



STROKE REGISTRY DATA DICTIONARY

I. AUTHORITY:

Health and Safety Code, Division 2.5, Section 1798.170. California Code of Regulations, Title 22, Section §100160.01

II. APPLICATION:

This policy provides data standards and entry criteria for Orange County Medical Emergency Data System (OC-MEDS) Stroke Registry reporting by provider facilities and their personnel. The resources listed below provide general guidelines and specifications for data submission and define data collection requirements for designated Stroke-Neurology Receiving Centers (SNRC) as noted in Policy 300.50, Section VII and Policy 650.00, Section VII.

III. DEFINITIONS:

Participating Facility: Any Emergency Receiving Center (ERC) designated by the Orange County Emergency Medical Services (OCEMS) authority as a Stroke-Neurology Receiving Center (SNRC's).

Data Element Name: The label provided for each data element to provide identification and reference.

OC-MEDS Usage: The data submission standard used in OC-MEDS to describe when a specific data element is to be completed and submitted based on the clinical and/or operational needs of the Orange County EMS System.

- **Mandatory:** Indicates that participating facilities are required to submit the corresponding data element in ALL cases, without exception or condition.
- **Required:** Indicates that participating facilities are required to submit the corresponding data element upon conditions specified under Inclusion Guidelines for Abstraction.
- **Recommended:** Indicates that participating facilities are advised (but not required) to submit the corresponding data element whenever applicable.

Format: Technical definition of the data element as expressed on the electronic registry form.

Allowable Values: The comprehensive list of values or entries from which a hospital may choose to submit data for each data element.

Notes for Abstraction: Guidelines designed to aid hospital personnel when reviewing suggested data sources for the purpose of obtaining appropriate data for submission.

Suggested Data Sources: A list of data sources which may contain requested information. These lists may contain exact specifications of which sources are valid and which sources are invalid.

Inclusion Guidelines for Abstraction: Several data elements may be Required for specific populations such as Ischemic Stroke Patients, but not for others such as Stroke Mimics. This section will provide details as to which populations are to be included for chart review and data submission.



STROKE REGISTRY DATA DICTIONARY

IV. PATIENT INCLUSION CRITERIA:

- A. Each patient received by a SNRC via an EMS provider with a field-based primary or secondary impression of “Stroke”.
 - i. Each participating facility will implement a mechanism to ensure accurate and complete capture of this patient population segment.
- B. Each patient cared for at a SNRC with a diagnosis of ischemic or hemorrhagic stroke.
 - i. ICD-10, I60.00 – I60.9 Non-Traumatic Subarachnoid Hemorrhage (SAH)
 - ii. ICD-10, I61.0 – I61.9 Non-Traumatic Intracerebral Hemorrhage (ICH)
 - iii. ICD-10, I63.00 – I63.9 Cerebral Infarction (Ischemic Stroke)
 - iv. ICD-10, G45.0 – G45.2, G45.8 – G45.9 TIA and related syndromes.
- C. Each patient referred by a SNRC to another acute care facility for stroke-related purposes.
 - i. Each participating facility will implement a mechanism to ensure accurate and complete capture of this patient population segment.
- D. General Inclusion Provisions
 - i. Patients admitted for a diagnosis noted above who are later transferred or expire.
 - ii. Patients directly admitted to inpatient units without first being seen in the ED.
 - iii. Patients who refuse treatment or have DNR/comfort care orders.
 - iv. Patients cared for in the ED but not admitted, i.e. death, left against medical advice, were evaluated/treated then transferred (“drip and ship”), or discharged after observation.
 - v. Patients who underwent a non-elective stroke-related procedure at your facility.
 - vi. More provisions are detailed within the specific data element descriptions with important notations within the Diagnosis and Discharge elements.
 - vii. The required patient population includes all patients meeting any of the above criteria (A-D), including “walk-in” patients.
- E. Optional Inclusion Provisions: Where not included in any of the above Inclusion Criteria (A – D), participating facilities may elect to use the following criteria to include additional patients.
 - i. ICD-10, O99.411 – O99.43 Diseases of the circulatory system complicating pregnancy, childbirth and puerperium.
 - ii. ICD-10, G97.31 – G97.32 Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a procedure.
 - iii. ICD-10, G97.51 – G97.52 Post-procedural hemorrhage and hematoma of a nervous system organ or structure following a procedure.
 - iv. ICD-10, I97.810 – I97.821 Intraoperative and postoperative cerebrovascular infraction.
 - v. Patients who present with stroke-like symptoms, but who do not end up being diagnosed with a stroke or TIA (stroke mimics).

**STROKE REGISTRY DATA DICTIONARY**V. LIST OF DATA ELEMENTS: Grouped by sections as presented in electronic registry form.

Data Element	Definition	Usage	Page
Arrival Information			
Receiving Facility	The name of the participating facility that received, evaluated, and/or treated the included patient.	Mandatory	6
EMS Service	The name of the transporting and/or treating EMS Service that treated and transported the included patient to the receiving participating facility.	Required	7
EMS Incident Number	The unique identification number for the EMS incident.	Required	8
Registry Number	The unique identifier assigned to each individual case in the OC-MEDS Stroke Registry	Mandatory	9
Medical Record Number	Number assigned by your hospital for tracking each patient.	Recommended	10
Account/Visit Number	Number assigned by your hospital for tracking each care episode.	Recommended	11
Arrival Date and Time	Date and Time that the patient arrived at your Emergency Department (or Hospital if patient is a direct admit).	Mandatory	12
Method of Arrival	How the patient arrived at your hospital.	Required	14
Advanced Stroke Notification	Indication that advanced notification was provided to your hospital by EMS regarding a potential stroke patient.	Required	15
Referring Hospital	The hospital that transferred the patient to your facility.	Required	16
Hospital Admission Date and Time	The date and time that the patient was admitted to the hospital in patient service.	Required	17
Patient Demographics			
Name	Last Name, First Name, Middle Initial	Recommended	18
Date of Birth	Date of Birth	Recommended	19
Age	Patient's age at the time of incident.	Required	20
Race and Ethnicity	Census defined standard for racial and ethnic categories.	Recommended	21
Sex	The patient's sex (male, female, or unknown).	Required	22

**STROKE REGISTRY DATA DICTIONARY**

Address	Street Address, City, County, State, Country and Zip.	Recommended	23
Alternative Residence	Documentation if the patient does not have a traditional home street address.	Recommended	24
Evaluation and Tracking			
Last Known Well (Date and Time)	The date and time prior to hospital arrival at which it was witnessed or reported that the patient was last known to be without signs and symptoms of the current stroke or at his/her baseline state of health.	Required	25
NIH Stroke Scale	For Ischemic Stroke, measured at hospital admission and discharge. Note that the NIHSS may be utilized for stroke not otherwise specified and hemorrhagic stroke; if used please document.	Required	27
Glasgow Coma Scale	For Hemorrhagic Stroke, measured at hospital admission and at hospital discharge.	Required	29
Modified Rankin Scale	For Ischemic Stroke, measured Pre-Event and at 90 days after diagnosis of stroke (not days after discharge).	Required	31
Treatment			
Brain Imaging Date and Time	The date and time that the brain imaging was initiated.	Required	33
IV Thrombolytic Administration	Yes/No and Date and Time that IV Thrombolytic therapy was initiated for a patient with ischemic stroke at your hospital or an outside facility	Required	35
IV Thrombolytic Contraindications	Yes/No, Reasons, Additional Warnings, and other documentation (for both 0-3hrs and 3-4.5hrs timeframes) regarding the non-use of IV Thrombolytic therapy.	Required	38
Reason for Delayed Initiation >60min	Reason for delaying/extending the initiation of thrombolytic therapy >60 min after arrival.	Required	46
IA Catheter Reperfusion	Yes/No and Date and Time that IA Catheter Reperfusion therapy was initiated for a patient with ischemic stroke at your hospital or an outside facility	Required	50
Complications of Therapy	Complications of IV Thrombolytic, IA Thrombolytic, or MER therapy. If patient experienced no complications please document as such.	Required	53
Clinical Trial Participant	Documentation that during this care episode the patient was enrolled in a stroke related clinical trial that affected the performance of standard stroke protocols or practices.	Recommended	55



STROKE REGISTRY DATA DICTIONARY

Telemedicine	Was telemedicine utilized during this episode of care. Telemedicine includes any remote diagnosis or treatment of the patient by means of telecommunications technology and specifically includes teleradiology services.	Required	57
Diagnosis and Discharge			
Final Clinical Diagnosis	Descriptive documentation of the final clinical diagnosis related to stroke. Please see element details for description of values.	Mandatory	58
If No Stroke Related Diagnosis	Descriptive documentation of the final clinical diagnosis of stroke mimics that in this care episode caused Advanced Stroke Notification by EMS and/or activation of your ED stroke protocols.	Required	60
Discharge Date and Time	The date and time that the patient was discharged from your facility	Mandatory	61
Discharge Disposition	Patient's final disposition upon discharge from your facility.	Mandatory	62
Destination Determination	If the patient was transferred from your facility to another acute care hospital, please document the reason that this action was taken and specify the facility	Required	64
ICD-10 Diagnosis	The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established for this patient during this specific care episode.	Mandatory	66

Full data specifications are provided on the following pages corresponding to the noted page numbers listed in the above table.

Approved:

Almaas A. Shaikh, MD, MPH, FACS
OCEMS Medical DirectorDaniel McDonnell, MS, MBA, NRP
OCEMS Administrator

Original Date: 11/14/2008
Reviewed Date(s): 4/1/2013; 4/1/2015; 08/18/2016, 09/06/2026
Revised Date(s): 4/1/2013; 4/1/2015; 08/25/2016, 09/15/2026
Effective Date: 10/1/2026 (Renumbered – Formerly Policy 650.10)



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Receiving Facility

OC-MEDS Usage: Mandatory

Definition:

The name of the participating facility that received, evaluated, and/or treated the included patient.

Suggested Data Collection Question: none

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values:

While the facility name is displayed, the underlying code is the facility's National Provider Identifier (NPI) as assigned by the Federal Office of Health and Human Services (HHS).

Notes for Abstraction: none

Suggested Data Sources: none

Inclusion Guidelines for Abstraction:

This element must be documented on ALL incidents, without exception or condition. It may NOT be left blank, nor documented as Not Applicable.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: EMS Service

OC-MEDS Usage: Required

Definition:

The name of the transporting and/or treating EMS Service that treated and/or transported the patient to the receiving participating facility.

Suggested Data Collection Question:

What is the EMS Service name associated with this patient's transport to your facility?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values:

While the EMS Service name is displayed, the underlying code is the EMS Service's National Provider Identifier (NPI) as assigned by the Federal Office of Health and Human Services (HHS) or the unique agency identifier as assigned by the National Fire Incident Reporting System.

Notes for Abstraction:

- Obtain from the EMS Patient Care Report filed in the patient's chart or access this information through the OC-MEDS Hospital Hub or Stroke Registry EMS Search function.

Suggested Data Sources:

- OCEMS Hospital Hub
- OCEMS Stroke Registry EMS Search
- Hospital or Health System Medical Records System

Inclusion Guidelines for Abstraction:

All patients who arrived via an EMS provider (911 Transport, Fire Service, Air Medical, IFT-ALS, BLS, etc) are required to have a documented EMS Service (provider) Name. That includes all patients transferred to your facility from another acute care facility via EMS Interfacility Transport.

Exclusion Guidelines for Abstraction:

This element is to be left blank if the patient is a "walk-in" or if they arrived at your facility via private transport, taxi, or other non-EMS transport service.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: EMS Incident Number

OC-MEDS Usage: Required

Definition:

The unique identification number assigned by the EMS Service for each call, and that corresponds to data element, eResponse.03, per OCEMS Policy 300.31.

Suggested Data Collection Question: What is the EMS Incident Number associated with this patient's transport to your facility?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values: All valid identifiers as defined by the EMS Service.

Notes for Abstraction:

- Obtain from the EMS Patient Care Report filed in the patient's chart or access this information through the OC-MEDS Hospital Hub or Stroke Registry EMS Search function.

Suggested Data Sources:

- OCEMS Hospital Hub
- OCEMS Stroke Registry EMS Search
- Hospital or Health System Medical Records System

Inclusion Guidelines for Abstraction:

All patients who arrived via an EMS provider (911 Transport, Fire Service, Air Medical, IFT-ALS, BLS, etc) are required to have a documented EMS Incident Number. That includes all patients transferred to your facility from another acute care facility via EMS Interfacility Transport.

Exclusion Guidelines for Abstraction:

This element is to be left blank if the patient is a "walk-in" or if they arrived at your facility via private transport, taxi, or other non-EMS transport service.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Registry Number

OC-MEDS Usage: Mandatory

Definition:

The unique identification number assigned by the participating facility to each individual case in the OC-MEDS Stroke Registry.

Suggested Data Collection Question: none

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values: All valid identifiers as defined by the participating facility.

Notes for Abstraction: none

Suggested Data Sources:

- Hospital or Health System Medical Records System
- 3rd party patient registry product
- OC-MEDS Stroke Registry (autogenerated upon manual data entry)

Inclusion Guidelines for Abstraction:

This element must be documented on ALL incidents, without exception or condition. It may NOT be left blank, nor documented as Not Applicable.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Medical Record Number

OC-MEDS Usage: Recommended

Definition:

Number assigned by your hospital for tracking all medical care provided by your hospital and/or health system to each patient over an extended period of time typically consisting of multiple care episodes and multiple medical conditions.

Suggested Data Collection Question:

What is the medical record number associated with this patient?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values: All pertinent identifiers as defined by hospital and health system standards.

Notes for Abstraction: None

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a documented Medical Record Number.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Account/Visit Number

OC-MEDS Usage: Recommended

Definition:

Number assigned by your hospital in order to link a patient with this specific and unique episode of care. This number will only be associated with a single discrete care episode.

Suggested Data Collection Question:

What is the account number associated with this patient's particular episode of care?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values: All pertinent identifiers as defined by hospital and health system standards.

Notes for Abstraction: None

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a documented Account/Visit Number.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Arrival Date and Time

OC-MEDS Usage: Mandatory

Definition:

The earliest documented date and time that the patient arrived at your emergency department or hospital if the patient was transferred directly to an inpatient unit.

Suggested Data Collection Question:

What was the earliest documented time that the patient arrived at your facility?

Format:

Length: Date: 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Date and Time

Occurs: 1

Allowable Values:

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add
12 to that number and record.

YYYY = Year (20xx)

Notes for Abstraction:

- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- For times that include seconds, remove the seconds and record the time as is. Do not round up. Example: 15:00:35 would be recorded as 15:00
- The medical record must be abstracted as documented (taken at “face value”). When the time documented is obviously in error, an approximated value must be triangulated from reliable sources.
- Arrival time should not be abstracted simply as the earliest time in one of the acceptable sources, without regard to other substantiating documentation.
- Arrival time may be different than 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 in 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.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Arrival Date and Time (cont.)

Notes for Abstraction (cont.):

- 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

Specifically Excluded Sources

- EMS Patient Care Report
- Physician Office Record
- H&P

Inclusion Guidelines for Abstraction: This element must be documented on ALL incidents, without exception or condition. It may NOT be left blank.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Method of Arrival

OC-MEDS Usage: Required

Definition: The method by which the patient arrived at your hospital.

Suggested Data Collection Question: How did the patient arrive at your hospital?

Format:

Type: Single-Select

Occurs: 1

Allowable Values:

- EMS from home/scene
- Private transportation/taxi/other from home/scene
- Transfer from another hospital
- Not Documented (ND) or unknown

Notes for Abstraction:

- Choose “EMS from home/scene” whenever the patient arrived at your hospital by public or private EMS. This method includes ground or air transport, public or private transport service, and 911 Emergent or Non-emergent transports. However, do not include those patients being transferred from another acute care hospital. Those patients are grouped under the value: “Transfer from another hospital”.
- Choose “Transfer from another hospital” when they are arriving from another hospital.
- If the patient had a stroke while an inpatient please select “Transfer from another hospital” and then select your own hospital from the referring hospital list.
- “Private transportation” includes cab, bus, car, bike, walk-in, etc.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

This element must be documented on ALL incidents, without exception or condition. However, if no valid documentation is available the not value “Not Documented (ND) or unknown” may be used.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Advanced Stroke Notification

OC-MEDS Usage: Required

Definition:

Documentation that advanced notification was provided to your hospital by EMS regarding a potential stroke patient. Expectations in the prehospital environment are to test blood glucose, use a prehospital stroke assessment tool, and to notify appropriate receiving center of the incoming patient.

Suggested Data Collection Question:

Was advanced notification provided by the EMS crew or system that a stroke patient was enroute to your facility?

Format:

Type: Single-Select

Occurs: 1

Allowable Values:

Yes Advanced Notification is documented as received by your hospital from EMS including MICN or other contact from the EMS unit's base hospital.

No/ND No Advanced Notification was received or is documented as received by your hospital from EMS including MICN or other contact from the EMS unit's base hospital.

N/A Not Applicable, select this choice when the patient is a "walk-in", or arrived by other private transportation (non-EMS).

Notes for Abstraction:

- See above definitions of allowable values.
- Patients who were transferred from another acute care hospital should have Advanced Notification provided by EMS regarding patient condition and estimated time of arrival.
- This element is applicable to patients who were transferred from another acute care hospital.

Suggested Data Sources:

Only Acceptable Sources

- Emergency department record
- Nursing admission assessment/admitting note

Specifically Excluded Sources

- EMS Patient Care Report

Inclusion Guidelines for Abstraction:

All patients who arrive by EMS from home/scene or who are transferred from another acute care hospital are required to have this element documented. If EMS was uninvolved in the patient's arrival at your facility you should document this element as "N/A".

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Referring Hospital

OC-MEDS Usage: Required

Definition:

The hospital that transferred the patient to your facility. This field is pertinent when the patient is being transferred from another acute care hospital to your facility via a planned or 911 interfacility EMS transport.

Suggested Data Collection Question: From what hospital was this patient referred?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values:

All pertinent identifiers as defined by the state of California. Any acute care hospital transferring a patient to a facility participating in this registry will be assigned a pertinent identifier.

Notes for Abstraction:

- If the patient is not being transferred to your facility from another acute care hospital please disregard this element and leave the value field blank.
- If the patient had a stroke while an in-patient please select "Transfer from another hospital" and then select your own hospital from the referring hospital list.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry who were transferred to your facility from another acute care hospital are required to have this element documented. However, if no valid documentation is available, leave the field blank.

Exclusion Guidelines for Abstraction:

For any patient not being transferred from another acute care hospital (or not an in-patient stroke), please leave this field blank.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Hospital Admission Date and Time

OC-MEDS Usage: Required

Definition:

The date and time that the patient was admitted to your hospital.

Suggested Data Collection Question:

When was the patient admitted to your hospital? NOT to be confused with when the patient arrived at your hospital or was admitted to the Emergency Department. This question focuses on the hospital's in-patient services.

Format:

Length: Date: 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Date and Time

Occurs: 1

Allowable Values:

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add
12 to that number and record.

YYYY = Year (20xx)

Notes for Abstraction:

- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- For times that include seconds, remove the seconds and record the time as is. Do not round up. Example: 15:00:35 would be recorded as 15:00
- If you are unable to determine the time based on provided documentation, leave the field blank.
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error and no other documentation is found that provides this information, leave the field blank.
- Arrival time may be different than 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 was admitted to acute inpatient.

Suggested Data Sources:

- Nursing admission assessment/admitting note

Inclusion Guidelines for Abstraction: This element is required for ALL patients that were admitted to your hospital. incidents, without exception or condition. It may NOT be left blank, nor documented as Not Applicable.

Exclusion Guidelines for Abstraction:

Patients not admitted to your hospital are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Name (Last, First, Middle Initial)

OC-MEDS Usage: Recommended

Definition: The patient's full legal name.

Suggested Data Collection Question:

What is the patient's name documented as in your medical record, or associated medical documents?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values:

The patient's legal name or any valid identify uniformly used in a similar field in your facilities medical record or associated medical documents.

Notes for Abstraction:

- While this element is not required it is recommended for quality improvement purposes requiring documentation and data reconciliation.
- This element will auto-populate from the OCEMS Prehospital Care Report (PCR), however please validate manually if required by your facility.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a documented name.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Date of Birth

OC-MEDS Usage: Recommended

Definition: The patient's date of birth.

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

Format:

Length: 10, MM-DD-YYYY

Type: Date

Occurs: 1

Allowable Values:

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

Notes for Abstraction:

- While this element is not required it is recommended for quality improvement purposes requiring documentation and data reconciliation.
- This element will auto-populate from the OCEMS Prehospital Care Report (PCR), however please validate manually if required by your facility.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a documented date of birth.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Age and Age Units

OC-MEDS Usage: Required

Definition: The patient's age in appropriate units.

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

Format:

Length: 1-3

Type: Alphanumeric

Occurs: 1

Allowable Values: 0-120, Years, Month, Days, Hours

Notes for Abstraction:

- This element is required and should be validated by cross-referencing multiple acceptable sources of data documentation.
- This element can be auto-populated for those patients with a linked OC-MEDS Prehospital Care Report for applicable patients. Note that this field should be validated with your facilities documentation to ensure a correct value.
- This element will auto-calculate from the date of birth element.
- If a date of birth is not available, this element should be documented as the estimated age provided in the patient's chart.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are required to have a documented age and age unit.

Exclusion Guidelines for Abstraction: No populations are excluded from this element, however if there is no documentation to support a correct value, this element may be left blank



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Race and Ethnicity

OC-MEDS Usage: Recommended

Definition:

Self-identification categories defined by the U.S Office of Management and Budget as race and ethnicity.

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

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

Race	Ethnicity
American Indian or Alaska Native	Hispanic or Latino
Asian	Not Hispanic or Latino
Black or African American	Not Known
Native Hawaiian or Other Pacific Islander	
Other Race	
White	
Not Known	

Notes for Abstraction:

- People of any race may be of any ethnic origin and vice versa.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a documented race and ethnicity. If documentation does not exist to categorize then please not as "Not Known."

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Sex

OC-MEDS Usage: Required

Definition:
The patient's biological sex.

Suggested Data Collection Question: Is the patient male, female, or unknown?

Format:
Length: 1-20
Type: Alphanumeric
Occurs: 1

Allowable Values:

- Male
- Female
- Not Known

Notes for Abstraction:

- This element is required and should be validated by cross-referencing multiple acceptable sources of data documentation.
- This element will be auto-populated from the OCEMS Prehospital Care Report for applicable patients. Note that this field should be validated with your facilities documentation to ensure a correct value.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction: All patients included in this registry are required to have a gender documented. If documentation does not exist to categorize the patient, or if the patient is intersex, the value "Not Known" may be documented.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Patient Address

OC-MEDS Usage: Recommended

Definition: The patient's full home address (Street, City, County, State, Country, Postal Code).

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

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values: All pertinent values.

Notes for Abstraction:

- While only recommended this information is particularly valuable in identifying and tracking geographic areas which may be underserved by our current healthcare system.
- This element will be auto-populated from the OCEMS Prehospital Care Report for applicable patients. Note that this field should be validated with your facilities documentation to ensure a correct value.
- If a home address is not known please leave only those fields blank for which no information exists. For example if no street address is listed, please try to provide a city, postal code, etc.
- If street address is left blank a response to Alternate Residence is requested.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are recommended to have a home address documented. If documentation does not exist to categorize then please leave blank, but respond to the Alternate Residence field.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Alternative Residence

OC-MEDS Usage: Recommended

Definition: Indication of the residency/home status of a patient without a typical home address.

Suggested Data Collection Question:

If the patient doesn't have a typical home address what is their residency/home status?

Format:

Length: 1-20

Type: Single Choice

Occurs: 1

Allowable Values:

- Undocumented Citizen
- Migrant
- Homeless
- Foreign Visitor
- Not Known
- Not Applicable

Notes for Abstraction:

- While only recommended this information is particularly valuable in identifying and tracking geographic areas which may be underserved by our current healthcare system.
- This element will be auto-populated from the OCEMS Prehospital Care Report for applicable patients. Note that this field should be validated with your facilities documentation to ensure a correct value.
- Even if a patient does not have a traditional home address, please try to obtain a city, postal code, etc. to aid in the assessment of our EMS system.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry without a home street address are recommended to have an Alternative Residence documented.

Exclusion Guidelines for Abstraction: Patients who have a home street address.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Last Known Well (Date and Time)

OC-MEDS Usage: Required

Definition:

The date and time prior to hospital arrival at which it was witnessed or reported that the patient was last known to be without signs and symptoms of the current stroke or at his/her baseline state of health.

Suggested Data Collection Question: What is the date and time that the patient was last known well?

Format:

Length: Date: 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Date and Time

Occurs: 1

Allowable Values:

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add
12 to that number and record.

YYYY = Year (20xx)

Notes for Abstraction:

- The purpose of this data element is to identify the earliest possible time that stroke symptoms began. It is also known as "Onset Time". If a patient experiences the onset of their symptoms in the company of another individual who can verify that the patient was functioning normally up until the time of start of symptoms, then in this patient the time "last known well" is also the time of symptom onset. However, if no witness is present at the onset of symptoms, please document the time that the patient was last known to be well or at their baseline state of health.
- Please treat the date and time fields as a single element. A value in one field should not be entered if you do not have documentation of the other field. For example, if you only know the date but not the time, do not enter any information into either the date or time fields.
- Leave this element blank if there is any documentation by a physician/PA/NP that the Last Known Well Date or Time is unknown/uncertain/unclear.
- If there is contradictory information documented and it is clear that clinical decisions were based on one set of documented elements and not the other, then base your data selection on that information which informed clinical decision making.
- Do not interpret vague statements as concrete date and time information. For example, if "Patient OK last night" you should leave both the date and time fields blank.
- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- For times that include "seconds", remove the seconds and record the time as is. Example: 15:00:35 would be recorded as 15:00



STROKE REGISTRY DATA DICTIONARY



Data Element Name: Last Known Well (Date and Time) (cont.)

Suggested Data Sources:

- Prehospital Care Report (only if congruent with hospital decision making)
- Code Stroke form/template
- Emergency Department records
- History and physical
- IV flow sheets
- Medication administration record
- Nursing flow sheets
- Progress notes
- Transfer sheet

Inclusion Guidelines for Abstraction:

Please make all attempts to document a Last Known Well (Date and Time) for every patient included in this registry. This is a required element. However, if this element is not documented or is lacking per the above instructions you may leave these fields blank.

Exclusion Guidelines for Abstraction:

Note that there are valid reasons why a stroke patient will not have a Last Known Well documented. For example, patients admitted for elective carotid interventions or patients who experienced a delay in stroke diagnosis may not have an applicable Date and Time of Last Known Well.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: NIH Stroke Scale

OC-MEDS Usage: Required

Definition:

Documentation that NIH Stroke Scale (NIHSS) was performed as indicated at this hospital. The NIHSS serves several purposes, but its main use in clinical medicine is for the assessment of the degree of neurologic deficit or severity caused by a given stroke. Fields recorded for this element are whether or not an NIHSS assessment was performed on arrival at the hospital (Initial) and at discharge. Corresponding scores (0-42) are also documented.

Suggested Data Collection Question:

- Was the NIH Stroke Scale (NIHSS) performed as part of the patient's initial evaluation?
- Was the NIH Stroke Scale (NIHSS) performed as part of the patient's final (discharge) evaluation?

Format:

Length: 1-3

Type: Single-Select and Numeric

Occurs: 1

Allowable Values:

- Yes
- No/ND (Not Documented)
- Score may range from 0-42, per the structure of the NIH Stroke Scale.

Notes for Abstraction:

- The NIHSS element (all fields) is required for all stroke patients with an ischemic diagnosis.
- The NIHSS is commonly used and may have significant clinical value for all stroke patients regardless of specific diagnosis. If the patient has a documented NIHSS please record in the registry as such regardless of final discharge diagnosis.
- The NIHSS score may be documented by a physician/PA/NP/RN.
- The Initial NIHSS must be documented to have been performed prior to any acute recanalization therapy (i.e. IV thrombolytic (t-PA) therapy, IA thrombolytic (t-PA) therapy, or mechanical reperfusion therapy (MER)) or within 12 hours of arrival at the hospital for patients who do not undergo recanalization therapy at your hospital.
- Patients who are referred from another acute care hospital should have the NIHSS documented that was part of your facility's initial evaluation, not part of the referring hospital's initial assessment.
- The Discharge NIHSS must be documented to have been performed as part of the discharge evaluation or within two days of the patient's discharge date.
- If your facility discharges/transfers the patient to another acute care hospital for further treatment and/or care please provide entry of the discharge/transfer NIHSS regardless of the patient's length of stay at your facility, including patients who were referred to another hospital directly from your ED.
- If a total NIHSS score is documented, then you may select "Yes" to document that an assessment was performed and enter a numerical value (0-42) to document the score.
- Total scores obtained by telemedicine and documented in your medical record are recorded as "Yes" and score value entered.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: NIH Stroke Scale

Notes for Abstraction (cont.):

- If components of the NIHSS are scored but the total is not documented or left blank, select "No" and leave the score field blank.
- Do not infer or calculate a total NIHSS score from documented NIHSS category scores.
- If there is any documentation to suggest that the NIHSS score recorded is an estimate, select "No" and leave the score field blank.

Suggested Data Sources:

- Emergency Department Records
- History and Physical
- Nursing Flow Sheet
- Progress Notes
- Transfer Sheet
- Admitting Note
- Consultation form/note
- Nursing Assessment
- Discharge Summary (only for the Discharge NIHSS)

Inclusion Guidelines for Abstraction:

This data element is required for all patients who have a final diagnosis of ischemic stroke. All patients who have a documented NIHSS, regardless of final diagnosis, are recommended to be included in this data element.

Exclusion Guidelines for Abstraction:

Patients who do not have a final diagnosis of ischemic stroke are not required for inclusion in this element. However, it is recommended for any patient who received an NIHSS assessment.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Glasgow Coma Scale

OC-MEDS Usage: Required

Definition:

Documentation that Glasgow Coma Scale (GCS) was performed as indicated at this hospital. The GCS serves several purposes, but its main use for stroke patients is for the assessment of the degree of impairment caused by a given stroke, particularly for hemorrhagic stroke. Fields recorded for this element are whether or not a GCS assessment was performed on arrival at the hospital (Initial) and at discharge. The corresponding scores (3-15) are also required.

Suggested Data Collection Question:

- Was the Glasgow Coma Scale (GCS) performed as part of the patient's initial evaluation?
- Was the Glasgow Coma Scale (GCS) performed as part of the patient's final (discharge) evaluation?

Format:

Length: 1-3

Type: Single-Select and Numeric

Occurs: 1

Allowable Values:

- Yes
- No/ND (Not Documented)
- Score may range from 3-15, per the structure of the Glasgow Coma Scale.

Notes for Abstraction:

- The GCS element (all fields) is required for all stroke patients with a hemorrhagic diagnosis.
- The GCS is commonly used and may have significant clinical value for all stroke patients regardless of specific diagnosis. If the patient has a documented GCS please record in the registry as such regardless of final discharge diagnosis.
- The GCS score may be documented by a physician/PA/NP/RN.
- The Initial GCS must be documented to have been performed prior to any surgical intervention (i.e. clipping, coiling, or any other pertinent surgical intervention) or within 6 hours of arrival at the hospital for patients who do not undergo surgical intervention at your hospital.
- Patients who are referred from another acute care hospital should have the GCS documented that was part of your facility's initial evaluation, not part of the referring hospital's initial assessment.
- The Discharge GCS must be documented to have been performed as part of the discharge evaluation or within two days of the patient's discharge date.
- If your facility discharges the patient to another acute care hospital for further treatment and/or care please provide entry of the discharge GCS regardless of the patient's length of stay at your facility, including patients who were referred to another hospital directly from your ED.
- If a total GCS score is documented, then you may select "Yes" to document that an assessment was performed and enter a numerical value (3-15) to document the score.
- If components of the GCS are scored but the total is not documented or left blank, select "No" and leave the score field blank.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Glasgow Coma Scale (cont.)

Notes for Abstraction (cont.):

- Do not infer or calculate a total GCS score from documented GCS category scores.
- If there is any documentation to suggest that the GCS score recorded is an estimate, select "No" and leave the score field blank.

Suggested Data Sources:

- Emergency Department Records
- History and Physical
- Nursing Flow Sheet
- Progress Notes
- Transfer Sheet
- Admitting Note
- Consultation form/note
- Nursing Assessment
- Discharge Summary (only for the Discharge GCS)

Inclusion Guidelines for Abstraction:

This data element is required for all patients who have a final diagnosis of hemorrhagic stroke. All patients who have a documented GCS, regardless of final diagnosis are recommended to be included in this data element.

Exclusion Guidelines for Abstraction:

Patients who do not have a final diagnosis of hemorrhagic stroke are not required for inclusion in this element. However, it is recommended for any patient who received a GCS assessment.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Modified Rankin Scale (mRS)

OC-MEDS Usage: Required

Definition:

Documentation of a Modified Rankin Scale (mRS). For Ischemic Stroke Patients, measured Pre-Event and at 90 (≥ 75 and ≤ 105) days after diagnosis of stroke (not days after discharge). The mRS is a disability scale ranging from 0-6 and is the most widely used outcome measure for stroke patients. The mRS score should be obtained through standardized interviews.

Suggested Data Collection Question:

- Was a Pre-Event Modified Rankin Scale (mRS) determined as part of the patient's evaluation?
- Was a 90 Day Modified Rankin Scale (mRS) performed as part of the patient's clinical follow-up?

Format:

Length: 1-3

Type: Single-Select and Numeric

Occurs: 1

Allowable Values:

- Yes
- No/ND (Not Documented)
- Score may range from 0-6, per the structure of the Modified Rankin Scale.
- Entry of 7 = Unable to contact patient/caregiver

Notes for Abstraction:

- mRS may be documented by a physician, NP, RN, medical assistant or any individual specifically trained and tasked by your facility to record this information.
- Pre-Event means before the acute stroke event that initiated this care episode.
- Pre-Event mRS should be obtained with the same standardized interview as the 90 Day mRS but with a focus on the patient's functional status prior to the stroke event.
- If assessment was attempted but unsuccessful after at least three (3) attempts to contact the patient and/or caregiver, select "No" and enter value = 7.
- If the patient expired after discharge, 90 Day Post Stroke mRS value = 6.
- If a score range is indicated in the medical record, select the higher value. (2-3 = 3)
- Documentation of the 90 Day Post Stroke mRS must be obtained within the 90 day timeframe which is defined as ≥ 75 and ≤ 105 days after diagnosis, not after discharge.
- If the follow up was attempted but not completed within the 90 day timeframe listed above, please select "No/ND" and enter value = 7.
- If the patient expired prior to discharge, 90 Day Post Stroke mRS value = 6.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Modified Rankin Scale (mRS) (cont.)

Notes for Abstraction (cont.):

- Interview format should be standardized. Telephone or in-person interviews are acceptable.
- If the patient cannot be interviewed because of communication deficits or other limitation, an interview with the patient's caregiver is acceptable.
- If the patient and/or caregiver refuse to respond, please select "No/ND" and enter value = 7.
- Caregiver is defined as the patient's family or other person (i.e. home health, VNA provider, prison official, law enforcement personnel, etc.) who will be/is responsible for care of the patient.

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

Inclusion Guidelines for Abstraction:

All patients with a final diagnosis of ischemic stroke and recanalization intervention (IV t-PA, IA t-PA or MER) are required to be included in this element. All patients who have a documented mRS (initial or 90 Day Post), regardless of final diagnosis are recommended to be included in this data element.

Exclusion Guidelines for Abstraction:

Patients meeting exclusion criteria may leave this element blank. Patients admitted for Elective Carotid Intervention.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Initial Brain Imaging Date and Time

OC-MEDS Usage: Required

Definition:

Documentation of the date and time that initial brain imaging was performed (initiated and completed) at this hospital (or transferring hospital) for this particular episode of care.

Suggested Data Collection Questions:

- Was initial brain imaging performed at your hospital and if so, at what time and date was that brain imaging initiated?

Format:

Length: Date: 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Date, and Time

Occurs: 1

Allowable Values:

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add

YYYY = Year (20xx)

12 to that number and record.

Notes for Abstraction:

- This data element seeks information regarding the brain image which was used to guide treatment and therapy decisions for this stroke event. In most cases this will be the initial brain imaging.
- However, if the initial brain imaging was insufficient to guide treatment decisions, please record information for that brain imaging which was definitive, such as when you receive a transfer patient from another hospital and choose to repeat the initial brain imaging which was produced by the sending facility because it was insufficient.
- If initial brain imaging has been completed at an outside hospital, and that imaging served as a definitive diagnostic for further care, please document that imaging date and time.
- For inpatient stroke, use the first brain image performed after discovery of stroke symptoms in the hospital. If patient had brain imaging performed in the hospital prior to stroke symptom onset, use the brain imaging performed after discovery of stroke symptoms in the hospital.
- If the patient arrives to the hospital with transient symptoms that resolve and brain imaging is completed, but later in the hospital stay the patient has new onset stroke symptoms and meets criteria to be entered as an inpatient stroke, new brain imaging should be performed. If new brain imaging is not performed, select value = No/ND. Do not use brain imaging performed for the prior resolved event.
- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Initial Brain Imaging Date and Time (cont.)

Suggested Data Sources:

- Emergency Department Record
- Nursing Flow Sheet
- Progress Notes
- Radiology Records
- Neurology Records
- Telemedicine Records

Inclusion Guidelines for Abstraction:

Please attempt to document Initial Brain Imaging for every patient included in this registry. This is a required element. However, if this element is not documented in the patient's chart or is lacking per the above instructions, please leave this element blank.

Exclusion Guidelines for Abstraction:

Note that there are valid reasons why a stroke patient will not have brain imaging performed and/or documented. This question is not designed to assess or represent all clinical presentations and standards of treatment and evaluation. Nonetheless it is an important part of the registry for all patients.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IV Thrombolytic at Outside Hospital

OC-MEDS Usage: Required

Definition:

Documentation that intravenous (IV) Thrombolytic therapy was initiated at an outside hospital.

Suggested Data Collection Question:

Was IV Thrombolytic initiated at another hospital?

Format:

Length: 1-3

Type: Single-Select

Occurs: 1

Allowable Values:

- Yes
- Not Performed

Notes for Abstraction:

- Either "IV Thrombolytic" or "IV thrombolytic therapy" are acceptable labels for this documentation.
- If IV Thrombolytic was administered at another hospital and the patient was subsequently transferred to another hospital, select "Yes."
- If the patient was transferred to this hospital with IV Thrombolytic infusing, select "Yes."
- Various ICD-10 Procedure Code lists are available to help identify these patients. The Joint Commission Comprehensive Stroke Performance Measurement Implement Guide (current version) is the recommended source for validating your facility's list.
- Note that thrombolytics may be used to flush, open, or maintain patency of a central line (i.e. PICC line). Please assess documentation to validate that the thrombolytic was administered for a stroke.

Suggested Data Sources:

- Emergency Department Record
- Transfer Records
- Nursing Flow Sheet

Inclusion Guidelines for Abstraction:

All patients with a diagnosis of ischemic stroke who were treated at an outside hospital are required for inclusion in this element. If the patient was not treated at an outside hospital, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IV Thrombolytic Initiated at This Hospital

OC-MEDS Usage: Required

Definition:

Documentation that intravenous (IV) Thrombolytic therapy was initiated at this hospital.

Suggested Data Collection Question:

Was IV Thrombolytic initiated at your hospital and if so, at what time and date was that initiation?

Format:

Length: 1-20 **Date:** 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Single-Select, Date, and Time

Occurs: 1

Allowable Values:

- Yes
- Not Performed

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add

YYYY = Year (20xx)

12 to that number and record.

Notes for Abstraction:

- Either "IV Thrombolytic" or "IV thrombolytic therapy" are acceptable labels for this documentation.
- When a "hang time" or "infusion time" for IV Thrombolytic is documented in the medical record, select "Yes" and record the date and 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
- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- If IV Thrombolytic was administered at another hospital and the patient was subsequently transferred to another hospital, select "Not Performed" and make note within the element "IV Thrombolytic Contraindications".
- If the patient was transferred to this hospital with IV Thrombolytic infusing, select "Not Performed" and make note within the element "IV Thrombolytic Contraindications".
- Use the date/time at which IV Thrombolytic initiation was first documented. If a discrepancy exists between documentation from different sources, choose the earliest date/time. If there are two or more different IV Thrombolytic initiation dates/times (either different IV Thrombolytic episodes or corresponding with the same episode), enter the earliest date/time.
- If the date/time IV Thrombolytic was initiated is unable to be determined from medical record documentation, leave the date/times field blank, however "Yes" is still the correct response if IV Thrombolytic initiation can be confirmed/supported per a valid data source.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IV Thrombolytic Initiation (cont.)

Notes for Abstraction (cont.):

- The medical record must be abstracted as documented (taken at face value). When the date/time documented is obviously in error (i.e. not a valid date/format, prior to arrival at ED, or excessive time past Last Known Well date/time) please leave the date/time field blank.
- Various ICD-10 Procedure Code lists are available to help identify these patients. The Joint Commission Comprehensive Stroke Performance Measurement Implement Guide (current version) is the recommended source for validating your facility's list.
- Note that thrombolytics may be used to flush, open, or maintain patency of a central line (i.e. PICC line). Please assess documentation to validate that the thrombolytic was administered for a stroke.

Suggested Data Sources:

- Emergency Department Record
- Nursing Flow Sheet
- Progress Notes
- IV Flow Sheets
- Medication Administration Record

Inclusion Guidelines for Abstraction:

All patients with a diagnosis of ischemic stroke are required for inclusion in this element. When applicable the Yes/No element may NOT be left blank. For the date and time components, include all patients who received IV thrombolytic therapy. If the patient did not receive IV Thrombolytic therapy the date and time may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IV Thrombolytic (0-3hrs) Contraindications

OC-EMS Usage: Required

Definition:

Documented reason for NOT providing IV Thrombolytic at your hospital within the first three hours of their arrival.

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within the first three hours of the patient's arrival, was a valid contraindication documented for the withholding of treatment?

Format:

Length: 1-3

Type: Single-Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Documentation of the contraindication must be done on the day or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.
- Documentation which refers to intravenous medications only (i.e. "Hold IV medications," "No IVs", etc) is not acceptable. Value = No Contraindication Documented.
- System reasons are not acceptable as "other" reasons, regardless of any linkage to therapy.
 - CT not available, IV pump malfunction, etc. Value = No Contraindication Documented.
 - Thrombolytic agent not available from pharmacy. Value = No Contraindication Documented.
 - Unable to contact neuro consulting. Value = No Contraindication Documented.
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No Contraindication Documented.

Suggested Data Sources:

- Consultation Notes
- Emergency Room Records
- History and Physical
- Medication Reconciliation Form
- Nursing Notes
- Physician Orders
- Progress Notes
- Transfer Forms

Inclusion Guidelines for Abstraction: This element is required for all ischemic stroke patients who did not receive an IV Thrombolytic. When applicable, this element may NOT be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Reasons for no IV Thrombolytic (0-3hrs)

OC-EMS Usage: Required

Definition:

The documented reason(s) for NOT providing IV Thrombolytic at your hospital within the first three hours of their arrival.

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within the first three hours of the patient's arrival, what were the valid contraindications documented for the withholding of treatment?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- Suspicion of subarachnoid hemorrhage
- Seizure at onset
- SBP > 185 or DBP > 110 mmHg despite treatment
- Recent surgery/trauma (<15 days)
- Recent intracranial or spinal surgery, head trauma, or stroke (<3 mo.)
- Platelets <100,000, PTT > 40 sec after heparin use, or PT > 15 or INR > 1.7, or known bleeding diathesis
- History of intracranial hemorrhage or brain aneurysm or vascular malformation or brain tumor
- CT findings (ICH, SAH, or major infarct signs)
- Blood glucose concentration <50 mg/dl (2.7 mmol/L)
- Arterial puncture at noncompressible site in previous 7 days
- Active internal bleeding (<22 days)

Notes for Abstraction:

- Documentation of the contraindication must be done on the day or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No Contraindication Documented.

Suggested Data Sources:

- Consultation Notes
- Emergency Room Records
- History and Physical
- Medication Reconciliation Form
- Nursing Notes
- Physician Orders



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Reasons for no IV Thrombolytic (0-3hrs) (cont.)

Suggested Data Sources: (cont.)

- Progress Notes
- Transfer Forms

Inclusion Guidelines for Abstraction:

This element is required for all ischemic stroke patients who did not receive an IV Thrombolytic. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.
Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IV Thrombolytic (3-4.5hrs) Contraindications

OC-EMS Usage: Required

Definition:

Documented reason for NOT providing IV Thrombolytic at your hospital between the third and fourth and a half hours of their arrival.

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within 3-4.5 hours of the patient's arrival, was a valid contraindication documented for the withholding of treatment?

Format:

Length: 1-3

Type: Single-Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Documentation of the contraindication must be done on the day or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No Contraindication Documented.

Suggested Data Sources:

- Consultation Notes
- Emergency Room Records
- History and Physical
- Medication Reconciliation Form
- Nursing Notes
- Physician Orders
- Progress Notes
- Transfer Forms

Inclusion Guidelines for Abstraction:

This element is required for all ischemic stroke patients who did not receive an IV Thrombolytic. When applicable, this element may NOT be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Reasons for no IV Thrombolytic (3-4.5hrs)

OC-EMS Usage: Required

Definition:

The documented reason(s) for NOT providing IV Thrombolytic at your hospital within hours 3-4.5 of the patient's arrival.

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within 3-4.5 hours of the patient's arrival, what were the valid contraindications documented for the withholding of treatment?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- Suspicion of subarachnoid hemorrhage
- Seizure at onset
- SBP > 185 or DBP > 110 mmHg despite treatment
- Recent surgery/trauma (<15 days)
- Recent intracranial or spinal surgery, head trauma, or stroke (<3 mo.)
- Platelets <100,000, PTT > 40 sec after heparin use, or PT > 15 or INR > 1.7, or known bleeding diathesis
- History of intracranial hemorrhage or brain aneurysm or vascular malformation or brain tumor
- CT findings (ICH, SAH, or major infarct signs)
- Blood glucose concentration <50 mg/dl (2.7 mmol/L)
- Arterial puncture at noncompressible site in previous 7 days
- Active internal bleeding (<22 days)

Notes for Abstraction:

- Documentation of the contraindication must be done on the day or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No Contraindication Documented.

Suggested Data Sources:

- Consultation Notes
- Emergency Room Records
- History and Physical
- Medication Reconciliation Form
- Nursing Notes
- Physician Orders



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Reasons for no IV Thrombolytic (3-4.5hrs) (cont.)

Suggested Data Sources: (cont.)

- Progress Notes
- Transfer Forms

Inclusion Guidelines for Abstraction:

This element is required for all ischemic stroke patients who did not receive an IV Thrombolytic. .If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.
Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Additional Warnings for Patients Treated Between 3-4.5hrs

OC-EMS Usage: Required

Definition:

Additional documentation in the medical record for not administering IV Thrombolytic in the three to four and a half hour treatment window.

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within 3-4.5 hours of the patient's arrival, were additional warnings documented for the withholding of treatment?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- Age > 80
- Any anticoagulant use prior to admission (even if INR < 1.7)
- CT findings of > 1/3 MCA
- NIHSS > 25
- Prior stroke and diabetes

Notes for Abstraction:

- Only select "Additional Warnings" if any of these reasons for no IV alteplase are explicitly documented in the context of the 3-4.5-hour treatment window.
- Documentation of the contraindication must be done on the day or the day after hospital arrival. It is not necessary to review documentation outside of this timeframe to answer this data element.
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No Contraindication Documented.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Inclusion Guidelines for Abstraction:

All patients with a diagnosis of ischemic stroke who did not receive IV Thrombolytic are required for inclusion. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Hospital-Related or Other Factors (0-3hrs) & (3-4.5hrs)

OC-EMS Usage: Required

Definition:

Documentation of hospital-related or other reasons for not administering IV Thrombolytics

Suggested Data Collection Question:

If IV Thrombolytic was not provided at your facility within either the 0-3 or 3-4.5 time period of the patient's arrival, what factors were documented for the withholding of treatment?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- Delay in Patient Arrival
- In-Hospital Time Delay
- Delay in Stroke Diagnosis
- No IV Access
- Rapid or Early Improvement
- Advanced Age (0-3hrs) ONLY
- Stroke Too Severe (0-3hrs) ONLY
- Other

Notes for Abstraction:

- It is acceptable to infer reasons for non-treatment.
- Documented Contraindications/Reasons do not exclude documentation of this element.
- Delays in getting the CT done/read, or in patient evaluation, then select "In-hospital Time Delay".
- If patients receive IA therapy in favor of IV therapy, then select "Other" under "Hospital Related or Other Factors". Note the abstractor should also select "No" for "Documented Contraindications or Warnings for not initiating IV thrombolytic?"

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Inclusion Guidelines for Abstraction:

This element is required for all patients with a diagnosis of ischemic stroke who did not receive IV Thrombolytic therapy. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Eligibility or Medical Reasons For Delay in IV Thrombolytic Greater Than 60 Minutes After Arrival

OC-EMS Usage: Required

Definition:

Documentation of medical or eligibility reasons causing the delay in IV Thrombolytic therapy.

Suggested Data Collection Question:

If IV Thrombolytic was initiated greater than 60 minutes after arrival, were eligibility or medical reasons documented?

Format:

Length: 1-3

Type: Single-Select

Allowable Values:

- Yes
- No

Notes for Abstraction:

- Reasons for delay in treatment with IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist
- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe record this element, value = No.
- It is permissible to abstract reasons for non-treatment from the medical record that are entered after the IV thrombolytic treatment decision has occurred. This should be done only when the documentation is written by an appropriate provider who was involved in the IV thrombolytic decision but was unable to document it at the time. This documentation needs to be made prior to patient discharge.

Suggested Data Sources:

- Hospitalization Data
- Emergency Room Records

Inclusion Guidelines for Abstraction:

This element is required for all patients with a diagnosis of ischemic stroke who did not initially receive IV Thrombolytic within 60 minutes, but later did receive IV Thrombolytic therapy. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Eligibility Reasons

OC-EMS Usage: Required

Definition:

The specific eligibility reason for delay in IV thrombolytic administration.

Suggested Data Collection Question:

Were eligibility reasons documented for the delay in IV thrombolytic beyond 60 minutes?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- Care-Team unable to determine eligibility
- Initial Refusal
- Social/Religious
- Specify Eligibility Reason (opens a text comment field)

Notes for Abstraction:

- "Care-team unable to determine eligibility" means that the diagnosis of stroke was made but that eligibility for thrombolytic therapy could not be established or verified by the clinician
- "Initial refusal" should be selected if there is documentation that the patient and/or family initially refused treatment with IV thrombolytic for any reason other than a social/religious reason.
- "Social/Religious" means that the patient and/or family refused treatment due to their cultural or religious beliefs.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Inclusion Guidelines for Abstraction:

This element is required for all patients with a diagnosis of ischemic stroke who did not initially receive IV Thrombolytic within 60 minutes, but later did receive IV Thrombolytic therapy. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.
Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Medical Reasons

OC-EMS Usage: Required

Definition:

The specific eligibility reason for delay in IV thrombolytic administration.

Suggested Data Collection Question:

Were eligibility reasons documented for the delay in IV thrombolytic beyond 60 minutes?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

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

Notes for Abstraction:

- The medical record must be abstracted as documented (taken at face value). If any reason documented is not explicitly linked to the withholding of therapy within the appropriate timeframe, then it should not be documented here.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Inclusion Guidelines for Abstraction:

This element is required for all patients with a diagnosis of ischemic stroke who did not initially receive IV Thrombolytic within 60 minutes, but later did receive IV Thrombolytic therapy. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Hospital Related or Other Reasons

OC-EMS Usage: Required

Definition:

Documentation that a hospital-related or other reason for delay in IV thrombolytic administration was present which may or may not be documented but is apparent to the abstractor.

Suggested Data Collection Question:

If there is no documented eligibility or medical reason for delay in IV thrombolytic administration, were there hospital related or other reasons?

Format:

Length: 1-20

Type: Multi-Select

Occurs: Multiple

Allowable Values:

- In-Hospital Time Delay
- Delay in Stroke Diagnosis
- Need for Additional Imaging
- Equipment Related Delay
- Other (opens a text comment field)

Notes for Abstraction:

- It is acceptable to infer reasons for non-treatment.

Suggested Data Sources:

- Admission Data
- Hospitalization Data

Inclusion Guidelines for Abstraction:

This element is required for all patients with a diagnosis of ischemic stroke who did not initially receive IV Thrombolytic within 60 minutes, but later did receive IV Thrombolytic therapy. If no values are applicable, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IA Catheter Reperfusion

OC-MEDS Usage: Required

Definition:

Documentation that intra-arterial (IA) Thrombolytic therapy, including Mechanical Endovascular Reperfusion (MER) therapy, was initiated at your facility.

Suggested Data Collection Question:

Was IA Thrombolytic or MER initiated at your hospital and if so, at what time and date was that initiation?

Format:

Length: 1-3 **Date:** 10, MM-DD-YYYY **Time:** 5, HH:MM (24hr/Military Time)
Type: Single-Select, Date, and Time
Occurs: 1

Allowable Values:

- Yes
- Not Performed

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

HH = Hour (00-23)
MM = Minute (00-59)

Must be in 24hr/Military Format
If the time is 12hr p.m. format, add
12 to that number and record.

Notes for Abstraction:

- Acceptable labels include "IA thrombolytic", "IA t-PA", MER, etc.
- When a "start time" or "infusion time" for IA t-PA is documented in the medical record, select "Yes" and record the date and 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
- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- If IA therapy was administered at another hospital and the patient was subsequently transferred to your hospital, select "Not Performed" and make note within the contraindications element.
- Use the date/time at which IA therapy initiation was first documented. If a discrepancy exists between documentation from different sources, choose the earliest date/time. If there are two or more different IA therapy initiation dates/times (either different IA therapy episodes or corresponding with the same episode), enter the earliest date/time.
- If the date/time IA therapy was initiated is unable to be determined from medical record documentation, leave the date/times field blank, however "Yes" is still the correct response if IA therapy initiation can be confirmed/supported per a valid data source.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IA Catheter Reperfusion (cont.)

Notes for Abstraction (cont.):

- The medical record must be abstracted as documented (taken at face value). When the date/time documented is obviously in error (i.e. not a valid date/format, prior to arrival at ED, or excessive time past Last Known Well date/time) please leave the date/time field blank.
- Various ICD-10 Procedure Code lists are available to help identify these patients. The Joint Commission Comprehensive Stroke Performance Measurement Implement Guide (current version) is the recommended source for validating your facility's list.

Suggested Data Sources:

- Consultation Notes
- Progress Notes
- Operative Notes
- Diagnostic Test Reports

Inclusion Guidelines for Abstraction:

All patients with a diagnosis of ischemic stroke are required for inclusion in this element. When applicable the Yes/No element may NOT be left blank. For the date and time components, include all patients who received IA Catheter Reperfusion therapy. If the patient did not receive IA Catheter Reperfusion therapy the date and time may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: IA Catheter Reperfusion at Outside Hospital

OC-MEDS Usage: Required

Definition:

Documentation that IA Catheter Reperfusion, including MER, therapy was initiated at an outside hospital.

Suggested Data Collection Question:

Was IA therapy initiated at another hospital?

Format:

Length: 1-3

Type: Single-Select

Occurs: 1

Allowable Values:

- Yes
- Not Performed

Notes for Abstraction:

- Either "IA Thrombolytic" or "MER" are acceptable labels for this documentation.
- If IA Thrombolytic was administered at another hospital and the patient was subsequently transferred to another hospital, select "Yes."
- If the patient was transferred to this hospital with IA Thrombolytic infusing, select "Yes."
- Note that thrombolytics may be used to flush, open, or maintain patency of a central line (i.e. PICC line). Please assess documentation to validate that the thrombolytic was administered for a stroke.

Suggested Data Sources:

- Emergency Department Record
- Transfer Records
- Nursing Flow Sheet

Inclusion Guidelines for Abstraction:

All patients with a diagnosis of ischemic stroke who were treated at an outside hospital are required for inclusion in this element. If the patient was not treated at an outside hospital, this element may be left blank.

Exclusion Guidelines for Abstraction:

Patients without a diagnosis of ischemic stroke should be excluded from this element. Please ensure that IA Thrombolytic is not confused with IV Thrombolytic.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Complications of Therapy

OC-MEDS Usage: Required

Definition:

Documentation of complications (adverse results) from IV Thrombolytic, IA Thrombolytic, or MER therapy. Specifically recording 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 initiation of treatment with IV Thrombolytic, IA Thrombolytic or MER procedure.

Suggested Data Collection Question:

Are there any documented complications resulting from IV Thrombolytic, IA Thrombolytic, or MER therapy?

Format:

Length: 1-20

Type: Single-Select

Occurs: 1

Allowable Values:

- Symptomatic intracranial hemorrhage <36 hours
- Life threatening, serious systemic hemorrhage <36 hours
- Other serious complication
- No serious complications
- Unable to Determine

Notes for Abstraction:

- The complication must be documented to have been experienced within 36 hours of treatment or procedure. If multiple times exist, measure from the more recent time documentation, resulting in a longer window of time for review.
- Symptomatic intracranial hemorrhage is defined as the clinical deterioration of ≥ 4 point increase on NIHSS and brain image finding of parenchymal hematoma, or subarachnoid hemorrhage, or intraventricular hemorrhage.
- 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 ($\leq$) 36 hours following the initiation of therapy.
 - If a 5 point increase exists at 12 hours but is a 3 point increase at 20 hours, they are positive for the NIHSS criteria of a complication.
 - If a 3 point increase exists at 20 hours, but a 6 point increase exists at 40 hours, they are negative for the NIHSS criteria of a complication.
- If no NIHSS score is documented within 36 hours, value = Unable to Determine.
- If components of the NIHSS are scored but the total is not documented or left blank, select value = Unable to Determine.
- Do not infer or calculate a total NIHSS score from documented NIHSS category scores.

**STROKE REGISTRY DATA DICTIONARY****Data Element Name:** Complications of Therapy (cont.)**Notes for Abstraction (cont.):**

- If there is any documentation to suggest that the NIHSS score recorded is an estimate, select value = Unable to Determine.
- For the purposes of this data element, do not use brain imaging reports for CT/MRI performed prior to therapy. Abstract only brain imaging reports for tests done after these interventions.
- Reports of preliminary findings within the 36 hour timeframe may be used in abstraction.
- When conflicting information is documented, assume that there was intracranial hemorrhage.
- Terms to guide inclusion

Bleed	Hemorrhagic Conversion	Parenchymal Hematoma
Brain Hemorrhage	Hemorrhagic Expansion	Parenchymal Hemorrhage
Cerebral Hemorrhage	Hemorrhagic Transformation	Parenchymal Intracerebral Hemorrhage
ECASS criteria PH1 or PH2	Intracerebral Hemorrhage ICH	
Hemorrhage	Intraventricular Hemorrhage	Subarachnoid Hemorrhage SAH

- If the patient has documented evidence to suggest no complication was present, please select value = No Serious Complication.
- The medical record must be abstracted as documented (taken at face value). If the lack of any complication is not sufficiently documented (i.e. no follow up NIHSS within 36 hours), please select value = Unable to Determine.

Suggested Data Sources:

- Consultation Notes
- Emergency Department Record
- History and Physical
- Nursing Flow Sheet
- Progress Notes
- Admitting Note
- Nursing Assessment
- Brain Imaging Reports
- Diagnostic Test Reports
- Radiology Reports

Inclusion Guidelines for Abstraction:

All ischemic stroke patients who were treated with IV or IA recanalization therapy (IV or IA t-PA or who underwent an MER procedure).

Exclusion Guidelines for Abstraction: Patients without ischemic stroke and who were not treated with applicable therapies.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Clinical Trial Participant

OC-MEDS Usage: Recommended

Definition:

Documentation that during this care episode the patient was enrolled in a clinical trial that affected the performance of standard stroke protocols or practices.

Suggested Data Collection Question:

During this hospital stay (care episode, ED observation, etc), was the patient enrolled in a clinical trial that affected the performance of standard stroke protocols or practices?

Format:

Length: 1

Type: Alphanumeric

Occurs: 1

Allowable Values:

- | | |
|-----|---|
| Yes | There is documentation that during this hospital stay the patient was enrolled in a clinical trial that affected the performance of standard stroke protocols and practices. |
| No | There is no documentation that during this hospital stay the patient was enrolled in a clinical trial that affected the performance of standard stroke protocols and practices. |

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.
- 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.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Clinical Trial Participant (cont.)

Notes for Abstraction (cont.):

- In the following situations, select "No": (cont.)
 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 that the clinical trial will affect the performance of standard stroke protocols and practices should not be made unless clearly specified and described.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

Only capture patients enrolled in clinical trials studying patients with stroke.

Exclusion Guidelines for Abstraction: None



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Telemedicine

OC-MEDS Usage: Required

Definition:

Documentation of whether or not telemedicine was used during this episode of care. Telemedicine includes any remote evaluation, diagnosis or treatment of a patient by means of telecommunications technology and specifically includes teleradiology and teleneurology services.

Suggested Data Collection Question:

Was telemedicine used to provide care for the patient during this episode of care at your facility?

Format:

Length: 1-50

Type: Single-Select

Occurs: 1

Allowable Values:

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

Notes for Abstraction: None

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients included in this registry are required to have a documented value for this element. This element should NOT be left blank.

Exclusion Guidelines for Abstraction: None



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Final Clinical Diagnosis

OC-MEDS Usage: Mandatory

Definition:

Descriptive documentation of the final clinical diagnosis related to stroke. This field is used to define the patient populations and may be the principle or secondary diagnosis assigned at discharge.

Suggested Data Collection Question: What is the final clinical diagnosis related to stroke?

Format:

Length: 1-20

Type: Single-Select

Occurs: 1

Allowable Values:

- Ischemic Stroke
- Intracerebral Hemorrhage
- Subarachnoid Hemorrhage
- Stroke Not Otherwise Specified
- Transient Ischemic Attack (<24hrs)
- No Stroke Related Diagnosis
- Elective Carotid Intervention Only

Notes for Abstraction:

- For most cases the final clinical diagnosis related to stroke will be equivalent to the principal diagnosis code. However, for some cases such as in-patient or in-hospital stroke or TIA the principal diagnosis code and the final diagnosis related to stroke will differ. The final diagnosis related to stroke can be the principal or secondary diagnosis assigned at discharge.
- For patients whose symptoms resolve upon arrival to ED, but then later return later during the hospitalization (symptoms >24hrs or infraction on brain imaging while an inpatient) please select "Ischemic Stroke".
- For patients who arrive with symptoms of stroke and have a complete resolution after IV or IA therapy please select "Ischemic Stroke".
- For patients admitted with ischemic stroke who are treated with IV or IA therapy and develop the complication of intracerebral hemorrhage select "Ischemic Stroke".
- If a patient is transferred to your hospital for management of a hemorrhagic complication after treatment with IV or IA therapy for an ischemic stroke at the referring hospital select "Ischemic Stroke" as this is the stroke diagnosis that initially lead to the patient's hospitalization.
- For patients admitted for non-stroke related illness, but who experience a stroke after admission select the stroke diagnosis documented by the physician.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Final Clinical Diagnosis (cont.)

Notes for Abstraction (cont.):

- Patients who present with neurological symptoms, but after work-up are determined not to have suffered from an ischemic or hemorrhagic stroke, are not required to be entered into the Orange County Stroke Registry unless they arrived at your facility via EMS or underwent IV or IA treatment for stroke.
 - The patient presents with a stroke-like clinical picture and IV Thrombolytic is initiated, but the final clinical diagnosis is later determined not to be stroke related. This patient must be included.
 - The patient presents with a stroke-like clinical presentation and a 'stroke code' is activated and/or the patient is followed by a stroke service until the stroke diagnosis is ruled out, but did not arrive via EMS or receive any IV or IA treatment specific for stroke. This patient is not required, but is recommended for inclusion in this registry.
- Patients who are found to have incidentally discovered infarcts (silent, subclinical, or prior CNS infarction) are not required for this registry.
- For patients who are documented as having "CVA" or "Stroke" in their medical record, without any additional documentation regarding the stroke type and who have:
 - No evidence of hemorrhage on initial brain imaging select "Ischemic Stroke".
 - Evidence of both ischemic injury and brain hemorrhage on initial imaging select "Stroke Not Otherwise Specified."
 - Evidence of hemorrhagic injury only, select a hemorrhagic stroke value.
- Select "Elective Carotid Intervention only" for patients with documentation that demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting). Do not select this option for patients that present with an acute stroke event.

Suggested Data Sources:

- Discharge Summary
- Face Sheet
- UB-04

Inclusion Guidelines for Abstraction:

All patients included in this registry are mandated to have a documented value for this element.
This element may NOT be left blank.

Exclusion Guidelines for Abstraction: none



STROKE REGISTRY DATA DICTIONARY

Data Element Name: If No Stroke Related Diagnosis

OC-MEDS Usage: Required

Definition:

Descriptive documentation of the final clinical diagnosis of stroke-like presentations (stroke mimics) that in this care episode caused Advanced Stroke Notification by EMS and/or the activation of your ED stroke protocols.

Suggested Data Collection Question:

What was the patient's final clinical diagnosis if it was not stroke-related?

Format:

Length: 1-20

Type: Alphanumeric

Occurs: 1

Allowable Values:

- Delirium
- Electrolyte or Metabolic Imbalance
- Functional Disorder – Includes conversion disorders.
- Migraine
- Seizure
- Other – Includes dizziness, giddiness, aphasia, other speech disturbance, dysarthria, dysphagia, altered mental status, peripheral vertigo, and others.
- Uncertain

Notes for Abstraction:

- Documentation must be provided by the physician/APN/PA that the neurological symptoms were the result of an alternative non-stroke-related diagnosis.
- This assignment of diagnosis should be done independently of the ICD-10-CM code assigned. However, the diagnosis selected here should ideally be equivalent to the final ICD-10-CM code. In circumstances when another ICD-10-CM code has been chosen and there is a discrepancy, please consult your local Stroke Coordinator for direction.

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients who have a Final Clinical Diagnosis equal to No Stroke Related Diagnosis in this registry are required to have a documented value for this element.

Exclusion Guidelines for Abstraction: All patients with a stroke related Final Clinical Diagnosis are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Discharge Date and Time

OC-MEDS Usage: Mandatory

Definition:

The date and time that the patient was discharged from your facility.

Suggested Data Collection Question:

What was the date and time that the patient was discharged from your facility?

Format:

Length: Date: 10, MM-DD-YYYY

Time: 5, HH:MM (24hr/Military Time)

Type: Date and Time

Occurs: 1

Allowable Values:

MM = Month (01-12)

HH = Hour (00-23)

Must be in 24hr/Military Format

DD = Day (01-31)

MM = Minute (00-59)

If the time is 12hr p.m. format, add
12 to that number and record.

YYYY = Year (20xx)

Notes for Abstraction:

- 00:00 = midnight. If the time is documented as 12midnight review supporting documentation to determine correct date. Incorrect: 24:00 1/1/2016. Correct: 00:00 1/2/2016.
- For times that include seconds, remove the seconds and record the time as is. Do not round up. Example: 15:00:35 would be recorded as 15:00
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error, an approximated value must be triangulated from reliable sources.

Suggested Data Sources:

- Discharge Summary
- Face Sheet
- UB-04

Inclusion Guidelines for Abstraction: This element must be documented on ALL incidents, without exception or condition. It may NOT be left blank, nor documented as Not Applicable.

Exclusion Guidelines for Abstraction: No populations are excluded from this element.



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Discharge Disposition

OC-MEDS Usage: Mandatory

Definition:

The final place or setting to which the patient was discharged on the day of discharge from your facility.

Suggested Data Collection Question: What was the patient's documented discharge disposition?

Format:

Length: 1-20

Type: Single-Select

Occurs: 1

Allowable Values:

- Home
- Acute Care Facility
-
- Hospice – Home
- Hospice – Health Care Facility
- Deceased/Expired
- AMA - Left Against Medical Advice
- Other Health Care Facility
- Not Documented or Unable to Determine

Notes for Abstraction:

- Only use documentation written on the day prior to discharge through 30 days after discharge when abstracting this data element. Example:
 - Documentation in the Discharge Planning notes on 04-01-20xx state that the patient will be discharged back home. On 04-06-20xx the physician orders and nursing discharge notes on the day of discharge reflect that the patient was being transferred to skilled care. The documentation from 04-06-20xx would be used to select value "5" (Other Health Care Facility).
- The medical record must be abstracted as documented (taken at "face value"). Inferences should not be made based on internal knowledge.
- If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract.
- If documentation is contradictory, use the latest documentation. Examples:
 - Discharge summary dictated 2 days after discharge states patient went home. Physician note on day of discharge further clarifies that the patient will be going home with hospice. Select value "2" (Hospice - Home).
 - Discharge planner note from day before discharge states XYZ Nursing Home. Discharge order from day of discharge states Discharge home. Contradictory documentation, use latest. Select value "1" (Home).



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Discharge Disposition (cont.)

Notes for Abstraction (cont.):

- Physician order on discharge states Discharge to ALF. Discharge instruction sheet completed after the physician order states patient discharged to SNF. Contradictory documentation, use latest. Select value "5" (Other Health Care Facility).
- If documentation is contradictory, and you are unable to determine the latest documentation, select the disposition indicating the highest level of care.
- Hospice values include discharges with hospice referrals and evaluations.
- If the medical record identifies the facility the patient is being discharged to by name only (e.g., Park Meadows), perform an internet search for that facility. If you are unable to make a definitive judgement on the type of facility, select "Other".
- If the medical record states only that the patient is being discharged and does not address the place or setting to which the patient was discharged, select "Home".
- When determining whether to select value "AMA", explicit "left against medical advice" documentation is not required:
 - Patient is refusing to stay for continued care - Select value "AMA".
 - Documentation suggesting that the patient left before discharge instructions could be given does not count. Documentation should still exist to indicate disposition.
 - A signed AMA form is not required, for the purposes of this data element.
 - Do not consider AMA documentation and other disposition documentation as contradictory. If any source states the patient left against medical advice, select "AMA", regardless of whether the AMA documentation was written last, i.e. AMA form signed and discharge instruction sheet states Discharged home with belongings - Select "AMA".

Suggested Data Sources:

Only acceptable sources

- Progress notes
- Physician orders
- Discharge summary
- Discharge instruction sheet
- Discharge planning notes
- Nursing discharge notes
- Social service notes
- Transfer record

Excluded Data Sources

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

Inclusion Guidelines for Abstraction:

All patients included in this registry are mandated to have a documented value for this element.

Exclusion Guidelines for Abstraction: none



STROKE REGISTRY DATA DICTIONARY

Data Element Name: Destination Determination

OC-MEDS Usage: Required

Definition:

If the patient was transferred from your facility to another acute care hospital, please document this determination.

Suggested Data Collection Question:

For what reason was this patient transferred from your facility to another acute care hospital?

Format:

Length: 1-20

Type: Single-Select

Occurs: 1

Allowable Values:

- Specialty Resource Center
- Hospital of Choice
- Not Known
- Hospital Transferred To (select facility)

Notes for Abstraction: none

Suggested Data Sources:

- Progress notes
- Physician orders
- Discharge summary
- Discharge instruction sheet
- Discharge planning notes
- Nursing discharge notes
- Social service notes
- Transfer record

Inclusion Guidelines for Abstraction:

All patients transferred from your facility to another acute care hospital are required to have this element documented.

Exclusion Guidelines for Abstraction: none



STROKE REGISTRY DATA DICTIONARY



Data Element Name: Hospital Transferred To

OC-MEDS Usage: Required

Definition:

The name and location of the acute care hospital to which the patient is being transferred for the continuation of stroke care.

Suggested Data Collection Question:

What is the name of the acute care hospital that the patient is being transferred to?

Format:

Length: 1-20

Type: Single-Select

Occurs: 1

Allowable Values: All pertinent facilities as defined by the State of California.

Notes for Abstraction: none

Suggested Data Sources: Only acceptable sources

Inclusion Guidelines for Abstraction:

All patients transferred from your facility to another acute care hospital are required to have this element documented.

Exclusion Guidelines for Abstraction: none



STROKE REGISTRY DATA DICTIONARY

Data Element Name: ICD 10 Diagnosis

OC-MEDS Usage: Mandatory

Definition:

The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code associated with the diagnosis established for this patient during this specific care episode.

Suggested Data Collection Question:

What are the ICD-10-CM diagnosis codes associated with this patient's acute stroke event?

Format:

Length: 3-7

Type: Search Enabled Field

Occurs: Multiple

Allowable Values:

Any valid diagnosis code as per the CMS ICD-10-CM master code table (2016 Code Descriptions in Tabular Order): <https://www.cms.gov/Medicare/Coding/ICD10/2016-ICD-10-CM-and-GEMs.html>

Notes for Abstraction:

- The primary focus of this element is to record the Principle Diagnosis Code, however if the stroke-related diagnosis code is not the Principle Diagnosis Code, please enter both codes.
- The admission code or initial diagnosis code may be a importance for documentation of patients with dynamic progressions and especially important to identify if a patient is transferred to your hospital for management of a hemorrhagic complication after treatment with IV or IA therapy for an ischemic stroke at the referring hospital.
- Entering in multiple codes may enable more focused QI efforts by your hospital, however no ICD-10 codes unrelated to stroke are required by this registry.

Suggested Data Sources:

- Face Sheet
- Admission Form
- Code List
- Problem List
- Discharge Summary
- UB-04

Inclusion Guidelines for Abstraction:

All patients included in this registry are mandated to have a documented value for this element. This element may NOT be left blank.

Exclusion Guidelines for Abstraction: none