Data Dictionary for SETRAC Stroke Data Elements

For state designated stroke centers that do not use Get With The Guidelines - Stroke.

Underlined terms within the SETRAC Data Element column are defined in the Data Dictionary column.

SETRAC Data Element	Data Dictionary
1. Number of patients who were discharged with a final clinical diagnosis related to stroke: 1a. Number of Ischemic Strokes 1b. Number of Intracerebral Hemorrhages 1c. Number of Subarachnoid Hemorrhages	Exclude: -Inpatient strokes Final Clinical Diagnosis – The diagnosis defined in the Uniform Hospital Discharge Data Set (UHDDS) as "that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care." Usually this diagnosis is equivalent to the final ICD-9-CM code. Inpatient strokes – The following are considered to be inpatient strokes: • A patient in your hospital ED, radiology suite, or observation unit experiences a new onset of stroke symptoms, or • Stroke symptoms are first discovered after a patient was already admitted to your hospital as an inpatient Notes for abstraction: Patients who arrive with symptoms of stroke and have complete resolution after IV tPA should be diagnosed with "aborted stroke" (434.91) and not as TIA (435), and should be considered to have a Final Clinical Diagnosis of ischemic stroke. For patients admitted with ischemic stroke who are treated with IV tPA or other medications and develop the complication of intracerebral hemorrhage, enter their Final Clinical Diagnosis as ischemic stroke, even if they receive an ICD-9-CM code related to hemorrhagic stroke. If a patient is treated with IV tPA for an ischemic stroke at an outside hospital and then transferred to your hospital for management of a hemorrhagic complication, enter their Final Clinical Diagnosis as ischemic stroke, as this is the stroke diagnosis that initially lead to the patient's hospitalization. Patients with transient symptoms whose brain imaging shows infarction are routinely diagnosed as by treating physicians. For these patients, enter the Final Clinical Diagnosis as documented by the physician, even if the ICD-9 code assigned is one of ischemic stroke. If a patient's medical record documents "CVA" or "Stroke" without any additional documentation around stroke type, and the patient has no evidence of hemorrhage on initial brain imaging, enter the patient's Final Clinical Diagnosis as Ischemic Stroke. Patients who present with symptoms that are ultimately determined to have been caused by stroke or TIA should be assigned a Final Clinical Diagnosis of stroke, TIA, etc. as appropriate, even if these symptoms are not recognized as having been caused by stroke in the initial phase of the patient's hospital care. The ICD-9-CM Code Tables can be found in the Specifications Manual for National Hospital Inpatient Quality Measures, http://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx.

SETRAC Data Element	Data Dictionary
2. Number of Ischemic Stroke patients (1a) who were >= 18 years of age and were not enrolled in a clinical trial for stroke.	Include: -Final clinical diagnosis = ischemic stroke Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke Enrolled in a clinical trial for stroke – Use the definition from TJC/Stroke Core Measures: *During this hospital stay, was the patient enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. STK)?* *To answer "Yes", BOTH of the following must be true:* 1. *There must be a signed consent form for clinical trial. For the purposes of abstraction, a clinical trial is defined as an experimental study in which research subjects are recruited and assigned a treatment/intervention and their outcomes are measured based on the intervention received. Treatments/interventions most often include use of drugs, surgical procedures, and devices. Often a control group is used to compare with the treatment/intervention. Allocation of different interventions to participants is usually randomized.* 2. *There must be documentation on the signed consent form that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. STK). 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.*

SETRAC Data Element	Data Dictionary
3. Of the patients reported in #2, how many received endovascular treatments at your facility?	Include: -Final clinical diagnosis = ischemic stroke Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke Endovascular treatments - Includes all uses of IA delivery of pharmacologic thrombolytic therapy, as well as mechanical devices such as "clot retrieval devices", for acute ischemic stroke, such as • IA Thrombolytic • Retrievable stent • Other mechanical clot retriever device (not retrievable stent) • Clot suction device • Intracranial angioplasty, with or without permanent (non-retrieved stent) • Cervical carotid angioplasty, with or without stent Mechanical devices may be used alone or in conjunction with IA thrombolytic therapy. Notes for abstraction: This data element is looking to capture patients that receive IA catheter-based reperfusion for acute stroke events only, and not those that undergo carotid revascularization for secondary prevention, elective stenting, or purely diagnostic angio. If IA thrombolytic therapy is given regionally (remote from clot due to an inability to access the clot), include the patient in this count. Patients who fall under the following scenarios should not be included in this count: • Catheter-based treatment, including groin puncture for planned therapeutic intervention, is attempted but ultimately unsuccessful • Catheter-based treatment for planned therapeutic intervention is initiated, but there is no visualized occlusion

SETRAC Data Element	Data Dictionary
4. Of the patients reported in #2, 4.a. How many received IV tPA at your facility? 4.b. How many received IV tPA at an outside facility? 4.c. How many did NOT receive IV tPA?	Include: -Final clinical diagnosis = ischemic stroke Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke Notes for abstraction: IV tPA includes: • Activase • Alteplase • IV t-PA (Intravenous Tissue Plasminogen Activator) • Recombinant t-PA Tissue plasminogen activator The following patients should be included in the count for 4.a.: • Patients who begin treatment with IV tPA but do not get the full dose due to a medical reason like an elevated INR or a newly discovered history element • Patients who received IV tPA in the ED in your hospital and then were transferred from your ED (without hospital admission) to another acute care hospital Patients who had IV tPA initiated at outside facility and not initiated at your facility should be included in the count for 4.b. Patients transferred from another hospital where IV tPA was started, even if the infusion continues after the patient arrives at your facility, should be included in the count for 4.b.

SETRAC Data Element	Data Dictionary
5. Of the patients reported in #4.a., 5.a. How many received tPA within 60 minutes of ED arrival? 5.b. How many received tPA more than 60 minutes after ED arrival?	Include -Final clinical dx = ischemic stroke -IV tPA initiated at your facility Exclude -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke -Missing or unknown values for arrival date/time or for date/time IV tPA initiated -Date/time IV tPA initiated < Arrival date/time Within 60 minutes of ED arrival - Patients who receive IV t-PA at my hospital within 60 minutes after triage. More than 60 minutes after ED arrival - Patients who receive IV t-PA at my hospital more than 60 minutes after triage. Notes for abstraction: Consider the date/time IV tPA is received to be the date/time IV tPA is initiated, i.e., the date/time of bolus administration.

6. Of the patients reported in #5.b., document the reason(s) for delay. Eligibility or Medical Reasons: • Social/Religious reasons • Initial Refusal • Care-team unable to determine eligibility • Hypertension requiring aggressive control with IV medications • Further diagnostic evaluation to confirm stroke for patients with hypoglycemia (blood glucose < 50), seizures, or major metabolic disorders • Management of concomitant emergent/acute conditions such as cardiopulmonary arrest, respiratory failure (requiring intubation) • Investigational or experimental protocol for thrombolysis Hospital-Related or Other Reasons: • Delay in stroke diagnosis • In-hospital time delay • Equipment-related delay • Other	Include -Final clinical dx = ischemic stroke -IV tPA initiated at your facility -IV tPA initiated more than 60 minutes after ED arrival Exclude -Inpatient strokes -Age <18 years Notes for abstraction: If eligibility or medical reasons were documented as the cause for delay, select the reason(s). If eligibility or medical reasons were not documented as the cause for delay, then select the hospital-related or other reason(s) responsible for the delay. Only one category of reasons – eligibility/medical or hospital-related/other – should be selected for each patient, but within each category, more than one reason per patient may be selected. Eligibility or medical reason(s) for delay in IV tPA treatment must be documented by a physician/APN/PA or pharmacist. Hospital-related or other reasons do not have to be documented as such; they may be inferred by the abstracter. More on Specific Eligibility or Medical Reasons Select “Social/Religious reasons” if there is documentation that the patient and/or family refused IV tPA treatment due to their cultural or religious beliefs, even if they later changed their mind and tPA was administered. Select “initial refusal”, • if there is documentation that the patient and/or family initially refused treatment with IV tPA for any reason other than a social/religious reason, or • if the patient could not participate in shared decision making or provide consent, and there is documentation that the delay in treatment with IV rt-PA was due to reasonable attempts to contact a proxy decision maker to obtain consent. Select "Care-team unable to determine eligibility" if the diagnosis of stroke was made but eligibility for IV tPA could not be established or verified by the clinician. e.g., time last known well unknown; lack of accurate medical history raises concern about IV tPA eligibility If an investigational or experimental protocol for thrombolysis was used, there should be a signed IRB consent form in the medical record. More on Specific Hospital-Related or Other Reasons Examples of equipment-related delays include a telemedicine equipment issue, CAT Scan/MRI availability, or IV pump malfunction.

SETRAC Data Element	Data Dictionary
7. Of the patients who did not receive tPA at your facility (4.b. & 4.c.), how many arrived at your facility within 3.5 hours of time last known well?	Include: -Final clinical diagnosis = ischemic stroke -Arrived at hospital within 3.5 hours from time last known well (LKW) Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke -IV tPA initiated at your facility Time last known well (LKW) – When the patient was last known to be in his/her usual state of health (without the signs and symptoms of the current stroke) or at his/her baseline, prior to the beginning of the current stroke Notes for abstraction: • The time last known well might be established by a telephone or in person conversation, and should be the time closest to the time of discovery for which there is clear evidence that the patient was at their previous baseline. This is not the same as the time of symptom discovery, unless the start of stroke symptoms is clearly witnessed. • If the patient's "last known well" date or time cannot be determined, then LKW is considered to be unknown, and the patient should be excluded from this measure. • If there is documentation of one or more episodes of transient stroke symptoms **and** documentation of symptom resolution between episodes (e.g. patient returns to baseline), then the date/time LKW is when the most recent (last) episode begins.* If the most recent episode occurs after hospital arrival, the patient is considered to have an inpatient stroke and should be excluded from this measure. *NOTE: This differs from TJC/Core Measures interpretation of LKW. • If time LKW is documented as a range of time prior to hospital or ED arrival (e.g., "2 - 3 hours ago"), assume the maximum time in that range (e.g., 3 hours). • If multiple times LKW are documented, either because subsequent more accurate information became available or because of different levels of expertise in sorting out the actual LKW time, use the time recorded according to the following hierarchy: o neurology o admitting physician o emergency department physician o ED nursing notes o EMS

8. Of the patients reported in #7, document the contraindications/warnings or hospital-related reasons why tPA was not given. Contraindications and Warnings: • Active internal bleeding • CT findings • Hx of ICH, etc • Platelets, PT, INR levels • Surgery <3mo • Surgery <15days • SBP, DBP • Seizure at onset • Suspicion SAH • Advanced age • UTD eligibility • Glucose levels • Comorbid conditions • tPA outside hosp • Left heart thromb • Life expect. <1yr • Pregnancy • Pt. refused • Too severe • Too mild • Rapid Improvement • MI in previous 3 months Additional Warnings for patients treated between 3-4.5hrs: • Age>80 • Prior Stroke and Diabetes • Any prior anticoagulant • NIHSS > 25	Include: -Final clinical diagnosis = ischemic stroke -Arrived at hospital within 3.5 hours from time last known well (LKW) Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke -IV tPA initiated at your facility Contraindications and Warnings: • Active internal bleeding - Active internal bleeding (<22 days) • CT findings - CT findings (ICH, SAH, or major infarct signs) • Hx of ICH, etc – History of intracranial hemorrhage or brain aneurysm or vascular malformation or brain tumor • Platelets, PT, INR levels - Platelets < 100,000, PTT > 40 sec after heparin use, or PT > 15 or INR > 1.7, or known bleeding diathesis • Surgery <3mo - Recent intracranial or spinal surgery, head trauma, or stroke (<3 mo.) • Surgery <15days – Recent surgery/trauma (<15 days) • SBP, DBP – SBP > 185 or DBP > 110 mmHg despite treatment • Seizure at onset – Seizure at onset • Suspicion SAH – Suspicion of subarachnoid hemorrhage • Advanced age – Advanced age (see “Notes for abstraction”) • UTD eligibility – Care-team unable to determine eligibility • Glucose levels – Glucose < 50 or > 400 mg/dL • Comorbid conditions – Increased risk of bleeding due to comorbid conditions • tPA outside hosp – IV or IA tPA given at outside hospital • Left heart thromb – Left heart thrombus • Life expect. <1yr – Life expectancy <1 yr or severe comorbid illness or CMO on admission • Pregnancy - Pregnancy • Pt. refused – Patient/Family refused • Too severe – Stroke severity too severe (e.g., NIHSS >22) • Too mild– Stroke severity too mild • Rapid Improvement – Rapid improvement • MI in previous 3 months - MI in previous 3 months Additional Warnings for patients treated between 3-4.5hrs: • Any prior anticoagulant – Any anticoagulant use prior to admission (even if INR < 1.7)

• CT findings >1/3 MCA Hospital-Related or Other Reasons: • Delay in Patient Arrival • Delay in Stroke diagnosis • In-hospital Time Delay • No IV access • Other	Rationale: While IV tPA is not FDA approved for use in the 3-4.5 hour window, there is a Class 1A level guideline from the American Heart Association regarding this treatment. There is a Quality report available to assist tracking performance on this measure: Expansion of the Time Window for Treatment of Acute Ischemic Stroke With Intravenous Tissue Plasminogen Activator. (link is http://stroke.ahajournals.org/cgi/reprint/STROKEAHA.109.192535). Jauch EC, Saver JL, Adams HP, Bruno A, Connors JJ, Demaerschalk BM, et al. AHA/ASA Guideline: Guidelines for the early management of patients with acute ischemic stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke. 2013;STR.0b013e318284056apublished online before print January 31 2013, doi:10.1161/STR.0b013e318284056a* Notes for abstraction: If contraindications and/or warnings were documented as the reason for not initiating IV tPA, select them. If contraindications/warnings were not documented as the reason for not initiating IV tPA, then select the hospital-related or other reason(s) responsible. Only one category of reasons – contraindications/warnings or hospital-related/other – should be selected for each patient, but within each category, more than one reason per patient may be selected. Contraindications/warnings must be mentioned in the context of IV thrombolytics and must be documented by a physician/APN/PA or pharmacist with three exceptions: patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital. These three exceptions may be documented by a nurse. “Additional Warnings 3-4.5 hr” must be explicitly documented in the context of the 3-4.5 hour treatment window. Hospital-Related or Other Reasons are the only reasons for no-treatment that may be inferred. These selections are provided to assist in quality improvement activities. More on Specific Contraindications or Warnings Select “Advanced age” if the medical record clearly states this as the reason the patient did not receive IV tPA. There is no specific age limit on the use of IV tPA; many facilities routinely give treatment to patients of advanced age. Conditions that increase the risk of bleeding must be explicitly documented as the reason for not providing IV tPA. These conditions may include: Acute pericarditis, SBE (spontaneous bacterial endocarditis), Hemostatic defects, Diabetic hemorrhagic retinopathy, Septic thrombophlebitis, occluded AV cannula, or patient is currently receiving oral anticoagulants. Select “Platelets, PT, INR levels” if the patient is on anticoagulants and this is documented as the reason for no IV tPA, and the PT, PTT, or INR is elevated. Select “Comorbid conditions” if the patient is on anticoagulants and this is documented as the reason for no IV tPA, but there is no INR or PTT recorded.

SETRAC Data Element	Data Dictionary
	If symptoms are rapidly improving or there is minimal to no disability associated with the stroke symptoms, select "Rapid improvement" or "Stroke severity too mild". Note that there is no lower limit to NIHSS score that prohibits the use of IV tPA. Physician documentation of "no IV tPA due to low NIHSS or NIHSS = 3" would be appropriately categorized as stroke severity too mild. **Documentation of an NIHSS score of zero is considered sufficient documentation that the stroke was too mild, and an explicit statement linking this as the reason for non-treatment is not needed.** Select "Too severe" if the physician documents that tPA was withheld due to the severity of the stroke symptoms. Note that there is no upper limit in terms of NIHSS score that prohibits the use of IV tPA; many facilities would treat a patient with an NIHSS score of 25. The contraindications and warnings here have been taken from the package insert for Activase, inclusion and exclusion criteria from previous clinical trials, and clinical practice guidelines. For further guidance, refer to "Guidelines for the Early Management of Patients With Acute Ischemic Stroke" and "Guidelines for the Early Management of Adults with Ischemic Stroke". More on Specific Hospital-Related or Other Reasons Select "Delay in Stroke diagnosis" if the diagnosis is unclear. Select "In-hospital Time Delay" if there is a delay in getting the CT done or read or a delay in patient evaluation. Select "Other" if the patient receive IA therapy and there is no documentation in the medical record that the patient/family was offered IV t-PA.

SETRAC Data Element	Data Dictionary
9. Of the patients reported in #4a, how many were transferred to another acute care facility AFTER receiving tPA?	Include: -Final clinical diagnosis = ischemic stroke -IV tPA initiated at your facility Exclude: -Inpatient strokes -Age <18 years -Enrolled in a clinical trial for stroke Notes for abstraction: This measure includes: • Drip-and-ship patients (those who received tPA at your facility but were never actually admitted as an inpatient), and • Patents who were admitted to your facility, received tPA, and then were discharged to another acute care hospital.
10. Of the patients reported in #1b and #1c, how many were transferred to another acute care facility?	Include: -Final clinical diagnosis = ICH -Final clinical diagnosis = SAH Exclude: -Inpatient strokes Notes for abstraction: This measure includes: • Patients who were transferred before being admitted to your facility, and • Patents who were admitted to your facility and then discharged to another acute care hospital.

EMS Elements

SETRAC Data Element	SETRAC Response Format/Options	Inclusion/Exclusion Criteria	Notes for Abstraction
11. How did the patients in #1 arrive at your hospital? (Arrival mode) 11.a. Number arriving via EMS from home/scene 11.b. Number arriving via private transportation/taxi/other from home/scene 11.c. Number arriving via transfer from another hospital 11.d. Number with arrival mode not documented or unknown	Enter number of each	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage Exclude: -Inpatient strokes	
12. Of the patients in 11.a., was the patient care record available at time of patient arrival? 12.a. Number with Yes 12.b. Number with No/ND	Enter number of each. Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	
13. Of the patients in 12.b., was the patient care record available at a later time during hospitalization?	Enter number patients that fall under each option: Yes, No/ND Sum of responses should equal 12.b.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene -Response to 12=No/ND Exclude: -Inpatient strokes	

SETRAC Data Element	SETRAC Response Format/Options	Inclusion/Exclusion Criteria	Notes for Abstraction
14. EMS agency name or number	Enter number patients that fall under each option: (list of EMS agencies) Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	
15. Dispatched as suspected stroke?	Enter number patients that fall under each option: Yes, No, ND Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	
16. Blood Glucose level (mg/dl)	Enter number patients that fall under each option: Documented, Not Documented, Glucometer Not Available Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	

SETRAC Data Element	SETRAC Response Format/Options	Inclusion/Exclusion Criteria	Notes for Abstraction
17. Pre-hospital stroke screen performed? 17.a. Number with Yes 17.b. Number with No 17.c. Number in which this was ND	Enter number patients that fall under each option: Yes, No, ND Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	-If EMS documents LAMS unreliable due to previous CVA, check "yes" -If EMS documents unable to evaluate due to AMS, check "yes"
18. Of the patients in 17.a., how many were suspected strokes?	Enter number patients that fall under each option: Yes, No, ND Sum of responses should equal 17.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene -Pre-hospital stroke screen performed Exclude: -Inpatient strokes	
19. How was the destination decision made?	Enter number patients that fall under each option: Directed to designated stroke center by protocol, Directed to nearest facility by protocol, Patient/Family choice, Online Medical Direction, Closest facility, Other, Unknown/ND Sum of responses should equal 11.a.	Include: -Final clinical diagnosis = ischemic stroke, subarachnoid hemorrhage, intracerebral hemorrhage -Arrival mode = EMS from home/scene Exclude: -Inpatient strokes	