it should be converted to 11-25-2007. When converting 24:00 to 00:00 do not forget to change the Arrival Date.

**Example:**

- Midnight or 24:00 on 11-24-2007 = 00:00 on 11-25-2007

**Notes for Abstraction:**

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

**Example:**

- 15:00:35 would be recorded as 15:00
If the time of arrival is unable to be determined from medical record documentation, select “UTD.”

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

Example:

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

Note:

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

Review the ONLY ACCEPTABLE SOURCES to determine the earliest time the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. Use the earliest time documented unless other documentation suggests the patient was not in the hospital at the time. The intent is to utilize any documentation which reflects processes that occurred in the ED or hospital.

- In determining if there is documentation which suggests the patient was not in the hospital at a given time, sources outside of the ONLY ACCEPTABLE SOURCES list can be referenced. However, do not use times described as hospital arrival on these sources for Arrival Time.

Examples:

- 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 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 Time 0800. ED rhythm strip 0830. EMS report indicates patient was receiving EMS care from 0805 through 0825. Enter 0830 for Arrival Time.

The source “Emergency department record” includes any documentation from the time period that the patient was an ED patient – e.g., ED face sheet, ED consent/Authorization for treatment forms, ED/Outpatient Registration/sign-in forms, ED vital sign record, triage record, ED physician orders, ECG reports, telemetry/rhythm strips, laboratory reports, x-ray reports.

Do not use preprinted times on a vital sign graphic record.

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 time may differ from the admission time.

If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a
SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the time the patient arrived at the ED or on the floor for acute inpatient care as the arrival time.

• Observation status:
  ◦ If the patient was admitted to observation from an outpatient setting of the hospital, use the time the patient arrived at the ED or on the floor for observation care as the arrival time.
  ◦ If the patient was admitted to observation from the ED of the hospital, use the time the patient arrived at the ED as the arrival time.

• Direct Admits:
  ◦ If the patient is a “Direct Admit” to the cath lab, use the earliest time the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival time.
  ◦ For “Direct Admits” to acute inpatient or observation, use the earliest time the patient arrived at the nursing floor or in observation (as documented in the ONLY ACCEPTABLE SOURCES) as the arrival time.
  ◦ If the patient was transferred from your hospital’s satellite/free-standing ED or from another hospital within your hospital’s system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival time at the first facility.

Suggested Data Sources:  

**ONLY ACCEPTABLE SOURCES**

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

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>• Addressographs/stamps</td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>Birthdate</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Collected For:</td>
<td>All Records</td>
</tr>
<tr>
<td>Definition:</td>
<td>The month, day, and year the patient was born.</td>
</tr>
</tbody>
</table>

**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 HBIPS discharge measures, i.e., HBIPS-1, 4, 5, 6, 7, patient's age (in years) is calculated by Discharge Date minus Birthdate. For event measures, i.e., HBIPS-2, 3, patient's age at time of event (in years) is calculated by Event Date minus Birthdate. The algorithm to calculate age must use the month and day portion of birthdate, and discharge date or event, as appropriate to yield the most accurate age.

**Suggested Data Collection Question:**

What is the patient’s date of birth?

**Format:**

- **Length:** 10 – MM-DD-YYYY (includes dashes)
- **Type:** Date
- **Occurs:** 1

**Allowable Values:**

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (1880-Current Year)

**Notes for Abstraction:**

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

**Suggested Data Sources:**

- Emergency department record
- Face sheet
- Registration form
Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
</tbody>
</table>
**Data Element Name:** Clinical Trial

**Collected For:** All Records

**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.

**Suggested Data Collection Question:** During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied?

**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,
- **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, 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.** 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.

**PC:**
Only capture patients enrolled in clinical trials studying pregnant patients or newborns. For Perinatal Care measures ONLY, it is appropriate for the ORYX® Vendor to default the data element to "No" unless the ICD-9-CM diagnosis code of V70.7, "Examination of participant in a clinical trial" is present. If this code is present, or the organization knows via some other
electronic method that the patient is participating in a clinical trial, default the data element to "Yes". Hospital abstractors may change defaulted value of "No" based on hospital participation in clinical trial.

• 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.

**Suggested Data Sources:**

**ONLY ACCEPTABLE SOURCES:**

• Signed consent form for clinical trial

**FOR PC ONLY**

• UB-04, Field Locations: 67A-Q

**Additional Notes:**

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
</tbody>
</table>
Data Element Name: Comfort Measures Only

Collected For: CAH-01.1, CAH-03, CAH-04, CSTK-04, CSTK-04a, CSTK-04b, CSTK-06.

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

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

Format:
- Length: 1
- Type: Alphanumeric
- Occurs: 1

Allowable Values:

1 Day 0 or 1: The earliest day the physician/APN/PA documented comfort measures only was the day of arrival (Day 0) or day after arrival (Day 1).

2 Day 2 or after: The earliest day the physician/APN/PA documented comfort measures only was two or more days after arrival day (Day 2+).

3 Timing unclear: There is physician/APN/PA documentation of comfort measures only during this hospital stay, but whether the earliest documentation of comfort measures only was on day 0 or 1 OR after day 1 is unclear.

4 Not Documented/UTD: There is no physician/APN/PA documentation of comfort measures only, or unable to determine from medical record documentation.

Notes for Abstraction:
- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- Physician/APN/PA documentation of comfort measures only (hospice, comfort care, etc.) mentioned in the following contexts suffices:
  - Comfort measures only recommendation
  - Order for consultation or evaluation by a hospice care service
  - Patient or family request for comfort measures only
  - Plan for comfort measures only
  - Referral to hospice care service
- 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 “2.”

POLST order for comfort care dated prior to arrival - Select "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.

- 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 value “4”:
  - 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”.

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

Additional Notes: Excluded Data Sources:

- Restraint order sheet

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain dead</td>
<td>None</td>
</tr>
<tr>
<td>Brain death</td>
<td>None</td>
</tr>
<tr>
<td>Comfort care</td>
<td>None</td>
</tr>
<tr>
<td>Comfort measures</td>
<td>None</td>
</tr>
<tr>
<td>Comfort measures only (CMO)</td>
<td>None</td>
</tr>
</tbody>
</table>
Comfort only
DNR-CC
End of life care
Hospice
Hospice care
Organ harvest
Terminal care
<table>
<thead>
<tr>
<th>Data Element Name:</th>
<th>Discharge Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collected For:</td>
<td>All Records, Not collected for HBIPS-2 and HBIPS-3</td>
</tr>
<tr>
<td>Definition:</td>
<td>The month, day, and year the patient was discharged from acute care, left against medical advice, or expired during this stay.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>What is the date the patient was discharged from acute care, left against medical advice (AMA), or expired?</td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 10 – MM-DD-YYYY (includes dashes)</td>
</tr>
<tr>
<td></td>
<td>Type: Date</td>
</tr>
<tr>
<td></td>
<td>Occurs: 1</td>
</tr>
<tr>
<td>Allowable Values:</td>
<td>MM = Month (01-12)</td>
</tr>
<tr>
<td></td>
<td>DD = Day (01-31)</td>
</tr>
<tr>
<td></td>
<td>YYYYY = Year (20xx)</td>
</tr>
<tr>
<td>Notes for Abstraction:</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>For HBIPS only, if the patient was in an acute-care hospital and had multiple admissions to the psychiatric unit during his or her hospitalization, this information should be abstracted only once at the time of discharge from the hospital.</td>
</tr>
<tr>
<td>Suggested Data Sources:</td>
<td>• Face sheet</td>
</tr>
<tr>
<td></td>
<td>• Progress notes</td>
</tr>
<tr>
<td></td>
<td>• Physician orders</td>
</tr>
<tr>
<td></td>
<td>• Discharge summary</td>
</tr>
<tr>
<td></td>
<td>• Nursing discharge notes</td>
</tr>
<tr>
<td></td>
<td>• Transfer note</td>
</tr>
<tr>
<td></td>
<td>• UB-04, Field Location: 6</td>
</tr>
<tr>
<td>Additional Notes:</td>
<td>Guidelines for Abstraction:</td>
</tr>
<tr>
<td>Inclusion</td>
<td>Exclusion</td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>Discharge Disposition</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Collected For:</td>
<td>ACHF-01, ACHF-02, ACHF-03, ACHF-07, ACHF-08, AMI, CAC-3, CAH-01, CAH-02, CAH-03, CAH-05, CAH-06, CAH-07, CAH-08, CAH-09, CAH-10, CSTK-02, HF, Osteo, PN, PN-7, SCA, STK, SUB-03, SUB-04, TOB-03, VTE-03, VTE-04, VTE-05,</td>
</tr>
<tr>
<td>Definition:</td>
<td>The final place or setting to which the patient was discharged on the day of discharge.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>What was the patient’s discharge disposition on the day of discharge?</td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 1</td>
</tr>
</tbody>
</table>

**Type:** Alphanumeric  
**Occurs:** 1

<table>
<thead>
<tr>
<th>Allowable Values:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Home</td>
</tr>
<tr>
<td>2 Hospice - Home</td>
</tr>
<tr>
<td>3 Hospice – Health Care Facility</td>
</tr>
<tr>
<td>4 Acute Care Facility</td>
</tr>
<tr>
<td>5 Other Health Care Facility</td>
</tr>
<tr>
<td>6 Expired</td>
</tr>
<tr>
<td>7 Left Against Medical Advice/AMA</td>
</tr>
<tr>
<td>8 Not Documented or Unable to Determine (UTD)</td>
</tr>
</tbody>
</table>

*Notes for Abstraction:*

- **Only use documentation from the day of or the day before 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”.
- **Consider discharge disposition documentation in the discharge summary or a post-discharge addendum as day of discharge documentation, regardless of when it was dictated/written.**
- **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 “4”.
- To select value “7” there must be explicit documentation that the patient left against medical advice.

**Examples:**
- Progress notes state that patient requests to be discharged but that discharge was medically contraindicated at this time. Nursing notes reflect that patient left against medical advice and AMA papers were signed, select value “7”.
- Physician order written to discharge to home. Nursing notes reflect that patient left before discharge instructions could be given, select value “1”.

**Suggested Data Sources:**
- Progress notes
- Physician orders
- Discharge summary
- Discharge instruction sheet
- Discharge planning notes
- Nursing discharge notes
- Social service notes
- Transfer record

**Additional Notes:**

**Excluded Data Sources:**
- Any documentation prior to the day of or day before discharge
- UB-04

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion Guidelines for Abstraction: For Value 1:</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assisted Living Facilities</td>
<td>None</td>
</tr>
<tr>
<td>• Court/Law Enforcement – includes detention facilities, jails, and prison</td>
<td></td>
</tr>
<tr>
<td>• Home – includes board and care, foster or residential care, group or personal care homes, and homeless shelters</td>
<td></td>
</tr>
<tr>
<td>• Home with Home Health Services</td>
<td></td>
</tr>
<tr>
<td>• Outpatient Services including outpatient procedures at another hospital, Outpatient Chemical Dependency Programs and Partial Hospitalization.</td>
<td></td>
</tr>
<tr>
<td>Value 3:</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Hospice Care - General Inpatient and Respite</td>
<td></td>
</tr>
<tr>
<td>• Hospice Care - Residential and Skilled Facilities</td>
<td></td>
</tr>
<tr>
<td>• Hospice Care - Other Health Care Facilities (excludes home)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acute Short Term General and Critical Access Hospitals</td>
</tr>
<tr>
<td>• Cancer and Children's Hospitals</td>
</tr>
<tr>
<td>• Department of Defense and Veteran's Administration Hospitals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value 5:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Extended or Immediate Care Facility (ECF/ICF)</td>
</tr>
<tr>
<td>• Long Term Acute Care Hospital (LTACH)</td>
</tr>
<tr>
<td>• Nursing Home or Facility including Veteran's Administration Nursing Facility</td>
</tr>
<tr>
<td>• Psychiatric Hospital or Psychiatric Unit of a Hospital</td>
</tr>
<tr>
<td>• Rehabilitation Facility including Inpatient Rehabilitation Facility/Hospital or Rehabilitation Unit of a Hospital</td>
</tr>
<tr>
<td>• Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed</td>
</tr>
<tr>
<td>• Transitional Care Unit (TCU)</td>
</tr>
</tbody>
</table>
Data Element Name: Discharge Time

Collected For: CSTK-01, CSTK-03, CSTK-06,

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

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

Format: Length: 5 – HH:MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:
00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Discharge 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 Discharge Date. Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

• For times that include "seconds", remove the seconds and record the military time. Example: 15:00:35 would be recorded as 15:00.
• For patients who expire, the time that the patient was pronounced / time of death should be used for the discharge time.
• If the time of discharge is unable to be determined from medical record documentation, select “UTD”.

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

Example:
Documentation indicates the Discharge Time was 3300. No other documentation in the list of ONLY ACCEPTABLE SOURCES provides a valid time. Since the Discharge Time is outside of the range in the Allowable Values for “Hour,” it is not a valid time and the abstractor should select “UTD”.

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

Suggested Data Sources:

• Face sheet
• Nursing notes
• Progress notes
• Physician orders
• Discharge summary
• Transfer note
• UB-04, Field Location: 6

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>ED Patient</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Collected For:</td>
<td>CAH-01.1, CAH-02.1, CAH-03, CAH-04, CAH-05, CAH-06, CAH-08.1, CAH-09.1, CAH-10.1, CSTK-01, CSTK-03</td>
</tr>
<tr>
<td>Definition:</td>
<td>Patient received care in a dedicated emergency department of the facility.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>Was the patient an ED patient at the facility?</td>
</tr>
</tbody>
</table>
| Format:           | Length: 1  
|                   | Type: Alphanumeric  
|                   | Occurs: 1 |
| Allowable Values: | Y (Yes) There is documentation the patient was an ED patient.  
|                   | N (No) There is no documentation the patient was an ED patient, OR unable to determine from medical record documentation. |
| Notes for Abstraction: | • For the purposes of this data element an ED patient is defined as any patient receiving care or services in the Emergency Department.  
|                   | • Patients seen in an Urgent Care, ER Fast Track, etc. are not considered an ED patient unless they received services in the emergency department at the facility (e.g., patient treated at an urgent care and transferred to the main campus ED is considered an ED patient, but a patient seen at the urgent care and transferred to the hospital as a direct admit would not be considered an ED patient).  
|                   | • Patients presenting to the ED who do not receive care or services in the ED abstract as a “No” (e.g., patient is sent to hospital from physician office and presents to ED triage and is instructed to proceed straight to floor).  
|                   | • Patients presenting to the ED for outpatient services such as lab work etc. will abstract as a “Yes”.  
| ED:               | • If a patient is transferred in from any emergency department (ED) or observation unit OUTSIDE of your hospital, select “No”. This applies even if the emergency department or observation unit is part of your hospital’s system (e.g., your hospital’s free-standing or satellite emergency department), has a shared medical record or provider number, or is in close proximity. Select “No”, even if the transferred patient is seen in this facility’s ED.  
|                   | • If the patient is transferred to your hospital from an outside hospital where he was an inpatient or outpatient, select “No”. This applies even if the two hospitals are close in proximity, part of the same hospital system, have the same provider number, and/or there is one
medical record. Select “No”, even if the transferred patient is seen in this facility’s ED.

**Suggested Data Sources:**
- Emergency department record
- Face sheet
- Registration form

**Additional Notes:**

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>• Urgent Care</td>
</tr>
<tr>
<td></td>
<td>• Fast Track ED</td>
</tr>
<tr>
<td></td>
<td>• Terms synonymous with Urgent Care</td>
</tr>
</tbody>
</table>
Data Element Name: Elective Carotid Intervention

Collected For: CSTK-01, CSTK-05, CSTK-07, CSTK-07a.

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

Suggested Data Collection Question: Was this admission for the sole purpose of performance of an elective carotid intervention?

Format: Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:
Y (Yes) There is documentation that this admission was solely for the performance of elective carotid intervention.

N (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:
- Patients admitted for an acute stroke are not considered to have been admitted solely for the purpose of the performance of elective carotid intervention.
- If the patient was admitted for an acute stroke, even if a carotid intervention was performed after admission, select “No”.
- When documentation of the procedure is not linked with “elective”, select “No”.
- 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.
• 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”.

**Suggested Data Sources:**
- History and physical
- Physician orders
- Physician’s notes
- OR report

**Additional Notes:**

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with ICD-9-CM 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.</td>
<td>Patients with ICD-9-CM 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.</td>
</tr>
</tbody>
</table>

- Elective
  - Anticipated
  - Asymptomatic
  - Evaluation
  - Non-emergent
  - Planned
  - Pre-admission
  - Pre-arranged
  - Pre-planned
  - Pre-scheduled
  - Preventive
  - Previously arranged
  - Prophylactic
  - Scheduled
  - Work-up
<table>
<thead>
<tr>
<th>Data Element Name:</th>
<th>First Radiographic Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collected For:</td>
<td>CSTK-07</td>
</tr>
<tr>
<td>Definition:</td>
<td>First radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter. For purposes of this data element, “access” means touching any portion of the clot in the occluded arterial segment.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>Is there documentation in the medical record of the first radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter?</td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 1</td>
</tr>
<tr>
<td></td>
<td>Type: Alphanumeric</td>
</tr>
<tr>
<td></td>
<td>Occurs: 1</td>
</tr>
</tbody>
</table>

| Allowable Values: | Y (Yes) There is documentation of the first radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter. |
|                  | N (No) There is no documentation of the first radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter, OR unable to determine from medical record documentation. |

| Notes for Abstraction: | Identify the first radiographic image after hospital arrival showing access of the occluded arterial segment with a microcatheter. If unable to determine which image showed access of the occluded arterial segment first, select “No”. |
|                       | For this data element, look for reports of images obtained by angiography or magnetic resonance angiogram (MRA) |
|                       | If a diagnostic test report conflicts with other sources documenting the first image showing access of the occluded arterial segment with a microcatheter, use the documentation found in the diagnostic test report. |

| Suggested Data Sources: | Consultation notes |
|                         | Emergency department record |
|                         | History and physical |
|                         | Progress notes |
|                         | Diagnostic test reports |
|                         | Operative notes |
|                         | Procedure notes |
|                         | Admitting notes |
|                         | Brain imaging reports |
|                         | Radiology reports |
**Additional Notes:**

**Excluded Data Sources:**
- Discharge Summary

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Data Element Name:** First Radiographic Image Date

**Collected For:** CSTK-07.

**Definition:** The month, date, and year of the first radiographic image showing access of the occluded arterial segment with a microcatheter.

**Suggested Data Collection Question:** What is the date of the first radiographic image showing access of the occluded arterial segment with a microcatheter?

**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:**
- Use the date documented for the first radiographic image showing access of the occluded arterial segment with a microcatheter. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more first radiographic image dates (either different images or corresponding with the same image), enter the earliest date.
- If the first radiographic image 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 first radiographic image date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the first radiographic 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 Commission’s Data Warehouse. Use of “UTD” for First Radiographic Image Date allows the case to be accepted into the warehouse.

**Suggested Data Sources:**
- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Diagnostic test reports
- Operative notes
- Procedure notes
- Admitting notes

**Additional Notes:**

**Excluded Data Sources:**

- Discharge summary

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: *First Radiographic Image Time*

Collected For: CSTK-07.

Definition: The time (military time) that the first radiographic image showing access of the occluded arterial segment with a microcatheter was documented at this hospital.

Suggested Data Collection Question: What is the time that the first radiographic image showing access of the occluded arterial segment with a microcatheter was documented at this hospital?

Format: Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the *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:

- Use the time that the first radiographic image showing access of the occluded arterial segment with a microcatheter documented. If a discrepancy exists in time documentation from different sources,
choose the earliest time. If there are two or more different first radiographic image times (either different images or corresponding with the same 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
- First Radiographic Image Time refers to the time documented for initial image showing access of the occluded arterial segment with a microcatheter.
- If the time of the first 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 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 radiographic image time was 3300. No other documentation in the medical record provides a valid time. Since the first radiographic 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 Commission’s Data Warehouse. Use of “UTD” for First Radiographic Image Time allows the case to be accepted into the warehouse.

Suggested Data Sources:
- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Diagnostic test reports
- Procedure notes
- Admitting notes
- Operative notes

Additional Notes:

Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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<th>Exclusion</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>
Data Element Name: Highest NIHSS Score Documented Prior to IV Thrombolytic Initiation

Collected For: CSTK-05

Definition: The highest NIHSS score documented prior to IV thrombolytic initiation. 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 prior to initiation of IV 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 after hospital arrival but prior to IV thrombolytic initiation. The initial NIHSS score or ANY other NIHSS score documented within this timeframe may be used.
• For purposes of this data element, score documentation between 0 and 42 is acceptable.
• 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 highest score documented prior to IV thrombolytic 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: Excluded Data Sources:
• Discharge summary
### Guidelines for Abstraction:

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</tbody>
</table>
Data Element Name: *Highest NIHSS Score Documented Prior to Therapy Initiation*

Collected For: **CSTK-05.**

Definition: The highest NIHSS score documented prior to IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy initiation. 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 prior to initiation of 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 after hospital arrival but prior to therapy initiation. The initial NIHSS score or ANY other NIHSS score documented within this timeframe may be used.
- For purposes of this data element, score documentation between 0 and 42 is acceptable.
- If only one NIHSS score is documented prior to therapy initiation and no other score(s) are available for comparison, enter the value for that score.
- If no NIHSS score is documented prior to therapy initiation, select “UTD”.
- If unable to determine the highest score documented prior to 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: Excluded Data Sources:
• Discharge summary

**Guidelines for Abstraction:**

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<tbody>
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</tbody>
</table>
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 (t-PA) 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 (t-PA) 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 (t-PA) 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 (t-PA) 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 (t-PA) 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 (t-PA) therapy, select “UTD”.
• If unable to determine the highest score documented within 36 hours following IV thrombolytic (t-PA) 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:

Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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<tbody>
<tr>
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</tr>
<tr>
<td>Data Element Name</td>
<td>Highest NIHSS Score Documented Within 36 Hours Following Therapy Initiation</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Collected For</td>
<td>CSTK-05.</td>
</tr>
<tr>
<td>Definition</td>
<td>The highest NIHSS score documented within 36 hours following initiation of IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy. The NIHSS measures several aspects of brain function, including consciousness, vision, sensation, movement, speech, and language.</td>
</tr>
<tr>
<td>Suggested Data Collection Question</td>
<td>What is the highest NIHSS score documented within 36 hours following initiation of therapy?</td>
</tr>
</tbody>
</table>
| 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 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 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 therapy, select the highest score.

**EXAMPLES:**
- NIHSS Score is 10 at 1500 and 20 at 2300. Both scores are documented following the initiation of therapy. Select NIHSS score of 20.
- 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.
- 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 therapy initiation, select “UTD”.
- If unable to determine the highest score documented within 36 hours following 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: Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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<th>Exclusion</th>
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</thead>
<tbody>
<tr>
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<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Hispanic Ethnicity
Collected For: All Records
Definition: Documentation that the patient is of Hispanic ethnicity or Latino.

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

Format:
Length: 1
Type: Character
Occurs: 1

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

Notes for Abstraction: The data element, Race, is required in addition to this data element.

Suggested Data Sources:
• Emergency department record
• History and physical
• Face sheet
• Nursing admission assessment
• Progress notes

Additional Notes:
Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
<td>• None</td>
</tr>
<tr>
<td>• Black-Hispanic</td>
<td></td>
</tr>
<tr>
<td>• Chicano</td>
<td></td>
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<tr>
<td>• H</td>
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</tr>
<tr>
<td>• Hispanic</td>
<td></td>
</tr>
<tr>
<td>• Latin American</td>
<td></td>
</tr>
<tr>
<td>• Latino/Latina</td>
<td></td>
</tr>
<tr>
<td>• Mexican-American</td>
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</tr>
<tr>
<td>• Spanish</td>
<td></td>
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<tr>
<td>• White-Hispanic</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: ICD-9-CM Other Diagnosis Codes

Collected For: All Records, Optional for HBIPS-2, HBIPS-3 and PBM; Used in algorithm for PC-01, 02, 03, 04, and 05

Definition: The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes associated with the diagnosis for this hospitalization.

Suggested Data Collection Question: What were the ICD-9-CM other diagnosis codes selected for this medical record?

Format: Length: 6 (implied decimal point)
Type: Alphanumeric
Occurs: 24

Allowable Values: Any valid ICD-9-CM diagnosis code

Notes for Abstraction: None

Suggested Data Sources:
- Face sheet
- Discharge summary
- UB-04, Field Locations: 67A-Q
  NOTE: Medicare will only accept codes listed in fields A-H

Additional Notes:

<table>
<thead>
<tr>
<th>Guidelines for Abstraction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>• None</td>
</tr>
</tbody>
</table>
Data Element Name: ICD-9-CM Other Procedure Codes

Collected For: All Records, Optional for all HBIPS Records; Used in algorithm for PC-01, 02, 04 and 05;

Definition: The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes identifying all significant procedures other than the principal procedure.

Note: If transmitted for the HBIPS measure set, all applicable edits (e.g., valid value, ICD-9-CM Other Procedure Date exists, etc.) will apply.

Suggested Data Collection Question: What were the ICD-9-CM code(s) selected as other procedure(s) for this record?

Format:
- Length: 5 (with or without decimal point)
- Type: Alphanumeric
- Occurs: 24

Allowable Values: Any valid ICD-9-CM procedure code

Notes for Abstraction: None

Suggested Data Sources:
- Face sheet
- Discharge summary
- UB-04, Field Location: 74A-E

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
</tbody>
</table>
**Data Element Name:** ICD-9-CM Other Procedure Dates

**Collected For:** All Records, Optional for All HBIPS and PBM Records

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

**Note:** If transmitted for the HBIPS measure set, all applicable edits (e.g., valid value, ICD-9-CM Other Procedure Codes exists, etc.) will apply.

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

**Format:**
- **Length:** 10 – MM-DD-YYYY (includes dashes) or UTD
- **Type:** Date
- **Occurs:** 24

**Allowable Values:**
- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20xx)
- Leave Blank if Unable to Determine

**Notes for Abstraction:**
- If the procedure date for the associated procedure 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 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 leave blank.

**Examples:**
- Documentation indicates the ICD-9-CM Other Procedure Dates was 02-42-2008. 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 02-12-2008 and documentation indicates the ICD-9-CM Other Procedure Dates was 03-12-2008. 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 leave blank.

**Note:** Transmission of a case with an invalid date as described above will be rejected from the Joint Commission’s Data Warehouse.
Suggested Data Sources:
- Consultation notes
- Face sheet
- Progress notes
- Discharge summary
- Operative report
- Procedure notes
- Diagnostic test reports
- UB-04, Field Locations: 74A-E

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
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<th>Exclusion</th>
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</thead>
<tbody>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
</tbody>
</table>
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:** 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

**Note:**

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the ICD-9-CM Other Procedure Date(s) 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 ICD-9-CM Other Procedure Date(s).

Example:

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

**Notes for Abstraction:**

- Use the time when the associated procedure(s) was (were) performed.
- 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 when the associated procedure(s) was (were) 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 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 ICD-9-CM Other Procedure time(s) was 3300. No other documentation in the medical record provides a valid time. Since the ICD-9-CM Other Procedure time(s) 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.

Suggested Data Sources:

• Consultation notes
• Face sheet
• Progress notes
• Discharge summary
• Diagnostic test reports
• Operative notes
• Procedure notes
• UB-04, Field Location: 74A-E

Additional Notes: Guidelines for Abstraction:

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<tbody>
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<td>None</td>
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</tbody>
</table>
Data Element Name: ICD-9-CM Principal Diagnosis Code

Collected For: All Records, Optional for HBIPS-2 and HBIPS-3; Used in algorithm for PC-01, 02, 03, 04, 05 and PBM-03

Definition: The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code associated with the diagnosis established after study to be chiefly responsible for occasioning the admission of the patient for this hospitalization.

Suggested Data Collection Question: What was the ICD-9-CM code selected as the principal diagnosis for this record?

Format: 

- **Length:** 6 (implied decimal point)
- **Type:** Alphanumeric
- **Occurs:** 1

Allowable Values: Any valid ICD-9-CM diagnosis code

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:
- Face sheet
- Discharge summary
- UB-04, Field Location: 67

Additional Notes:

**Guidelines for Abstraction:**

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<tbody>
<tr>
<td>• Refer to Appendix A, for ICD-9-CM Code Tables.</td>
<td>• Refer to Appendix A, for ICD-9-CM Code Tables.</td>
</tr>
</tbody>
</table>
Data Element Name: ICD-9-CM Principal Procedure Code

Collected For: All Records, Optional for All HBIPS Records; Used in algorithm for PC-01, 02, 04 and 05

Definition: The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code that identifies the principal procedure performed during this hospitalization. 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.

Note: If transmitted for the HBIPS measure set, all applicable edits (e.g., valid value, ICD-9-CM Principal Procedure Date exists, etc.) will apply.

Suggested Data Collection Question: What was the ICD-9-CM code selected as the principal procedure for this record?

Format: Length: 5 (with or without decimal point)  
Type: Alphanumeric  
Occurs: 1

Allowable Values: Any valid ICD-9-CM procedure code.

Notes for Abstraction: The principal procedure as described by the Uniform Hospital Discharge Data Set (UHDDS) is one performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.

Suggested Data Sources:  
- Face sheet  
- Discharge summary  
- UB-04, Field Location: 74

Additional Notes: Guidelines for Abstraction:

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</table>
Data Element Name: **ICD-9-CM Principal Procedure Date**

Collected For: All Records, Optional for All HBIPS and PBM Records

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

**Note:** If transmitted for the HBIPS measure set, all applicable edits (e.g., valid value, **ICD-9-CM Principal Procedure Code** exists, etc.) will apply.

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

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

**Type:** Date

**Occurs:** 1

Allowable Values:

<table>
<thead>
<tr>
<th>MM</th>
<th>Month (01-12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD</td>
<td>Day (01-31)</td>
</tr>
<tr>
<td>YYYY</td>
<td>Year (20xx)</td>
</tr>
</tbody>
</table>

Leave Blank if Unable to Determine

Notes for Abstraction:

- If the principal procedure date is unable to be determined from medical record documentation, leave blank.
- 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 leave blank.

Examples:

- Documentation indicates the **ICD-9-CM Principal Procedure Date** was 02-42-2008. 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 leave blank.
- Patient expires on 02-12-2008 and documentation indicates the **ICD-9-CM Principal Procedure Date** was 03-12-2008. 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 leave blank.

**Note:** Transmission of a case with an invalid date as described above will be rejected from the Joint Commission’s Data Warehouse.
**Suggested Data Sources:**
- Consultation notes
- Face sheet
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- UB-04, Field Location: 74

**Additional Notes:**

**Guidelines for Abstraction:**

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```
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

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 ICD-9-CM Principal Procedure 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 ICD-9-CM Principal Procedure Date.
Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:
- Use the time when the principal procedure was performed.
- 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 when the principal procedure was performed is unable to be determined from medical record documentation, select “UTD”.

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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 of the ICD-9-CM Principal Procedure was 3300. No other documentation in the medical record provides a valid time. Since the 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.

### Suggested Data Sources:
- Consultation notes
- Face sheet
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- UB-04, Field Location: 74

### Additional Notes:

### Guidelines for Abstraction:

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</table>
Data Element Name: INR Value < 1.4

Collected For: CSTK-04, CSTK-04b.

Definition: Documentation of an international normalized ratio (INR) value less than 1.4 following initiation of a procoagulant reversal agent. This value correlates to the ability of the blood to clot.

Suggested Data Collection Question: Is there documentation in the medical record of an INR value less than 1.4 following initiation of a procoagulant reversal agent?

Format: Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of of an INR result less than 1.4 following initiation of a procoagulant reversal agent.

N (No) There is no documentation of an INR result less than 1.4 following initiation of a procoagulant reversal agent, OR unable to determine from medical record documentation.

Notes for Abstraction: To determine the value for this data element, review the INR results obtained after the initiation of a procoagulant reversal agent. If any result is less than 1.4, select “Yes”.

Suggested Data Sources:
• Emergency department record
• Laboratory report
• Nursing notes
• Progress notes

Additional Notes:

Guidelines for Abstraction:

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</table>
Data Element Name: INR Value < 1.4 Date

Collected For: CSTK-04b.

Definition: The month, date, and year of the FIRST recorded international normalized ratio (INR) value less than 1.4 following initiation of a procoagulant reversal agent.

Suggested Data Collection Question: What is the date of the FIRST recorded international normalized ratio (INR) value less than 1.4 following initiation of a procoagulant reversal agent?

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:

• Use the date documented for the FIRST recorded INR value less than 1.4 following initiation of a procoagulant reversal agent. If a discrepancy exists in INR value date documentation from different sources, choose the earliest date.
  EXAMPLE:
  ◦ Lab report dated 8/9/20XX documents INR 1.2 and nursing notes document INR 1.0 on 8/10/20XX., select 8/9/20XX.
  ◦ ED record documents INR 1.3 on 1/1/20XX and physician documents INR 1.3 in progress notes on 1/2/20XX, select 1/1/20XX.

• If the first INR value less than 1.4 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 FIRST recorded INR value less than 1.4 date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the FIRST recorded INR value less than 1.4 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 INR Value Less Than 1.4 Date allows the case to be accepted into the warehouse.
Suggested Data Sources:
- Emergency department record
- Laboratory report
- Nursing notes
- Progress notes

Additional Notes:

Guidelines for Abstraction:

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</table>
Data Element Name: **INR Value < 1.4 Time**

Collected For: CSTK-04b

Definition: The time (military time) of the **FIRST** recorded international normalized ratio (INR) value less than 1.4 following initiation of a procoagulant reversal agent.

Suggested Data Collection Question: What is the time of the **FIRST** recorded international normalized ratio (INR) value less than 1.4 following initiation of a procoagulant reversal agent?

Format:
- **Length:** 5 - HH-MM (with or without colon) or UTD
- **Type:** Time
- **Occurs:** 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

**Note:**

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the **INR Value Less Than 1.4 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 **INR Value Less Than 1.4 Date**.

Example:

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

**Notes for Abstraction:**

- Use the time of the **FIRST** recorded INR value less than 1.4 following initiation of a procoagulant reversal agent. If a discrepancy exists in
time documentation from different sources, choose the earliest time.

**EXAMPLE:**
- Lab report timed 23:24 on 8/9/20XX documents INR 1.2 and nursing notes timed 01:00 on 8/10/20XX document INR 1.0, select 23:24.
- ED record documents INR 1.3 at 21:30 on 1/1/20XX and physician documents INR 1.3 in progress notes timed 15:00 on 1/2/20XX, select 21:30.

- 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 the **FIRST** recorded INR less than 1.4 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** recorded INR value less than 1.4 time was 3300. No other documentation in the medical record provides a valid time. Since the **FIRST** recorded INR value less than 1.4 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 **INR Value Less Than 1.4 Time** allows the case to be accepted into the warehouse.

**Suggested Data Sources:**
- Emergency department record
- Laboratory report
- Nursing notes
- Progress notes

**Additional Notes:**

**Guidelines for Abstraction:**

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</table>
Data Element Name: IV Thrombolytic Initiation Date

Collected For: CSTK-05.

Definition: The month, date, and year 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 that IV thrombolytic therapy was initiated for this patient at this 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:

- 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 Commission’s Data Warehouse. Use of “UTD” for IV Thrombolytic Initiation Date 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

Additional Notes:

Guidelines for Abstraction:

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</table>
Data Element Name: IV Thrombolytic Initiation Time

Collected For: CSTK-05

Definition: The time (military time) for which IV thrombolytic therapy was initiated 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 was the time of initiation for IV thrombolytic therapy?

Format:

Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note: 00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the IV Thrombolytic Initiation 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 IV Thrombolytic Initiation Date.

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

Notes for Abstraction:

- 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 Commission’s 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

Additional Notes:

Guidelines for Abstraction:

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Data Element Name: Initial Blood Glucose Value at Hospital Arrival

Collected For: CSTK-05, CSTK-07a.

Definition: Documentation of the blood glucose value obtained closest to 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 blood glucose value obtained closest to 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 closest to hospital arrival.

Suggested Data Sources:
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Consultation form/note
- Nursing assessment

Additional Notes: Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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Data Element Name: Initial Hunt and Hess Scale Date

Collected For: CSTK-03

Definition: The month, date, and year 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 patient’s 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 that the Hunt and Hess scale was first performed at this 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 (2012-Current Year)
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 Commission’s Data Warehouse. Use of “UTD” for Initial Hunt and Hess Scale Date allows the case to be accepted into the warehouse.

Suggested Data Sources:

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

Additional Notes:

Excluded Data Sources:

• Discharge summary

Guidelines for Abstraction:

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</table>
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.

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: • Physician/APN/PA documentation of Hunt and Hess scale only.

Suggested Data Sources: • Consultation notes
• Emergency department record
• History and physical
• Progress notes
• Admitting note

Additional Notes: Excluded Data Sources:
• Discharge summary

Guidelines for Abstraction:

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</table>
Data Element Name: *Initial Hunt and Hess Scale Time*

Collected For: CSTK-03.

Definition: The time (military time) for which 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 patient’s 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 time for which the Hunt and Hess scale was first performed at this hospital?

Format: 

**Length:** 5 - HH-MM (with or without colon) or UTD  
**Type:** Time  
**Occurs:** 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

**Note:**

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the *Initial Hunt and Hess Scale 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 *Initial Hunt and Hess Scale Date.*

Example:

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

- 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.
- 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.
- 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 Commission’s 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

_Additional Notes:_

**Excluded Data Sources:**

- Discharge summary

_Guidelines for Abstraction:_

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Data Element Name: Initial ICH Score Date

Collected For: CSTK-03

Definition: The month, date, and year 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 that the ICH score was first performed at this 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 (2012-Current Year)
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 Commission’s Data Warehouse. Use of
“UTD” for Initial ICH Score Date allows the case to be accepted into the warehouse.

Suggested Data Sources:
- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Admitting note

Additional Notes: Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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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.

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: • Physician/APN/PA documentation of the ICH score only.

Suggested Data Sources:
• Consultation notes
• Emergency department record
• History and physical
• Progress notes
• Admitting note

Additional Notes: Excluded Data Sources:
• Discharge summary

Guidelines for Abstraction:

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</table>
Data Element Name: Initial ICH Score Time

Collected For: CSTK-03.

Definition: The time (military time) for which 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 time for which the ICH score was first performed at this hospital?

Format: Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Initial ICH Score 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 Initial ICH Score Date.
Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- 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.
- 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.
- 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 Commission’s 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

Additional Notes:

Excluded Data Sources:

- Discharge summary

Guidelines for Abstraction:

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**Data Element Name:** Initial INR Value ≥ 1.4  
**Collected For:** CSTK-04, CSTK-04a  
**Definition:** Documentation that the international normalized ratio (INR) value performed closest to hospital arrival was greater than or equal to 1.4. This value correlates to the ability of the blood to clot. Higher values greater than or equal to 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 or equal to 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 or equal to 1.4.
- **N (No)** There is no documentation that the INR value performed closest to hospital arrival was greater than or equal to 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. If any result is greater than or equal to 1.4, select “Yes”.

**Suggested Data Sources:**  
- Emergency department record  
- Laboratory report  
- Nursing notes  
- Progress notes

**Additional Notes:**  

**Guidelines for Abstraction:**

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Data Element Name: Initial NIHSS Score Date

Collected For: CSTK-01.

Definition: The month, date, and year 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 t-PA.

Suggested Data Collection Question: What is the date that the NIHSS score was first performed at this 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 (2012-Current Year)
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 Commission’s Data Warehouse. Use of “UTD” for Initial NIHSS Score Date 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

Additional Notes:

Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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Data Element Name: Initial NIHSS Score Performed

Collected For: CSTK-01.

Definition: Documentation of the first National Institutes 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 t-PA. 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).

Suggested Data Sources: • Consultation notes
• Emergency department record
• History and physical
• Nursing flow sheet
• Progress notes
• Admitting note
• Nursing assessment

Additional Notes: Excluded Data Sources:
• Discharge summary

Guidelines for Abstraction:

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</table>
Data Element Name: Initial NIHSS Score Time

Collected For: CSTK-01.

Definition: The time (military time) for which the NIHSS score was first performed 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 t-PA.

Suggested Data Collection Question: What is the time for which the NIHSS score was first performed at this hospital?

Format:

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

Type: Time

Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Initial NIHSS Score 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 Initial NIHSS Score Date.
Example:
Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx
Notes for Abstraction:

- 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 same assessment), 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
- *Initial NIHSS Score Time* refers to the time that the first NIHSS score was performed.
- 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).
- 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 Commission’s 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

Additional Notes:

Excluded Data Sources:

- Discharge summary

Guidelines for Abstraction:

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Data Element Name: Initial NIHSS Score at Hospital Arrival

Collected For: CSTK-05, CSTK-07a.

Definition: Documentation of the NIHSS score obtained closest to 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 NIHSS score obtained closest to 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 closest to hospital arrival.

Suggested Data Sources:
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Consultation form/note
- Nursing assessment

Additional Notes: Excluded Data Sources:
- Discharge summary

Guidelines for Abstraction:

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Data Element Name: Initial Platelet Count at Hospital Arrival

Collected For: CSTK-05, CSTK-07a.

Definition: Documentation of the platelet count obtained closest to 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 platelet count obtained closest to hospital arrival?

Format: Length: 6 (without comma)  
Type: Alphanumeric  
Occurs: 1

Allowable Values:  
PLT = platelet count value (no commas)  
UTD = Unable to Determine

Notes for Abstraction: To determine the value for this data element, review the platelet counts obtained closest to hospital arrival.

Suggested Data Sources:  
- History and physical  
- Nursing flow sheet  
- Progress notes  
- Admitting note  
- Consultation form/note  
- Nursing assessment

Additional Notes:  
Excluded Data Sources:  
- Discharge summary

Guidelines for Abstraction:

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Data Element Name: Initial Systolic Blood Pressure at Hospital Arrival

Collected For: CSTK-05, CSTK-07a.

Definition: Documentation of the systolic blood pressure (SBP) obtained closest to hospital arrival. Systolic blood pressure is the amount of pressure that blood exerts on vessels while the heart is beating. In a blood pressure reading (e.g., 120/80), it is the number on the top.

Suggested Data Collection Question: What is the systolic blood pressure (SBP) obtained closest to hospital arrival?

Format: 
- Length: 3
- Type: Alphanumeric
- Occurs: 1

Allowable Values: 
- SBP = systolic blood pressure value 
- UTD = Unable to Determine

Notes for Abstraction: To determine the value for this data element, review the systolic blood pressure readings obtained closest to hospital arrival.

Suggested Data Sources: 
- Emergency department record
- History and physical
- Nursing flow sheet
- Progress notes
- Admitting note
- Consultation form/note
- Nursing assessment

Additional Notes: 
Excluded Data Sources: 
- Discharge summary

Guidelines for Abstraction:

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### 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 patient’s 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 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.

6  The patient has expired.

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 or nurse (RN).
- 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 patient’s 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”.

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.

The caregiver is defined as the patient’s 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

Additional Notes:

Guidelines for Abstraction:

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<td>• Unchecked checkbox next to a mRS (e.g., blank checkbox on a pre-printed form next to mRS).</td>
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<td></td>
<td>• Pre-printed Modified Rankin Score Form (mRS) left blank</td>
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<td>Modified Rankin Score (mRS) Date</td>
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<td>Collected For:</td>
<td>CSTK-02.</td>
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<tr>
<td>Definition:</td>
<td>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.</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>What is the date that the Modified Rankin Score (mRS) was obtained post-discharge?</td>
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<td>Format:</td>
<td>Length: 10-MM-DD-YYYY (includes dashes) or UTD</td>
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**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 patient’s 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.

- 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 Commission’s 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

Additional Notes:

Guidelines for Abstraction:

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<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
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 in order to select “Yes”.
- 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 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

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Nimodipine</td>
<td>All other calcium channel blocker medications other than those listed as inclusions.</td>
</tr>
<tr>
<td>• Nimotop</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: **Nimodipine Administration Date**

Collected For: **CSTK-06.**

Definition: The month, date, and year 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 that nimodipine was first administered to this patient at this 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 (2012-Current Year)
- **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 Commission’s Data Warehouse. Use of “UTD” for **Nimodipine Administration Date** allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Emergency department record
- Nursing flow sheet
Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Nimodipine Administration Time

Collected For: CSTK-06

Definition: The 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.

Suggested Data Collection Question: What is the time of nimodipine administration for this patient at this hospital?

Format:

- Length: 5 - HH-MM (with or without colon) or UTD
- Type: Time
- Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:

- 00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Nimodipine Administration 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 Nimodipine Administration Date.
  Example:
  - Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- 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 Commission’s 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
- Medication reconciliation form

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Data Element Name:** Payment Source

**Collected For:** All Records, Optional for HBIPS-2 and HBIPS-3

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

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

**Format:**
- **Length:** 1
- **Type:** Alphanumeric
- **Occurs:** 1

**Allowable Values:**
1. Source of payment is Medicare.
2. Source of payment is NonMedicare.

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

**Suggested Data Sources:**
- Face sheet
- UB-04, Field Location: 50A, B or C

**Additional Notes:**

**Guidelines for Abstraction:**
<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare includes, but is not limited to:</td>
<td>• None</td>
</tr>
<tr>
<td>• Medicare Fee for Service (includes DRG or PPS)</td>
<td></td>
</tr>
<tr>
<td>• Black Lung</td>
<td></td>
</tr>
<tr>
<td>• End Stage Renal Disease (ESRD)</td>
<td></td>
</tr>
<tr>
<td>• Railroad Retirement Board (RRB)</td>
<td></td>
</tr>
<tr>
<td>• Medicare Secondary Payer</td>
<td></td>
</tr>
<tr>
<td>• Medicare HMO/Medicare Advantage</td>
<td></td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>Positive Brain Image</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Collected For:</td>
<td>CSTK-05</td>
</tr>
<tr>
<td>Definition:</td>
<td>Documentation of a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA thrombolytic (t-PA) therapy, OR mechanical endovascular reperfusion therapy initiation. The major risk of reperfusion therapy is hemorrhage</td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>Was there a positive finding on brain imaging of parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage following IV or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy initiation?</td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 1</td>
</tr>
<tr>
<td></td>
<td>Type: Alphanumeric</td>
</tr>
<tr>
<td></td>
<td>Occurs: 1</td>
</tr>
<tr>
<td>Allowable Values:</td>
<td>Y (YES) Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was detected on brain imaging following IV or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy initiation.</td>
</tr>
<tr>
<td></td>
<td>N (No) Parenchymal hematoma, subarachnoid hemorrhage, and/or intraventricular hemorrhage was not detected on brain imaging following IV or IA thrombolytic (t-PA) therapy, or mechanical endovascular reperfusion therapy initiation, OR Unable to determine (UTD) from the medical record documentation.</td>
</tr>
</tbody>
</table>
| Notes for Abstraction: | • For purposes of this data element, 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 (t-PA) 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”.  
• See the inclusion list for acceptable examples of documentation of a positive finding. The list is not all inclusive. |
| Suggested Data Sources: | • Diagnostic test reports  
• Brain imaging reports  
• Radiology reports |
### Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebral hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECASS criteria PH1 or PH2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemorrhagic conversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemorrhagic expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemorrhagic transformation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intraventricular hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenchymal hematoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenchymal hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenchymal intracerebral hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subarachnoid hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Element Name:</td>
<td>Positive Brain Image Date</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td></td>
</tr>
<tr>
<td>Collected For:</td>
<td>CSTK-05</td>
<td></td>
</tr>
<tr>
<td>Definition:</td>
<td>The month, date, and year 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.</td>
<td></td>
</tr>
<tr>
<td>Suggested Data Collection Question:</td>
<td>What was the date of the positive brain image finding?</td>
<td></td>
</tr>
<tr>
<td>Format:</td>
<td>Length: 10 - MM-DD-YYYY (includes dashes) or UTD Type: Date Occurs: 1</td>
<td></td>
</tr>
<tr>
<td>Allowable Values:</td>
<td>MM = Month (01-12) DD = Day (01-31) YYYYY = Year (2001-Current Year) UTD = Unable to Determine</td>
<td></td>
</tr>
</tbody>
</table>

**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 Commission’s Data Warehouse. Use of “UTD” for *Positive Brain Image Date* allows the case to be accepted into the warehouse.
Suggested Data Sources:
- Diagnostic test reports
- Brain imaging reports
- Radiology reports

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Data Element Name:** Positive Brain Image Time  

**Collected For:** CSTK-05  

**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.

**Suggested Data Collection Question:** What was the time of the positive brain image?

**Format:**  

- **Length:** 5 - HH-MM (with or without colon) or UTD  
- **Type:** Time  
- **Occurs:** 1  

**Allowable Values:**  

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

**Examples:**  

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

**Note:**  

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Positive Brain 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 Positive Brain Image Date.  

Example:  

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

- Use the time at which symptomatic intracranial hemorrhage was first documented following IV or IA thrombolytic (t-PA) 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 Commission’s 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

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Post-Treatment Thrombolysis in Cerebral Infarction (TICI) Reperfusion Grade

Collected For: CSTK-07a.

Definition: Documentation that the Thrombolysis in Cerebral Infarction (TICI) reperfusion grade was 2B 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 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:
- Physician/APN/PA documentation of the TICI grade only.

Suggested Data Sources:
- Consultation notes
- Emergency department record
- History and physical
- Progress notes
- Discharge summary
- Diagnostic test reports
- Operative notes
- Procedure notes
- Admitting notes

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Procoagulant Reversal Agent Initiation

Collected For: CSTK-04, CSTK-04a, CSTK-04b.

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

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Activated prothrombin complex concentrates</td>
<td>• Vitamin K Only</td>
</tr>
<tr>
<td>• Anti-inhibitor coagulant complex</td>
<td>• Factor IX (without complex)</td>
</tr>
<tr>
<td>• Autoplex T</td>
<td></td>
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<tr>
<td>• Bebulin VH</td>
<td></td>
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<tr>
<td>• Eptacog alfa</td>
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<tr>
<td>• Factor IX Complex</td>
<td></td>
</tr>
<tr>
<td>• Factor VIIa (Recombinant)</td>
<td></td>
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<tr>
<td>Feiba VH Immuno</td>
<td></td>
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<tr>
<td>-------------------------</td>
<td></td>
</tr>
<tr>
<td>Fresh frozen plasma (FFP)</td>
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</tr>
<tr>
<td>NovoSeven</td>
<td></td>
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<tr>
<td>NovoSeven RT</td>
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<tr>
<td>Profilnine SD</td>
<td></td>
</tr>
<tr>
<td>Proplex T</td>
<td></td>
</tr>
<tr>
<td>Prothrombin complex concentrates (PCCs)</td>
<td></td>
</tr>
<tr>
<td>rFVIIa</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: Procoagulant Reversal Agent Initiation Date

Collected For: CSTK-04a, CSTK-04b,

Definition: The month, date, and year that 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: What is the date that a procoagulant reversal agent was initiated for this patient at this 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:
- Use the date at which initiation of a procoagulant reversal agent was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different procoagulant reversal agent dates (either different procoagulant reversal agent episodes or corresponding with the same episode), enter the earliest date.
- If the date that a procoagulant reversal agent 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 procoagulant reversal agent date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the procoagulant reversal agent 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 Procoagulant Reversal Agent Date allows the case to be accepted into the warehouse.

Suggested Data Sources:
- Emergency department record
- Nursing flow sheet
- Progress notes
• IV flow sheets
• Mediation administration record

Additional Notes:

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Procoagulant Reversal Agent Initiation Time

Collected For: CSTK-04a, CSTK-04b.

Definition: The time (military time) for which 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: What was the time of initiation for the procoagulant reversal agent?

Format:

- Length: 5 - HH-MM (with or without colon) or UTD
- Type: Time
- Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

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

Note:

00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Procoagulant Reversal Agent 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 Procoagulant Reversal Agent Initiation Date.

Example:

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

Notes for Abstraction:

- Use the time at which initiation of the procoagulant reversal agent was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or
more different procoagulant reversal agent initiation times (either
different procoagulant reversal agent 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 the
procoagulant reversal agent time when other documentation cannot
be found.
• Procoagulant reversal agent initiation time refers to the time the
procoagulant reversal agent bolus/infusion was started.
• Do not use physician orders as they do not demonstrate initiation of
the procoagulant reversal agent (in the ED this may be used if
signed/initialed by a nurse).
• If the time of the procoagulant reversal agent 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 procoagulant reversal agent initiation
time was 3300. No other documentation in the medical record
provides a valid time. Since the procoagulant reversal agent 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 Procoagulant Reversal Agent Initiation 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)
• IV flow sheets

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
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</table>
Data Element Name: Proximal or Distal to the Primary Arterial Occlusion

Collected For: CSTK-07a.

Definition: Documentation in the medical record of the position of the microcatheter in relation to the primary arterial occlusion. The microcatheter is close (proximal) to the arterial occlusion, or the microcatheter is farther (distal) from the arterial occlusion.

Suggested Data Collection Question: What is the position of the microcatheter in relation to the primary arterial occlusion?

Format: Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

1  The microcatheter is proximal to the primary arterial occlusion.
2  The microcatheter is distal to the primary arterial occlusion.
3  Neither proximal or distal are documented in reference to the position of the microcatheter in relation to the primary arterial occlusion, OR unable to determine (UTD) from the medical record documentation.

Notes for Abstraction: Collect the position of the microcatheter in relation to the primary arterial occlusion for patients treated with 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

Additional Notes:

Guidelines for Abstraction:

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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Proximal</td>
<td>None</td>
</tr>
<tr>
<td>• Distal</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: Race
Collected For: All Records
Definition: Documentation of the patient's race.
Suggested Data Collection Question: What is the patient's race?
Format:
  Length: 1
  Type: Character
  Occurs: 1

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

Notes for Abstraction:
- The data element Hispanic Ethnicity is required in addition to this data element.
- If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race.
- Although the terms “Hispanic” and “Latino” are actually descriptions of the patient’s ethnicity, it is not uncommon to find them referenced as race. If the patient’s race is documented only as Hispanic/Latino, select “White.” If the race is documented as mixed Hispanic/Latino with another race, use whatever race is given (e.g., Black-Hispanic – select “Black”). Other terms for Hispanic/Latino include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican-American, Puerto Rican, South or Central American, and Spanish.
### Suggested Data Sources:
- Emergency department record
- History and physical
- Face sheet
- Nursing admission assessment
- Progress notes

### Additional Notes:

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black or African American</strong> 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.”</td>
<td>• None</td>
</tr>
<tr>
<td><strong>American Indian or Alaska Native</strong> A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment (e.g., any recognized tribal entity in North and South America [including Central America], Native American.)</td>
<td></td>
</tr>
<tr>
<td><strong>Asian</strong> A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.</td>
<td></td>
</tr>
<tr>
<td><strong>White</strong> A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (e.g., Caucasian, Iranian, White).</td>
<td></td>
</tr>
<tr>
<td><strong>Native Hawaiian or Pacific Islander</strong> A person having origins in any of the other original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.</td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: Reason for Not Achieving an INR Value < 1.4

Collected For: CSTK-04.

Definition: Reason for not achieving an INR value < 1.4

- Adverse reaction to a procoagulant reversal agent
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA)

This value correlates to the ability of the blood to clot.

Suggested Data Collection Question: Is there documentation by a physician/APN/PA in the medical record of a reason for not achieving an INR value < 1.4?

Format:

Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values:

Y (Yes) There is documentation of a reason for not achieving an INR value < 1.4.

N (No) There is no documentation of a reason for not achieving an INR value < 1.4, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Reasons for not achieving an INR value < 1.4 must be documented by the physician/APN/PA.
- **If reasons are not mentioned in the context of an INR value, do not make inferences** (e.g., do not assume that an INR value < 1.4 was not achieved because of an adverse reaction to a procoagulant reversal agent unless documentation explicitly states so.)
  - Reasons must be explicitly documented (e.g., “Last INR 1.6. NovoSeven stopped after patient developed DIC.”; “Patient with H/O bovine allergy. INR ↓ 1. 4 after FFP.”)
- 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:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient/family refusal</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name:  

Reason for Not Administering Nimodipine Treatment

Collected For:  

CSTK-06

Definition:  

Reason for not administering nimodipine treatment:

- Nimodipine allergy
- 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.
- 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

**Additional Notes:**

**Excluded Data Sources:**
- Any documentation dated/timed later than 24 hours after hospital arrival.

**Guidelines for Abstraction:**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient/family refusal</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Sex

Collected For: All Records

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

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

Format:

<table>
<thead>
<tr>
<th>Length</th>
<th>Type</th>
<th>Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Character</td>
<td>1</td>
</tr>
</tbody>
</table>

Allowable Values:

- M = Male
- F = Female
- U = Unknown

Notes for Abstraction:

- Collect the documented patient's sex at admission or the first documentation after arrival.
- Consider the sex to be unable to be determined and select “Unknown” if:
  - The patient refuses to provide their sex.
  - Documentation is contradictory.
  - Documentation indicates the patient is a Transexual.
  - Documentation indicates the patient is a Hermaphrodite.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Face sheet
- Progress notes
- UB-04 Field Location: 11
- Nursing admission notes

Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• None</td>
<td>• None</td>
</tr>
</tbody>
</table>
**Data Element Name:** Site of Primary Vessel Occlusion

**Collected For:** CSTK-07a.

**Definition:** Documentation in the medical record of the clinical location of the primary occluded vessel.

**Suggested Data Collection Question:** What artery is occluded?

**Format:**
- **Length:** 1
- **Type:** Alphanumeric
- **Occurs:** 1

**Allowable Values:**
1. Cervical internal carotid artery (ICA)
2. Intracranial ICA
3. Middle cerebral artery (MCA)
4. M1 MCA
5. M2 MCA
6. M3/M4 MCA
7. Anterior cerebral artery (ACA)
8. Vertebral artery (VA)
9. Basilar artery (BA)
10. Posterior communicating artery (PCA)
11. 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 (t-PA) 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
Additional Notes:

Guidelines for Abstraction:

<table>
<thead>
<tr>
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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Data Element Name: Therapy Initiation Date

Collected For: CSTK-05.

Definition: The month, date, and year that IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion 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 embolectomy devices with or without pharmacological thrombolysis.

Suggested Data Collection Question: What is the date that therapy was initiated for this patient at this 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:

- Use the date at which initiation of therapy was first documented. If a discrepancy exists in date documentation from different sources, choose the earliest date. If there are two or more different therapy initiation dates (either different therapy episodes or corresponding with the same episode), enter the earliest date.
- If the date 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 therapy initiation date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the therapy 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 Therapy Initiation Date allows the case to be accepted into the warehouse.
Suggested Data Sources:

- Consultation notes
- Emergency department record
- Face sheet
- Nursing flow sheet
- Progress notes
- Operative notes
- Procedure notes
- Medication administration record (MAR)
- Diagnostic test reports
- Flow sheets
- UB-04, Field Location: 74A-F

Additional Notes:

Guidelines for Abstraction:

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<thead>
<tr>
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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
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</tbody>
</table>
Data Element Name: Therapy Initiation Time

Collected For: CSTK-05

Definition: The time (military time) for which IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy was initiated 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 embolectomy devices with or without pharmacological thrombolysis.

Suggested Data Collection Question: What was the time of therapy initiation therapy?

Format: Length: 5 - HH-MM (with or without colon) or UTD
Type: Time
Occurs: 1

Allowable Values:

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

Time must be recorded in military time format. With the exception of Midnight and Noon:

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

Examples:

Midnight = 0000
Noon = 1200
5:31 am = 0531
5:31 pm = 1731
11:59 am = 1159
11:59 pm = 2359

Note:

0000 = midnight. If the time is documented as 0000 11-24-20xx, review supporting documentation to determine if the Therapy Initiation Date should remain 11-24-20xx or if it should be converted to 11-25-20xx.

When converting Midnight or 2400 to 0000, do not forget to change the Therapy Initiation Date.
Example:
Midnight or 2400 on 11-24-20xx = 0000 on 11-25-20xx
Notes for Abstraction:

- Use the time at which initiation of the IA thrombolytic (t-PA) therapy or mechanical endovascular reperfusion therapy was first documented. If a discrepancy exists in time documentation from different sources, choose the earliest time. If there are two or more different therapy initiation times (either different therapy 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 1500.
- The use of “infusion time” is acceptable as IA thrombolytic initiation time when other documentation cannot be found.
- The use of “start time” is acceptable as mechanical endovascular reperfusion therapy initiation time when other documentation cannot be found.
- Therapy initiation time refers to the time the thrombolytic bolus/infusion or mechanical endovascular reperfusion procedure was started.
- If the time of therapy 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 therapy initiation time was 3300. No other documentation in the medical record provides a valid time. Since the therapy 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 Therapy Initiation Time allows the case to be accepted into the warehouse.

Suggested Data Sources:

- Consultation notes
- Emergency department record
- Face sheet
- Nursing flow sheet
- Progress notes
- Diagnostic test reports
- Operative notes
- Procedure notes
- Medication administration record (MAR)
- Flow sheets
- UB-04, Field Location: 74A-F

Additional Notes:

Guidelines for Abstraction:

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<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data Element Name: Unique Blinded Case Identifier

Collected For: All Records, All Records (Used in transmission of anonymous patient-level data to the Joint Commission)

Definition: An identifier that is assigned to each patient by the hospital that uniquely identifies the patient for the episode of care. It is a fictitious identifier used to differentiate between individual patient records.

Suggested Data Collection Question: What number has been assigned to identify the patient?

Format:
- Length: 9
- Type: Numeric
- Occurs: 1

Allowable Values: Any valid positive number up to nine digits

- This identifier should not be derived from or related to information about the patient in such a way that it is possible to identify the patient via a review or manipulation of the data.
- Since a unique identifier is used for each medical record that is abstracted for the Joint Commission pilot, hospitals need to link this tracking identifier to the original patient record. This link will be important in the event that data quality issues arise and it is requested that the episode of care data be reviewed or if the patient is chosen to be included in the data reliability study.

Notes for Abstraction:

Suggested Data Sources: Additional Notes: Does not apply, determined by the hospital.

Guidelines for Abstraction:

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
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</tbody>
</table>
Data Element Name: Warning Signs and Symptoms of Stroke

Collected For: CSTK-01.

Definition: Documentation in the medical record that the patient presented with warning signs and symptoms of stroke at the time of arrival to the hospital emergency department. Stroke is a medical emergency. It is important to recognize warning signs and symptoms of stroke and initiate recanalization therapy when indicated in order to prevent or minimize infarction.

Suggested Data Collection Question: Did the patient present to the hospital emergency department with warning signs and symptoms of stroke?

Format: Length: 1
Type: Alphanumeric
Occurs: 1

Allowable Values: Y (Yes) There is documentation present in the medical record that the patient presented with warning signs and symptoms of stroke at the time of arrival to the hospital emergency department.

N (No) There was no documentation present in the medical record that the patient presented with warning signs and symptoms of stroke at the time of arrival to the hospital emergency department, or unable to determine from medical record documentation.

Notes for Abstraction: • If documentation indicates that ANY warning signs or symptoms were present at the time of the patient’s arrival to the hospital emergency department, select ‘Yes’.

Suggested Data Sources: • Consultation notes
• Emergency department record
• History and physical
• Nursing notes
• Nursing flow sheet
• Progress notes
• Physician orders
• Medication administration record (MAR)
• Medical transport records
• Medication reconciliation form

Additional Notes: Guidelines for Abstraction:

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<tbody>
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<td></td>
</tr>
<tr>
<td>Warning Signs and Symptoms of Stroke</td>
<td>None</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>• Aphasia</td>
<td></td>
</tr>
<tr>
<td>• Confusion</td>
<td></td>
</tr>
<tr>
<td>• Dizziness</td>
<td></td>
</tr>
<tr>
<td>• Dysarthria</td>
<td></td>
</tr>
<tr>
<td>• Expressive aphasia</td>
<td></td>
</tr>
<tr>
<td>• Headache</td>
<td></td>
</tr>
<tr>
<td>• Hemianopia</td>
<td></td>
</tr>
<tr>
<td>• Hemiparesis</td>
<td></td>
</tr>
<tr>
<td>• Hemiparesthesia</td>
<td></td>
</tr>
<tr>
<td>• Hemiplegia</td>
<td></td>
</tr>
<tr>
<td>• Loss of balance</td>
<td></td>
</tr>
<tr>
<td>• Loss of coordination</td>
<td></td>
</tr>
<tr>
<td>• Numbness or weakness of the face, arm or leg (unilateral or bilateral)</td>
<td></td>
</tr>
<tr>
<td>• Paresthesia (unilateral or bilateral)</td>
<td></td>
</tr>
<tr>
<td>• Paralysis (unilateral or bilateral)</td>
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<tr>
<td>• Receptive aphasia</td>
<td></td>
</tr>
<tr>
<td>• Syncope</td>
<td></td>
</tr>
<tr>
<td>• Trouble speaking</td>
<td></td>
</tr>
<tr>
<td>• Trouble understanding</td>
<td></td>
</tr>
<tr>
<td>• Trouble walking</td>
<td></td>
</tr>
<tr>
<td>• Vertigo</td>
<td></td>
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Tables
Appendix A CSTK

Table 8.1 Ischemic Stroke (STK)

<table>
<thead>
<tr>
<th>Code</th>
<th>Shortened Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>433.01</td>
<td>OCL BSLR ART W INFRC</td>
</tr>
<tr>
<td>433.1</td>
<td>OCL CRTD ART WO INFRC</td>
</tr>
<tr>
<td>433.11</td>
<td>OCL CRTD ART W INFRC</td>
</tr>
<tr>
<td>433.21</td>
<td>OCL VRTB ART W INFRC</td>
</tr>
<tr>
<td>433.31</td>
<td>OCL MLT BI ART W INFRC</td>
</tr>
<tr>
<td>433.81</td>
<td>OCL SPCF ART W INFRC</td>
</tr>
<tr>
<td>433.91</td>
<td>OCL ART NOS W INFRC</td>
</tr>
<tr>
<td>434</td>
<td>CRBL THRMBS WO INFRC</td>
</tr>
<tr>
<td>434.01</td>
<td>CRBL THRMBS W INFRC</td>
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<td>434.11</td>
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<td>CRBL ART OCL NOS W INFRC</td>
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Table 8.1a Thrombolytic Agent Procedures

<table>
<thead>
<tr>
<th>Code</th>
<th>Shortened Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.1</td>
<td>INJECTION OR INFUSION OF THROMBOLYTIC AGENT</td>
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Table 8.1b Thrombolytic Agent Procedures

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>38.91</td>
<td>ARTERIAL CATHETERIZATION</td>
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Table 8.1c Mechanical Endovascular Reperfusion Procedures

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<tr>
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<tbody>
<tr>
<td>0.63</td>
<td>PERC INS CAROTID STENT</td>
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<td>0.64</td>
<td>PERC INS EXTRACRAN STENT</td>
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Table 8.2 Hemorrhagic Stroke (STK)

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**Table 8.3 Carotid Intervention Procedures**
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