The New Jersey Acute Stroke Registry (NJASR), Version 2.1

Data Collection Manual

Effective Date: **January 1, 2014**
Last Revised Date: **January 7, 2020**

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GENERAL INFORMATION

This document contains definitions and specifications for the New Jersey Acute Stroke Registry (NJASR), Version 2.1, and the file layout for electronic data submission. The data elements and definitions closely match CDC's Paul Coverdell Stroke Data Registry.

NJASR is designed to collect data with the purpose of assessing quality of services and outcomes provided by stroke designated facilities in New Jersey. NJASR will be an integral part of the Department of Health's Cardiovascular Data Processing System (CDPS).

The Office of Health Care Quality Assessment staff is available to assist you with any questions on the data collection form. If you have any questions or comments, please contact us at:

Stroke Registry Data Coordinator
Office of Health Care Quality Assessment
New Jersey Department of Health
225 E. State Street, 2nd Floor, West
Trenton, NJ 08625-0360

Phone: (609) 984-7334 Toll Free: 800-418-1397
Fax: (609) 984-7735

DATA SUBMISSION

Starting with the first Quarter, 2010 data submission, all hospitals designated as Primary or Comprehensive Stroke Centers are required to submit acute stroke data specified in the NJASR (See Appendix VIII) in the format specified in Appendix VIII of this document. Data are to be submitted every quarter to the Department within forty-five (45) days after the close of the quarter following the schedule below. **Please report data only for patients 18 years or older.**

Quarter	**Months Included in Data Submission**	**Due Date**
First	January – March	May 15
Second	January - June	August 15
Third	January - September	November 15
Fourth	January - December	February 15

The data collection form provided in Appendix VIII of this document is a guide for data collection and is not intended to be completed or submitted as a substitute to the electronic data file. Data may be collected using a vendor of the facility's choosing and must be submitted following the file layout specified in this document (Appendix VIII). The electronic data file must be submitted through secure file transfer protocol that the facility or its vendor establishes in consultation with the Department. If compression of the data file is needed because of size, you may only use the file compression program WINZIP in order for Department staff to access your file.

Please make a note of the following on data submission:

- **The acceptable file format is comma delimited text file with text qualifier (") and should include field names on the first row**.

- Cumulative data must be submitted for the calendar year. For example, the second quarter data submission must also contain first quarter data and the fourth quarter data submission must also contain data from the first three quarters.

- DOH does not advice switching vendors in the middle of a reporting period. In case such a switch is necessary, the facility must arrange for transfer of its data to the new vendor in order to submit the cumulative data.

- **Please note that data submitted in any other format will not be accepted by the Department for processing**.

If you or your vendor is mailing the data on CD or flash drive for any unforeseen reason, please make sure to do so via overnight mail and send it to:

Stroke Registry Data Coordinator
Office of Health Care Quality Assessment
New Jersey Department of Health
225 East State Street, 2nd Floor, West
Trenton, NJ 08608

QUARTERLY ACTIVITY

Following each quarterly submission, the Department will run a validation report on submitted data and share the results with the facility stroke coordinator for verification and/or correction. This program generates hospital specific reports showing data entry errors or inconsistencies. A **Hospital will have ten (10) business days to review and resubmit a corrected file.** Failure to submit corrected data may result in hospitals not meeting stroke designation requirements.

Once the quarterly data submission period is closed, the Department generates summary tables showing key indicators for each hospital along with statewide statistics for further review and verification.

ANNUAL ACTIVITY

In the spring of each year, a validation report will be generated for the four quarters of data in the previous calendar year. A copy of the annual validation report will be sent to the respective hospitals' stroke coordinator for final verification, correction and certification.

Hospitals will have fifteen (15) business days to respond to this mailing. If a hospital's revised data are not received as requested, the Department will assume that there are no corrections to be made to the hospital's data.

After the data are closed for the year, corrections to the closed data will not be made without prior

approval by the Department. Any exceptions to this policy must be submitted in writing to the Director, Office of Health Care Quality Assessment. Accompanying this request should be any medical record documentation (if applicable) which may be reviewed by the Department's Stroke Advisory Panel. It is at the Department's discretion to accept or reject any request for a change on records after the database is closed.

AUDIT

The Department will review the annual data submission to ensure that all requested corrections are made and frequencies of data elements are consistent with statewide frequencies. Inconsistent data elements will be reviewed further with the facility to ensure correct reporting of data. The state reserves the right to have a sample of the hospital data reviewed by an independent auditor to validate the accuracy of data reported. In the event of such external review, the hospital will be required to provide all relevant documents to the auditor, correct discrepancies in data reporting, and send the data within 20 business days after the audit is completed.

THE STROKE SERVICES REPORT

The Department uses the final data to produce the Stroke Services Report. This report may include assess risk-adjusted outcome measures for each hospital and for selected population groups. The risk-adjusted outcome estimates will result from rigorous statistical models which take into account risk-factors of patients as well as their socio-demographic characteristics.

NJ Acute Stroke Registry	
Quarterly Activity	**Annual Activity**
Quarterly data submission due to the Department 45 days after close of quarter. Run validation reports, distribute to hospitals. Hospitals respond to validation report within 15 business days. Quarterly summary tables produced 60 days following end of quarter.	Run validation report; produce summary frequency tables; verify cases through data matching. Hospitals have 15 business days to respond to end of year validation reports and other inconsistencies identified. Database closed for analysis 90 days after end of year. Data analysis performed.

Notes: 1) Most data element definitions come from Paul Coverdell or from Manual for National Hospital Inpatient Quality Measures
2) * next to a field name indicates that the filed is added by the State.

WHAT SHOULD BE INLCUDED IN THE NJ ACUTE STROKE REGISTRY

Include:

- All patients admitted to the hospital with a new onset of Ischemic or Hemorrhagic stroke or TIA.
    - Additionally, enter all patients admitted to the hospital for treatment of new onset of Ischemic or Hemorrhagic stroke or TIA whose principle ICD code is non-stroke related. (For example, a patient presents to the hospital with concomitant AMI and stroke and may receive a principle ICD-10 code of AMI.)
- All patients who have an in-hospital stroke (patients who develop new onset of Ischemic or Hemorrhagic stroke or TIA during hospitalization).
- All patients who are evaluated and/or treated in the ED for new onset of Ischemic or Hemorrhagic stroke or TIA and are discharged from the ED.
    - This includes patients who:
        - Expire in the ED,
        - Leave against medical advice from the ED,
        - Discharged to home or other ambulatory setting from the ED,
        - Transferred to another acute care hospital from your ED.
- All patients who are discharged from observation status only (with no subsequent inpatient admission) for treatment of new onset of Ischemic or Hemorrhagic stroke or TIA.

Exclude:

- Patients <18 years of age.

DATA DEFINITIONS AND SPECIFICATIONS

(Note: Yellow Highlights indicate April 2019 and January 2020 updates)

A. DEMOGRAPHIC DATA

1. Hospital Type [HOSPTYPE]

Indicate hospital licensing designation. If hospital is not a licensed designated Stroke Center select "other."

1 = Primary
2 = Comprehensive
3 = Other

2. Hospital Code [HOSPNUM]

Indicate hospital code where stroke center services were provided. The assigned codes are consistent with Medicare provider numbers and are the same used in the New Jersey Hospital Discharge Data Collection System (See Appendix I for complete list of hospital codes).

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3. Transferred from [TXFROM]

Enter the hospital code the patient transferred from into your facility using the list provided in Appendix I. **Please note that the last digit refers to the hospital division code.** (See Appendix I for complete list of hospital codes). Enter 0000 if the patient did not transfer to your facility from another hospital.

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4. Medical Record [MEDRECNO]

Indicate the patient's medical record number.

_____ (Medical Record #)

5. Patient's Last Name [LNAME]

_____ Last Name

6. Patient's First Name [FNAME]

_____ First Name

7. Patient's Middle Initial [MI]

____ Middle Initial

8. Patient Date of Birth [DOB]

Indicate the month, day, and year of the patient's date of birth.

____/____/_____
MM/DD/YYYY

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

Notes for Abstraction:

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

Suggested Data Sources:

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

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

9. Patient Social Security Number [SSNUM]

Indicate the patient's social security number in the USA. For patients that have no social security number or are non-US residents, you may use 999-99-9999.

XXX – XX – XXXX (nine digits)

10. Patient Zip Code [ZIP]

Indicate the patient's five-digit zip code of residence. Use the hospital's zip code if the patient is transient/homeless.

__ __ __ __ __ (5-digit zip code)

11. Gender [Sex]

1 = Male
2 = Female
3 = Other/Unknown

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

Notes for Abstraction:

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

Suggested Data Sources:

- Consultation notes
- Emergency department record
- Face-sheet
- History and physical
- Nursing admission notes
- Progress notes

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

12. Race: Enter the patient's race as stated by the patient by selecting from 12a to 12f. **If multiple races are provided by the patient, select all that apply.**

12a. White **[RACEA]**	
12b. Black or African American **[RACEB]**	
12c. Asian **[RACEC]**	
12d. American Indian or Alaskan Native **[RACED]**	
12e. Native Hawaiian or Pacific Islander **[RACEE]**	
12f. Unknown or UTD (Unable to determine) or Unknown: **[RACEF]**	

Notes for Abstraction:

- The data element Hispanic Ethnicity is required in addition to this data element.
- If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select all that apply.
- Although the terms "Hispanic" and "Latino" are actually descriptions of the patient's ethnicity, it is not uncommon to find them referenced as race. If the patient's race is documented only as Hispanic/Latino, select "White." If the race is documented as mixed Hispanic/Latino with another race, use whatever race is given (e.g., Black-Hispanic – select "Black"). Other terms for Hispanic/Latino include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican-American, Puerto Rican, South or Central American, and Spanish.
- If unable to determine the patient's race or the patient's race is not stated (e.g., not documented, conflicting documentation or patient unwilling to provide), answer "Unknown or UTD" on 12f and leave 12a-12e blank.

Suggested Data Sources:

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

Inclusion Guidelines for Abstraction:

- Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as "Haitian" or "Negro" can be used in addition to "Black or African American".
- American Indian or Alaska Native: A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment (e.g., any recognized tribal entity in North and South America [including Central America], Native American).
- Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa (e.g., Caucasian, Iranian, White).
- Native Hawaiian or Pacific Islander: A person having origins in any of the other original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Exclusion Guidelines for Abstraction:
None

13. Hispanic or Latino Ethnicity [Hispanic]

1 = Yes (Hispanic ethnicity or Latino)
0 = No/UTD (Not Hispanic ethnicity or Latino or unable to determine from medical record documentation)

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

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

Inclusion Guidelines for Abstraction:
A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic or Latino."

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

Exclusion Guidelines for Abstraction:
None

14. Primary Payor [INSURER]

Indicate the **primary** insurer of the patient (See Appendix II for additional explanation of insurer classification).

1 = Blue Cross/Blue Shield
2 = Commercial
3 = HMO
4 = Medicaid
5 = Medicare
6 = Self Pay
7 = Tricare (CHAMPUS)
8 = Uninsured/Indigent
9 = Other

B. PRE-HOSPITAL/EMERGENCY MEDICAL SYSTEM (EMS) DATA

15. Where was the patient when the stroke was detected or when symptoms were discovered? [PlcOccur]

1 = Not in healthcare setting
2 = Another acute care facility
3 = Chronic health care facility
4 = Stroke occurred after hospital arrival (in ED/obs/inpatient)
5 = Outpatient health care setting
9 = ND or Cannot be determined

Notes:

- If the stroke occurred while the patient was at home and was admitted to an ED of another hospital and was subsequently transferred to your hospital- choose 1.
- If the patient was resident of a nursing home, but was out with family for the day and suffered a stroke - choose 1.
- If the patient suffered a stroke while a patient in the ED of another hospital or while an inpatient of another hospital and was transferred to your hospital – choose 2.
- If the patient was a resident of a nursing home, long-term care facility, inpatient rehab facility and the stroke occurred at one of these facilities –choose 3.
- An Assisted living facility should not be considered a chronic health care facility. If a resident of an assisted living facility, and the stroke occurred at the assisted living facility choose 1.
- If the patient has a stroke after hospital arrival or stroke occurred while ED patient, observation patient, in radiology suite, or inpatient – choose 4.
- Patients who have transient symptoms that are present on arrival to the ED **but resolve, and then later return** during the hospitalization and meet criteria for ischemic stroke should all be entered as inpatient strokes.

If Answer is 1, 2, 3, 5 or 9 on Item #15:

16. How did the patient get to your hospital for treatment of their stroke? [ArrMode]

Choose Emergency Medical Services (EMS) whenever the patient was brought to your hospital by EMS, whether by ground EMS or Air EMS. "Other" includes private transportation (e.g., cab, bus, car, walk-in, etc.). If a patient arrived via Mobile Stroke Unit, including if a patient is transferred to your facility via Mobile Stroke Unit, select "Mobile Stroke Unit." A Mobile Stroke Unit is a transport unit capable of diagnosing and treating acute strokes in the field. If contains highly specialized staff, imaging capabilities (CT scanner), mobile lab and the ability to administer IV alteplase.

1 = EMS from home or scene
2 = Private transportation/taxi/other
3 = Transferred from another hospital
10=Mobile Stroke Unit
9 = Not Documented or unknown

If patient arrived by EMS or Mobile Stroke Unit (i.e., is coded 1 or 10 Item # 16), then complete Items 17 through 21. If not, skip to Section C, Hospitalization.

17. Date call received by Emergency Medical System (EMS) or Mobile Stroke Unit [EMSRecD]

As recorded on the EMS trip sheet or other similar documentation.

____/____/_____
MM/ DD/YYYY

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

18. Date not documented: [EMSRecDND]

1 = Yes
0 = No

19. Time call received by EMS or Mobile Stroke Unit [EMSRecT]

As recorded on the EMS trip sheet or other similar documentation. This should be on a 24-hour time or military time.

__ __ : __ __
H H : M M

20. Time not documented: [EMSRecTND]

1 = Yes
0 = No

Notes for #17 - #20:
Date and time that the call first was received by the EMS dispatcher OR the date and time of the EMS vehicle dispatch as recorded on the EMS trip sheet or other documentation. This data element is looking to capture the data and time that EMS was first called to the scene of the stroke (and not meant to capture those patients that are transferred between hospitals via EMS). This should be on a 24-hour time or military time.

21. Was there EMS pre-notification to your hospital? [EMSNote]

1 = Yes
0 = No/ND

Whether EMS, whether a Traditional Responder or Mobile Stroke Unit, has notified the receiving hospital prior to arrival of a possible stroke patient. **Options include**: Yes: EMS notified the receiving hospital prior to arrival. No / Not Documented: EMS either did not pre-notify the receiving hospital or this was not documented.

Example: The stroke patient was picked up by the EMTs at 08:10. On their departure to the hospital at 08:20, they call the ED to inform them they are bringing in a potential stroke patient. They arrive at the ED at 08:30. The hospital was therefore pre-notified that a potential stroke patient was arriving.

This information can usually be found in the ED record, ED nursing notes, ED triage notes, ED physician notes, or EMS trip record.

C. HOSPITALIZATION

When reviewing ED records do NOT include any documentation from external sources (e.g., ambulance records, physician office records, laboratory reports) obtained prior to arrival. The intent is to utilize any documentation which reflects processes that occurred in the hospital ED or hospital.

If the patient is in an outpatient setting of the hospital (e.g., undergoing dialysis, chemotherapy, cardiac cath) and is subsequently admitted to the hospital, use the time the patient presents to the ED or arrives on the floor for inpatients care as arrival time. For "Direct Admits" to the hospital, use the earliest time the patient arrives at the hospital.

22. Date of Arrival at hospital/Emergency Department [EDTriagD]

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

____/____/_____
MM/ DD/YYYY

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

Notes for Abstraction:

- The medical record must be abstracted as documented (taken at "face value"). When the date documented is obviously in error (not a valid format/range or outside of the parameters of care [after the *Discharge Date*]) **and** no other documentation is found that provides this information, the abstractor should select "UTD."
  Examples:
  - Documentation indicates the *Arrival Date* was 03-**42**-20xx. No other documentation in the list of Only Acceptable Sources provides a valid date. Since the *Arrival Date* is outside of the range listed in the Allowable Values for "Day," it is not a valid date and the abstractor should select "UTD."
  - Patient expires on 02-12-20xx and all documentation within the Only Acceptable Sources indicates the *Arrival Date* was 03-12-20xx. Other documentation in the medical record supports the date of death as being accurate. Since the *Arrival Date* is after the *Discharge Date* (death), it is outside of the parameter of care and the abstractor should select "UTD."
- Review the Only Acceptable Sources to determine the earliest date the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. The intent is to utilize any documentation which reflects processes that occurred after arrival at the ED or after arrival to the nursing floor/observation/cath lab for a direct admit. • Documentation outside of the Only Acceptable Sources list should NOT be referenced (e.g., ambulance record, physician office record, H&P).
  Examples:
  - ED Triage Date/Time 03-22-20xx 2355. ED rhythm strip dated/timed 03-23-20xx 0030. EMS report indicates patient was receiving EMS care from

0005 through 0025 on 03-23-20xx. The EMS report is disregarded. Enter 03-22-20xx for *Arrival Date.*

- ED noted arrival time of 0100 on 04-14-20xx. Lab report shows blood culture collected at 2345 on 04-13-20xx. It is not clear that the blood culture was collected in the ED because the lab report does not specify it was collected in the ED (unable to confirm lab report as an Only Acceptable Source). Enter 04-14-20xx for *Arrival Date*.

- Arrival date should NOT be abstracted simply as the earliest date in one of the Only Acceptable Sources, without regard to other substantiating documentation. When looking at the Only Acceptable Sources, if the earliest date documented appears to be an obvious error, this date should not be abstracted.
  Examples:
  - ED arrival time noted as 0030 on 10-29-20xx. ED MAR shows an antibiotic administration time of 0100 on 10-28-20xx. Surrounding documentation on the ED MAR makes clear that the 10-28-20xx date is an obvious error - Date was not changed to 10-29-20xx. The antibiotic administration date/time would be converted to 0100 on 10-29-20xx. Enter 10-29-20xx for *Arrival Date.*
  - ED MAR shows an antibiotic administration time of 1430 on 11-03-20xx. All other dates in the ED record note 12-03-20xx. The antibiotic administration date of 11-03-20xx would not be used for *Arrival Date* because it is an obvious error.
  - ED ECG dated/timed as 05-07-20xx 2142. ED Greet Date/Time 05-08-20xx 0125. ED Triage Date/Time 05-08-20xx 0130. There is no documentation in the Only Acceptable Sources which suggests the 05-07-20xx is an obvious error. Enter 05-07-20xx for *Arrival Date.*
  - ED RN documents on a nursing triage note dated 04-24-20xx, "Blood culture collected at 2230." ED arrival time is documented as 0130 on 04-25-20xx. There is no documentation in the Only Acceptable Sources which suggests the 04-24-20xx is an obvious error. Enter 04-24-20xx for *Arrival Date.*
- The source "Emergency Department record" includes any documentation from the time period that the patient was an ED patient – e.g., ED face sheet, ED consent/Authorization for treatment forms, ED/Outpatient Registration/sign-in forms, ED vital sign record, ED triage record, ED physician orders, ED ECG reports, ED telemetry/rhythm strips, ED laboratory reports, ED x-ray reports.
- The source "Procedure notes" refers to procedures such as cardiac caths, endoscopies, and surgical procedures. Procedure notes do not include ECG and x-ray reports.
- The arrival date may differ from the admission date.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the date the patient arrived at the ED or on the floor for acute inpatient care as the arrival date.
- **Observation status**:
  - If the patient was admitted to observation from an outpatient setting of the hospital, use the date the patient arrived at the ED or on the floor for observation care as the arrival date.

- If the patient was admitted to observation from the ED of the hospital, use the date the patient arrived at the ED as the arrival date.

- **Direct Admits:**
  - If the patient is a "Direct Admit" to the cath lab, use the earliest date the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date.
  - For "Direct Admits" to acute inpatient or observation, use the earliest date the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival date.
- If the patient was transferred from your hospital's satellite/free-standing ED or from another hospital within your hospital's system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival date at the first facility.

Suggested Data Sources:

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

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
Addressographs/Stamps

23. Time of Arrival to Hospital/Emergency Department [EDTriagT]

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

__ __: __ __ (military time)
HH : MM

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

Time must be recorded in military time format.

With the exception of Midnight and Noon:
- If the time is in the a.m., conversion is not required
- If the time is in the p.m., add 12 to the clock time hour

Examples:
Midnight - 00:00 Noon - 12:00
5:31 am - 05:31 5:31 pm - 17:31
11:59 am - 11:59 11:59 pm - 23:59
Note:
00:00 = midnight. If the time is documented as 00:00 11-24-20xx, review supporting documentation to determine if the Arrival Date should remain 11-24-20xx or if it

should be converted to 11-25-20xx.
When converting Midnight or 24:00 to 00:00 do not forget to change the Arrival Date.
Example: Midnight or 24:00 on 11-24-20xx = 00:00 on 11-25-20xx

Notes for Abstraction:

- For times that include "seconds", remove the seconds and record the time as is.
  Example:
  - 15:00:35 would be recorded as 15:00
- The medical record must be abstracted as documented (taken at "face value"). When the time documented is obviously in error (not a valid format/range) and no other documentation is found that provides this information, the abstractor should select "UTD."
  Example:
  - Documentation indicates the Arrival Time was 3300. No other documentation in the list of Only Acceptable Sources provides a valid time. Since the Arrival Time is outside of the range in the Allowable Values for "Hour," it is not a valid time and the abstractor should select "UTD."
- Review the Only Acceptable Sources to determine the earliest time the patient arrived at the ED, nursing floor, or observation, or as a direct admit to the cath lab. The intent is to utilize any documentation which reflects processes that occurred after arrival at the ED or after arrival to the nursing floor/observation/cath lab for a direct admit.
- Documentation outside of the Only Acceptable Sources list should NOT be referenced (e.g., ambulance record, physician office record, H&P).
  Examples:
  - ED Triage Time 0800. ED rhythm strip 0830. EMS report indicates patient was receiving EMS care from 0805 through 0825. The EMS report is disregarded. Enter 0800 for Arrival Time.
  - ED noted arrival time of 0945. Lab report shows blood culture collected at 0830. It is not clear that the blood culture was collected in the ED because the lab report does not specify it was collected in the ED (unable to confirm lab report as an Only Acceptable Source). Enter 0945 for Arrival Time.
- Arrival time should NOT be abstracted simply as the earliest time in one of the Only Acceptable Sources, without regard to other substantiating documentation. When looking at the Only Acceptable Sources, if the earliest time documented appears to be an obvious error, this time should not be abstracted.
  Examples:
  - ED arrival time noted as 2300 on 10-28-20xx. ED MAR shows an antibiotic administration time of 0100 on 10-28-20xx. Surrounding documentation on the ED MAR makes clear that the 10-28-20xx date is an obvious error - Date was not changed to 10-29-20xx. The antibiotic administration date/time would be converted to 0100 on 10-29-20xx. Enter 2300 for Arrival Time.
  - ED face sheet lists arrival time of 13:20. ED Registration Time 13:25. ED Triage Time 13:30. ED consent to treat form has 1:17 time but "AM" is circled. ED record documentation suggests the 1:17 AM is an obvious error. Enter 13:20 for Arrival Time.
  - ED ECG timed as 1742. ED Greet Time 2125. ED Triage Time 2130.

There is no documentation in the Only Acceptable Sources which suggests the 1742 is an obvious error. Enter 1742 for Arrival Time.
    - ED RN documents on the nursing triage note, "Blood culture collected at 0730." ED arrival time is documented as 1030. There is no documentation in the Only Acceptable Sources which suggests the 0730 is an obvious error. Enter 0730 for Arrival Time.
- The source "Emergency Department record" includes any documentation from the time period that the patient was an ED patient – e.g., ED face sheet, ED consent/Authorization for treatment forms, ED/Outpatient Registration/sign-in forms, ED vital sign record, ED triage record, ED physician orders, ED ECG reports, ED telemetry/rhythm strips, ED laboratory reports, ED x-ray reports.
- The source "Procedure notes" refers to procedures such as cardiac caths, endoscopies, and surgical procedures. Procedure notes do not include ECG and x-ray reports.
- The arrival time may differ from the admission time.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the time the patient arrived at the ED or on the floor for acute inpatient care as the arrival time.
- Observation status:
    - If the patient was admitted to observation from an outpatient setting of the hospital, use the time the patient arrived at the ED or on the floor for observation care as the arrival time.
    - If the patient was admitted to observation from the ED of the hospital, use the time the patient arrived at the ED as the arrival time.
- Direct Admits:
    - If the patient is a "Direct Admit" to the cath lab, use the earliest time the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival time.
    - For "Direct Admits" to acute inpatient or observation, use the earliest time the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival time.
- If the patient was transferred from your hospital's satellite/free-standing ED or from another hospital within your hospital's system (as an inpatient or ED patient), and there is one medical record for the care provided at both facilities, use the arrival time at the first facility.

Suggested Data Sources:
ONLY ACCEPTABLE SOURCES:
- Emergency department record
- Nursing admission assessment/admitting note
- Observation record
- Procedure notes
- Vital signs graphic record

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
Addressographs/stamps

24. Hospital admission date [ADMDATE]

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

____/____/_____
MM/DD/YYYY

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

Notes for Abstraction:

- The intent of this data element is to determine the date that the patient was actually admitted to acute inpatient care. Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the admission date is correct. If the abstractor determines through chart review that the date from billing is incorrect, for purposes of abstraction, she/he should correct and override the downloaded value.
  If using claim information, the 'Statement Covers Period' is not synonymous with the 'Admission Date' and should not be used to abstract this data element. These are two distinctly different identifiers:
  - The Admission Date is purely the date the patient was admitted as an inpatient to the facility.
  - The Statement Covers Period ("From" and "Through" dates identifies the span of service dates included in a particular claim. The "From" Date is the earliest date of service on the claim.
- For patients who are admitted to observation status and subsequently admitted to acute inpatient care, abstract the date that the determination was made to admit to acute inpatient care and the order was written. Do not abstract the date that the patient was admitted to Observation.
  Example:
  Medical record documentation reflects that the patient was admitted to observation on 04-05-20xx. On 04-06-20xx the physician writes an order to admit to acute inpatient effective 04-05-20xx. The Admission Date would be abstracted as 04-06-20xx; the date the determination was made to admit to acute inpatient care and the order was written.
- If there are multiple inpatient orders, use the order that most accurately reflects the date that the patient was admitted. The admission date should not be abstracted from the earliest admission order without regards to substantiating documentation. If documentation suggests that the earliest admission order does not reflect the date the patient was admitted to inpatient care, this date should not be used.
  Example:
  Preoperative Orders are dated as 04-06-20xx with an order to admit to Inpatient. Postoperative Orders, dated 05-01-20xx, state to admit to acute inpatient. All other documentation supports that the patient presented to the hospital for surgery on 05-01-20xx. The admission date would be abstracted as 05-01-20xx.

Suggested Data Sources:
ONLY ALLOWABLE SOURCES
1. Physician orders – This is the priority data source for this data element
2. Face-Sheet
3. UB-04

Excluded Data Sources
UB-04 "From" and "Through" Dates

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
- Admit to observation
- Arrival date

25. In what area of your hospital was the patient first evaluated? [PlaceRcd]

1 = Emergency/Urgent Care
2 = Direct Admit (DA)
3 = Imaging suite prior to ED arrival or DA
9 = Cannot be determined

This question refers to route of patient arrival. Direct admit refers to type of admission that circumvents ED and might (but not always) include admissions from clinics/urgent care centers and transfers. Some hospitals may have a policy where EMS coordinates with the ED while en route to go directly to imaging prior to ED triage.

26. Was the patient admitted to your hospital? [EDAdm]

1 = Yes
0 = No, Not Admitted

27. If patient was Not Admitted to your hospital, select the reason why the patient was not admitted: [NonAdm]

1 = Patient was transferred from your ED to another acute care hospital
2 = Patient was discharged directly from ED to home or other location other than an acute hospital
3 = Patient left ED AMA
4 = Patient died while in ED
5 = Discharged from observation status without being admitted to the hospital
6 = Other

28. What was the presumptive hospital admission diagnosis at the time of admission? (select only one) [PreDx]

1 = Intracerebral Hemorrhage

2 = Transient Ischemic Attack
3 = Subarachnoid Hemorrhage
4 = Stroke not otherwise specified
5 = Ischemic Stroke
6 = No stroke related Diagnosis

The presumptive hospital admission diagnosis tries to identify the diagnosis at the time of hospital admission. It applies to transfer diagnosis, direct admission diagnosis or ED discharge/hospital admission diagnosis. In prospective case identification, if someone has a presumed diagnosis of migraine on admission, and 24 hours later is determined to have had an ischemic stroke, the presumed admission diagnosis is "No stroke related diagnosis," while the final hospital diagnosis would be "Ischemic Stroke."

Preferred order of documents to abstract from is as follows:

1. Code Stroke Sheet
2. ED physician note
3. History and Physical (H&P) (**presumptive diagnosis only**)
4. Face Sheet.

29. Did symptoms completely resolve prior to presentation? [Sxresolv]

1 = Yes
0 = No
9 = ND

Initial Findings:

30. Weakness/Paresis [Weakness]

1 = Yes
0 = No/ND

31. Altered level of consciousness [AltLOC]

1 = Yes
0 = No/ND

32. Aphasia [Aphasia]

1 = Yes
0 = No/ND

Initial Blood Pressure:

33. If patient received IV alteplase, what was the first systolic blood pressure [AdmsysBP]

_____ mmHg

Enter the first value obtained after arrival to this hospital or after discovery of stroke for inpatient stroke.

34. If patient received IV alteplase, what was the first diastolic blood pressure [AdmdiaBP]

_____ mmHg

Enter the first value obtained after arrival to this hospital or after discovery of stroke for inpatient stroke.

Initial Blood Glucose

35. If patient received IV alteplase, what was the first blood glucose? [AdmGlucose]

_____ mg/dL

Enter the first value obtained after arrival to this hospital. Do not enter pre-hospital glucose unless supplemental glucose was given in the field, then it is acceptable to use the glucose obtained in the field prior to supplemental glucose if available.

Prescription medications currently taking prior to admission:

36. Antiplatelet medication [AntPlAdmYN]

1 = Yes
0 = No/ND

Notes for Abstraction:

- If documentation in the medical record indicates that antiplatelet medication has been prescribed but patient has not filled the prescription, has not taken in the past week or is otherwise noncompliant, answer "No" to this field.

37. Anticoagulation medication [AntiCoagAdmYN]

1 = Yes
0 = No/ND

Notes for Abstraction:

- If documentation in the medical record indicates that anticoagulant medication has been prescribed but patient has not filled the prescription, has not taken in the past week or is otherwise noncompliant, answer "No" to this field.

38. Antihypertensive medication [HBPAdmYN]

1 = Yes
0 = No/ND

Notes for Abstraction:

- If documentation in the medical record indicates that antihypertensive medication has been prescribed but patient has not filled the prescription, has

not taken in the past week or is otherwise noncompliant, answer "No" to this field.

39. Cholesterol reducing medication [LipAdmYN]

1 = Yes
0 = No/ND

Notes for Abstraction:

- If there is documentation that the patient was on a lipid-lowering medication at home but there is indication it was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost), select "Yes".
- When conflicting information is documented in a medical record, select "Yes".

40. Antihyperglycemic medication [DMAdmYN]

1 = Yes
0 = No/ND

Notes for Abstraction:

- If documentation in the medical record indicates that diabetic medication has been prescribed but patient has not filled the prescription, has not taken in the past week or is otherwise noncompliant, answer "No" to this field.

41. Was patient ambulatory prior to current stroke/TIA [AmbStatA]

1 = Able to ambulate independently with or without device
2 = Assistance from another person
3 = Unable to ambulate (non-ambulatory)
9 = Not documented

Notes for Abstraction:

- Able to ambulate independently: Patient is ambulating without assistance (no help from another person) with or without a device. The use of a device, such as a cane, still meets this definition. Patient ambulating to and from the bathroom unassisted.
- With assistance (from person): Patient ambulating with assistance of another person.
- Unable to ambulate: Patient is on bed rest. Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile) at discharge
- ND: If it is unable to determine from documentation

D. IMAGING

42. Was brain imaging performed at your hospital after arrival as part of the initial evaluation of this episode of care or this event? [ImageYN]

This question applies to initial brain image for this event. If patient did not receive any brain imaging at this hospital/facility or at an outside facility, then you should answer "No." Use the first brain imaging performed after discovery of stroke for inpatient stroke.

1 = Yes
0 = No/ND
2 = NC – if outside imaging performed subsequent to onset of current symptom or prior to transfer or patient is DNR/CMO

If "Yes", to question #42, answer numbers 43 – 50 below.

43. Date of initial brain imaging [ImageD]

Enter date stamped on initial brain CT/MRI performed at your institution. Record only CT/MRI date the first study was performed at your hospital. **Please note: If the first brain image is done at an outside hospital, i.e., you answered 'NC' or '2' on number 42, skip this field and respond to field 44.** If date is not available, leave this field blank.

____/____/_____
MM/DD/YYYY

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

44. Date of initial brain imaging not documented or unknown [ImageDND]

1 = Yes
0 = No

45. Time of initial brain imaging (military time) [ImageT]

Enter time stamped on initial brain CT/MRI performed at your institution. Record only CT/MRI time the first study was performed at your hospital. **Please note: If the first brain image is done at an outside hospital, i.e., you answered 'NC' on number 42, skip this field and respond to field 46.** If time is not available, leave this field blank

__ __ : __ __
H H : M M

46. Time of initial brain imaging not documented or unknown [ImagTND]

1 = Yes
0 = No

47. Initial brain imaging findings? [ImageRes]

It is important that only new hemorrhages thought to be responsible for the current event should be used if checking hemorrhage. Do not mark hemorrhage for old hemorrhages found on imaging, which are not responsible for the current event.

1 = Hemorrhage
0 = No hemorrhage
9 = N/D or Not available

48. Date of Brain Imaging Results/Findings [ImagResD]

The earliest documented date of image reading. Please note: If the first brain image is done at an outside hospital, i.e., you answered "NC" or "2" on number 42, skip this field and respond to field 49.

____/____/____
MM/DD/YYYY

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

49. Date of initial brain image findings not documented or unknown: [ImagResDND]

1 = Yes
0 = No

50. Time of Brain Imaging Results/Findings (military time) [ImagResT]

Please record the earliest documented time of initial brain imaging findings. Please note: If the first brain image is done at an outside hospital, i.e., you answered "NC" or "2" on number 42, skip this field and respond to field 51.

__ __ : __ __
H H : M M

51. Time of initial brain image findings not documented or unknown: [ImagResTND]

1 = Yes
0 = No

E. SYMPTOM TIMELINE

If a stroke "onset time" is listed in the medical record, without reference to the circumstances preceding its detection, then it should be assumed to be the time "last known well" (#52 and #54). Enter this time in the specified format. If there is a specific reference to the patient having been discovered with symptoms already present, then this time should be treated as a "time of symptom discovery" (#56 and #58) rather than a time of "last known well."

52. Patient Last Known Well Date [LKWD]

When was the date patient last known to be well (i.e., in their usual state of health or at their baseline), prior to the beginning of the current stroke-like symptoms? If a stroke "onset time" is listed in the medical record, without reference to the circumstances preceding its detection, then it should be assumed to be the time "last known well."

____/____/_____
MM/DD/YYYY

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

Notes for Abstraction:

- When an actual date is not documented but there is reference to the date described in the medical record (e.g., today, tonight, this evening, and this morning), assume that the Date Last Known Well is the same as the date for that timeframe preceding hospital arrival. The Date Last Known Well and the Arrival Date may be the same date or a different date.
  Examples:
  - "Wife reports patient normal this evening. Hospital arrival is 0030 on 12-10-20xx." Date Last Known Well is 12-09-20xx.o "Patient states he felt perfectly fine earlier today. Arrives at hospital 3:59 PM on 12-10-20xx." Date Last Known Well is 12-10-20xx.
- If there are multiple dates of last known well documented, use the date recorded according to the following hierarchy:
  1. Neurology
  2. Admitting physician
  3. Emergency department physician
  4. ED nursing notes
  5. EMS
- If multiple dates last known well are documented by the same provider, use the earliest date recorded by that provider.

Suggested Data Sources:

- Ambulance record
- Emergency Department records
- History and Physical
- IV flow sheets

- Medication administration record
- Nursing flow sheets
- Progress notes
- Transfer sheet

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

53. Date last known well is unknown/not documented/UTD: [LKWDND]

1 = Yes
0 = No

54. Patient Last Known Well Time (military time) [LKWT]
Enter this time in the specified format.

__ __ : __ __
H H : M M

If there is a specific reference to the patient having been discovered with symptoms already present, then this time should be treated as "time of symptom discovery" rather than a time of "last known well."

When the onset of symptoms is clearly witnessed, then the time "last known well" is identical to the time of symptom discovery.

Notes for Abstraction:
- If the time last known well is documented as being a specific number of hours prior to arrival (e.g., felt left side go numb 2 hours ago) rather than a specific time, subtract that number from the time of ED arrival and enter that time as the time last known well.
- If the time last known well is noted to be a range of time prior to ED arrival (e.g., felt left side go numb 2-3 hours ago), assume the maximum time from the range (e.g., 3 hours), and subtract that number of hours from the time of arrival to compute the time last known well.
- If there are multiple times of last known well documented, use the time recorded according to the following hierarchy:
  1. Neurology
  2. Admitting physician
  3. Emergency department physician
  4. ED nursing notes
  5. EMS
- If multiple times of last known well are documented by the same provider, use the earliest time recorded by that provider.

Suggested Data Sources:

- Ambulance record
- Emergency department records
- History and physical
- IV flow sheets
- Medication administration record
- Nursing flow sheets
- Progress Notes
- Transfer sheet

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

55. Time last known well is unknown/not documented: [LKWTND]

1 = Yes
0 = No

When was the patient first discovered to have the current stroke or stroke-like symptoms?

56. Date patient was discovered with symptoms [DiscD]

___/___/_____
MM/DD/YYYY

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

If discovery date is unknown or not documented,

57. Date patient was discovered with symptoms was unknown/not documented: [DiscDND]

1 = Yes
0 = No

58. Time the patient was first discovered to have the current stroke or stroke-like symptoms [DiscT]

__ __ : __ __ (in Military Time)
H H : M M

If discovery time is unknown or not documented,

59. Discovery time unknown/not documented: [DiscTND]

1 = Yes
0 = No

60. Was NIH Stroke Scale performed as part of the initial evaluation of the patient? [NIHStrkSP]

1 = Yes
0 = No/ND

61. If NIH Stroke Score was performed, what was the first NIH Stroke Scale total score recorded by your hospital personnel? [NIHStrkS]

__ __ (enter score: 00 – 42)

Note: NIHSS can be recorded by either a doctor or a member of the "stroke team" (including a Physician Assistant (PA) or a Registered Nurse (RN).

Notes:

- If IV alteplase or endovascular procedure performed, enter the NIHSS performed prior to treatment with IV alteplase or endovascular procedure. For those who do not receive acute treatment you may report NIHSS performed within 48 hours.

- For inpatient strokes enter NIHSS only if performed after discovery of stroke in the hospital or new onset of symptoms in the hospital.

F. THROMBOLYTIC TREATMENT

62. Was IV alteplase initiated for this patient at this hospital? [TrmIVM]

Do not include thrombolytic therapy for indications other than ischemic stroke. That is, do not include intra-cerebral venous infusion for cerebral venous thrombosis, intraventricular infusion for intraventricular hemorrhage, intraprenchymal infusion for percutaneous aspiration of intracerebral hematoma, myocardial infarction, PE, or peripheral clot.

If documented reasons exist for not giving IV thrombolytic therapy at this hospital, then complete section G after finishing the remaining questions in Section F.

1 = Yes
0 = No

Notes for Abstraction:

- When a "hang time" or "infusion time" for IV thrombolytic is documented in the medical record, select "Yes".
- If IV thrombolytic therapy was administered at another hospital and patient was subsequently transferred to this hospital, select "No".
- If the patient was transferred to this hospital with IV thrombolytic infusing, select "No".
  If IV alteplase is started but is stopped before full dose is administered still select "yes."

Suggested Data Sources:

- Emergency room records
- Medication records
- Progress notes

Inclusion Guidelines for Abstraction:
Only Acceptable Thrombolytic Therapy for Stroke:

- Activase
- Alteplase
- IV alteplase
- Recombinant alteplase tissue plasminogen activator

Exclusion Guidelines for Abstraction:
Intra-arterial (IA) alteplase

If IV alteplase was initiated at this hospital or ED, answer field #s 63 - 66:

63. Date IV alteplase administered [TrmIVMD]

____/____/_____
MM/DD/YYYY

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

If date IV alteplase administered is unknown or not documented,

64. Date not documented or unknown [TrmIVMDND]

1 = Yes
0 = No

65. Time IV alteplase administered (military time) [TrmIVMT]
Record the time of the initial bolus of alteplase or the initiation of infusion if no bolus is given.

__ __ : __ __ **(in Military Time)**
H H : M M

If time IV alteplase administered is unknown or not documented,

Notes for Abstraction:

- Use the time at which initiation of the IV thrombolytic was first documented. If a discrepancy exists in time documentation from different sources, choose nursing documentation first before other sources. If multiple times are documented by the same individual, use the earliest time recorded by that person.
- The use of "hang time" or "infusion time" is acceptable as IV thrombolytic initiation time when other documentation cannot be found.
- IV thrombolytic initiation time refers to the time the thrombolytic bolus/infusion was started.
- Do not use physician orders unless there is documentation with the order that it was administered.
- If the time of IV thrombolytic initiation is unable to be determined from medical record documentation, select "1=Yes" for field 66.

Suggested Data Sources:

- Emergency department record
- IV flow sheets
- Medication administration record
- Nursing flow sheets
- Progress Notes

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

If patient received IV alteplase in the ED in your hospital and was then transferred from your ED (without hospital admission) to another acute care hospital, this instance of providing IV alteplase by your hospital must be recorded by your hospital even though the patient may not have been formally admitted to your hospital. If the patient was an instance of "drip and ship" IV alteplase in this hospital, you may skip the remaining questions after section F Thrombolytic Treatment and section G (Non-Treatment with Thrombolytics) and complete section K Discharge Data.

66. Time not documented or unknown [TrmIVMTND]

1 = Yes
0 = No

67. IV alteplase at an outside hospital or Mobile Stroke Unit [TrmIVT]

1 = Yes
0 = No

THE FOLLOWING INSTRUCTION APPLIES TO Fields 68 – 72 ONLY:

- #68 is looking to capture IA catheter-based treatment for acute ischemic stroke only. Do not select "Yes" for patients that underwent carotid revascularization for secondary prevention and/or those that had a purely diagnostic angio or elective stenting.
- IA catheter-based reperfusion therapy includes all uses of IA thrombolytic therapy, even if used in conjunction with mechanical devices such as "Clot retrieval devices."
- Mechanical devices may be used alone or in conjunction with IA thrombolytic therapy.
- The start time for IA catheter-based reperfusion therapy should be either the date and time on the angio showing evidence of treatment, or the start time of the infusion if the angiogram time is not available.
- Mark #74 (TrmExp) 'Yes' if medical records suggest that some kind of investigational thrombolytic protocol was used during provision of care.
- If #74 (TrmExp) is checked 'Yes', then specify the type of **investigational/ experimental thrombolysis** on #75 (ExpType). Do not provide the type on #75 unless TrmExp = 'Yes' on #74.
    - Note: Text field is to describe the nature of the experimental protocol described in <TrmExp>. If investigational or experimental protocol was used, there should be a signed IRB consent in the medical record.

68. IA catheter-based reperfusion at this hospital? [TrmIAM]

1 = Yes
0 = No

Notes for Abstraction:

- If catheter-based treatment for planned therapeutic intervention is initiated, but there is no visualized occlusion, then select "No".
- If IA thrombolytic therapy is given regionally (remote from clot due to an inability to access the clot) select "Yes".

If yes on number 68, answer fields 69 – 72

69. Date IA catheter-based reperfusion [TrmIAMD]

____/____/_____
MM/DD/YYYY

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

If IA catheter-based reperfusion date is unknown or not documented,

70. Date not documented or unknown: [TrmIAMDND]

1 = Yes
0 = No

71. Time IA catheter-based reperfusion (military time) [TrmIAMT]

__ __ : __ __
H H : M M

If IA catheter-based reperfusion time is unknown or not documented,

72. Time not documented or unknown: [TrmIAMTND]

1 = Yes
0 = No

73. IA catheter-based reperfusion at outside hospital [TrmIAT]

1 = Yes
0 = No

74. Investigational or experimental protocol for thrombolysis [TrmExp]

1 = Yes
0 = No

Note: There must be IRB signed consent in the medical record.

75. If yes to number 74, please specify below investigational/experimental thrombolysis: [ExpType]

Further Notes for #74:

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures
Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. AMI, CAC, HF, PN, SCIP, STK, VTE).

> Yes [There is documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. AMI, CAC, HF, PN, SCIP, STK, VTE).]
>
> No [There is no documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. AMI, CAC, HF, PN, SCIP, STK, VTE), or unable to determine from medical record documentation.]

Notes for Abstraction:

To select "Yes" to this data element, BOTH of the following must be true:

1. **There must be a signed consent form for clinical trial**. For the purposes of abstraction, a clinical trial is defined as an **experimental study** in which research subjects are recruited and assigned a treatment/intervention and their outcomes are measured based on the intervention received. Treatments/interventions most often include use of drugs, surgical procedures, and devices. Often a control group is used to compare with the treatment/intervention. Allocation of different interventions to participants is usually randomized.

2. **There must be documentation on the signed consent form that during this hospital stay the patient was enrolled in a clinical trial in which patients with the same condition as the measure set were being studied (i.e. AMI, CAC, HF, PN, SCIP, STK, VTE).** Patients may either be newly enrolled in a clinical trial during the hospital stay or enrolled in a clinical trial prior to arrival and continued active participation in that clinical trial during this hospital stay.

In the following situations, select "No":

1. **There is a signed patient consent form for an observational study only**. Observational studies are non-experimental and involve no intervention (e.g., registries). Individuals are observed (perhaps with lab draws, interviews, etc.), data is collected, and outcomes are tracked by investigators. Although observational studies may include the assessment of the effects of an intervention, the study participants are not allocated into intervention or control groups.

2. **It is not clear whether the study described in the signed patient consent form is experimental or observational**.

3. **It is not clear which study population the clinical trial is enrolling**. Assumptions should not be made if it is not specified.

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

Suggested Data Sources:

Only acceptable data sources
Signed consent form for clinical trial

Inclusion Guidelines for Abstraction
None

Exclusion Guidelines for Abstraction:
None

76. Other investigative therapy for ischemic or hemorrhagic stroke [Othtrial]

For ischemic or hemorrhagic stroke determined by documentation of an IRB-approved study as indicated by the presence of an informed consent form or a physician note that the patient is entering a therapeutic stroke study. Includes but not limited to studies involving neuroprotectants, perfusion augmentation, surgery or the use of lysis in intracerebral hemorrhage. **Exclude studies of thrombolysis for ischemic stroke reported in item number 74.**

1 = Yes
0 = No

77. Complications from Reperfusion Therapy (Thrombolytic or MER) [ThrmCmp]

0 = None
1 = Symptomatic ICH within 36 hours (< 36 hours)
2 = Life-threatening, serious systemic hemorrhage within 36 hours
3 = Other serious complications;
9 = Unknown/Unable to Determine

Notes:

- None = No serious complications

- Symptomatic ICH within 36 hours = CT hemorrhage shows intracranial bleed AND physician's notes indicate clinical deterioration due to hemorrhage. Indicate if hemorrhagic complications occurred as a result of IV alteplase administration within 36 hours from the time of alteplase bolus or a complication as a result of catheter based (IA) reperfusion with mechanical thrombolysis or clot retrieval procedures (Merci or Penumbra).

- Life threatening, serious systemic hemorrhage within 36 hours of thrombolytic therapy or MER: Serious systemic hemorrhage is defined by bleeding within 36 hours of thrombolytic therapy or MER and > 3 transfused units of blood within 7 days of discharge (whichever is earlier) AND physician note attributing bleeding problem as reason for transfusion.

  - Example: The patient received intravenous alteplase in the ED on 07/01/09. The following day the patient developed a sudden headache and decreased level of consciousness. A head CT was performed which showed a large intracerebral hemorrhage.

- Other Serious Complications: Additional medical intervention or prolonged LOS. Serious complications include those that are unexpected or out of proportion to the patient's expected course and documented as complications of reperfusion therapy.

- Unknown/Unable to Determine: If cannot determine from medical record documentation or no tPA given, then select Unknown.

- **If ALL #62 [TrmIVM], #67 [TrmIVT], #68 [TrmlAM] and #73 [TrmlAT] ARE ANSWERED "No", skip this element.**

78. Were there bleeding complications in a patient transferred after IV alteplase? [ThrmCmpTX]

1 = Yes & detected prior to transfer
2 = Yes but detected after transfer
3 = UTD
9 = Not applicable: Patient was not transferred or did not receive IV alteplase prior to transfer

Notes for Abstraction:

- Bleeding complication is defined as a Symptomatic ICH or a life threatening, serious systemic hemorrhage within 36 hours of alteplase

  - Symptomatic ICH within 36 hours of alteplase = CT hemorrhage shows intracranial bleed AND physician's notes indicate clinical deterioration due to hemorrhage.
  - Life threatening, serious systemic hemorrhage within 36 hours of alteplase: Serious systemic hemorrhage is defined by bleeding within 36 hours of IV alteplase and > 3 transfused units of blood within 7 days or discharge (whichever is earlier) AND physician note attributing bleeding problem as reason for transfusion.

G. NON-TREATMENT WITH THROMBOLYTICS

For fields #79 and #80, it is not expected that in routine situations the physician will explicitly identify which contraindication(s) and/or warning(s) were relevant to the 0-3 or 3-4.5 hour window. Most likely, this will only be documented when different reasons were relevant to the decision for the two time windows. If contraindication(s) and/or warning(s) for non-treatment are documented for the 0-3 hour treatment window, it is acceptable to assume the same reason(s) for non-treatment to be valid for the 3-4.5 hour window unless documentation in the medical record indicates the patients clinical condition changed. In these situations, there must be specific documentation around the reason for non-treatment in the 3-4.5 hour window.

79. Are there documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV thrombolytic in the 0-3hr treatment window: [ContrWarn]

1 = Yes
0 = No

If Yes: select from 0 – 3 hour listed items below:

Yes: There is documentation of a reason for not initiating IV thrombolytic.

No: There is no documentation of a reason for not initiating IV thrombolytic, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- Reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist with three exceptions: Patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital. These three exceptions may be documented by a nurse. Reason documentation must refer to the timeframe for thrombolytic therapy.

- If reasons are not mentioned in the context of IV thrombolytics, do not make inferences (e.g., do not assume that IV thrombolytic was not initiated because of a bleeding disorder unless documentation explicitly states so).

- Documentation of the initiation of IV or IA thrombolytic at a transferring hospital is a stand-alone reason and sufficient to meet the intent of this data element, even if IV alteplase was started at an outside hospital, and infusion continued after patient arrives at your facility. No further documentation of it as the reason for not initiating IV alteplase at this hospital is needed.

- Do not document evidence from outside the physician, or nurse notes that played a factor in the decision-making process for not giving thrombolytic therapy. EXCEPTION: If your hospital uses telemedicine in assessing stroke patients, it is acceptable to select reasons specified by the teleneurologist when reasons are documented in the medical record. In these cases, it is acceptable for the documentation to be done by a nurse.

- It is permissible to abstract reasons for non-treatment from the medical record that are documented after the IV alteplase treatment decision has been made as long as the documentation is made prior to patient discharge (addendums cannot be made after discharge). Documented reason must refer to the timeframe for thrombolytic therapy.

- "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 the clinician could not verify the patient's eligibility for treatment. The most common reason for this is that the time of onset could not be clearly established at the time of patient assessment in the ED. It can also arise when the timing of a recent procedure or surgery could not be definitely established, or time of last known well (LKW) is unknown. If unable to determine the time last known well, please select "unknown" for the time last known well field.

- If the patient is on anticoagulants (Warfarin, Coumadin) and this is documented as the reason for not administering IV thrombolytics, and the PT, PTT, or INR is elevated, select Exclusion Criteria "Acute bleeding diathesis".

- Conditions that increase the risk of bleeding or decrease the benefit of treatment to the individual patient must be explicitly listed in the medical record and documented as being the reason that thrombolytics were not used. Conditions may include: Acute pericarditis, SBE (spontaneous bacterial endocarditis), Hemostatic defects, Diabetic hemorrhagic retinopathy, Septic thrombophlebitis, occluded AV cannula, or patient is currently receiving oral anticoagulants (e.g., Warfarin, therapeutic dose of dabigatran (Pradaxa).

- Advanced age alone is no longer considered a sufficient reason for not providing alteplase in the 0-3 hour window. There is sufficient evidence from subgroup analysis of the randomized trials to conclude that beneficial effects of alteplase are seen in advanced age when patients are treated with 0-3 hours, and the Scientific Rationale for the Inclusion and Exclusion Criteria for Intravenous Alteplase in Acute Ischemic Stroke: A Statement for Healthcare Professionals from the American Heart Association/American Stroke Association recommends treatment of elderly ischemic stroke patients who meet other criteria, without restriction by age. There is no specific upper age limit on the use of IV alteplase. However, the prevalence of other exclusions or relative exclusions to treatment (e.g. other illnesses that reduce life expectancy to <1 year) may be higher in patients with very advanced age, reducing the number of elderly patients who may be eligible for alteplase treatment. For patients at 3-4.5 hours, age >80 remains a relative exclusion because such patients were not included in the randomized controlled trial.

- Select "Life expectancy < 1 year or severe co-morbid illness or CMO on admission" if the patient has an order for Comfort Measures Only in the ED and this restriction of care preceded evaluation for IV alteplase. This option is also appropriate when patients are not treated due to coexisting terminal cancer, advanced dementia, severe cardiopulmonary disease or other conditions which severely limit quality of life or life expectancy. Limited life expectancy, severe

co-morbid conditions, and CMO status all need to be explicitly documented as the reason for no IV alteplase. Do not make inferences.

- If documentation indicates a National Institute of Health Stroke Scale (NIHSS) score of zero, select "Yes" to *Documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV* thrombolytic and chooe Relative Exclusion Criteria "Stroke severity too mild (non-disabling)" under Relative Exclusions (Warnings). Score documentation must refer to the timeframe for thrombolytic therapy. If documentation indicates as NIHSS score of zero, then this may be considered the equivalent of documentation that the stroke was too mild and an explicit statement linking this as the reason for non-treatment is not required.

- Select "Stroke severity too mild (non-disabling) when there is minimal to no disability associated with the stroke symptoms (e.g. numbness, mild weakness, lack of gait impairment). Note that there is no lower limit to NIHSS score that prohibits the use of IV alteplase.

- If the physician documents "no IV alteplase due to low NIHSS or NIHSS = 3," then this would appropriately be categorized as stroke severity too mild.

Exclusions (Contraindications) & Relative Exclusions (Warnings) for not initiating IV thrombolytic in the 0-3 hour window				
Item	**Variable name**	**Text Prompt**		**Legal Values**
Exclusions (Contraindications)				
81	NonTrtBl	Active internal bleeding		1=Yes 0=No
82	NonTrtCT,	CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)		1=Yes 0=No
83	NonTrtHxHem	History of previous intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation or aneurysm		1=Yes 0=No
84	NonTrtPlat	Acute bleeding diathesis (low platelet count, increased PTT, INR ≥1.7 or use of NOAC). This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)		1=Yes 0= No
85	NonTrtTr	Recent intracranial or spinal surgery, significant head trauma or stroke in previous 3 months		1=Yes 0=No
87	NonTrtBP	Elevated blood pressure (systolic >185mmHg or diastolic >110 mmHg) despite treatment		1 = Yes 0 = No
89	NonTrtSuHem	Symptoms may suggest subarachnoid hemorrhage		1=Yes 0=No
89a	NonTrtAP	Arterial puncture at noncompressible site in previous 7 days		1=Yes 0=No
92	NonTrtG	Blood glucose concentration <50 mg/dL (2.7 mmol/L)		1=Yes 0=No

Relative Exclusions (Warnings): conditions that might lead to unfavorable outcomes:				
91	NonTrtNC	Care team unable to determine eligibility		1 = Yes 0 = No
94	NonTrtOH	IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival		1 = Yes 0 = No
96	NonTrtIL	Life expectancy < 1 year or severe co-morbid illness or CMO on admission		1 = Yes 0 = No
97	NonTrtMI	Recent acute myocardial infarction (within previous 3 months)		1 = Yes 0 = No
98	NonTrtPreg	Pregnancy		1 = Yes 0 = No
99	NonTrtFr	Patient/family refused		1 = Yes 0 = No
100	NonTrtSM	Stroke severity too mild (non-disabling)		1 = Yes 0 = No
88	NonTrtS	Seizure at onset with postictal residual neurological impairments		1 = Yes 0 = No
86	NonTrtSurg	Major surgery or serious trauma within previous 14 days		1 = Yes 0 = No
102a	NonTrtRecHem	Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)		1 = Yes 0 = No

Item	Variable name	Text Prompt		Legal Values
Hospital-Related or Other Factors:				
102	NonTrtRI	Rapid or Early Improvement		1=Yes 0=No
103	NonTrtA	Delay in patient arrival		1 = Yes 0 = No
104	NonTrtDDx	Delay in stroke diagnosis		1 = Yes 0 = No
105	NonTrtTD	In-hospital Time Delay, In-hospital Time Delay2		1 = Yes 0 = No
106	NonTrtIV	No IV access		1 = Yes 0 = No
107	NonTrtOt	Other (specify)		Total 25 characters

80. Are there documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV Thrombolytic in the 3 – 4.5 hr treatment window: [ContraWarn2]

1 = Yes
0 = No

If Yes: select from 3 – 4.5 hour items listed below.

Yes: There is documentation of a reason for not initiating IV thrombolytic.
No: There is no documentation of a reason for not initiating IV thrombolytic, OR unable to determine from the medical record documentation.

Notes for Abstraction:

- Reasons for not initiating IV thrombolytic therapy must be documented by a physician/APN/PA or pharmacist with three exceptions: Patient/family refusal, NIHSS score of zero, and initiation of IV or IA thrombolytic at a transferring hospital. These three exceptions may be documented by a nurse. Reason documentation must refer to the timeframe for thrombolytic therapy.

- If reasons are not mentioned in the context of IV thrombolytics, do not make inferences (e.g., do not assume that IV thrombolytic was not initiated because of a bleeding disorder unless documentation explicitly states so).

- Documentation of the initiation of IV or IA thrombolytic at a transferring hospital is a stand-alone reason and sufficient to meet the intent of this data element, even if IV alteplase was started at an outside hospital, and infusion continued after patient arrives at your facility. No further documentation of it as the reason for not initiating IV alteplase at this hospital is needed.

- Do not document evidence from outside the physician, or nurse notes that played a factor in the decision-making process for not giving thrombolytic therapy. EXCEPTION: If your hospital uses telemedicine in assessing stroke patients, it is acceptable to select reasons specified by the teleneurologist when reasons are documented in the medical record. In these cases, it is acceptable for the documentation to be done by a nurse.

- It is permissible to abstract reasons for non-treatment from the medical record that are documented after the IV alteplase treatment decision has been made as long as the documentation is made prior to patient discharge (addendums cannot be made after discharge). Documented reason must refer to the timeframe for thrombolytic therapy

- "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 the clinician could not verify the patient's eligibility for treatment. The most common reason for this is that the time of onset could not be clearly established at the time of patient assessment in the ED. It can also arise when the timing of a recent procedure or surgery could not be definitely established, or time of last known well (LKW) is unknown. If unable to determine the time last known well, please select "unknown" for the time last known well field.

- If the patient is on anticoagulants (Warfarin, Coumadin) and this is documented as the reason for not administering IV thrombolytics, and the PT, PTT, or INR is elevated, select Exclusion Criteria "Acute bleeding diathesis".

- Conditions that increase the risk of bleeding or decrease the benefit of treatment to the individual patient must be explicitly listed in the medical record and documented as being the reason that thrombolytics were not used. Conditions may include: Acute pericarditis, SBE (spontaneous bacterial endocarditis), Hemostatic defects, Diabetic hemorrhagic retinopathy, Septic thrombophlebitis, occluded AV cannula, or patient is currently receiving oral anticoagulants (e.g., Warfarin, therapeutic dose of dabigatran (Pradaxa).

- Advanced age alone is no longer considered a sufficient reason for not providing alteplase in the 0-3 hour window. There is sufficient evidence from subgroup analysis of the randomized trials to conclude that beneficial effects of alteplase are seen in advanced age when patients are treated with 0-3 hours, and the Scientific Rationale for the Inclusion and Exclusion Criteria for Intravenous Alteplase in Acute Ischemic Stroke: A Statement for Healthcare Professionals from the American Heart Association/American Stroke Association recommends treatment of elderly ischemic stroke patients who meet other criteria, without restriction by age. There is no specific upper age limit on the use of IV alteplase. However, the prevalence of other exclusions or relative exclusions to treatment (e.g. other illnesses that reduce life expectancy to <1 year) may be higher in patients with very advanced age, reducing the number of elderly patients who may be eligible for alteplase treatment. For patients at 3-4.5 hours, age >80 remains a relative exclusion because such patients were not included in the randomized controlled trial.

- Select "Life expectancy < 1 year or severe co-morbid illness or CMO on admission" if the patient has an order for Comfort Measures Only in the ED and this restriction of care preceded evaluation for IV alteplase. This option is also appropriate when patients are not treated due to coexisting terminal cancer, advanced dementia, severe cardiopulmonary disease or other conditions which severely limit quality of life or life expectancy. Limited life expectancy, severe co-morbid conditions, and CMO status all need to be explicitly documented as the reason for no IV alteplase. Do not make inferences.

- If documentation indicates a National Institute of Health Stroke Scale (NIHSS) score of zero, select “Yes” to *Documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV* thrombolytic and choose Relative Exclusion Criteria “Stroke severity too mild (non-disabling)” under Relative Exclusions (Warnings). Score documentation must refer to the timeframe for thrombolytic therapy. If documentation indicates as NIHSS score of zero, then this may be considered the equivalent of documentation that the stroke was too mild and an explicit statement linking this as the reason for non-treatment is not required.

- Select "Stroke severity too mild (non-disabling) when there is minimal to no disability associated with the stroke symptoms (e.g. numbness, mild weakness, lack of gait impairment). Note that there is no lower limit to NIHSS score that prohibits the use of IV alteplase.

- If the physician documents "no IV alteplase due to low NIHSS or NIHSS = 3," then this would appropriately be categorized as stroke severity too mild.

Exclusions (Contraindications) & Relative Exclusions (Warnings) for not initiating IV thrombolytic in the 3-4.5 hour window				
Item	**Variable name**	**Text Prompt**		**Legal Values**
Exclusions (Contraindications)				
81_2	NonTrtBl2	Active internal bleeding		1 = Yes 0 = No
82_2	NonTrtCT2	CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)		1 = Yes 0 = No
83_2	NonTrtHxHem2	History of previous intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation or aneurysm		1 = Yes 0 = No
84_2	NonTrtPlat2	Acute bleeding diathesis (low platelet count, increased PTT, INR ≥1.7 or use of NOAC). This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)		1 = Yes 0 = No
85_2	NonTrtTr2	Recent intracranial or spinal surgery, significant head trauma or stroke in previous 3 months		1 = Yes 0 = No
87_2	NonTrtBP2	Elevated blood pressure (systolic >185 mmHg or diastolic >110 mmHg) despite treatment		1 = Yes 0 = No
89_2	NonTrtSuHem2	Symptoms may suggest subarachnoid hemorrhage		1 = Yes 0 = No
89a_2	NonTrtAP2	Arterial puncture at noncompressible site in previous 7 days		1 = Yes 0 = No
92_2	NonTrtG2	Blood Glucose concentrations <50 mg/dL (2.7 mmol/L)		1 = Yes 0 = No
Relative Exclusions (Warnings): conditions that might lead to unfavorable outcomes:				
91_2	NonTrtNC2	Care team unable to determine eligibility		1 = Yes 0 = No
94_2	NonTrtOH2	IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival		1 = Yes 0 = No
96_2	NonTrtIL2	Life expectancy < 1 year or severe co-morbid illness or CMO on admission		1 = Yes 0 = No
97_2	NonTrtMI2	Recent acute myocardial infarction (within previous 3 months)		1 = Yes 0 = No
98_2	NonTrtPreg2	Pregnancy		1 = Yes 0 = No
99_2	NonTrtFr2	Patient/family refused		1 = Yes 0 = No
100_2	NonTrtSM2	Stroke severity too mild (non-disabling)		1 = Yes 0 = No
88_2	NonTrtS2	Seizure at onset with postictal residual neurological impairments		1 = Yes 0 = No
86_2	NonTrtSurg2	Major surgery of serious trauma within previous 14 days		1 = Yes 0 = No
102a_2	NonTrtRecHem2	Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)		1 = Yes 0 = No

Item	Variable name	Text Prompt		Legal Values
Hospital-Related or Other Factors:				
102_2	NonTrtRI2	Rapid or Early Improvement		1=Yes 0=No
103_2	NonTrtA2	Delay in patient arrival		1 = Yes 0 = No
104_2	NonTrtDDx2	Delay in stroke diagnosis		1 = Yes 0 = No
105_2	NonTrtTD2	In-hospital Time Delay, In-hospital Time Delay2		1 = Yes 0 = No
106_2	NonTrtIV2	No IV access		1 = Yes 0 = No
107_2	NonTrtOt2	Other (specify)		Total 25 characters

Only use the "Other Reason" [NonTrtOt or NonTrtOt2] if there is no reason specified that could be accurately captured by the listed choices. Do not select and enter "Other Reason" if you have already selected a specified reason. The "other reason" field will not exclude patients from the denominator of the alteplase measures. Remember to only abstract reasons that are specifically stated as the reason for not giving thrombolytic therapy. If the treatment team cannot determine when the stroke occurred and they document something like "cannot determine time of onset," this would be classified as <NonTrNC>, cannot determine eligibility.

Be very certain that a reason does not logically fit into any of the listed categories before resorting to entering text in the [NonTrtOt or NonTrtOt2]> field. Review of the past data reveals that most of the reasons for not giving alteplase will fall into one of the above delineated categories.

H. MEDICAL HISTORY

Check "Yes" if item is documented by physician or nurse in admission or discharge notes. This information is usually listed in the stroke pathway documentation, Admission Sheet, Diagnostic Reports, Discharge Summary, ED Nurses Notes, ED Physician Notes, Medication Order Sheets, Nurses Progress Notes, Physician Order Sheets, Physician Progress Notes.

Check/select only conditions that were known to be present prior to the current event. Do not check conditions that were newly diagnosed on the admission.	**Select Yes if it applies**
108. Atrial Fib/Flutter [MedHisAF]	1=Yes 0=No
109. CAD/prior MI [MedHisMI]	1=Yes 0=No
110. Carotid Stenosis [MedHisCS]	1=Yes 0=No
111. Current Pregnancy (or 6 weeks post-partum) [MedHisPG]	1=Yes 0=No
112. Diabetes Mellitus [MedHisDM]	1=Yes 0=No
113. Drugs/Alcohol Abuse [MedHisDrug]	1=Yes 0=No
114. Dyslipidemia [MedHisDL]	1=Yes 0=No
115. Family History of Stroke [MedFMHisStk]	1=Yes 0=No
116. Heart Failure [MedHisHF]	1=Yes 0=No
117. Hormone Replacement Therapy (HRT) [MedHisHRT]	1=Yes 0=No
118. Hypertension [MedHisHT]	1=Yes 0=No
119. Migraine [MedHisMig]	1=Yes 0=No
120. Obesity [MedHisObese]	1=Yes 0=No
121. Prior Stroke [MedHisStk]	1=Yes 0=No
122. History of Transient Ischemic Attack (TIA) or vertebral – basilar insufficiency (VBI) [MedHisTIA]	1=Yes 0=No
123. Peripheral vascular disease (PVD) [MedHisPVD]	1=Yes 0=No
124. Heart Valve prosthesis [MedHisVP]	1=Yes 0=No
125. Chronic Renal insufficiency - (Serum Creatinine > 2.0) [MedHisRenal]	1=Yes 0=No
126. Sickle Cell disease [MedHisSS]	1=Yes 0=No
127. Smoker [MedHisSM]	1=Yes 0=No
128. None of the above [MedHisNone]	1=Yes 0=No

129. Record patient's height in centimeters [HgtUnit]

_____ cms

Enter the patient's height in centimeters (cms). This information is usually listed in the Admission sheet, ED nurses' notes, ED Physicians' notes, Medication order sheets, Nurses progress notes, Physician order sheets, Physician progress notes, Dietary or nutrition services, Physical therapy or Occupation.

130. Record patient's weight in kilograms [WgtUnit]

_____ Kilograms

Enter the patient's weight in kilograms (KGs). This information is usually listed in the Admission sheet, ED Nurses' notes, ED Physician notes, Medication order sheets, Nurses progress notes, Physician order sheets, Physician Progress notes, Dietary or nutrition services, Physical therapy, or Occupational therapy.

I. IN-HOSPITAL PROCEDURES AND TREATMENT

Patient 019 was admitted directly to the floor from private internal medicine practice (that has admitting privileges at the institution). The internal medicine physician (Primary Attending) requests a consultation from Neurology via a written consultation request, which the neurology resident performs and documents. The patient is transferred from regular unit to the stroke unit, to the neurologist's care. The Data Entry will be "Yes" for '*Neurologist Admit*' (SUnitA), "Yes" for '*Other Service Admit*' (SUnitB), and "Yes" for '*Stroke Unit*' (SUnit E).

Where was the patient cared for and by whom?

131. Neurologist Admit [SUnitA]

1 = Yes
0 = No

132. Other Service Admit [SUnitB]

1 = Yes
0 = No

133. Stroke Consult [SUnitC]

1 = Yes
0 = No

134. No Stroke Consult [SUnitD]

1 = Yes
0 = No

135. In Stroke Unit [SUnitE]

1 = Yes
0 = No

136. Not in Stroke Unit [SUnitF]

1 = Yes
0 = No

137. When is the earliest time that the physician, advanced practice nurse, or PA documented that patient was on comfort measures only? [CMO]

1 = Day of arrival or first day after arrival
2 = 2nd day after arrival or later
3 = Timing unclear
4 = ND/UTD

- **"Comfort Measures Only"** refers to medical treatment of a dying person where

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

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

Further Notes for Abstraction:

- Only accept terms identified in the list of inclusions. No other terminology will be accepted.
- Physician/APN/PA documentation of comfort measures only (hospice, comfort care, etc.) mentioned in the following contexts suffices:
  - Comfort measures only recommendation
  - Order for consultation or evaluation by a hospice care service Patient or family request for comfort measures only
  - Plan for comfort measures only
  - Referral to hospice care service
- Determine the earliest day the physician/APN/PA DOCUMENTED comfort measures only in the ONLY ACCEPTABLE SOURCES. Do not factor in when comfort measures only was actually instituted.
  Examples:
  "Discussed comfort care with family on arrival" noted in day 3 progress note – Select "2nd day after arrival or later".
  POLST order for comfort care dated prior to arrival – Select "Day of arrival or first day after arrival".
- If any of the inclusions are documented in the ONLY ACCEPTABLE SOURCES, select "1", "2", or "3" accordingly, unless otherwise specified in this data element.
- Documentation of an Inclusion term in the following situations should be disregarded. Continue to review the remainder of the ONLY ACCEPTABLE SOURCES for acceptable Inclusion terms. If the ONLY documentation found is an Inclusion term in the following situations, select value "ND/UTD":
  - Documentation that is dated prior to arrival or documentation which refers to the pre-arrival time period (e.g., comfort measures only order in previous hospitalization record, "Pt. on hospice at home" in MD ED note).
    EXCEPTION:
    State-authorized portable orders (SAPOs). SAPOs are specialized forms, Out-of-Hospital DNR (OOH DNR) or Do Not Attempt Resuscitation (DNAR) orders, or identifiers authorized by state law, that translate a

patient's preferences about specific-end-of-life treatment decisions into portable medical orders. Examples:
− DNR-Comfort Care form
− MOLST (Medical Orders for Life-Sustaining Treatment)
− POLST (Physician Orders for Life-Sustaining Treatment)

- Pre-printed order forms signed by the physician/APN/PA:
  − Disregard an Inclusion term in a statement that is not part of the order or that is not clearly selected (on a form that offers options to select from). Examples:
    - Inclusion term used only in the title of the form (e.g., "DNR-Comfort Care" form, option "Comfort Care" is not checked)
    - Inclusion term used only in the pre-printed instruction for completing the form (e.g., "Copy of form to hospice", "Instructions" section of the form further defines the option "Comfort care")

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

- Documentation of "CMO" should be disregarded if documentation makes clear it is not being used as an acronym for Comfort Measures Only (e.g., "hx dilated CMO" – Cardiomyopathy context).
- If there is documentation of an Inclusion term clearly described as negative in one source and an Inclusion term NOT described as negative in another source, that second source would still count for comfort measures only.
  Examples:
  - On Day 0 (day of arrival) the physician documents "The patient is not a hospice candidate." On Day 3, the physician orders a hospice consult. Select "2nd day after arrival or later".
  - On Day 1 (day after arrival) the physician documents the patient is comfort measures only. On Day 2 the physician documents "The patient is

refusing CMO." Select "Day of arrival or first day after arrival".

Suggested Data Sources:

PHYSICIAN/APN/PA DOCUMENTATION ONLY IN THE FOLLOWING ONLY

ACCEPTABLE SOURCES:
- Discharge summary
- DNR/MOLST/POLST forms
- Emergency department record
- Physician orders
- Progress notes

Excluded Data Sources:
Restraint order sheet

Inclusion Guidelines for Abstraction:
- Brain dead
- Brain death
- Comfort care
- Comfort measures Comfort measures only (CMO)
- Comfort only
- DNR-CC
- End of life care
- Hospice
- Hospice care
- Organ harvest
- Terminal care

Exclusion Guidelines for Abstraction:
None

138. Was antithrombotic therapy received by the end of hospital day 2? [Athr2Day] (See Appendix III & Appendix IV for a complete list of Antithrombotic medications)

1 = Yes
0 = No/Not documented
2 = NC – Documented reason for not giving antithrombotic therapy exists in the medical record

Notes for Abstraction:

- Refer to Appendix III and Appendix IV for acceptable antithrombotic therapy. Antithrombotics include both anticoagulant and antiplatelet drugs.
- To compute end of hospital day two, count the day of arrival at this hospital as day one. If antithrombotic therapy was administered by 11:59 PM of hospital day two, answer "Yes" for this data element. E.g., patient arrives in ED on Monday 05:00; antithrombotic therapy must be initiated before 23:59 on Tuesday; if patient arrives at 23:30 on Monday antithrombotic therapy must be initiated by 23:59 on Tuesday.
  Example: Patient arrives at ED on Monday at 05:00 with an ischemic stroke. Because beds are full, patient waits in ED holding bed, and patient is not delivered to the stroke unit until 15:00 on Tuesday. Hospital day 1 is Monday (day of arrival at hospital), and hospital day 2 is Tuesday. Patient should receive antithrombotic therapy by 23:59 on Tuesday in order to answer "Yes".
- For antithrombotic therapy administered in the Emergency Department/observation area prior to the end of hospital day 2, select "Yes".
- Antithrombotic therapy administration information must demonstrate actual administration of the medication.
  Example: Do not use physician orders as they do not demonstrate administration of the antithrombotic therapy (in the ED this may be used if signed/initialed by a nurse).
- When antithrombotic is noted as a "home" or "current" medication or documentation indicates that it was received prior to hospital arrival only, select "No".
- Documentation of antithrombotic administration must be found within the timeframe of arrival to the end of hospital day 2. It is not necessary to review documentation outside of this timeframe to answer this data element.
- Reasons for patients not receiving antithrombotic medication must be documented by a physician, nurse practitioner/advanced practice nurse or physician assistant or pharmacist with one exception: Patient/family refusal does not have to be documented by a physician/APN/PA or pharmacist but it must be documented in the timeframe of arrival to the end of hospital day 2.
- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication can be ordered.
- If reasons are not mentioned in the context of antithrombotics, do not make inferences (e.g., do not assume that antithrombotic medication is not being

prescribed because of a bleeding disorder unless documentation explicitly states so).

- Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs the day of or day after hospital arrival constitutes a "clearly implied" reason for not administering antithrombotic therapy by end of hospital day 2. A hold/discontinuation of all p.o. medications counts if an antithrombotic was on order at the time of the notation.
- For patients on warfarin therapy prior to hospital arrival, but placed on hold the day of or after arrival due to "high INR", select "Yes".
- Lovenox SQ for VTE prophylaxis (i.e. enoxaparin SQ 40 mg once daily; enoxaparin SQ 30 mg Q12 hours) is not sufficient. If no other antithrombotic therapy is administered by the end of the hospital day 2, select "No."
- Acceptable reasons for not giving antithrombotic medication by the end of the 2nd hospital day include:
    - Allergy to or complication related to antithrombotic
    - Aortic dissection
    - Bleeding disorder
    - Brain/CNS cancer
    - CVA, hemorrhagic
    - Extensive/metastatic CA
    - Hemorrhage, any type
    - Intracranial surgery/biopsy
    - Patient/family refusal
    - Peptic ulcer
    - Planned surgery within 7 days following discharge
    - Risk of bleeding
    - Terminal or comfort care only
    - Unrepaired intracranial aneurysm
    - Other documented by physician/APN/PA or pharmacist

#139 is field is optional. It is considered a Historic Field in the Get With The Guidelines Patient Management Tool (ie, it has been retired and is not required for new patient records, however the field is still available to complete and historical responses are still available to view)."

139. Was the patient ambulatory at the end of hospital day 2 [DVTAmbul]

1 = Yes
0 = No
2 = Not Documented

Ambulatory:

- Patient ambulating without assistance (no help from another person)
- Patient ambulating with assistance of another person or assistive device throughout the day
- Patient ambulating to and from the bathroom

Non-ambulatory:

- Patient is on bed rest
- Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile) on the 2nd hospital day
- If unable to determine from documentation consider this patient non-ambulatory.

Hospital Day 2:
Day 1 is day of ARRIVAL. If there is documentation that the patient was ambulatory at or before 23:59 on the day after arrival, you will answer "Yes" to this question. Example: Patient 019 is only getting out of bed to the bedside commode and is primarily in the bed on the 2nd hospital day. This patient is considered non-ambulatory. Data entry would be "No".

What type of VTE prophylaxis was documented in the medical record? Check all that apply:

Type of VTE prophylaxis documented in record:	Answer **Yes** for all that apply:
140. Low dose unfractionated heparin (LDUH)[VTELDUHD]	1 = Yes 0 = No
141. Low molecular weight heparin (LMWH) [VTELMWH]	1 = Yes 0 = No
142. Intermittent pneumatic compression devices (IPC) [VTEIPC]	1 = Yes 0 = No
143. Graduated compression stockings (GCS)[VTEGCS]	1 = Yes 0 = No
144. Factor Xa Inhibitor [VTEXaI]	1 = Yes 0 = No
145. Warfarin [VTEwar]	1 = Yes 0 = No
146. Venous foot pumps (VFP) [VTEVFP]	1 = Yes 0 = No
147. Oral Factor Xa Inhibitor [VTEOXaI]	1 = Yes 0 = No
148. Not documented or none of the above [VTEND]	1 = Yes 0 = No

Suggested Data Sources:
STK
PHARMACOLOGICAL AND MECHANICAL
- Circulator notes
- Emergency department record
- Graphic/flow sheets
- Medication administration record
- Nursing notes
- Operative notes
- Physician notes

- Preoperative nursing notes
- Progress notes

Notes for Abstraction:

- If [VTEND]148=1, no other selection should be recorded.
- If only Graduated Compression Stockings were administered and no other VTE Prophylaxis from this list, select #143 [GCSVTE] = "No" and #148 [VTEND] = Yes."
- Abstract ALL VTE prophylaxis(s) that was administered the day of or the day after hospital admission. If no VTE prophylaxis was administered during this timeframe, select [VTEND][148]=1 .
- Selection of 1=Yes for fields #140-147includes any prophylaxis that was initially administered in the allowable time frame.
  Example:
  If a patient was admitted on 12/8/20xx and had IPCs applied at 13:00 on 12/09/20xx and LMWH was administered at 22:00 on 12/8/20xx, select [VTELMWH][141]=1 and [VTEIPC][142]=1
- Only select prophylaxis if there is documentation that it was administered. Documentation in the physician progress notes under assessment/Plan: "DVT prophylaxis – IPC" is not enough to select [VTEIPC][142]=1.
- If one pharmacological medication is ordered and another medication is substituted (such as per pharmacy formulary substitution or protocol), abstract the medication administered. Note: No copy of the formulary or protocol is required in the medical record.
  Example:
  Lovenox is ordered, but not received and is substituted with fondaparinux sodium, which is received by the patient. Abstract fondaparinux sodium as [VTEXaI][144]=1 for VTE Prophylaxis and abstract the date is was administered for VTE Prophylaxis Date.

Inclusion Guidelines for Abstraction:
Refer to Appendix H, VTE Prophylaxis Inclusion Table of the Centers for Medicare & Medicaid Services and the Joint Commission *Specifications Manual for National Hospital Inpatient Quality Measures*.

Exclusion Guidelines for Abstraction:
None

For #149 and #150: Abstraction should be based on initial date of VTE Prophylaxis only if #140, 141, 142, 144, 145, 146, or 147 = "yes.' #149 and #150 do not apply if Graduated Compression Stockings is the only VTE Prophylaxis administered.

149. What date was the initial VTE prophylaxis administered after hospital admission? [VTEDate]
The day, month and year that the **initial** VTE prophylaxis (mechanical and/or pharmacologic) was administered **after hospital admission**.

____/____/_____
MM/DD/YYYY

MM = Month (1-12)
DD = Day (01-31)
YYYY = Year (20xx)

150. If the Date is Not Documented (ND), Answer "1=Yes" for Unknown or Unable to Determine[VTEDateND]

1 = Yes (Date Unable to Determine)
0 = No

Element definition from Specifications Manual for National Hospital Inpatient Quality Measures

Notes for Abstraction:
STK

- The medical record must be abstracted as documented (taken at "face value"). When the date documented is obviously in error (not a valid date/format) and no other documentation is found that provides this information, the abstractor should select "UTD".
  Example:
  Documentation indicates the VTE Prophylaxis Date was 03-42-20xx. No other documentation in the medical record provides a valid date. Since the *VTE Prophylaxis Date* is outside of the range listed in the Allowable Values for "Day," it is not a valid date and the abstractor should select "UTD."
  Note: Transmission of a case with an invalid date as described above will be rejected from the CMS Clinical Warehouse and the Joint Commission's Data Warehouse. Use of "UTD" for VTE Prophylaxis Date allows the case to be accepted into the warehouses."

Suggested Data Sources:

- Consultation notes
- Emergency department record
- History and physical
- Radiology report
- Observation notes
- Outpatient surgery notes
- Physician notes

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
None

151. If not documented or none of the above types of prophylaxis apply, is there documentation why VTE prophylaxis was not administered at hospital admission? [NoVTEDoc]

1 = Yes
0 = No

Answer if only Graduated Compression Stockings (GCS) on #143 [VTEGCS] or Not Documented or none of the above on #148 [VTEND] = Yes

Element definition from Manual for National Hospital Inpatient Quality Measures

Documentation why mechanical AND pharmacologic VTE prophylaxis was not administered at hospital admission. Explicit documentation of a contraindication to BOTH mechanical prophylaxis AND pharmacological prophylaxis is needed.

Yes: There is documentation why VTE prophylaxis was not administered at hospital admission.

No: There is no documentation why VTE prophylaxis was not administered at hospital admission or unable to determine from medical record documentation.

Notes for Abstraction:

- If the patient received VTE prophylaxis as per fields #140, 141, 142, 144, 145, 146, or 147, select "No".
  EXCEPTION:
  - Stroke patients require a documented reason for not administering another form of prophylaxis when graduated compression stockings (GCS) are the ONLY form of VTE prophylaxis administered.
- Documentation of the reason for no VTE prophylaxis must be written by the day after hospital admission or surgery end date. Documentation written after arrival but prior to admission is acceptable. It is not necessary to review documentation outside of this timeframe to answer this data element.
- Reasons for not administering VTE prophylaxis must be documented by a physician/APN/PA or pharmacist.
  EXCEPTIONS:
  - Patient refusal may be documented by a nurse.

- If reasons are not mentioned in the context of VTE prophylaxis, do not make inferences (e.g., do not assume that VTE Prophylaxis was not administered because of a bleeding disorder unless documentation explicitly states so).
  - Reasons must be explicitly documented (e.g., "Active GI bleed –low molecular weight heparin (LMWH) contraindicated", "No enoxaparin" [no reason given]) To select "Yes" for this data element, documentation of a reason for not administering both mechanical and pharmacological VTE prophylaxis must be present in the medical record.
  - Documentation of a reason for not administering pharmacological forms of prophylaxis in the absence of documentation why no mechanical prophylaxis was administered is not sufficient reason documentation when no VTE prophylaxis is administered the day of or day after hospital admission.
- For patients determined to be at low risk for VTE:
  - If documentation of "No VTE Prophylaxis needed" is written, then it will be inferred that both mechanical and pharmacological options were not indicated for the patient, select "Yes".

- A completed risk assessment within this timeframe is an acceptable source for this data element, if it is clear that the patient is at low risk for VTE and does not need VTE prophylaxis. If there is conflicting information about the need for prophylaxis, select "No".
- Documentation that the patient is ambulating without mention of VTE prophylaxis is insufficient. Do not infer that VTE prophylaxis is not needed unless explicitly documented.

- For patients determined to be at risk for VTE and pharmacologic prophylaxis is contraindicated, then evaluation for mechanical prophylaxis must be addressed. For example, if there is physician documentation of "bleeding, no pharmacologic prophylaxis", there must also be documentation about mechanical prophylaxis such as "no mechanical prophylaxis" to select "Yes".
  - For patients with a reason for no pharmacologic prophylaxis and an order for mechanical prophylaxis that was not administered without a reason, select "No".
  - For patients with a reason for no mechanical prophylaxis and an order for pharmacologic prophylaxis that was not administered without a reason, select "No".
- For patients on continuous IV heparin therapy the day of or day after hospital admission, select "Yes".
- For patients on warfarin therapy prior to admission, but placed on hold due to "high INR", select "Yes".
- For patients receiving anticoagulant therapy other than warfarin for atrial fibrillation or other conditions the day of or the day after hospital admission, select "Yes".
- If CMO was documented after the day after arrival (Day 1) but by the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission, select "Yes".

  Examples:
  - Patient arrives in the ED on 06/01/20xx but is in observation until admission to the hospital on 06/03/20xx. If CMO is documented by 06/04/20xx, select "Yes".
  - The patient was admitted on 5/31/20xx and the surgery end date was 06/01/20xx, select "Yes" if CMO was documented by 06/02/xx.
- Patient/family refusal may be documented by a nurse, but should be documented within the same timeframe as the reason for no VTE prophylaxis. Patient/family refusal of any form of prophylaxis is acceptable to select "Yes". For example, "patient refused heparin," select "Yes".

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

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

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

Inclusion Guidelines for Abstraction:
- Reasons for not administering any mechanical or pharmacologic prophylaxis:
- Patient at low risk for VTE
- Explicit documentation that the patient does not need VTE prophylaxis
- Patient/family refusal

Exclusion Guidelines for Abstraction:
None

152. Is there a documented reason for using Oral Factor Xa Inhibitor for VTE? [OFXaVTEReason]

1 = Yes
0 = No

Answer this item if Oral Factor Xa Inhibitor on # 144 [VTEOXaI] = Yes

Yes: There is physician/APN/PA or pharmacist documentation why Oral Factor Xa Inhibitor was administered for VTE Prophylaxis.

No: There is no physician/APN/PA or pharmacist documentation why Oral Factor Xa Inhibitor was administered for VTE Prophylaxis, OR unable to determine from the medical record documentation.

Notes for Abstraction:
- **Only acceptable reasons identified in the list of inclusions. No other reasons will be accepted**.
- History of atrial fibrillation/flutter or current finding of atrial fibrillation/flutter, select "Yes".
- History of hip or knee Replacement surgery, select "Yes".
- When conflicting information is documented in the medical record, select "Yes".

Suggested Data Sources:
PHYSICIAN/APN/PA OR PHARMACIST DOCUMENTATION ONLY IN THE FOLLOWING ONLY ACCEPTABLE SOURCES:
- Anesthesia record
- Consultation notes
- Emergency department record
- History and physical
- Operative Note
- Physician orders

- Progress notes
- Risk assessment form
- Transfer sheet

Inclusion Guidelines for Abstraction: This list is all inclusive

- AF
- A-fib
- Atrial fibrillation
- Atrial flutter
- Persistent atrial fibrillation
- Paroxysmal atrial fibrillation
- PAF
- History of any remote episode of documented atrial fibrillation or flutter except within 8 weeks following CABG
- Total hip arthroplasty
- Partial hip arthroplasty
- Total hip Replacement
- Partial hip Replacement
- THR
- Total knee arthroplasty
- Total knee Replacement
- TKR
- Treatment of venous thromboembolism

Exclusion Guidelines for Abstraction:

- History of atrial fibrillation or flutter that terminated within 8 weeks following CABG
- History of transient and entirely reversible episode of documented atrial fibrillation or flutter due to thyrotoxicosis
- PAC
- Paroxysmal atrial tachycardia
- Paroxysmal supraventricular tachycardia
- PAT
- Premature atrial contraction
- PST
- Hip fracture

153. Other Therapeutic Anticoagulation [OtherAcoag] (See Appendix IV for list of anticoagulants)

1 = Unfractionated heparin IV
2 = Dabigatran (Pradaxa)
3 = Argatroban
4 = Desirudin (Iprivask)
5 = Rivaroxaban (Xarelto)
6 = Lepirudin (Refludan)
8 = Apixaban (Eliguis)
9 = Other Anticoagulant

154. Was the patient NPO throughout the entire hospital stay (i.e., this patient never received foods, fluids or medication by mouth at any time) [NPO]

1 = Yes
0 = No or Not Documented

- Answer "Yes" for number 154 only if the patient was kept NPO during the entire hospitalization and was discharged, transferred or deceased NPO. This response should not be used in any other circumstances. Data abstractors should wait until either patient is taken off NPO or discharged prior to answering this question.
- Patients receiving nothing by mouth should be considered NPO even if NG, OG or gastrostomy tube is being used.
- For inpatient stroke, assess NPO from date and time of symptom onset while hospitalized.

155. Was patient screened for dysphagia prior to any oral intake, including food, fluids, or medications? [DysphaYN]

1 = Yes
0 = No or Not Documented
2 = NC – documented reason for not screening exists in the medical record

Documentation in the record should indicate that an assessment of the patient's **ability to swallow** was completed by a health care professional prior to oral intake of food, fluid, or medications.

Reasons for not performing a dysphagia screen must be explicitly documented by a physician, nurse practitioner/advanced practice nurse, or physician assistant. If reasons are not mentioned in the context of dysphagia screening, do not make inferences unless documentation explicitly states so. Acceptable reasons for not performing dysphagia screening include patient refusal, patients who are made CMO prior to receiving anything by mouth and complete recovery of all symptoms and neurological deficits prior to arrival.
A variety of methods may be employed to assess swallowing status. These methods may include but are not limited to:

- Bedside swallow assessment
- Simple water swallow test
- Burke water swallow test
- Bedside swallowing assessment
- Simple standardized bedside swallowing assessment (SSA)
- Barium swallow
- Video Fluoroscopy
- Double contrast esophagoscopy
- Radio nucleotide studies
- Manometry
- Endoscopy
- Formal evaluation by speech language pathologist

The following are not acceptable as swallow screening:

- Patient evaluation using the NIH/NIHSS (National Institute of Health/National Institute of Health Stroke Scale) is NOT considered dysphagia screening
- Documentation of "Cranial nerves intact" is NOT considered dysphagia screening

- Positive gag reflex noted

If patient/family refuses treatment, record this as 'NC'.

- For inpatient stroke assess dysphagia screen prior to oral intake from date/time of symptom discovery.
  Example 1: Patient 019 is admitted to the in-patient unit from the ED as NPO. The ED physician notes document evidence of dysphagia and a formal swallowing evaluation is ordered. Data entry will be to check "Yes". Example 2: Patient 020 is admitted with dysarthria and drooling. The ED physician notes evidence of dysphagia and the diet order reads NPO except meds. No formal swallowing evaluation is performed. Data entry is "ND".

156. IV therapeutic heparin administered? [IVHep]

Was IV–heparin, low molecular-weight heparin or another heparinoid used for full anticoagulation? Exclude agents that were used subcutaneously at low doses for DVT prophylaxis.

1 = Yes
0 = No

157. Was the patient's cardiac rhythm monitored continuously? [Telemetric]

There is documentation of at least 24 hours of continuous telemetry monitoring. This may be done at any designated unit that includes cardiac monitoring whether the monitoring is local (i.e." Fixed" monitoring) or remotely if the patient is monitored via a telemetry device (i.e." Remote" monitoring)." This does not include holter monitoring.

1 = Yes
0 = No

J. OTHER IN-HOSPITAL COMPLICATIONS

ITEMS 158 THROUGH 160 BELOW REFER TO IN-HOSPITAL ACQUIRED EVENTS REQUIRING TREATMENT. PRE-EXISTING CONDITIONS AND THERAPY PRESENT PRIOR TO ADMISSION SHOULD NOT BE COUNTED IN RESPONDING TO THESE DATA ELEMENT.

158. Did patient experience a DVT or pulmonary embolus (PE) during this admission [DVTDocYN]

This refers to DVT or PE confirmed by ultrasound or venous imaging.

1 = Yes
0 = No/ND

Objectively confirmed DVT based on duplex ultrasound, contrast venography, CT with contrast venogram, MR imaging or MR venography]

Example: Patient 019 was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. On day 4 of admission the patient had a tender calf, ultrasound revealed a DVT of the left calf. Answer would be "Yes." Example: Patient 019 was prescribed DVT prophylaxis on admission to hospital for ischemic stroke. On day 4 of admission the patient had tender calf, ultrasound negative for DVT. Answer would be "No."

159. Was there documentation that the patient was treated for pneumonia during this admission? [PneumYN]

1 = Yes
0 = No
9 = NC

Indicate if patient was treated for nosocomial aspiration pneumonia that occurs after 48 hours of admission.

Yes: There was clinical mention of hospital-acquired pneumonia by the physician, and treatment with an antibiotic for pneumonia.

No: There was clinical mention of hospital-acquired pneumonia by the physician, but treatment with an antibiotic was not prescribed.

NC: If there was no clinical mention of hospital-acquired pneumonia, select "NC."

Example: Patient 019 is admitted with stroke symptoms and started on an oral diet after passing a dysphagia screen. A chest X-ray from day 2 describes "pneumonia vs. atelectasis." This is mentioned in the physician notes but the decision is made to treat for congestive heart failure and wait for a fever before starting antibiotics. No antibiotics are subsequently given. Select "No". This information is usually listed in the Consultation progress notes, Diagnostic reports, Discharge summary, Nurses

progress notes, Nutritionist progress notes, Physician progress notes, Speech therapy progress notes.

160. Was patient treated for a urinary tract infection (UTI) during this admission? [UTI]

1 = Yes
0 = No/Not documented

Indicate if patient was treated for urinary tract infection that developed following admission:

Yes: There was clinical mention of UTI by the physician, and treatment with an antibiotic for UTI.

No: There was clinical mention of UTI by the physician, but treatment with an antibiotic was not prescribed or there was no clinical mention of UTI "ND."

161. If patient was treated for UTI, did the patient have Foley catheter during this admission? [UTIFoley]

1 = Yes, and patient had catheter in place on arrival
2 = Yes, but only after admission
0 = No
9 = Unable to determine

For the Foley catheter, if the patient had a catheter in place prior to the event/admission select choice 1. If patient did not arrive with a catheter in place, but required a Foley after admission, select 2. If patient had a condom catheter only, select No.

K. DISCHARGE DATA

Indicate the date the patient was discharged from acute care, left against medical advice, or expired during this stay.

The discharge date is the day that patient is discharged from your institution's acute unit OR the date of the patient's expiration OR the patient's discharge OR the date of transfer to, a rehabilitation unit, skilled nursing or hospice unit in your institution, even if that hospital is affiliated with your own. Record the date as MM/DD/YYYY.

Example: Patient 019 is admitted to your in-patient neurology floor from your ED, with a diagnosis of acute ischemic stroke, on January 10, 2009 (01/10/2009). Due to extension of the infarct, need for jejunostomy and placement, the patient is still in the inpatient unit on January 30, 2009 (01/30/2009). The patient expires from complications of aspiration pneumonia on February 12, 2009 (02/12/2009). Date of discharge is entered as 02/12/2009. This information is usually listed in the Discharge Summary, Physician Order Sheets, Physician Progress Notes.

[Because this data element is critical in determining the population for all measures, the abstractor should NOT assume the UB-04 claim information for the discharge date is correct. If the abstractor determines through chart review that the UB-04 day is incorrect, she/he should correct and override the value. If the abstractor is unable to determine the correct discharge date through chart review, she/he should default to the UB-04 date. Use the UB-04 date only as a last resort.]

162. Date of discharge from hospital [DATEDC]

____/____/_____
MM/DD/YYYY

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

163. ICD-discharge diagnosis code related to stroke (See Appendix V) **[ICDStDx]**

__ __ __ - __ __

164. Principal discharge ICD-diagnosis code (see Appendix V) **[ICDPrDx]**

__ __ __ - __ __ Any valid ICD-10-CM diagnosis code

The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) code that is primarily responsible for the admission of the patient to the hospital for care during this hospitalization.

Suggested Data Sources:

- Discharge summary
- Face-sheet
- UB-04

Inclusion Guidelines for Abstraction:

165. Valid diagnosis code per the CMS ICD-10-CM master code table (Code Descriptions in Tabular Order): https://www.cms.gov/Medicare/Coding/ICD10/index.html**Clinical hospital diagnosis related to stroke that was ultimately responsible for this admission (check only one item) [DisDx]**

This is the clinical admission diagnosis after completion of all diagnostic procedures, examinations and consultations. Note that this may be different from the presumptive hospital admission diagnosis and the final ICD-10-CM code diagnosis entered on #163 or 164. Do not change the presumptive diagnosis based on this information.

1 = Subarachnoid hemorrhage
2 = Intracerebral hemorrhage
3 = Ischemic stroke
4 = Transient ischemic attack
5 = Stroke not otherwise specified
6 = No stroke related diagnosis
8 = Elective Carotid intervention only

"Elective carotid intervention only" means that documentation demonstrates that the current admission is solely for the performance of an elective carotid intervention (e.g., elective carotid endarterectomy, angioplasty, carotid stenting).

Notes for Abstraction

- Patients admitted for an acute stroke are not considered to have been admitted solely for the purpose of the performance of elective carotid intervention.
- If the patient was admitted for an acute stroke, even if a carotid intervention was performed after admission, do not select "8".
- When documentation of the procedure is not linked with "elective", do not select "8".
- When the patient is directly admitted to the hospital post-procedure following an elective carotid intervention performed as an outpatient, select "8".
  Example:
  Patient scheduled for elective carotid endarterectomy right side on 05/17/20xx at 08:30. Patient checks into outpatient surgery at 06:13 and proceeds to the O.R., then to PACU. Patient status is changed to inpatient at 11:35 on 05/17/20xx. Patient discharged home on 05/18/20xx.

EXCEPTION:

- Patients with documentation of an elective carotid intervention performed and discharged from the outpatient setting prior to hospital admission for stroke.
  Example:
  Pt scheduled for outpatient placement of an elective right carotid stent on 05/17/20xx. Patient discharged home on 05/17/20xx following the procedure. Patient arrives in the ED two days later with complaints of syncope and left-sided numbness, and is admitted to the hospital on 05/19/20xx.
- When documentation clearly indicates that the carotid intervention is elective, (e.g., admitting orders to obtain informed consent for a carotid procedure; pre-operative testing completed prior to admission; surgical orders for carotid endarterectomy dated prior to arrival; physician office visit documentation prior to arrival stating, "CEA with Dr. X planned in the near future"), select "8".

- For patients whose symptoms resolve upon arrival, but return later in the hospitalization (symptoms > 24hrs or infarction on brain imaging while an inpatient) select 'ischemic stroke'. In this case, for field #15 *Patient location when stroke was detected/symptoms were discovered* select 'stroke occurred after hospital arrival (in ED/Obs/inpatient)." For ischemic stroke patients who develop the complication of intracerebral hemorrhage after being treated with IV alteplase or other medications, select 'ischemic stroke'.
- If a patient is transferred to your hospital for management of a hemorrhagic complication after IV alteplase for an ischemic stroke, select 'ischemic stroke'.
- For patients whose initial imaging shows evidence of both ischemic injury and also brain hemorrhage**,** select 'stroke not otherwise specified'.

Suggested Data Sources: PHYSICIAN/APN/PA DOCUMENTATION ONLY

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

Inclusion Guidelines for Abstraction:

- Patients with ICD-10-CM procedure codes, if medical record documentation states that the patient was admitted for the elective performance of the procedure. Anticipated
- Asymptomatic
- Evaluation
- Non-emergent
- Planned
- Pre-admission
- Pre-arranged
- Pre-planned
- Pre-scheduled
- Preventive
- Previously arranged
- Prophylactic
- Scheduled
- Work-up

Exclusion Guidelines for Abstraction:

Patients with Carotid Intervention procedure codes on Appendix VII, if medical record documentation indicates that the patient is also being treated for an acute stroke during this hospitalization.

166. What was the patient's discharge disposition on the day of discharge [DCWhere]?

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

1 = Home
2 = Hospice – Home
3 = Hospice – Health Care Facility
4 = Acute Care Facility
5 = Other Health Care Facility
6 = Expired
7 = Left Against Medical Advice/AMA

8 = Not Documented or Unable to Determine (UTD)

Notes for Abstraction:

- **Only use documentation from the day before 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).
- Consider discharge disposition documentation in the discharge summary, a post-discharge addendum, or a late entry as day of discharge documentation, regardless of when it was dictated/written.
- The medical record must be abstracted as documented (taken at "face value"). Inferences should not be made based on internal knowledge.
- If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract. If documentation is contradictory, use the latest documentation.
  Examples:
  - Discharge summary dictated 2 days after discharge states patient went "home". Physician note on day of discharge further clarifies that the patient will be going "home with hospice". Select value "2" ("Hospice - Home").
  - Discharge planner note from day before discharge states "XYZ Nursing Home". Discharge order from day of discharge states "Discharge home". Contradictory documentation, use latest. Select value "1" ("Home").
  - Physician order on discharge states "Discharge to ALF". Discharge instruction sheet completed after the physician order states patient discharged to "SNF." Contradictory documentation, use latest. Select value "5" ("Other Health Care Facility").
- If documentation is contradictory, and you are unable to determine the latest documentation, select the disposition ranked highest (top to bottom) in the following list. See Inclusion lists for examples.
  - Acute Care Facility
  - Hospice – Health Care Facility
  - Hospice – Home
  - Other Health Care Facility
  - Home
- Hospice (values "2" and "3") includes discharges with hospice referrals and evaluations.
- If the medical record states only that the patient is being discharged to another hospital and does not reflect the level of care that the patient will be receiving, select value "4" ("Acute Care Facility").
- If the medical record identifies the facility the patient is being discharged to by name only (e.g., "Park Meadows"), and does not reflect the type of facility or level of care, select value "5" ("Other Health Care Facility").
- If the medical record states only that the patient is being "discharged" and does not address the place or setting to which the patient was discharged, select value "1" ("Home").
- When determining whether to select value "7" ("Left Against Medical Advice/AMA"):

- Explicit "left against medical advice" documentation is not required. E.g., "Patient is refusing to stay for continued care" – Select value "7".
- Documentation suggesting that the patient left before discharge instructions could be given does not count.
- A signed AMA form is not required, for the purposes of this data element.
- Do not consider AMA documentation and other disposition documentation as "contradictory". If any source states the patient left against medical advice, select value "7", regardless of whether the AMA documentation was written last. E.g., AMA form signed and discharge instruction sheet states "Discharged home with belongings" – Select "7".

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

Excluded Data Sources:
- Any documentation prior to the last two days of hospitalization
- Coding documents
- UB-04

Inclusion Guidelines for Abstraction:
Home (Value 1):
- Assisted Living Facilities (ALFs) – Includes ALFs and assisted living care at nursing home, intermediate care, and skilled nursing facilities
- Court/Law Enforcement – includes detention facilities, jails, and prison
- Home – includes board and care, foster or residential care, group or personal care homes, retirement communities and homeless shelters
- Home with Home Health Service
- Outpatient Services including outpatient procedures at another hospital, Outpatient Chemical Dependency Programs and Partial Hospitalization

Hospice – Home (Value 2):
- Hospice in the home (or other "Home" setting as above in Value 1)

Hospice - Health Care Facility (Value 3):
- Hospice - General Inpatient and Respite
- Hospice - Residential and Skilled Facilities
- Hospice - Other Health Care Facilities

Acute Care Facility (Value 4):
- Acute Short Term General and Critical Access Hospitals
- Cancer and Children's Hospitals
- Department of Defense and Veteran's Administration Hospitals

Other Health Care Facility (Value 5):

- Extended or Immediate Care Facility (ECF/ICF)
- Long Term Acute Care Hospital (LTACH)
- Nursing Home or Facility including Veteran's Administration Nursing Facility
- Psychiatric Hospital or Psychiatric Unit of a Hospital
- Rehabilitation Facility including Inpatient Rehabilitation Facility/Hospital or Rehabilitation Unit of a Hospital
- Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed
- Transitional Care Unit (TCU)

Exclusion Guidelines for Abstraction:
None

167. If discharged to another healthcare facility on #166 what type was it? [OHFType]
Answer only if Discharge Disposition = 5 Other Health Care Facility

1 = Skilled nursing facility
2 = Inpatient rehabilitation
3 = Long-term care facility or, hospital
4 = Intermediate care facility
5 = Other

Notes for Abstraction
- Skilled nursing facility includes those patients previously captured under Discharge Status (03) Dsch/Trans to skilled nursing facility (SNF) and (61) Dsch/Trans to hospital-based Medicare approved swing bed. Examples: Skilled Nursing Facility (SNF), Sub-Acute Care or Swing Bed, Transitional Care Unit (TCU).
- Long-term care facility or hospital includes those patients previously captured under Discharge Status (63) Dsch/Trans to Medicare certified long term care hosp and (64) Disch/Trans to a nursing facility certified under Medicaid but not certified under Medicare. LTCH Usage Note: For hospitals that meet the Medicare criteria for LTCH certification. A Long-term care hospital or long-term care facilities provide acute inpatient care with an average length of stay greater than 25 days.
- Other includes those patients previously captured under Discharge Status (65) Dsch/Trans to a psychiatric hospital or psychiatric distinct part unit of a hospital or other healthcare facility not defined in above options.
- New Jersey does not have Intermediate care facilities and should not be used as a valid response.

If item #166 = 6 (i.e., patient is coded "expired" on # 166) skip # 168.

168. Ambulation status at discharge [AmbStatD]

1 = Able to ambulate independently (no help from another person) with or without device
2 = With assistance from other person
3 = Unable to ambulate
9 = Not documented

Notes for Abstraction:

- Able to ambulate independently: Patient is ambulating without assistance (no help from another person) with or without a device. The use of a device, such as a cane, still meets this definition. Patient ambulating to and from the bathroom unassisted.
- With assistance (from person): Patient ambulating with assistance of another person.
- Unable to ambulate: Patient is on bed rest. Patient is only getting out of bed to the bedside commode (or up in chair) and is primarily in the bed (or immobile) at discharge
- ND: If it is unable to determine from documentation.

169. If past medical history of smoking is checked as "Yes" on #127, was the adult patient or their care giver given smoking cessation advise or counseling during the hospital stay? [SmkCesYN]

1 = Yes
0 = No or not documented in the medical record
2 = NC – A documented reason exists for not performing counseling

Notes for Abstraction:

- Patch, gum, and other smoking cessation therapies are considered "counseling"

Lipid Levels:

170. Total Cholesterol [LipTotal]

___ ___ ___ mg/dl

171. Triglycerides [LipTri]

___ ___ ___ ___ mg/dl

172. HDL (3-digits) [LipHDL]

___ ___ ___ mg/dl

173. LDL (3 digits) [LipLDL]

___ ___ ___ mg/dl

Notes for Abstraction of lipid levels (#170-#173):

- For this measurement, look for the highest level in the first 48 hours or within 30 days prior to hospital arrival. Direct and calculated (indirect) LDL-c values are acceptable.
- If triglycerides are >400 mg/dL, enter the values for total cholesterol, HDL and triglycerides, BUT leave the LDL value blank. If your hospital has the capability to directly measure LDL levels and this is available to you, enter that value.
- If lipid values are not documented or if the first lipid values available are measured greater than 48 hours after arrival, mark #174 "Yes".

- If the patient refuses to have labs drawn or there is documentation that the patient is comfort measures only within 48 hours of arrival, mark #175 = "Yes".

If #174 = "Yes" or #175 = "Yes", you can skip #170-173.

174. If the lipid values are not documented or if the first lipid values available are measured greater than 48 hours after arrival, answer "Yes" for Lipids Not Documented (ND) [LipND]

1 = Yes
0 = No

175. If the patient refuses to have labs drawn or there is documentation that the patient is comfort measures only within 48 hours of arrival, answer "Yes" for Lipids: NC [LipNC]

1 = Yes
0 = No

176. A1C (Glycosylated Hb) [HbA1c] Complete this field if patient has a history of diabetes, is a newly diagnosed diabetic or if this test result is available.

__ __ . __ %

177. If no documentation (ND) on A1C ND, Answer "Yes".

1 = Yes
0 = No

178. Cholesterol reducing treatment prescribed at discharge [LipDisYN]] (See Appendix VI for a list of Statin Drugs)

1= None prescribed/ND
2= None – contraindicated
3= Statin
4= Fibrate
6= Other med
7= Niacin
8= Absorption inhibitor
9=PCSK9 inhibitor

Notes for Abstraction:

- In determining whether a cholesterol reducing medication was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list a statin medication that is not included in any of the other discharge medication sources (e.g., discharge orders). All discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor.
    - In cases where there is a cholesterol reducing medication in one source that is not mentioned in other sources, it should be interpreted as a

discharge medication (select the medication class) unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - Consider it a discharge medication in the absence of contradictory documentation.

- If documentation is contradictory (e.g., physician noted “d/c lovastatin” in the discharge orders, but lovastatin is listed in the discharge summary’s discharge medication list), or after careful examination of circumstances, context, timing, etc, documentation raises enough questions, the case should be deemed "unable to determine" (select "None prescribed/ND").
- Consider documentation of a hold on a cholesterol reducing medication after discharge in one location and a listing of that cholesterol reducing medication as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not defined (e.g., “Hold lovastatin”). Examples of a hold with a defined timeframe include “Hold Vytorin x2 days” and “Hold lovastatin until ALT/AST normalize.”
- If a cholesterol reducing medication is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of a cholesterol reducing medication after discharge (e.g., “Hold Vytorin x2 days,” “Start statins as outpatient,” “Hold lovastatin”), select “None prescribed/ND”.
- If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
  Examples:
  − Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
  − Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.

- Disregard a cholesterol reducing medication documented only as a recommended medication for discharge (e.g., “Recommend sending patient home on lovastatin”). Documentation must be clear that a cholesterol reducing medication was actually prescribed at discharge.
- Disregard documentation of cholesterol reducing medication prescribed at discharge when noted only by medication class (e.g., “Statin Prescribed at Discharge: Yes” on a core measures form). The cholesterol reducing medication must be listed by name.
- Reasons for no cholesterol reducing treatment must be documented by a physician, nurse practitioner/advanced practice nurse or physician assistant.
- If reasons are not mentioned in the context of cholesterol reducing drugs, do not make inferences (e.g., do not assume that cholesterol reducing drugs are not being prescribed because of a particular condition unless documentation explicitly states so.)
- Documented reasons for not prescribing cholesterol reducing treatment may include:
  - Allergy to or complication related to cholesterol reducing treatment
    - Documentation of an allergy/sensitivity to one particular medication class is acceptable to take as an allergy to the entire class of medications (e.g., “Allergic to Lipitor”).

        - An allergy or adverse reaction to one class of cholesterol reducing medications would NOT be a reason for not administering all cholesterol reducing medications. Another medication class can be ordered.
    - Patient/family refusal
    - Hepatitis
    - Hepatic failure
    - Myalgias
    - Rhabdomyolysis

179. If statin was not prescribed, was there a documented reason for not prescribing a statin medication: [StatnNC]

1 = Yes
0 = No

Definition: Reasons for not prescribing a statin medication at discharge:

- Statin medication allergy
- Other reasons documented by physician/advanced practice nurse/physician assistant (physician/APN/PA) or pharmacist
- LDL-C less than 70 mg/dL

Statins are a class of pharmaceutical agents that modify LDL cholesterol by blocking the action of an enzyme in the liver which is needed to synthesize cholesterol thereby decreasing the level of cholesterol circulating in the blood.

Notes for Abstraction:

- Documentation of LDL-C less than 70 mg/dL anytime during the hospital stay is an acceptable stand-alone reason for not prescribing statin medication at discharge. Linkage with statin is not needed. If more than one LDL value is documented, the highest value must be less that 70 mg/dL. LDL values obtained within 30 days prior to hospital arrival are acceptable to select "Yes."
- A statin medication "allergy" or "sensitivity" documented at any time during the hospital stay counts as an allergy regardless of what type of reaction might be noted (e.g., "Allergies: Atorvastatin – Nausea" – select "Yes").
- Documentation of an allergy/sensitivity to one particular statin medication is acceptable to take as an allergy to the entire class of statin medications (e.g., "Allergic to Lipitor").
- When conflicting information is documented in a medical record, select "Yes."
- Reasons for not administering statin therapy must be documented by a physican/APN/PA or pharmacist with one exception: Patient/family refusal of any form of statin therapy may be documented by a nurse.
- In determining whether there is a reason documented by physician/APN/PA or pharmacist for not prescribing a statin medication at discharge:
    - Reasons must be explicitly documented (e.g., "Chronic liver failure – Statins contraindicated", "Hx muscle soreness with statins in past") or clearly implied (e.g., "No evidence of atherosclerosis – no statin therapy", "Pt. refusing all medications," "Supportive care only – no medication," statin medication on pre-printed order form is crossed out, "Statins not indicated," "No statin medications" [no reason given]). If reasons are not

mentioned in the context of statin medications, do not make inferences (e.g., do not assume that a statin medication is not being prescribed because of the patient's history of alcoholism or severe liver disease alone).

- Physician/APN/PA or pharmacist documentation of a hold on a statin medication or discontinuation of a statin medication that occurs during the hospital stay constitutes a "clearly implied" reason for not prescribing a statin medication at discharge. A hold/discontinuation of all PO medications counts if statin medication PO was on order at the time of the notation.

  EXCEPTIONS:

  - Documentation of a conditional hold or discontinuation of a statin medication does not count as a reason for not prescribing a statin medication at discharge (e.g., "Hold Zocor if severe diarrhea persists," "Stop atorvastatin if myalgias persist").
  - Discontinuation of a particular statin medication documented in combination with the start of a different statin medication (i.e., switch in type of statin medication) does not count as a reason for not prescribing a statin medication at discharge.

  Examples:

  - "Stop lovastatin" and "Start atorvastatin 80 mg po q hs" in same physician order
  - "Change Crestor to Lipitor" in progress note
  - "Do not continue after discharge" checked for Vytorin and "Continue after discharge" checked for Advicor on a physician-signed discharge medication reconciliation form

  - Discontinuation of a statin medication at a particular dose documented in combination with the start of a different dose of that statin (i.e., change in dosage) does not count as a reason for not prescribing a statin medication at discharge.

  Examples:

  - "Stop Simvastatin 20 mg po q hs" and "Start Simvastatin 40 mg po q hs" in same physician order
  - "Increase Pravachol 40 mg to 80 mg" in progress note
  - "Do not continue after discharge" checked for Zocor 40 mg and "Continue after discharge" checked for Zocor 80 mg on a physician-signed discharge medication reconciliation form

- Reason documentation which refers to a more general medication class is not acceptable (e.g., "No cholesterol-reducers", "Hold all lipid-lowering medications").
- Deferral of statin medication from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing a statin medication unless the problem underlying the deferral is also noted. Examples:
  -"Consulting neurologist to evaluate pt. for statin therapy" - select "No".
  -"Severe diarrhea. Start statin if OK with neurology." - select "Yes".
- If there is documentation of a plan to initiate/restart a statin medication, and the reason/problem underlying the delay in starting/restarting the medication is also noted, this constitutes a "clearly implied" reason for not prescribing a statin medication at discharge.

  Acceptable examples (select "Yes"):

  - "Liver enzymes high. May start lovastatin as outpatient."

- "Add statin if myalgias resolve"
  Unacceptable examples (select "No"):
  - "Consider starting statins in a.m."
  - "May add Zocor when pt. can tolerate."
  - Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no statin medications due to abnormal liver enzymes" - select "Yes," even if documentation indicates that the liver enzyme levels normalized by the time of discharge and the lipid-lowering medication was restarted).
  - Crossing out of a statin medication counts as a "clearly implied reason" for not prescribing statin medication at discharge only if on a pre-printed form.
  - Statin medications may also be referred to as HMG CoA reductase inhibitors
- When the current record includes documentation of a pre-arrival reason for no statin medication, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival statin medication allergy.
  - Pre-arrival hold/discontinuation or notation such as "No stain medications" IF the underlying reason/problem is also noted (e.g., "Lipitor discontinued in transferring hospital secondary to severe diarrhea").
  - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No statin medications") (e.g., "Hx muscle soreness to statins in past" in transferring ED record).

Suggested Data Sources:
- Consultation notes
- Discharge summary
- Emergency department record
- History and physical
- Medication administration record
- Medication reconciliation form
- Physician orders
- Progress Notes

Excluded Data Sources:
Any documentation dated/timed after discharge, except discharge summary.

Inclusion Guidelines for Abstraction:
Examples:
- Hepatic failure
- Hepatitis
- Myalgias
- Patient/family refusal
- Rhabdomyolysis

Refer to Appendix VI comprehensive list of Statin Medications.

Exclusion Guidelines for Abstraction:
Statin medication allergy described using one of the negative modifiers or qualifiers listed in Appendix H, Table 2.6. Qualifiers and Modifiers Table of the Specification Manual for National Hospital Inpatient Quality Measures.

180. Is there documentation that antihypertensive medication was prescribed at discharge? [HBPTreat]

1 = Yes
0 = No/Not documented
2 = NC

The appropriate time to initiate antihypertensive medication in the setting of acute ischemic stroke is unknown. However, many patients are discharged on antihypertensive medications.

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Example 1: Patient 025 is admitted to the in-patient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. Paroxysmal atrial fibrillation (PAF) is noted during admission but he returns to sinus rhythm spontaneously. He is discharged on day 5 on his original pre-admission medications and the DASH diet. Data Entry will be to multi-select "Yes" for antihypertensive medication at discharge.

Example 2: The notes for patient 019 document critical intracranial stenosis. At discharge his blood pressure is 100/60 and his lisinopril and furosemide were held with a plan to restart if BP increases. Data entry would be to select "No/Not documented.

This information is usually listed in the stroke pathway documentation, Admission sheet, Diagnostic reports, Discharge summary, ED Nurses notes, ED Physician notes, Medication order sheets, Nurses progress notes, Physician order sheets, Physician progress.

181. Was antithrombotic (antiplatelet or anticoagulant) medication that is approved for stroke prescribed at discharge? [AthDscYN]

1 = Yes
0 = No/Not documented
2 = NC

Yes: Antithrombotic therapy from the inclusion list below was prescribed at hospital discharge.

No/Not documented: Antithrombotic therapy was not prescribed at hospital discharge OR an alternate antithrombotic therapy not on the inclusion list below was prescribed at hospital discharge, OR unable to determine from medical record documentation.

NC: There is documentation of a reason for not prescribing antithrombotic therapy from the inclusion list below at hospital discharge

Select "Yes" **only** if one of the following antithrombotic medications was prescribed

at discharge.

Antiplatelet Inclusion:	**Anticoagulant Inclusion:**
Aspirin	Apixaban (Eliquis)
Aspirin/dipyridamole (Aggrenox)	Argatroban
Clopidogrel (Plavix)	Dabigatran (Pradaxa)
Ticlopidine (Ticlid)	Edoxaban (Savaysa)
	Fondaparinux (Arixtra)
	Full dose LMW heparin
	Lepirudin (Refludan)
	Rivaroxaban (Xarelto)
	Unfractioned heparin IV
	Warfarin (Coumadin)

See Appendix III (Antiplatelet Medications) and Appendix IV (Anticoagulant Medications) for a full list of antithrombotic medications by brand name, generic name, and drug class.

Notes for Abstraction:

If the patient is only on prasugrel or ticagrelor, select “No/ND”.

- In determining whether antithrombotic therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an antithrombotic that is not included in any of the other discharge medication sources (e.g., discharge orders). All discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor.
    - In cases where there is an antithrombotic in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - Consider it a discharge medication in the absence of contradictory documentation.
    - If documentation is contradictory (e.g., physician noted “d/c Plavix” in the discharge orders, but Plavix is not listed in the discharge summary’s discharge medication list), or after careful examination of circumstances, context, timing, etc., documentation raises enough questions, the case should be deemed "unable to determine" (select "No").
    - Consider documentation of a hold on an antithrombotic after discharge in one location and a listing of that antithrombotic as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not defined (e.g., “Hold Plavix”). Examples of a hold with a defined timeframe include “Hold Plavix x2 days” and “Hold ASA until after stress test.” If an antithrombotic is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of antithrombotic therapy after discharge (e.g., “Hold Plavix x2 days,” “Start Plavix as outpatient,” “Hold Plavix”), select “No”.
    - If two discharge summaries are included in the medical record, use the one

with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.

Examples:

− Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.

− Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.

- Disregard an antithrombotic medication documented only as a recommended medication for discharge (e.g., "Recommend sending patient home on aspirin"). Documentation must be clearer that an antithrombotic was actually prescribed at discharge.
- Disregard documentation of antithrombotic prescribed at discharge when noted only by medication class (e.g., "Antithrombotic Prescribed at Discharge: Yes" on a core measures form). The antithrombotic must be listed by name and on the above inclusion list in order to be considered an antithrombotic therapy approved in stroke.
- Reasons for not prescribing antithrombotic therapy from the inclusion list at hospital discharge must be documented by a physician/APN/PA or pharmacist.
- If reasons for not prescribing an antithrombotic therapy from the inclusion list are not mentioned in the context of antithrombotics, do not make inferences (e.g., do not assume that antithrombotic therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
    - Reasons for not prescribing an antithrombotic therapy from the inclusion list must be explicitly documented (e.g., Active GI bleed – antithrombotic therapy contraindicated", "No ASA" [no reason given]).
    - Physician/APN/PA or pharmacist documentation of a hold on an antithrombotic medication or discontinuation of an antithrombotic medication that occurs during the hospital stay constitutes a "clearly implied" reason for not prescribing antithrombotic therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral antithrombotic medication from the inclusion list (e.g., Plavix) was on order at the time of the notation.

      EXCEPTIONS:

      - Documentation of a conditional hold or discontinuation of an antithrombotic medication does not count as a reason for not prescribing an antithrombotic medication at discharge (e.g., "Hold ASA if guaiac positive", "Stop Plavix if rash persists", "No ASA for 24 hours following thrombolytic therapy").

      - Discontinuation of a particular antithrombotic medication documented in combination with the start of a different antithrombotic medication (i.e., switch type of antithrombotic medication) does not count as a reason for not prescribing an antithrombotic medication at discharge.

      Examples:

      "Stop Plavix" and "Start Plavix 75 mg po daily" in same physician order

      "Change Plavix to aspirin" in progress note

      "Do not continue after discharge" checked for Plavix and "Continue after discharge" checked for clopidogrel on a physician-signed discharge

medication reconciliation form
- Discontinuation of an antithrombotic medication at a particular dose documented in combination with the start of a different dose of that antithrombotic (i.e., change in dosage) does not count as a reason for not prescribing an antithrombotic medication at discharge.
Examples:
 “Stop Ecotrin 300 mg po daily” and “Start Ecotrin 325 mg po daily” in same physician order
 “Increase Ectotrin 81 mg to 325 mg daily” in progress note
 “Do not continue after discharge” checked for Ecotrin 300 mg and “Continue after discharge” checked for Ecotrin 325 mg on a physician-signed discharge medication reconciliation form

- Deferral of antithrombotic therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing antithrombotic therapy at discharge unless the problem underlying the deferral is also noted.
Examples:
- “Consulting neurologist to evaluate pt. for warfarin therapy.” - DO NOT select “NC. You must select “No/ND”.
- “Rule out GI bleed. Start ASA if OK with gastroenterology.” - select “NC”.
- If there is documentation of a plan to initiate/restart antithrombotic therapy from the inclusion list, and the reason/problem underlying the delay in starting/restarting antithrombotic therapy is also noted, this constitutes a “clearly implied” reason for not prescribing antithrombotic therapy from the inclusion list at discharge.
Acceptable examples (select “NC”):
- “Stool Occult Blood positive. May start Coumadin as outpatient.”
- “Start ASA if hematuria subsides.”
Unacceptable examples (- DO NOT select “NC. You must select “No/ND”.):
- “Consider starting Coumadin in a.m.”- “May add Plavix when pt. can tolerate”
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating “no ASA due to rectal bleeding” - select “NC,” even if documentation indicates that the rectal bleeding has resolved by the time of discharge and ASA was restarted).
- Crossing out of an antithrombotic medication counts as a "clearly implied reason" for not prescribing antithrombotic therapy at discharge only if on a pre-printed form.

- An allergy or adverse reaction to one type of antithrombotic would NOT be a reason for not administering all antithrombotics. Another medication on the inclusion list can be ordered.
- When conflicting information is documented in a medical record, select “NC”.
- When the current record includes documentation of a pre-arrival reason for no antithrombotic therapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the

underlying reason/problem is also noted (e.g., “Coumadin held in transferring hospital due to possible GI bleed”).
    - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No ASA") (e.g., "Hx GI bleeding with ASA" in transferring ED record).
- Reasons for not PRESCRIBING antithrombotic therapy from the inclusion list at hospital discharge:
    - Allergy or complication related to all antithrombotic medications
    - Serious side effect to medication
    - Aortic dissection
    - Bleeding disorder
    - Brain/CNS cancer
    - CVA, hemorrhagic
    - Extensive/metastatic CA
    - Hemorrhage, any type
    - Intracranial surgery/biopsy
    - Patient/family refusal
    - Peptic ulcer
    - Planned surgery within 7 days following discharge
    - Risk of bleeding or discontinued due to bleeding
    - Unrepaired intracranial aneurysm
    - Terminal illness
    - Other documented by physician/APN/PA or pharmacist

Please note: Anticoagulants at doses (low dose) designed to prevent deep vein thrombosis are insufficient as antithrombotic therapy to prevent recurrent ischemic stroke or TIA. Conversely, antiplatelet agents at doses to prevent recurrent ischemic stroke or TIA are insufficient therapy to prevent deep vein thrombosis. However, anticoagulants at full therapeutic doses (such as full dose LMW heparin, unfractionated heparin IV, or warfarin) are considered acceptable treatment options for both DVT prophylaxis and antithrombotic medication.

DVT prevention doses may include:

- dalteparin (Fragmin): 2500 or 5000 units SQ every day
- enoxaparin (Lovenox): 30-40 mg SQ every day or 2 times a day
- fondaparinux (Arixtra): 2.5 mg SQ every day
- Heparin: 5000 units SQ every 8-12 hrs
- rivaroxaban (Xarelto) Oral: 10 mg every day for prevention of DVT after hip surgery

Therapeutic doses, that may prevent DVT and also be effective as therapeutic anticoagulation to prevent stroke, may include: These doses are provided to aid chart abstraction and not as an endorsement of any of the specific medicines for treatment or prevention of stroke. In many cases these medicines are not approved by the FDA for treatment or prevention of stroke, but could reasonably be used off-label for that purpose.

- apixaban (Eliquis): 5mg twice daily (2.5 mg twice daily in patients with two or more of the following: age >/= 80 years, weight </= 60kg, or serum creatinine >/= 1.5mg/dL)
- argatroban at any dose IV infusion
- dabigatran (Pradaxa): 150 mg 2 times a day (75 mg 2 times a day in patients with renal failure)
- dalteparin (Fragmin) : 100 IU/kg SQ every 12hrs
- fondaparinux (Arixtra): 5-10 mg SQ every day

- Heparin: continuous IV infusion titrated to elevated PTT outside the normal range. Typical ranges could include PTT 50-70 or 60-84; however, IV heparin is not of proven benefit for acute ischemic stroke or secondary prevention of stroke.
- lepirudin (Refludan) at any dose IV infusion
- rivaroxaban (Xarelto) Oral: 20 mg every day (15 mg every day in patients with renal failure)

This information is usually listed in the Consultation progress notes, Discharge summary, Medication list or orders, Discharge orders, Nurses progress notes, Physician progress notes, Physical or Occupational therapy progress notes.

181a. Was an antithrombotic medication not on the Antithrombotic Therapy Approved in Stroke inclusion list (an alternate antithrombotic medication) prescribed at discharge? [AthDCMed]

1 = Yes
0 = No/ND

Yes: An alternate antithrombotic therapy was prescribed at hospital discharge

No: An alternate antithrombotic therapy was not prescribed at hospital discharge, OR unable to determine from the medical record documentation

182. If patient was discharged on an antithrombotic medication, was it an antiplatelet? [AthDCPlts]

1 = Yes
0 = No/ND

183. If patient was discharged on an antithrombotic medication, was it an anticoagulant? [AthDCCoag]

1 = Yes
0 = No/ND

184. Was atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF) documented during this episode of care?[AFibYN]

1 = Yes
0 = No/Not documented (ND)

Yes: Current finding of any atrial fibrillation/flutter was documented.

No/ND: Current finding of any atrial fibrillation/flutter was not documented, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Documented current findings of any condition described in the definition statement meets this data element.
- Documentation of atrial fibrillation or flutter on current EKG, select “Yes”.

- Diagnosis of current atrial fibrillation or flutter anywhere in the medical record, select “Yes”.
- See the inclusion list for acceptable examples of documentation. The list is not all-inclusive.

Inclusion Guidelines for Abstraction
- AF
- A-fib
- Atrial fibrillation
- Atrial flutter
- Persistent atrial fibrillation
- Paroxysmal atrial fibrillation
- PAF
- Discharges with an ICD-10-CM Other Diagnosis Code of I48.0, I48.1, I48.2, I48.3, I48.4, I48.91, I48.92

185. If a history of atrial fibrillation/flutter or PAF is documented in the medical history of the patient or the patient experienced atrial fibrillation/flutter or PAF during this episode of care, was patient prescribed anticoagulation medication discharge? [AFibRx]

1 = Yes
0 = No/Not documented (ND)
2 = Contraindicated (NC)

Yes: Anticoagulation therapy was prescribed at hospital discharge.

No/ND: Anticoagulation therapy was not prescribed at discharge or unable to determine from medical record documentation.

NC: There is documentation of a reason for not prescribing anticoagulation therapy.

Notes for Abstraction:
- See Appendix IV for list of anticoagulant medications.
- In determining whether anticoagulation therapy was prescribed at discharge, it is not uncommon to see conflicting documentation amongst different medical record sources. For example, the discharge summary may list an anticoagulant that is not included in any of the other discharge medication sources (e.g., discharge orders). All discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor.
    - In cases where there is an anticoagulant in one source that is not mentioned in other sources, it should be interpreted as a discharge medication (select "Yes") unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - Consider it a discharge medication in the absence of contradictory documentation.
    - If documentation is contradictory (e.g., physician noted “d/c Coumadin” in the discharge orders, but Coumadin is listed in the discharge summary’s discharge medication list), or after careful examination of circumstances, context, timing, etc., documentation raises enough questions, the case should be deemed "unable to determine" (select "No").

- Consider documentation of a hold on an anticoagulant after discharge in one location and a listing of that anticoagulant as a discharge medication in another location as contradictory ONLY if the timeframe on the hold is not defined (e.g., "Hold Coumadin"). Examples of a hold with a defined timeframe include "Hold Coumadin x2 days" and "Hold warfarin until after stress test."
- If an anticoagulant is NOT listed as a discharge medication, and there is only documentation of a hold or plan to delay initiation/restarting of anticoagulation therapy after discharge (e.g., "Hold Coumadin x2 days," "Start Coumadin as outpatient," "Hold Coumadin"), select "No".
- If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc.
  Examples:
  − Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
  − Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.

- Disregard an anticoagulant medication documented only as a recommended medication for discharge (e.g., "Recommend sending patient home on dabigatran"). Documentation must be clearer that an anticoagulant was actually prescribed at discharge.
- Disregard documentation of anticoagulant prescribed at discharge when noted only by medication class (e.g., "Anticoagulant Prescribed at Discharge: Yes" on a core measures form). The anticoagulant must be listed by name.
- Reasons for not prescribing anticoagulation therapy at hospital discharge must be documented by a physician/APN/PA or pharmacist.
- If reasons are not mentioned in the context of anticoagulation therapy, do not make inferences (e.g., do not assume that anticoagulation therapy was not prescribed because of a bleeding disorder unless documentation explicitly states so).
  - Reasons must be explicitly documented (e.g., "Active GI bleed – anticoagulation therapy contraindicated", "No warfarin" [no reason given]).
  - Physician/APN/PA or pharmacist documentation of a hold on an anticoagulant medication or discontinuation of an anticoagulant medication that occurs during the hospital stay constitutes a "clearly implied" reason for not prescribing anticoagulation therapy at discharge. A hold/discontinuation of all p.o. medications counts if an oral anticoagulant medication (e.g., warfarin) was on order at the time of the notation.
    EXCEPTIONS:
    - Documentation of a conditional hold or discontinuation of an anticoagulant medication does not count as a reason for not prescribing an anticoagulant medication at discharge (e.g., "Hold Coumadin if guaiac positive", "Stop warfarin if rash persists", "No warfarin for 24 hours following thrombolytic therapy").
    - Discontinuation of a particular anticoagulant medication documented in combination with the start of a different anticoagulant medication

(i.e., switch type of anticoagulant medication) does not count as a reason for not prescribing an anticoagulant medication at discharge.
Examples:
-"Stop warfarin" and "Start warfarin 2 mg po daily" in same physician order
-"Change Coumadin to Pradaxa" in progress note
-"Do not continue after discharge" checked for warfarin and "Continue after discharge" checked for Coumadin on a physician-signed discharge medication reconciliation form

- Discontinuation of an anticoagulant medication at a particular dose documented in combination with the start of a different dose of that anticoagulant (i.e., change in dosage) does not count as a reason for not prescribing an anticoagulant medication at discharge.
Examples:
-"Stop warfarin 5 mg po daily" and "Start warfarin 2.5 mg po daily" in same physician order
-"Decrease dabigatran 150 mg po BID to 75 mg po BID" in progress note
-"Do not continue after discharge" checked for Coumadin 5 mg and "Continue after discharge" check for Coumadin 2.5 mg on a physician-signed discharge medication reconciliation form

- Deferral of anticoagulation therapy from one physician/APN/PA or pharmacist to another does NOT count as a reason for not prescribing anticoagulation therapy at discharge unless the problem underlying the deferral is also noted.
Examples:
- "Consulting neurologist to evaluate pt. for warfarin therapy." - DO NOT select "NC". You must select "No/ND".
- "Rule out GI bleed. Start Coumadin if OK with gastroenterology" - select "NC".
- If there is documentation of a plan to initiate/restart anticoagulation therapy, and the reason/problem underlying the delay in starting/restarting anticoagulation therapy is also noted, this constitutes a "clearly implied" reason for not prescribing anticoagulation therapy at discharge.
Acceptable examples (select "NC"):
- "Stool Occult Blood positive. May start Coumadin as outpatient."
- "Start warfarin if hematuria subsides."
Unacceptable examples (- DO NOT select "NC". You must select "No/ND".):- "Consider starting Coumadin in a.m."
- "May add warfarin when pt. can tolerate"
- Reasons do NOT need to be documented at discharge or otherwise linked to the discharge timeframe: Documentation of reasons anytime during the hospital stay are acceptable (e.g., mid-hospitalization note stating "no warfarin due to rectal bleeding" - select "NC," even if documentation indicates that the rectal bleeding has resolved by the time of discharge and warfarin was restarted).
- Crossing out of an anticoagulant medication counts as a "clearly implied reason" for not prescribing anticoagulation therapy at discharge only if on a pre-printed form.

- An allergy or adverse reaction to one type of anticoagulant would NOT be a reason for not administering all anticoagulants. Another medication can be

ordered.

- When conflicting information is documented in a medical record, select “NC”.
- When the current record includes documentation of a pre-arrival reason for no anticoagulation therapy, the following counts regardless of whether this documentation is included in a pre-arrival record made part of the current record or whether it is noted by hospital staff during the current hospital stay:
  - Pre-arrival hold/discontinuation or notation such as "No Coumadin" IF the underlying reason/problem is also noted (e.g., “Coumadin held in transferring hospital due to possible GI bleed”).
  - Pre-arrival "other reason" (other than hold/discontinuation or notation of "No warfarin") (e.g., "Hx GI bleeding with warfarin" in transferring ED record).
- Reasons for not PRESCRIBING anticoagulation therapy at hospital discharge:
  - Allergy to all anticoagulant medications
  - Aortic dissection
  - Bleeding disorder
  - Brain/CNS cancer
  - CVA, hemorrhagic
  - Extensive/metastatic CA
  - Hemorrhage, any type
  - Intracranial surgery/biopsy
  - Patient/family refusal
  - Peptic ulcer
  - Planned surgery within 7 days following discharge
  - Risk of bleeding
  - Unrepaired intracranial aneurysm
  - Other documented by physician/APN/PA or pharmacist

Was there documentation that the patient and/or caregiver received education and/or resource materials regarding any of the following?

186. Risk factors for stroke [EducRF]

1 = Yes
0 = No/Not documented

Documentation that the patient/caregiver received educational materials that address risk factors for stroke. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

Yes: WRITTEN instructions/educational material given to patient/caregiver address risk factors for stroke.

No: WRITTEN instructions/educational material given to patient/caregiver do not address risk factors for stroke, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Educational material must specifically address risk factors for stroke:

Example:
Stroke Risk Factors:
  - Overweight
  - Smoking
  - Sedentary lifestyle

- See the inclusion list for acceptable risk factors for stroke. The list is not all-inclusive.
- Individual risk factors that are not mentioned in the context of education provided on the risk factors for stroke, do not count (e.g., discharge instruction to limit alcohol without explicit documentation that excessive alcohol consumption is a risk factor for stroke).
- Acceptable materials include discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, and DVDs.
  - Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
  - Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the patient refused written instructions/material which addressed risk factors for stroke, select "Yes".
- If documentation indicates that written instructions/material on risk factors for stroke were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:
- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Inclusion Guidelines for Abstraction:
Risk Factors for Stroke:
- Age
- Atrial fibrillation
- Carotid artery stenosis
- Carotid/peripheral or other artery disease

- Cigarette smoking
- Diabetes mellitus
- Excessive alcohol consumption
- Heredity (family history)
- High blood pressure
- Other heart disease (e.g., coronary heart disease, heart failure, dilated cardiomyopathy)
- Overweight (BMI greater than or equal to 25)
- Physical inactivity
- Poor diet (e.g., high in saturated fat, trans fat, cholesterol or sodium)
- Prior stroke, TIA or heart attack
- Race
- Sex (gender)
- Sickle cell disease (also called sickle cell anemia)

Exclusion Guidelines for Abstraction:
Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Stroke Risk Factors teaching sheet given to patient").

187. Stroke warning signs [EducSSx]

1 = Yes
0 = No/Not documented

Documentation that the patient/caregiver received educational materials that address the warning signs and symptoms of stroke. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.
Suggested Data Collection Question: Did the WRITTEN instructions or other documentation of educational material given to the patient/caregiver address warning signs and symptoms of stroke?

Yes: WRITTEN instructions/educational material given to patient/caregiver address warning signs and symptoms of stroke.

No: WRITTEN instructions/educational material given to patient/caregiver do not address warning signs and symptoms of stroke, OR unable to determine from medical record documentation.

Notes for Abstraction:
- Include instructions which address what to do if warning signs or symptoms of stroke are noted.
  Example:
  - "Call 911 immediately if sudden numbness or weakness of an extremity is noted."
- Acceptable materials include discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, and DVDs.
  - Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a

copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
    - Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the patient refused written instructions/material which addressed warning signs and symptoms of stroke, select "Yes".
- If documentation indicates that written instructions/material on warning signs and symptoms of stroke were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g. home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:
- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Inclusion Guidelines for Abstraction:
- Warning Signs and Symptoms of Stroke
- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause

Exclusion Guidelines for Abstraction:
Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Warning Signs and Symptoms of Stroke").

188. How to activate EMS [EducEMS]

1 = Yes
0 = No/Not documented

Documentation that the patient/caregiver received educational materials that address the need for activation of the emergency medical system (EMS) if signs or symptoms of stroke occur. Immediate activation of the emergency medical system by calling 911 or another EMS number improves hospital arrival time and the likelihood of

thrombolytic administration.

Yes: WRITTEN instructions/educational material given to patient/caregiver address activation of the emergency medical system (EMS) if signs or symptoms of stroke occur.

No: WRITTEN instructions/educational material given to patient/caregiver do not address activation of the emergency medical system (EMS) if signs or symptoms of stroke occur, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Educational material must address activation of the emergency medical system if signs or symptoms of stroke occur.
  Example:
  - "Call 911 immediately if sudden numbness or weakness of an extremity is noted".
- Acceptable materials include discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, and DVDs.
  - Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
  - Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the patient refused written instructions/material which addressed activation of the emergency medical system (EMS) if signs or symptoms of stroke occur, select "Yes".
- If documentation indicates that written instructions/material on activation of the emergency medical system (EMS) were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g. home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:

- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Inclusion Guidelines for Abstraction:
Emergency Medical System
- EMS
- 911

Warning Signs and Symptoms of Stroke
- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause

Exclusion Guidelines for Abstraction:
Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to "Activation of the Emergency Medical System").

189. Need for follow-up after discharge [EducCC]

1 = Yes
0 = No/Not documented

Documentation that the patient/caregiver received educational materials that address the need for continuing medical care after discharge. Patient education programs for specific chronic conditions have increased healthful behaviors, improved health status, and/or decreased health care costs of their participants.

Yes: WRITTEN instructions/educational material given to patient/caregiver address follow-up with a physician/APN/PA after discharge.

No: WRITTEN instructions/educational material do not address follow-up with a physician/APN/PA or unable to determine from medical record documentation.

Notes for Abstraction:
- In the absence of explicit documentation that follow-up involves contact with a physician/APN/PA, the abstractor may infer contact with a physician/APN/PA, unless documentation suggests otherwise (e.g., BP check, laboratory work only).
- Acceptable materials include discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, and DVDs.
    - Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
    - Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.

- If the patient refused written instructions/material which addressed follow-up, select “Yes”.
- If documentation indicates that written instructions/material on follow-up after discharge were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select “Yes”.
- The caregiver is defined as the patient’s family or any other person (e.g., home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:
- Discharge instruction sheet
- Discharge summary
- Education record
- Home health referral form
- Nursing discharge notes
- Nursing notes
- Progress notes
- Teaching sheet

Inclusion Guidelines for Abstraction:
None

Exclusion Guidelines for Abstraction:
- Follow-up prescribed on PRN or as needed basis
- Follow-up noted only as Not Applicable (N/A), None, or left blank
- Pre-printed follow-up appointment instruction with all fields left blank (e.g., “Please return for follow up appointment with Dr. [blank line] on [blank line]”, "Make an appointment with your physician in [blank line] for follow up"), unless next to checked checkbox
- Unchecked checkbox next to instruction (e.g., blank checkbox on discharge instruction sheet next to “Call Dr.’s office for appointment within two weeks”)

190. Their prescribed medications [EducMeds]

1 = Yes
0 = No/Not documented

Documentation that the patient/caregiver received educational materials that address all medications prescribed at discharge. Instructions must address at least the names of all discharge medications but may also include other usage instructions such as dosages, frequencies, side effects, etc. The importance of medications prescribed to prevent a second stroke (e.g., Plavix) should be emphasized.

Yes: WRITTEN instructions/educational material given to patient/caregiver address discharge medications.

No: WRITTEN instructions/educational material do not address all discharge medications, OR unable to determine from medical record documentation.

Notes for Abstraction:

- Abstraction is a two-step process:

1. Determine all of the medications being prescribed at discharge, based on available medical record documentation.

    - Discharge medication information included in a discharge summary dated after discharge should be used as long as it was added within 30 days after discharge.
    - If two discharge summaries are included in the medical record, use the one with the latest date/time. If one or both are not dated or timed, and you cannot determine which was done last, use both. This also applies to discharge medication reconciliation forms. Use the dictated date/time over transcribed date/time, file date/time, etc. Examples:
      − Two discharge summaries, one dictated 5/22 (day of discharge) and one dictated 5/27 - Use the 5/27 discharge summary.
      − Two discharge medication reconciliation forms, one not dated and one dated 4/24 (day of discharge) - Use both.
    - If discharge medications are noted using only references such as "continue home meds," "resume other meds," or "same medications," rather than lists of the names of the discharge medications, the abstractor should use all sources to compile a list of medications the patient was on prior to arrival (or in the case of acute care transfers, use the medications the patient was on prior to arrival at the first hospital).
    - Disregard all references to laxatives, antacids, vitamins, minerals (EXCEPT potassium), food supplements, and herbs, prn or not, AND disregard references to medications by class only (e.g., "heparinoids") where the specific medication name is not specified. They are NOT required in the written instructions for the purposes of the Stroke Education measure (STK-8).
    - If there is documentation of a plan to start/restart a medication after discharge or a hold has been placed on a medication for a defined timeframe after discharge (e.g., "Start Plavix as outpatient," Hold ASA until after endoscopy"), consider this a discharge medication requiring education.
    - PRN medications are required on the discharge instructions, with ONE exception: When discharge medications outside of the written discharge instructions are noted using ONLY references such as "continue current medications" or "continue present meds," rather than lists of the names of the discharge medications, and the abstractor is referencing what medications the patient was taking on the day of discharge (for comparison against the written discharge instructions, to confirm completeness of that list), medications which are clearly listed as prn (given on an as needed basis only) do NOT need to be included in the instructions.
    - Oxygen should not be considered a medication.
    - Medications which the patient will not be taking at home (and/or the caregiver will not be giving at home) are NOT required in the medication list included in the written discharge instructions (e.g.,

monthly B12 injections, dialysis meds, chemotherapy).

2. Check this list against the written discharge instructions given to the patient to ensure that these instructions addressed at least the names of all of the discharge medications. If a list of discharge medications is not documented elsewhere in the record, and the completeness of the medication list in the instructions cannot be confirmed as complete, or it can be determined to be incomplete, select "No".

    - EXCEPTION: If a comparison list is not available, and the discharge list in the written discharge instructions cannot be determined to be complete or incomplete, but the written discharge instructions have the name or initials of the physician/advanced practice nurse/physician assistant (physician/APN/PA) signed on the form, presume the list of discharge medications in those instructions is complete. Signatures that are dated/ timed after discharge are not acceptable.
    - In making medication name comparisons, consider two medications that are brand/trade name vs. generic name in nature or that have the same generic equivalent as matches.
      Examples of matches:
      − Coumadin vs. Warfarin
      − ASA vs. EC ASA− Plavix vs. Clopidogrel
      − Mevacor vs. Lovastatin
      − Lopressor vs. Metoprolol
      − Metoprolol vs. Metoprolol Succinate
      Example of a mismatch:
      − Lopressor vs. Toprol
    - If there is documentation that the patient was discharged on insulin(s) of ANY kind, ANY reference to insulin as a discharge medication in the written discharge instructions can be considered a match, for the purposes of the Stroke Education measure (STK-8). E.g., D/C summary notes patient discharged on "Humulin Insulin" and "Insulin 70/30" is listed on the discharge instruction sheet – Consider this a match. However, contradictory documentation abstraction guidelines still apply to insulin cases (e.g., D/C summary notes patient discharged on "Novolog 50 units t.i.d." and "Novolog 50 units t.i.d." is discontinued on discharge medication reconciliation form – Select "No").

- In determining the medications prescribed at discharge (step 1 above), all discharge medication documentation available in the chart should be reviewed and taken into account by the abstractor.
    - If there is a medication in one source that is not mentioned in other sources, take it as a discharge medication (i.e., required in the written discharge instructions) unless documentation elsewhere in the medical record suggests that it was NOT prescribed at discharge - Consider it a discharge medication in the absence of contradictory documentation.
    - If documentation is contradictory (e.g., physician noted "d/c ASA" in the discharge orders, but it is listed in the discharge summary's discharge medication list), or, after careful examination of circumstances, context, timing, etc., documentation raises enough questions about what

medications are being prescribed at discharge, the case should be deemed "unable to determine" (select "No"), regardless of whether the medication in question is included in the written discharge instructions.
    - If there is documentation of a plan to start/restart a medication after discharge or a hold on a medication for a defined timeframe after discharge (e.g., "Start Plavix as outpatient," "Hold Lasix x 2 days," "Hold ASA until after endoscopy"):
      - If it is NOT listed as a discharge medication elsewhere (e.g., "Lasix," "Plavix"), it is not required in the discharge instructions (but if it is listed on the instructions, this is acceptable).
      - If it IS listed as a discharge medication elsewhere (e.g., "Lasix," "Plavix"), do not regard this as contradictory documentation, and require the medication in the discharge instructions.
    - Disregard a medication documented only as a recommended medication for discharge. E.g., "Recommend sending patient home on Vasotec" – Vasotec is not required in the discharge instructions (but if it is listed on the instructions, this is acceptable). Documentation must be more clear that such a medication was actually prescribed at discharge.
    - Do not give credit in cases where the patient was given written discharge medication instructions only in the form of written prescriptions.
- Acceptable materials include discharge instruction sheets, brochures, booklets, teaching sheets, videos, CDs, and DVDs.
    - Documentation must clearly convey that the patient/caregiver was given a copy of the material to take home. When the material is present in the medical record and there is no documentation which clearly suggests that a copy was given, the inference should be made that it was given IF the patient's name or the medical record number appears on the material AND hospital staff or the patient/caregiver has signed the material.
    - Use only documentation provided in the medical record itself. Do not review and use outside materials in abstraction. Do not make assumptions about what content may be covered in material documented as given to the patient/caregiver.
- Written instructions given anytime during the hospital stay are acceptable.
- If the patient refused written discharge instructions/material which addressed discharge medications, select "Yes".
- If documentation indicates that written instructions/material on discharge medications were not given because the patient is cognitively impaired (e.g., comatose, obtunded, confused, short-term memory loss) and has no caregiver available, select "Yes".
- The caregiver is defined as the patient's family or any other person (e.g., home health, VNA provider, prison official or other law enforcement personnel) who will be responsible for care of the patient after discharge.

Suggested Data Sources:
- Discharge instruction sheet
- Discharge progress notes
- Discharge summary
- Home health referral form
- Medication reconciliation form
- Nursing notes

- Teaching sheet

Inclusion Guidelines for Abstraction:
None

191. Is there documentation in the record that the patient was assessed for or received rehabilitation services? [RehabPlan]

1 = Yes
0 = No/Not documented

Documentation that the patient was assessed for or received rehabilitation services during this hospitalization. Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness, or disease to as normal a condition as possible.
Suggested Data Collection Question: Was the patient assessed for and/or did the patient receive rehabilitation services during this hospitalization?

Yes: Patient was assessed for and/or received rehabilitation services during this hospitalization.

No: Patient was not assessed for nor did patient receive rehabilitation services during this hospitalization, OR unable to determine from medical record documentation.

Notes for Abstraction:
- The assessment for rehabilitation services must be completed by a qualified provider. See the inclusion list for acceptable examples of documentation. The list is not all-inclusive.
- If a documented reason exists for not completing a rehabilitation assessment, select "Yes".
  Examples:
  - "Patient returned to prior level of function, rehabilitation not indicated at this time."
  - "Patient unable to tolerate rehabilitation therapeutic regimen."
  - Patient/family refusal
- Do not infer that documentation of symptoms resolved means that a rehabilitation assessment was completed, unless mentioned in the context of rehabilitation services.
  Example: "Symptoms resolved – no rehab needed."
- When an assessment is not found in the medical record but documentation indicates that rehabilitation services were initiated (i.e., Physical Therapy (PT), Occupational Therapy (OT), Speech Language Therapy (SLT), Neuropsychology) during the hospital stay, select "Yes".
  Examples:
  - "PT x2 for range of motion (ROM) exercises at bedside."
  - Patient aphasic – evaluated by speech pathology"
- When patient is transferred to a rehabilitation facility or referred to rehabilitation services following discharge, select "Yes".

Suggested Data Sources:
PHYSICIAN/APN/PA/KT/PT/OT/SLT OR NEUROPSYCHOLOGIST DOCUMENTATION ONLY FOR REHABILITATION ASSESSMENT:

- Consultation notes
- Discharge instruction sheet
- Discharge summary
- History and physical
- Occupational therapy notes
- Physical therapy notes
- Physician orders
- Progress notes
- Referral forms
- Rehabilitation records

Excluded Data Sources:

- Any documentation other than Physician/APN/PA/KT/PT/OT/SLT/Neuropsychologist

Inclusion Guidelines for Abstraction:

- Assessment/consult done by a member of the rehabilitation team.
- Patient received rehabilitation services from a member(s) of the rehabilitation team.
- Rehabilitation team members include:
  - Physician
  - Physiatrist
  - Neuro-psychologist
  - Physical therapist
  - Occupational therapist
  - Speech and language pathologist
  - Advanced Practice nurse
  - Kinesiotherapist
  - Physician Assistant

Exclusion Guidelines for Abstraction:
Request/order for inpatient rehabilitation consult that was not performed

192. Did patient receive rehabilitation services during hospitalization? [Rehreccei]

1 = Yes
0 = No/Not documented

Rehabilitation services include, but are not limited to physical therapy, occupational therapy, and speech and language therapy. The following does not qualify as a "Yes" answer: request for consultation for rehabilitation services that **was not performed** limited to physical therapy, occupational therapy, and speech therapy.

Acceptable indications in the chart that a patient was assessed for or received rehabilitation services include:

- Consult by rehabilitation services
- Assessment/treatment by members of the rehabilitation team

- Patient received rehabilitation services during hospitalization
- Patient transferred to rehabilitation facility
- Patient referred to rehabilitation services following discharge
- Specific documentation that the patient was assessed and reasons patient ineligible to receive rehabilitation services (e.g., symptoms resolved or patient returned to prior level of function, poor prognosis, patient unable to tolerate rehabilitation therapeutic regimen)
- Patient/family refused rehabilitation services.

Examples of members of a rehabilitation team may include:

- Physiatrist
- Neuro-psychologist
- Physical therapist
- Occupational therapist
- Speech and language pathologist

193. Was patient transferred to a rehabilitation facility? [Rehtrans]

1= Yes
0= No/Not documented

194. Was patient referred to rehabilitation services following discharge? [Rehrefer]

1= Yes
0 = No/Not documented

195. Was patient ineligible to receive rehabilitation services because symptoms resolved? [Rehineli]

1 = Yes
0 = No/Not documented

196. Was patient ineligible to receive rehabilitation services due to impairment (i.e., poor prognosis or patient being unable to tolerate rehabilitation therapeutic regimen)? [RehineliPP]

1 = Yes
0 = No/Not documented

197. Was Modified Rankin Scale done at discharge? [mRSDone]

1 = Yes
0 = No/ND

If No/ND on # 197, skip # 198

198. Modified Rankin Scale at discharge [ModRankScore]

The scale will measure functional outcome after stroke based upon the event of disability or disabling symptoms experienced by the patient following the event,

measured using the Modified Rankin Tool.

Information can be obtained from the patient's medical record, Stroke Team, or nurse notes.

0 = No symptoms at all
1 = No significant disability despite symptoms; able to carry out all usual and activities
2 = Slight disability; unable to carry out previous activities, but able to look after own affairs without assistance
3 = Moderate disability; requiring some help, but able to walk without assistance
4 = Moderately severe disability, unable to walk without assistance and unable to attend to own bodily needs without assistance
5 = Severe disability, bedridden, incontinent and requiring constant nursing care and attention
6 = Dead

Note:

If Discharge Disposition = 2-Hospice – Home, 3-Hospice – Health Care Facility, 4-Acute Care Facility 7-Left AMA, Or if #26 = 0 (not admitted) or #27 is answered 1-6, then Modified Rankin Scale is not required.

[The following fields are reserved for important technologies, therapies, complications or other emerging stroke-related issues that were not anticipated at this time by the department.]

199.Reserved Field 1 [**Reserved1**]
200.Reserved Field 2 [**Reserved2**]
201.Reserved Field 3 [**Reserved3**]
202.Reserved Field 4 [**Reserved4**]
203.Reserved Field 5[**Reserved5**]
204. Reserved Field 6[**Reserved6**]
205. Reserved Field 7[**Reserved7**]
206. Reserved Field 8[**Reserved8**]
207. Reserved Field 9[**Reserved9**]
208. Reserved Field 10[**Reserved10**]
209. Reserved Field 11 [**Reserved11**]
210. Reserved Field 12 [**Reserved12**]
211. Reserved Field 13 [**Reserved13**]
212. Reserved Field 14[**Reserved14**]
213. Reserved Field 15 [**Reserved15**]

APPENDIX I: LIST OF HOSPITALS IN NEW JERSEY

Item # 2: Hospital Code (HOSPNUM) & Item # 3: Hospital Transferred From Code

Indicate the hospital code where stroke center services were performed (or the patient was transferred from) using the list below. The assigned codes are consistent with Medicare provider numbers and are the same used in UB-92 discharge form.

Hospital Code	Hospital Name
0642	AtlantiCare Regional Medical Center - City
0641	AtlantiCare Regional Medical Center - Mainland
0250	CarePoint Health - Bayonne Medical Center
1120	Bayshore Community Hospital
0580	Bergen Regional Medical Center
0110	Cape Regional Medical Center
0920	Capital Health System at Fuld
0440	Capital Health System at Mercer
1110	CentraState Medical Center
0170	Chilton Memorial Hospital
0160	CarePoint Health - Christ Hospital
0090	Clara Maass Medical Center
0410	Community Medical Center
0140	Cooper Hospital/University Medical Center
0310	Deborah Heart and Lung Center
0830	East Orange General Hospital
0450	Englewood Hospital and Medical Center
0010	Hackensack University Medical Center
1300	Hackensack UMC at Pascack Valley
1150	Hackettstown Regional Medical Center
0400	CarePoint Health - Hoboken University Medical Center
0080	Holy Name Hospital
0050	Hunterdon Medical Center
0740	Jersey City Medical Center
0730	Jersey Shore University Medical Center
1080	JFK Medical Center (Edison)
0862	Jefferson Cherry Hill Hospital

APPENDIX I (Continued)

Hospital Code	Hospital Name
0863	Jefferson Stratford Hospital
0861	Jefferson Wash. Twp. Hospital
0840	Monmouth Medical Center – Southern Campus
0610	Lourdes Medical Center of Burlington Cty.
1189	Hudson Regional Hospital
0910	Memorial Hospital of Salem County
0750	Monmouth Medical Center
0150	Morristown Memorial Hospital
0540	Hackensack UMC - Mountainside Hospital
0020	Newark Beth Israel Medical Center
0280	Newton Memorial Hospital
0522	Ocean Medical Center
0290	Our Lady of Lourdes Medical Center
0510	Overlook Hospital
0030	Hackensack UMC - Palisades
0392	Raritan Bay Medical Center-Old Bridge
0391	Raritan Bay Medical Center-Perth Amboy
0340	Riverview Medical Center
0380	Robert Wood Johnson University Hospital (RWJUH)
1100	RWJUH - Hamilton
0240	RWJUH - Rahway
0470	Shore Medical Center
0480	RWJUH - Somerset
0322	Inspira Health Center - Bridgeton
0690	Inspira Medical Center - Elmer
0324	Inspira Medical Center - Vineland
1130	Southern Ocean County Hospital
0760	St. Barnabas Medical Center
0500	St. Clare's Hospital-Denville
0670	St. Clare's Hospital-Dover
1200	St. Clare's Hospital-Sussex
0210	St. Francis Medical Center
0190	St. Joseph's Hospital and Medical Center

APPENDIX I (Continued)

Hospital Code	Hospital Name
0191	St. Joseph's Wayne Hospital
0060	St. Mary's Hospital (Passaic)
0960	St. Michael's Medical Center
0700	St. Peter's University Hospital
0270	Trinitas Hospital
1190	Univesity Hospital
0810	Inspira Medical Center Woodbury, Inc.
0100	University Medical Center of Princeton at Plainsboro
0120	Valley Hospital
0570	Virtua-Memorial Hospital Burlington Cty.
0222	Virtua-West Jersey Hospital Berlin
0223	Virtua – WJHS Camden (Satellite ED)
0224	Virtua-West Jersey Hospital Marlton
0221	Virtua-West Jersey Hospital Voorhees
0600	St. Luke’s Warren Hospital
20171	AcuteCare Specialty Hospital of Kimball
20172	AcuteCare Specialty Hospital of Monmouth
20180	Care One at Raritan Bay Medical Center
20190	Select Specialty Hospital - NE NJ - Rochelle
20200	Kindred Hospital New Jersey - Morris County
20201	Kindred New Jersey - Rahway
20202	Kindred New Jersey - Wayne
20220	Lourdes Specialty Hospital of Southern New Jersey
20240	Columbus Hospital LTACH
8888	VA hospital
9999	Out-of-state hospital **(For Transfers Only)**
0000	Non Transfers

APPENDIX II:
HEALTH INSURANCE STATUS PAYOR CLASSIFICATION

Item # 14 (Health Insurance Status Payor Classification)

Indicate the primary payor as being Medicare, Medicaid, HMO, Blue Cross, Commercial, Self-Pay, CHAMPUS, Uninsured or Other using the following classifications:

Medicare

Title XVII Part A
Title XVII Part B

Medicaid

Title XIX

Health Maintenance Organizations (HMO)
Americaid Inc.
American Preferred Provider Plan Inc.
HIP/RHP of New Jersey
HMO Blue (Medigroup - Central)
HMO of PA/NJ (U.S. Health Care)
Aetna Health Plans of NJ, Inc.
CIGNA Health Plan of New Jersey
Metra Health Care Plan of Upstate NY
Prucare of New Jersey
Garden State Health Plan
HMO Blue Medigroup - Metro
HMO Blue Medigroup - North
HMO Blue Medigroup - South
HMO Blue Medigroup - Shore line
Metra Health Care Plan of NJ
NYL Care Health Plans of NJ, Inc.
Oxford Health Plan
Sanus of New Jersey
CIGNA Health Plan of Southern N.J.
Greater Atlantic Health Services
Amerihealth HMO Inc.
Atlanticare Health Plan
Chubb Health Plan
Community Health Care & Devt. Corp.
First Option Health Plan
Harmony Health Plan
HMO Blue (BC/BS of NJ)
Liberty Health Plan
Managed Health Care Systems of NJ, Inc.
Physician Health Care Plan of NJ
Physician Health Services of NJ, Inc
University Health Plan Inc.
Other HMO

Blue Cross Plan
Alaska
Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey-All other groups
NJ Non-Group Line of Business
New Jersey FEP
Garden State
Host
New Mexico
New York
North Carolina
North Dakota
Ohio
Cleveland
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
Tennessee
Texas
Utah
Virginia
Vermont

Washington
West Virginia
Wisconsin
Wyoming
Puerto Rico
Other Blue Cross

Commercial
AARP
Aetna
NJ Carpenters Health Fund
Connecticut General
Continental Assurance
Equitable
Guardian Life
Intercontinental
John Hancock
Massachusetts Mutual
Metropolitan Life
Mutual of Omaha
New York Life
Provident Alliance
Prudential
Travelers
Washington National Insurance
New Jersey Auto Dealers Association
Allstate
Mutual Life of New York
National Association of Letter Carriers
Local Union Insurance
Lincoln National
New Jersey Turnpike Authority
Rasmussen
Inter County Health Plan
American Postal Workers
Leader Administrators
Fred S. James (James Benefit)
Mail Handlers Benefit Plan
Other Commercial Insurance

Self-Pay

Direct
Other Source of Patient Pay

Tricare (Formerly CHAMPUS)

Uninsured/Indigent

Charity Care

Other

Department of Vocational Rehabilitation
New Jersey State Health Benefits Plan
Other Government
Premier Preferred Care of New Jersey
Union Insurance
Personnel Health Program
Magnet (Magna Care)
Hospital Responsibility
QualCare
Other
No Fault
Allstate
New Jersey Manufacturers
State Farm
Other No Fault
Workers Compensation
Aetna
Insurance Company of North America
Liberty Mutual
Employers Mutual
New Jersey Manufacturers
Travelers
Other Workers Compensation

APPENDIX III: ANTIPLATELET MEDICATIONS

Generic Name	Brand Name	Drug Class
Aspirin, ASA	Acetylsalicylic Acid Acuprin 81 Alka-Seltzer Alka-Seltzer Morning Relief Anacin Arthritis Foundation Aspirin Arthritis Pain Ascriptin Arthritis Pain Formula ASA ASA Baby ASA Baby Chewable ASA Baby Coated ASA Bayer ASA Bayer Children's ASA Buffered ASA Children's ASA EC ASA Enteric Coated ASA/Maalox Ascriptin Aspergum Aspir-10 Aspir-Low Aspir-Lox Aspir-Mox Aspir-Trin Aspirbuf Aspircaf Aspirin Aspirin Baby Aspirin Bayer Aspirin Bayer Children's Aspirin Buffered Aspirin Child Aspirin Child Chewable Aspirin Children's Aspirin EC Aspirin Enteric Coated Aspirin Litecoat Aspirin Lo-Dose Aspirin Low Strength Aspirin Tri-Buffered Aspirin, Extended Release Aspirin/butalbital/caffeine Aspirin/caffeine Aspirtab Bayer Aspirin	Antiplatelet

Generic Name	Brand Name	Drug Class
	Bayer Aspirin PM Extra Strength Bayer Children's Bayer EC Bayer Enteric Coated Bayer Low Strength Bayer Plus Buffered ASA Buffered Aspirin Buffered Baby ASA Bufferin Bufferin Arthritis Strength Bufferin Extra Strength Buffex Cama Arthritis Reliever Child's Aspirin Coated Aspirin Cosprin CTD Aspirin Dasprin Doans Pills Easprin EC ASA Ecotrin Ecotrin Low Strength Adult Effervescent Pain & Antacid Empirin Entab Entaprin Entercote Enteric Coated Aspirin Enteric Coated Baby Aspirin Excedrin Excedrin Extra Strength Excedrin Geltab Excedrin Migraine Extra Strength Bayer Genacote Genprin Halfprin Lifecoat Aspirin Low Dose ASA Magnaprin Med Aspirin Norwich Aspirin Pain Relief (Effervescent) Pain Relief with Aspirin Sloprin St. Joseph Aspirin Stanback Analgesic	

Generic Name	Brand Name	Drug Class
	Therapy Bayer Tri Buffered Aspirin Uni-As Uni-Buff Uni-Tren Zorprin	
Aspirin/Dipyridamole	Aggrenox	Antiplatelet
Clopidogrel	Plavix	Antiplatelet
Ticlopidine	Ticlid	Antiplatelet
Prasugrel*	Effient*	Antiplatelet
Ticagrelor*	Brilinta*	Antiplatelet
Other Antiplatelet*	Example: Cilostazol*	Antiplatelet

* = Drug is not listed in Appendix C Table 8.2 or 8.3 in the Specifications Manual for National Hospital Inpatient Quality Measures

APPENDIX IV: ANTICOAGULANT MEDICATIONS

Generic Name	Brand Name	Drug Class
apixaban	Eliquis	Oral Factor Xa Inhibitor
argatroban	N/A	Direct Thrombin Inhibitor
dabigatran, dabigatran etexilate	Pradaxa	Direct Thrombin Inhibitor
dalteparin	Fragmin	LMWH
desirudin*	Iprivask*	Direct Thrombin Inhibitor
edoxaban	Savaysa	Oral Factor Xa Inhibitor
enoxaparin	Lovenox	LMWH (Note: Lovenox 40 mg sc qd is for DVT prevention and not of proven benefit for stroke prevention and is insufficient as antithrombotic therapy at this dose)
fondaparinux	Arixtra	Factor Xa Inhibtor
Heparin IV (heparin, heparin sodium, heparin Na, heparin sod, heparin sodium inj, heparin sodium inj pork, unfractionated heparin [NOT hep-lock, heparin flush])	N/A	Unfractioned Heparin IV
lepirudin	Refludan	Direct Thrombin Inhibitor
rivaroxaban	Xarelto	Oral Factor Xa Inhibitor
tinzaparin	Innohep	LMWH
Warfarin, Warfarin Sodium	Coumadin, Jantoven	

* = Drug is not listed in Appendix C Table 8.2 or 8.3 in the Specifications Manual for National Hospital Inpatient Quality Measures

APPENDIX V: TYPICAL STROKE ICD-10-CM CODES

Items #163 and 164: Typical Stroke ICD-10-CM Codes

	Ischemic Stroke
ICD-10-CM	**Description**
I63	Cerebral infarction
I63.0	Cerebral infarction due to thrombosis of precerebral arteries
I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery
I63.01	Cerebral infarction due to thrombosis of vertebral artery
I63.011	Cerebral infarction due to thrombosis of right vertebral artery
I63.012	Cerebral infarction due to thrombosis of left vertebral artery
I63.019	Cerebral infarction due to thrombosis due to thrombosis unspecified vertebral artery
I63.02	Cerebral infarction due to thrombosis of basilar artery
I63.03	Cerebral infarction due to thrombosis of carotid artery
I63.031	Cerebral infarction due to thrombosis of right carotid artery
I63.032	Cerebral infarction due to thrombosis of left carotid artery
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery
I63.09	Cerebral infarction due to thrombosis of other precerebral artery
I63.1	Cerebral infarction due to embolism of precerebral arteries
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery
I63.11	Cerebral infarction due to embolism of vertebral artery
I63.111	Cerebral infarction due to embolism of right vertebral artery
I63.112	Cerebral infarction due to embolism of left vertebral artery
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery
I63.12	Cerebral infarction due to embolism of basilar artery
I63.13	Cerebral infarction due to embolism of carotid artery
I63.131	Cerebral infarction due to embolism of right carotid artery
I63.132	Cerebral infarction due to embolism of left carotid artery
I63.139	Cerebral infarction due to embolism of unspecified carotid artery
I63.19	Cerebral infarction due to embolism of other precerebral artery
I63.2	Cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries
I63.21	Cerebral infarction due to unspecified occlusion or stenosis of vertebral arteries
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral arteries
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries
I63.23	Cerebral infarction due to unspecified occlusion or stenosis of carotid arteries
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries
I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries
I63.3	Cerebral infarction due to thrombosis of cerebral arteries
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery

	Ischemic Stroke
ICD-10-CM	**Description**
I63.31	Cerebral infarction due to thrombosis of middle cerebral artery
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery
I63.32	Cerebral infarction due to thrombosis of anterior cerebral artery
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery
I63.33	Cerebral infarction due to thrombosis of posterior cerebral artery
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery
I63.34	Cerebral infarction due to thrombosis of cerebellar artery
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery
I63.39	Cerebral infarction due to thrombosis of other cerebral artery
I63.4	Cerebral infarction due to embolism of cerebral arteries
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery
I63.41	Cerebral infarction due to embolism of middle cerebral artery
I63.411	Cerebral infarction due to embolism of right middle cerebral artery
I63.412	Cerebral infarction due to embolism of left middle cerebral artery
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery
I63.42	Cerebral infarction due to embolism of anterior cerebral artery
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery
I63.43	Cerebral infarction due to embolism of posterior cerebral artery
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery
I63.44	Cerebral infarction due to embolism of cerebellar artery
I63.441	Cerebral infarction due to embolism of right cerebellar artery
I63.442	Cerebral infarction due to embolism of left cerebellar artery
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery
I63.49	Cerebral infarction due to embolism of other cerebral artery
I63.5	Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery
I63.51	Cerebral infarction due to unspecified occlusion or stenosis of middle cerebral artery
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery
I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery
I63.52	Cerebral infarction due to unspecified occlusion or stenosis of anterior cerebral artery

	Ischemic Stroke
ICD-10-CM	**Description**
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery
I63.53	Cerebral infarction due to unspecified occlusion or stenosis of posterior cerebral artery
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery
I63.54	Cerebral infarction due to unspecified occlusion or stenosis of cerebellar artery
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I63.81	Other cerebral infarction due to occlusion or stenosis of small artery
I63.89	Other cerebral infarction
I63.9	Cerebral infarction, unspecified

	Subarachnoid Stroke
ICD-10-CM	**Description**
I60	Nontraumatic subarachnoid hemorrhage
I60.0	Nontraumatic subarachnoid hemorrhage from carotid siphon and bifurcation
I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
I60.1	Nontraumatic subarachnoid hemorrhage from middle cerebral artery
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery
I60.20	Nontraumatic subarachnoid hemorrhage from unspecified anterior communicating artery
I60.21	Nontraumatic subarachnoid hemorrhage from right anterior communicating artery
I60.22	Nontraumatic subarachnoid hemorrhage from left anterior communicating artery
I60.3	Nontraumatic subarachnoid hemorrhage from posterior communicating artery

	Subarachnoid Stroke
ICD-10-CM	**Description**
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery
I60.5	Nontraumatic subarachnoid hemorrhage from vertebral artery
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial arteries
I60.8	Other nontraumatic subarachnoid hemorrhage
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified

	Hemmorhagic Stroke
ICD-10-CM	**Description**
I61	Nontraumatic intracerebral hemorrhage
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
I61.3	Nontraumatic intracerebral hemorrhage in brain stem
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized
I61.8	Other nontraumatic intracerebral hemorrhage
I61.9	Nontraumatic intracerebral hemorrhage, unspecified

	Transient Ischemic Attack (TIA) and Related Syndromes
ICD-10-CM	Description
G45	Transient cerebral ischemic attacks and related syndromes
G45.0	Vertebro-basilar artery syndrome
G45.1	Carotid artery syndrome (hemispheric)
G45.2	Multiple and bilateral precerebral artery syndromes
G45.8	Other transient cerebral ischemic attacks and related syndromes
G45.9	Transient cerebral ischemic attack, unspecified

	Diseases of the Circulatory System Complicating Pregnancy, Childbirth and Puerperium
ICD-10-CM	Description
O99.4	Diseases of the circulatory system complicating pregnancy, childbirth and the puerperium
O99.41	Diseases of the circulatory system complicating pregnancy
O99.411	Diseases of the circulatory system complicating pregnancy, first trimester
O99.412	Diseases of the circulatory system complicating pregnancy, second trimester
O99.413	Diseases of the circulatory system complicating pregnancy, third trimester
O99.419	Diseases of the circulatory system complicating pregnancy, unspecified trimester
O99.42	Diseases of the circulatory system complicating pregnancy, childbirth
O99.43	Diseases of the circulatory system complicating the puerperium

The following codes may also be used to screen for additional stroke/TIA cases inclusion:

	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a procedure
ICD-10-CM	Description
G97.3	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a procedure
G97.31	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating a nervous system procedure
G97.32	Intraoperative hemorrhage and hematoma of a nervous system organ or structure complicating other procedure

	Post-procedural hemorrhage and hematoma of a nervous system organ or structure following a procedure
ICD-10-CM	Description
G97.5	Postprocedural hemorrhage and hematoma of a nervous system organ or structure following a procedure
G97.51	Postprocedural hemorrhage and hematoma of a nervous system organ or structure following a nervous system procedure
G97.52	Postprocedural hemorrhage and hematoma of a nervous system organ or structure following other procedure

	Intraoperative and postoperative cerebrovascular infarction
ICD-10-CM	Description
I97.8	Other intraoperative and postprocedural complications and disorders of the circulatory system, not elsewhere classified
I97.81	Intraoperative cerebrovascular infarction
I97.810	Intraoperative cerebrovascular infarction during cardiac surgery
I97.811	Intraoperative cerebrovascular infarction during other surgery
I97.82	Postprocedural cerebrovascular infarction
I97.820	Postprocedural cerebrovascular infarction during cardiac surgery
I97.821	Postprocedural cerebrovascular infarction during other surgery
I97.88	Other intraoperative complications of the circulatory system, not elsewhere classified
I97.89	Other postprocedural complications and disorders of the circulatory system, not elsewhere classified

APPENDIX VI: CHOLESTEROL REDUCING MEDICATIONS

Generic Name	Brand Name	Drug Class
Atorvastatin	Lipitor	Statin
Alirocumab	Praluent	PCSK9 Inhibitor
Atorvastatin + amlodipine	Caduet	Statin + calcium channel blocker (blood pressure)
Evolocumab	Repatha	PCSK9 Inhibitor
Cholestyramine, Cholestyramine Light	Prevalite, Prevalite Powder	Other Med
Choline Fenofibrate	Trilipix	Fibrate
Colesevelam	Welchol	Other Med
Colestipol	Colestid	Other Med
Ezetimibe	Zetia	Absorption Inhibitor
Fenofibrate	Antara, Fenoglide, Fibricor, Lipofen, Lofibra, Triglide	Fibrate
Fenofibric Acid	Trilipix	Fibrate
Fish Oil	Lovaza	Other Med
Fluvastatin, Fluvastatin XL	Lescol, Lescol XL	Statin
Gemfibrozil	Gemcor, Lopid	Fibrate
Icosapent ethyl*	Vascepa*	Other Med
Lomitapide*	Juxtapid*	Other Med
Lovastatin	Altocor, Altoprev, Mevacor	Statin
Lovastatin + extended release niacin	Advicor	Statin + niacin
Mipomersen sodium*	Kynamro*	Other Med
Niacin, Niacin Extended Release, Niacin ER, Niacin SR, Niacin TR	B-3-50, B3-500-Gr, Niacor, Niacor B3, Niaspan, Niaspan ER, Nico-400, Nicolar, Nicobid Tempules, Slo-Niacin	Niacin
Nicotinic Acid	Niacor, Niaspan, Nicotinex, Slo-Niacin	Niacin
Pitavastatin	Livalo	Statin
Pravastatin	Pravachol	Statin
Rosuvastatin	Crestor	Statin
Simvastatin	Zocor	Statin
Simvastatin + extended release niacin	Simcor	Statin + niacin
Simvastatin + ezetimibe	Vytorin	Statin + absorption inhibitor

*** = Drug is not listed in Appendix C Table 8.1 in the Specifications Mannual for National Hospital Inpatient Quality Measures**

APPENDIX VII: CAROTID INTERVENTION PROCEDURES

Codes and Shortened Descriptions

021W09D	Bypass Thoracic Aorta to Carotid with Autologous Venous Tissue, Open Approach
021W0AD	Bypass Thoracic Aorta to Carotid with Autologous Arterial Tissue, Open Approach
021W0JD	Bypass Thoracic Aorta to Carotid with Synthetic Substitute, Open Approach
021W0KD	Bypass Thoracic Aorta to Carotid with Nonautologous Tissue Substitute, Open Approach
021W0ZD	Bypass Thoracic Aorta to Carotid, Open Approach
021W49D	Bypass Thoracic Aorta to Carotid with Autologous Venous Tissue, Percutaneous Endoscopic Approach
021W4AD	Bypass Thoracic Aorta to Carotid with Autologous Arterial Tissue, Percutaneous Endoscopic Approach
021W4JD	Bypass Thoracic Aorta to Carotid with Synthetic Substitute, Percutaneous Endoscopic Approach
021W4KD	Bypass Thoracic Aorta to Carotid with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
021W4ZD	Bypass Thoracic Aorta to Carotid, Percutaneous Endoscopic Approach
031H09J	Bypass Right Common Carotid Artery to Right Extracranial Artery with Autologous Venous Tissue, Open Approach
031H0AJ	Bypass Right Common Carotid Artery to Right Extracranial Artery with Autologous Arterial Tissue, Open Approach
031H0JJ	Bypass Right Common Carotid Artery to Right Extracranial Artery with Synthetic Substitute, Open Approach
031H0KJ	Bypass Right Common Carotid Artery to Right Extracranial Artery with Nonautologous Tissue Substitute, Open Approach
031H0ZJ	Bypass Right Common Carotid Artery to Right Extracranial Artery, Open Approach
031J09K	Bypass Left Common Carotid Artery to Left Extracranial Artery with Autologous Venous Tissue, Open Approach
031J0AK	Bypass Left Common Carotid Artery to Left Extracranial Artery with Autologous Arterial Tissue, Open Approach
031J0JK	Bypass Left Common Carotid Artery to Left Extracranial Artery with Synthetic Substitute, Open Approach
031J0KK	Bypass Left Common Carotid Artery to Left Extracranial Artery with Nonautologous Tissue Substitute, Open Approach
031J0ZK	Bypass Left Common Carotid Artery to Left Extracranial Artery, Open Approach
031K09J	Bypass Right Internal Carotid Artery to Right Extracranial Artery with Autologous Venous Tissue, Open Approach
031K0AJ	Bypass Right Internal Carotid Artery to Right Extracranial Artery with Autologous Arterial Tissue, Open Approach
031K0JJ	Bypass Right Internal Carotid Artery to Right Extracranial Artery with Synthetic Substitute, Open Approach
031K0KJ	Bypass Right Internal Carotid Artery to Right Extracranial Artery with Nonautologous Tissue Substitute, Open Approach
031K0ZJ	Bypass Right Internal Carotid Artery to Right Extracranial Artery, Open Approach
031L09K	Bypass Left Internal Carotid Artery to Left Extracranial Artery with Autologous Venous Tissue, Open Approach

031L0AK Bypass Left Internal Carotid Artery to Left Extracranial Artery with Autologous Arterial Tissue, Open Approach

031L0JK Bypass Left Internal Carotid Artery to Left Extracranial Artery with Synthetic Substitute, Open Approach

031L0KK Bypass Left Internal Carotid Artery to Left Extracranial Artery with Nonautologous Tissue Substitute, Open Approach

031L0ZK Bypass Left Internal Carotid Artery to Left Extracranial Artery, Open Approach

031M09J Bypass Right External Carotid Artery to Right Extracranial Artery with Autologous Venous Tissue, Open Approach

031M0AJ Bypass Right External Carotid Artery to Right Extracranial Artery with Autologous Arterial Tissue, Open Approach

031M0JJ Bypass Right External Carotid Artery to Right Extracranial Artery with Synthetic Substitute, Open Approach

031M0KJ Bypass Right External Carotid Artery to Right Extracranial Artery with Nonautologous Tissue Substitute, Open Approach

031M0ZJ Bypass Right External Carotid Artery to Right Extracranial Artery, Open Approach

031N09K Bypass Left External Carotid Artery to Left Extracranial Artery with Autologous Venous Tissue, Open Approach

031N0AK Bypass Left External Carotid Artery to Left Extracranial Artery with Autologous Arterial Tissue, Open Approach

031N0JK Bypass Left External Carotid Artery to Left Extracranial Artery with Synthetic Substitute, Open Approach

031N0KK Bypass Left External Carotid Artery to Left Extracranial Artery with Nonautologous Tissue Substitute, Open Approach

031N0ZK Bypass Left External Carotid Artery to Left Extracranial Artery, Open Approach

031S09G Bypass Right Temporal Artery to Intracranial Artery with Autologous Venous Tissue, Open Approach

031S0AG Bypass Right Temporal Artery to Intracranial Artery with Autologous Arterial Tissue, Open Approach

031S0JG Bypass Right Temporal Artery to Intracranial Artery with Synthetic Substitute, Open Approach

031S0KG Bypass Right Temporal Artery to Intracranial Artery with Nonautologous Tissue Substitute, Open Approach

031S0ZG Bypass Right Temporal Artery to Intracranial Artery, Open Approach

031T09G Bypass Left Temporal Artery to Intracranial Artery with Autologous Venous Tissue, Open Approach

031T0AG Bypass Left Temporal Artery to Intracranial Artery with Autologous Arterial Tissue, Open Approach

031T0JG Bypass Left Temporal Artery to Intracranial Artery with Synthetic Substitute, Open Approach

031T0KG Bypass Left Temporal Artery to Intracranial Artery with Nonautologous Tissue Substitute, Open Approach

031T0ZG Bypass Left Temporal Artery to Intracranial Artery, Open Approach

037G34Z Dilation of Intracranial Artery with Drug-eluting Intraluminal Device, Percutaneous Approach

037G3DZ Dilation of Intracranial Artery with Intraluminal Device, Percutaneous Approach

037G3ZZ Dilation of Intracranial Artery, Percutaneous Approach

037G44Z Dilation of Intracranial Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach

037G4DZ Dilation of Intracranial Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037G4ZZ Dilation of Intracranial Artery, Percutaneous Endoscopic Approach
037H34Z Dilation of Right Common Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037H3DZ Dilation of Right Common Carotid Artery with Intraluminal Device, Percutaneous Approach
037H3ZZ Dilation of Right Common Carotid Artery, Percutaneous Approach
037H44Z Dilation of Right Common Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037H4DZ Dilation of Right Common Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037H4ZZ Dilation of Right Common Carotid Artery, Percutaneous Endoscopic Approach
037J34Z Dilation of Left Common Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037J3DZ Dilation of Left Common Carotid Artery with Intraluminal Device, Percutaneous Approach
037J3ZZ Dilation of Left Common Carotid Artery, Percutaneous Approach
037J44Z Dilation of Left Common Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037J4DZ Dilation of Left Common Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037J4ZZ Dilation of Left Common Carotid Artery, Percutaneous Endoscopic Approach
037K34Z Dilation of Right Internal Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037K3DZ Dilation of Right Internal Carotid Artery with Intraluminal Device, Percutaneous Approach
037K3ZZ Dilation of Right Internal Carotid Artery, Percutaneous Approach
037K44Z Dilation of Right Internal Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037K4DZ Dilation of Right Internal Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037K4ZZ Dilation of Right Internal Carotid Artery, Percutaneous Endoscopic Approach
037L34Z Dilation of Left Internal Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037L3DZ Dilation of Left Internal Carotid Artery with Intraluminal Device, Percutaneous Approach
037L3ZZ Dilation of Left Internal Carotid Artery, Percutaneous Approach
037L44Z Dilation of Left Internal Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037L4DZ Dilation of Left Internal Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037L4ZZ Dilation of Left Internal Carotid Artery, Percutaneous Endoscopic Approach
037M34Z Dilation of Right External Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037M3DZ Dilation of Right External Carotid Artery with Intraluminal Device, Percutaneous Approach
037M3ZZ Dilation of Right External Carotid Artery, Percutaneous Approach
037M44Z Dilation of Right External Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach

037M4DZ Dilation of Right External Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037M4ZZ Dilation of Right External Carotid Artery, Percutaneous Endoscopic Approach
037N34Z Dilation of Left External Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037N3DZ Dilation of Left External Carotid Artery with Intraluminal Device, Percutaneous Approach
037N3ZZ Dilation of Left External Carotid Artery, Percutaneous Approach
037N44Z Dilation of Left External Carotid Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037N4DZ Dilation of Left External Carotid Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037N4ZZ Dilation of Left External Carotid Artery, Percutaneous Endoscopic Approach
037P34Z Dilation of Right Vertebral Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037P3DZ Dilation of Right Vertebral Artery with Intraluminal Device, Percutaneous Approach
037P3ZZ Dilation of Right Vertebral Artery, Percutaneous Approach
037P44Z Dilation of Right Vertebral Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037P4DZ Dilation of Right Vertebral Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037P4ZZ Dilation of Right Vertebral Artery, Percutaneous Endoscopic Approach
037Q34Z Dilation of Left Vertebral Artery with Drug-eluting Intraluminal Device, Percutaneous Approach
037Q3DZ Dilation of Left Vertebral Artery with Intraluminal Device, Percutaneous Approach
037Q3ZZ Dilation of Left Vertebral Artery, Percutaneous Approach
037Q44Z Dilation of Left Vertebral Artery with Drug-eluting Intraluminal Device, Percutaneous Endoscopic Approach
037Q4DZ Dilation of Left Vertebral Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037Q4ZZ Dilation of Left Vertebral Artery, Percutaneous Endoscopic Approach
037R3DZ Dilation of Face Artery with Intraluminal Device, Percutaneous Approach
037R4DZ Dilation of Face Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037S3DZ Dilation of Right Temporal Artery with Intraluminal Device, Percutaneous Approach
037S4DZ Dilation of Right Temporal Artery with Intraluminal Device, Percutaneous Endoscopic Approach
037T3DZ Dilation of Left Temporal Artery with Intraluminal Device, Percutaneous Approach
037T4DZ Dilation of Left Temporal Artery with Intraluminal Device, Percutaneous Endoscopic Approach
03BG0ZZ Excision of Intracranial Artery, Open Approach
03BG4ZZ Excision of Intracranial Artery, Percutaneous Endoscopic Approach
03BH0ZZ Excision of Right Common Carotid Artery, Open Approach
03BH4ZZ Excision of Right Common Carotid Artery, Percutaneous Endoscopic Approach
03BJ0ZZ Excision of Left Common Carotid Artery, Open Approach
03BJ4ZZ Excision of Left Common Carotid Artery, Percutaneous Endoscopic Approach
03BK0ZZ Excision of Right Internal Carotid Artery, Open Approach

03BK4ZZ Excision of Right Internal Carotid Artery, Percutaneous Endoscopic Approach
03BL0ZZ Excision of Left Internal Carotid Artery, Open Approach
03BL4ZZ Excision of Left Internal Carotid Artery, Percutaneous Endoscopic Approach
03BM0ZZ Excision of Right External Carotid Artery, Open Approach
03BM4ZZ Excision of Right External Carotid Artery, Percutaneous Endoscopic Approach
03BN0ZZ Excision of Left External Carotid Artery, Open Approach
03BN4ZZ Excision of Left External Carotid Artery, Percutaneous Endoscopic Approach
03BP0ZZ Excision of Right Vertebral Artery, Open Approach
03BP4ZZ Excision of Right Vertebral Artery, Percutaneous Endoscopic Approach
03BQ0ZZ Excision of Left Vertebral Artery, Open Approach
03BQ4ZZ Excision of Left Vertebral Artery, Percutaneous Endoscopic Approach
03BR0ZZ Excision of Face Artery, Open Approach
03BR4ZZ Excision of Face Artery, Percutaneous Endoscopic Approach
03BS0ZZ Excision of Right Temporal Artery, Open Approach
03BS4ZZ Excision of Right Temporal Artery, Percutaneous Endoscopic Approach
03BT0ZZ Excision of Left Temporal Artery, Open Approach
03BT4ZZ Excision of Left Temporal Artery, Percutaneous Endoscopic Approach
03BU0ZZ Excision of Right Thyroid Artery, Open Approach
03BU4ZZ Excision of Right Thyroid Artery, Percutaneous Endoscopic Approach
03BV0ZZ Excision of Left Thyroid Artery, Open Approach
03BV4ZZ Excision of Left Thyroid Artery, Percutaneous Endoscopic Approach
03BY0ZZ Excision of Upper Artery, Open Approach
03BY3ZZ Excision of Upper Artery, Percutaneous Approach
03BY4ZZ Excision of Upper Artery, Percutaneous Endoscopic Approach
03CG3ZZ Extirpation of Matter from Intracranial Artery, Percutaneous Approach
03CH0ZZ Extirpation of Matter from Right Common Carotid Artery, Open Approach
03CH3ZZ Extirpation of Matter from Right Common Carotid Artery, Percutaneous Approach
03CH4ZZ Extirpation of Matter from Right Common Carotid Artery, Percutaneous Endoscopic Approach
03CJ0ZZ Extirpation of Matter from Left Common Carotid Artery, Open Approach
03CJ3ZZ Extirpation of Matter from Left Common Carotid Artery, Percutaneous Approach
03CJ4ZZ Extirpation of Matter from Left Common Carotid Artery, Percutaneous Endoscopic Approach
03CK0ZZ Extirpation of Matter from Right Internal Carotid Artery, Open Approach
03CK3ZZ Extirpation of Matter from Right Internal Carotid Artery, Percutaneous Approach
03CK4ZZ Extirpation of Matter from Right Internal Carotid Artery, Percutaneous Endoscopic Approach
03CL0ZZ Extirpation of Matter from Left Internal Carotid Artery, Open Approach
03CL3ZZ Extirpation of Matter from Left Internal Carotid Artery, Percutaneous Approach
03CL4ZZ Extirpation of Matter from Left Internal Carotid Artery, Percutaneous Endoscopic Approach
03CM0ZZ Extirpation of Matter from Right External Carotid Artery, Open Approach
03CM3ZZ Extirpation of Matter from Right External Carotid Artery, Percutaneous Approach
03CM4ZZ Extirpation of Matter from Right External Carotid Artery, Percutaneous Endoscopic Approach
03CN0ZZ Extirpation of Matter from Left External Carotid Artery, Open Approach
03CN3ZZ Extirpation of Matter from Left External Carotid Artery, Percutaneous Approach
03CN4ZZ Extirpation of Matter from Left External Carotid Artery, Percutaneous Endoscopic Approach

03CP0ZZ Extirpation of Matter from Right Vertebral Artery, Open Approach
03CP3ZZ Extirpation of Matter from Right Vertebral Artery, Percutaneous Approach
03CP4ZZ Extirpation of Matter from Right Vertebral Artery, Percutaneous Endoscopic Approach
03CQ0ZZ Extirpation of Matter from Left Vertebral Artery, Open Approach
03CQ3ZZ Extirpation of Matter from Left Vertebral Artery, Percutaneous Approach
03CQ4ZZ Extirpation of Matter from Left Vertebral Artery, Percutaneous Endoscopic Approach
03CR0ZZ Extirpation of Matter from Face Artery, Open Approach
03CR3ZZ Extirpation of Matter from Face Artery, Percutaneous Approach
03CR4ZZ Extirpation of Matter from Face Artery, Percutaneous Endoscopic Approach
03CS0ZZ Extirpation of Matter from Right Temporal Artery, Open Approach
03CS3ZZ Extirpation of Matter from Right Temporal Artery, Percutaneous Approach
03CS4ZZ Extirpation of Matter from Right Temporal Artery, Percutaneous Endoscopic Approach
03CT0ZZ Extirpation of Matter from Left Temporal Artery, Open Approach
03CT3ZZ Extirpation of Matter from Left Temporal Artery, Percutaneous Approach
03CT4ZZ Extirpation of Matter from Left Temporal Artery, Percutaneous Endoscopic Approach
03CU0ZZ Extirpation of Matter from Right Thyroid Artery, Open Approach
03CU3ZZ Extirpation of Matter from Right Thyroid Artery, Percutaneous Approach
03CU4ZZ Extirpation of Matter from Right Thyroid Artery, Percutaneous Endoscopic Approach
03CV0ZZ Extirpation of Matter from Left Thyroid Artery, Open Approach
03CV3ZZ Extirpation of Matter from Left Thyroid Artery, Percutaneous Approach
03CV4ZZ Extirpation of Matter from Left Thyroid Artery, Percutaneous Endoscopic Approach
03JY4ZZ Inspection of Upper Artery, Percutaneous Endoscopic Approach
03RH07Z Replacement of Right Common Carotid Artery with Autologous Tissue Substitute, Open Approach
03RH0JZ Replacement of Right Common Carotid Artery with Synthetic Substitute, Open Approach
03RH0KZ Replacement of Right Common Carotid Artery with Nonautologous Tissue Substitute, Open Approach
03RH47Z Replacement of Right Common Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
03RH4JZ Replacement of Right Common Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach
03RH4KZ Replacement of Right Common Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
03RJ07Z Replacement of Left Common Carotid Artery with Autologous Tissue Substitute, Open Approach
03RJ0JZ Replacement of Left Common Carotid Artery with Synthetic Substitute, Open Approach
03RJ0KZ Replacement of Left Common Carotid Artery with Nonautologous Tissue Substitute, Open Approach
03RJ47Z Replacement of Left Common Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
03RJ4JZ Replacement of Left Common Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RJ4KZ Replacement of Left Common Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RK07Z Replacement of Right Internal Carotid Artery with Autologous Tissue Substitute, Open Approach

03RK0JZ Replacement of Right Internal Carotid Artery with Synthetic Substitute, Open Approach

03RK0KZ Replacement of Right Internal Carotid Artery with Nonautologous Tissue Substitute, Open Approach

03RK47Z Replacement of Right Internal Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RK4JZ Replacement of Right Internal Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RK4KZ Replacement of Right Internal Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RL07Z Replacement of Left Internal Carotid Artery with Autologous Tissue Substitute, Open Approach

03RL0JZ Replacement of Left Internal Carotid Artery with Synthetic Substitute, Open Approach

03RL0KZ Replacement of Left Internal Carotid Artery with Nonautologous Tissue Substitute, Open Approach

03RL47Z Replacement of Left Internal Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RL4JZ Replacement of Left Internal Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RL4KZ Replacement of Left Internal Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RM07Z Replacement of Right External Carotid Artery with Autologous Tissue Substitute, Open Approach

03RM0JZ Replacement of Right External Carotid Artery with Synthetic Substitute, Open Approach

03RM0KZ Replacement of Right External Carotid Artery with Nonautologous Tissue Substitute, Open Approach

03RM47Z Replacement of Right External Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RM4JZ Replacement of Right External Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RM4KZ Replacement of Right External Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RN07Z Replacement of Left External Carotid Artery with Autologous Tissue Substitute, Open Approach

03RN0JZ Replacement of Left External Carotid Artery with Synthetic Substitute, Open Approach

03RN0KZ Replacement of Left External Carotid Artery with Nonautologous Tissue Substitute, Open Approach

03RN47Z Replacement of Left External Carotid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RN4JZ Replacement of Left External Carotid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RN4KZ Replacement of Left External Carotid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RP07Z Replacement of Right Vertebral Artery with Autologous Tissue Substitute, Open Approach

03RP0JZ Replacement of Right Vertebral Artery with Synthetic Substitute, Open Approach

03RP0KZ Replacement of Right Vertebral Artery with Nonautologous Tissue Substitute, Open Approach

03RP47Z Replacement of Right Vertebral Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RP4JZ Replacement of Right Vertebral Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RP4KZ Replacement of Right Vertebral Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RQ07Z Replacement of Left Vertebral Artery with Autologous Tissue Substitute, Open Approach

03RQ0JZ Replacement of Left Vertebral Artery with Synthetic Substitute, Open Approach

03RQ0KZ Replacement of Left Vertebral Artery with Nonautologous Tissue Substitute, Open Approach

03RQ47Z Replacement of Left Vertebral Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RQ4JZ Replacement of Left Vertebral Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RQ4KZ Replacement of Left Vertebral Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RR07Z Replacement of Face Artery with Autologous Tissue Substitute, Open Approach

03RR0JZ Replacement of Face Artery with Synthetic Substitute, Open Approach

03RR0KZ Replacement of Face Artery with Nonautologous Tissue Substitute, Open Approach

03RR47Z Replacement of Face Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RR4JZ Replacement of Face Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RR4KZ Replacement of Face Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RS07Z Replacement of Right Temporal Artery with Autologous Tissue Substitute, Open Approach

03RS0JZ Replacement of Right Temporal Artery with Synthetic Substitute, Open Approach

03RS0KZ Replacement of Right Temporal Artery with Nonautologous Tissue Substitute, Open Approach

03RS47Z Replacement of Right Temporal Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach

03RS4JZ Replacement of Right Temporal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach

03RS4KZ Replacement of Right Temporal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

03RT07Z Replacement of Left Temporal Artery with Autologous Tissue Substitute, Open Approach

03RT0JZ Replacement of Left Temporal Artery with Synthetic Substitute, Open Approach

03RT0KZ Replacement of Left Temporal Artery with Nonautologous Tissue Substitute, Open Approach

03RT47Z Replacement of Left Temporal Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
03RT4JZ Replacement of Left Temporal Artery with Synthetic Substitute, Percutaneous Endoscopic Approach
03RT4KZ Replacement of Left Temporal Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
03RU07Z Replacement of Right Thyroid Artery with Autologous Tissue Substitute, Open Approach
03RU0JZ Replacement of Right Thyroid Artery with Synthetic Substitute, Open Approach
03RU0KZ Replacement of Right Thyroid Artery with Nonautologous Tissue Substitute, Open Approach
03RU47Z Replacement of Right Thyroid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
03RU4JZ Replacement of Right Thyroid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach
03RU4KZ Replacement of Right Thyroid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
03RV07Z Replacement of Left Thyroid Artery with Autologous Tissue Substitute, Open Approach
03RV0JZ Replacement of Left Thyroid Artery with Synthetic Substitute, Open Approach
03RV0KZ Replacement of Left Thyroid Artery with Nonautologous Tissue Substitute, Open Approach
03RV47Z Replacement of Left Thyroid Artery with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
03RV4JZ Replacement of Left Thyroid Artery with Synthetic Substitute, Percutaneous Endoscopic Approach
03RV4KZ Replacement of Left Thyroid Artery with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
04BY0ZZ Excision of Lower Artery, Open Approach
04BY3ZZ Excision of Lower Artery, Percutaneous Approach
04BY4ZZ Excision of Lower Artery, Percutaneous Endoscopic Approach
04JY4ZZ Inspection of Lower Artery, Percutaneous Endoscopic Approach
057L3DZ Dilation of Intracranial Vein with Intraluminal Device, Percutaneous Approach
057L4DZ Dilation of Intracranial Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057M3DZ Dilation of Right Internal Jugular Vein with Intraluminal Device, Percutaneous Approach
057M4DZ Dilation of Right Internal Jugular Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057N3DZ Dilation of Left Internal Jugular Vein with Intraluminal Device, Percutaneous Approach
057N4DZ Dilation of Left Internal Jugular Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057P3DZ Dilation of Right External Jugular Vein with Intraluminal Device, Percutaneous Approach
057P4DZ Dilation of Right External Jugular Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057Q3DZ Dilation of Left External Jugular Vein with Intraluminal Device, Percutaneous Approach
057Q4DZ Dilation of Left External Jugular Vein with Intraluminal Device, Percutaneous Endoscopic Approach

057R3DZ Dilation of Right Vertebral Vein with Intraluminal Device, Percutaneous Approach
057R4DZ Dilation of Right Vertebral Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057S3DZ Dilation of Left Vertebral Vein with Intraluminal Device, Percutaneous Approach
057S4DZ Dilation of Left Vertebral Vein with Intraluminal Device, Percutaneous Endoscopic Approach
057T3DZ Dilation of Right Face Vein with Intraluminal Device, Percutaneous Approach
057T4DZ Dilation of Right Face Vein with Intraluminal Device, Percutaneous Endoscopic Approach
05BL0ZZ Excision of Intracranial Vein, Open Approach
05BL4ZZ Excision of Intracranial Vein, Percutaneous Endoscopic Approach
05BM0ZZ Excision of Right Internal Jugular Vein, Open Approach
05BM4ZZ Excision of Right Internal Jugular Vein, Percutaneous Endoscopic Approach
05BN0ZZ Excision of Left Internal Jugular Vein, Open Approach
05BN4ZZ Excision of Left Internal Jugular Vein, Percutaneous Endoscopic Approach
05BP0ZZ Excision of Right External Jugular Vein, Open Approach
05BP4ZZ Excision of Right External Jugular Vein, Percutaneous Endoscopic Approach
05BQ0ZZ Excision of Left External Jugular Vein, Open Approach
05BQ4ZZ Excision of Left External Jugular Vein, Percutaneous Endoscopic Approach
05BR0ZZ Excision of Right Vertebral Vein, Open Approach
05BR4ZZ Excision of Right Vertebral Vein, Percutaneous Endoscopic Approach
05BS0ZZ Excision of Left Vertebral Vein, Open Approach
05BS4ZZ Excision of Left Vertebral Vein, Percutaneous Endoscopic Approach
05BT0ZZ Excision of Right Face Vein, Open Approach
05BT4ZZ Excision of Right Face Vein, Percutaneous Endoscopic Approach
05BV0ZZ Excision of Left Face Vein, Open Approach
05BV4ZZ Excision of Left Face Vein, Percutaneous Endoscopic Approach
05BY0ZZ Excision of Upper Vein, Open Approach
05BY4ZZ Excision of Upper Vein, Percutaneous Endoscopic Approach
05CL3ZZ Extirpation of Matter from Intracranial Vein, Percutaneous Approach
05CM0ZZ Extirpation of Matter from Right Internal Jugular Vein, Open Approach
05CM3ZZ Extirpation of Matter from Right Internal Jugular Vein, Percutaneous Approach
05CM4ZZ Extirpation of Matter from Right Internal Jugular Vein, Percutaneous Endoscopic Approach
05CN0ZZ Extirpation of Matter from Left Internal Jugular Vein, Open Approach
05CN3ZZ Extirpation of Matter from Left Internal Jugular Vein, Percutaneous Approach
05CN4ZZ Extirpation of Matter from Left Internal Jugular Vein, Percutaneous Endoscopic Approach
05CP0ZZ Extirpation of Matter from Right External Jugular Vein, Open Approach
05CP3ZZ Extirpation of Matter from Right External Jugular Vein, Percutaneous Approach
05CP4ZZ Extirpation of Matter from Right External Jugular Vein, Percutaneous Endoscopic Approach
05CQ0ZZ Extirpation of Matter from Left External Jugular Vein, Open Approach
05CQ3ZZ Extirpation of Matter from Left External Jugular Vein, Percutaneous Approach
05CQ4ZZ Extirpation of Matter from Left External Jugular Vein, Percutaneous Endoscopic Approach
05CR0ZZ Extirpation of Matter from Right Vertebral Vein, Open Approach
05CR3ZZ Extirpation of Matter from Right Vertebral Vein, Percutaneous Approach

05CR4ZZ Extirpation of Matter from Right Vertebral Vein, Percutaneous Endoscopic Approach
05CS0ZZ Extirpation of Matter from Left Vertebral Vein, Open Approach
05CS3ZZ Extirpation of Matter from Left Vertebral Vein, Percutaneous Approach
05CS4ZZ Extirpation of Matter from Left Vertebral Vein, Percutaneous Endoscopic Approach
05CT0ZZ Extirpation of Matter from Right Face Vein, Open Approach
05CT3ZZ Extirpation of Matter from Right Face Vein, Percutaneous Approach
05CT4ZZ Extirpation of Matter from Right Face Vein, Percutaneous Endoscopic Approach
05CV0ZZ Extirpation of Matter from Left Face Vein, Open Approach
05CV3ZZ Extirpation of Matter from Left Face Vein, Percutaneous Approach
05CV4ZZ Extirpation of Matter from Left Face Vein, Percutaneous Endoscopic Approach
05HY02Z Insertion of Monitoring Device into Upper Vein, Open Approach
05HY32Z Insertion of Monitoring Device into Upper Vein, Percutaneous Approach
05HY42Z Insertion of Monitoring Device into Upper Vein, Percutaneous Endoscopic Approach
05RM07Z Replacement of Right Internal Jugular Vein with Autologous Tissue Substitute, Open Approach
05RM0JZ Replacement of Right Internal Jugular Vein with Synthetic Substitute, Open Approach
05RM0KZ Replacement of Right Internal Jugular Vein with Nonautologous Tissue Substitute, Open Approach
05RM47Z Replacement of Right Internal Jugular Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RM4JZ Replacement of Right Internal Jugular Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RM4KZ Replacement of Right Internal Jugular Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RN07Z Replacement of Left Internal Jugular Vein with Autologous Tissue Substitute, Open Approach
05RN0JZ Replacement of Left Internal Jugular Vein with Synthetic Substitute, Open Approach
05RN0KZ Replacement of Left Internal Jugular Vein with Nonautologous Tissue Substitute, Open Approach
05RN47Z Replacement of Left Internal Jugular Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RN4JZ Replacement of Left Internal Jugular Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RN4KZ Replacement of Left Internal Jugular Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RP07Z Replacement of Right External Jugular Vein with Autologous Tissue Substitute, Open Approach
05RP0JZ Replacement of Right External Jugular Vein with Synthetic Substitute, Open Approach
05RP0KZ Replacement of Right External Jugular Vein with Nonautologous Tissue Substitute, Open Approach
05RP47Z Replacement of Right External Jugular Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RP4JZ Replacement of Right External Jugular Vein with Synthetic Substitute, Percutaneous Endoscopic Approach

05RP4KZ Replacement of Right External Jugular Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RQ07Z Replacement of Left External Jugular Vein with Autologous Tissue Substitute, Open Approach
05RQ0JZ Replacement of Left External Jugular Vein with Synthetic Substitute, Open Approach
05RQ0KZ Replacement of Left External Jugular Vein with Nonautologous Tissue Substitute, Open Approach
05RQ47Z Replacement of Left External Jugular Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RQ4JZ Replacement of Left External Jugular Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RQ4KZ Replacement of Left External Jugular Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RR07Z Replacement of Right Vertebral Vein with Autologous Tissue Substitute, Open Approach
05RR0JZ Replacement of Right Vertebral Vein with Synthetic Substitute, Open Approach
05RR0KZ Replacement of Right Vertebral Vein with Nonautologous Tissue Substitute, Open Approach
05RR47Z Replacement of Right Vertebral Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RR4JZ Replacement of Right Vertebral Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RR4KZ Replacement of Right Vertebral Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RS07Z Replacement of Left Vertebral Vein with Autologous Tissue Substitute, Open Approach
05RS0JZ Replacement of Left Vertebral Vein with Synthetic Substitute, Open Approach
05RS0KZ Replacement of Left Vertebral Vein with Nonautologous Tissue Substitute, Open Approach
05RS47Z Replacement of Left Vertebral Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RS4JZ Replacement of Left Vertebral Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RS4KZ Replacement of Left Vertebral Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RT07Z Replacement of Right Face Vein with Autologous Tissue Substitute, Open Approach
05RT0JZ Replacement of Right Face Vein with Synthetic Substitute, Open Approach
05RT0KZ Replacement of Right Face Vein with Nonautologous Tissue Substitute, Open Approach
05RT47Z Replacement of Right Face Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RT4JZ Replacement of Right Face Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RT4KZ Replacement of Right Face Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
05RV07Z Replacement of Left Face Vein with Autologous Tissue Substitute, Open Approach
05RV0JZ Replacement of Left Face Vein with Synthetic Substitute, Open Approach

05RV0KZ	Replacement of Left Face Vein with Nonautologous Tissue Substitute, Open Approach
05RV47Z	Replacement of Left Face Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
05RV4JZ	Replacement of Left Face Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
05RV4KZ	Replacement of Left Face Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
069300Z	Drainage of Esophageal Vein with Drainage Device, Open Approach
06930ZZ	Drainage of Esophageal Vein, Open Approach
069330Z	Drainage of Esophageal Vein with Drainage Device, Percutaneous Approach
06933ZZ	Drainage of Esophageal Vein, Percutaneous Approach
069340Z	Drainage of Esophageal Vein with Drainage Device, Percutaneous Endoscopic Approach
06934ZZ	Drainage of Esophageal Vein, Percutaneous Endoscopic Approach
06BY0ZZ	Excision of Lower Vein, Open Approach
06BY4ZZ	Excision of Lower Vein, Percutaneous Endoscopic Approach
06C30ZZ	Extirpation of Matter from Esophageal Vein, Open Approach
06C33ZZ	Extirpation of Matter from Esophageal Vein, Percutaneous Approach
06C34ZZ	Extirpation of Matter from Esophageal Vein, Percutaneous Endoscopic Approach
06R307Z	Replacement of Esophageal Vein with Autologous Tissue Substitute, Open Approach
06R30JZ	Replacement of Esophageal Vein with Synthetic Substitute, Open Approach
06R30KZ	Replacement of Esophageal Vein with Nonautologous Tissue Substitute, Open Approach
06R347Z	Replacement of Esophageal Vein with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
06R34JZ	Replacement of Esophageal Vein with Synthetic Substitute, Percutaneous Endoscopic Approach
06R34KZ	Replacement of Esophageal Vein with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
B3060ZZ	Plain Radiography of Right Internal Carotid Artery using High Osmolar Contrast
B3061ZZ	Plain Radiography of Right Internal Carotid Artery using Low Osmolar Contrast
B306YZZ	Plain Radiography of Right Internal Carotid Artery using Other Contrast
B3070ZZ	Plain Radiography of Left Internal Carotid Artery using High Osmolar Contrast
B3071ZZ	Plain Radiography of Left Internal Carotid Artery using Low Osmolar Contrast
B307YZZ	Plain Radiography of Left Internal Carotid Artery using Other Contrast
B3080ZZ	Plain Radiography of Bilateral Internal Carotid Arteries using High Osmolar Contrast
B3081ZZ	Plain Radiography of Bilateral Internal Carotid Arteries using Low Osmolar Contrast
B308YZZ	Plain Radiography of Bilateral Internal Carotid Arteries using Other Contrast
B30D0ZZ	Plain Radiography of Right Vertebral Artery using High Osmolar Contrast
B30D1ZZ	Plain Radiography of Right Vertebral Artery using Low Osmolar Contrast
B30DYZZ	Plain Radiography of Right Vertebral Artery using Other Contrast
B30F0ZZ	Plain Radiography of Left Vertebral Artery using High Osmolar Contrast
B30F1ZZ	Plain Radiography of Left Vertebral Artery using Low Osmolar Contrast
B30FYZZ	Plain Radiography of Left Vertebral Artery using Other Contrast
B30G0ZZ	Plain Radiography of Bilateral Vertebral Arteries using High Osmolar Contrast
B30G1ZZ	Plain Radiography of Bilateral Vertebral Arteries using Low Osmolar Contrast
B30GYZZ	Plain Radiography of Bilateral Vertebral Arteries using Other Contrast

B30R0ZZ Plain Radiography of Intracranial Arteries using High Osmolar Contrast
B30R1ZZ Plain Radiography of Intracranial Arteries using Low Osmolar Contrast
B30RYZZ Plain Radiography of Intracranial Arteries using Other Contrast
B30RZZZ Plain Radiography of Intracranial Arteries
B3160ZZ Fluoroscopy of Right Internal Carotid Artery using High Osmolar Contrast
B3161ZZ Fluoroscopy of Right Internal Carotid Artery using Low Osmolar Contrast
B316YZZ Fluoroscopy of Right Internal Carotid Artery using Other Contrast
B3170ZZ Fluoroscopy of Left Internal Carotid Artery using High Osmolar Contrast
B3171ZZ Fluoroscopy of Left Internal Carotid Artery using Low Osmolar Contrast
B317YZZ Fluoroscopy of Left Internal Carotid Artery using Other Contrast
B3180ZZ Fluoroscopy of Bilateral Internal Carotid Arteries using High Osmolar Contrast
B3181ZZ Fluoroscopy of Bilateral Internal Carotid Arteries using Low Osmolar Contrast
B318YZZ Fluoroscopy of Bilateral Internal Carotid Arteries using Other Contrast
B31D0ZZ Fluoroscopy of Right Vertebral Artery using High Osmolar Contrast
B31D1ZZ Fluoroscopy of Right Vertebral Artery using Low Osmolar Contrast
B31DYZZ Fluoroscopy of Right Vertebral Artery using Other Contrast
B31F0ZZ Fluoroscopy of Left Vertebral Artery using High Osmolar Contrast
B31F1ZZ Fluoroscopy of Left Vertebral Artery using Low Osmolar Contrast
B31FYZZ Fluoroscopy of Left Vertebral Artery using Other Contrast
B31G0ZZ Fluoroscopy of Bilateral Vertebral Arteries using High Osmolar Contrast
B31G1ZZ Fluoroscopy of Bilateral Vertebral Arteries using Low Osmolar Contrast
B31GYZZ Fluoroscopy of Bilateral Vertebral Arteries using Other Contrast
B31R0ZZ Fluoroscopy of Intracranial Arteries using High Osmolar Contrast
B31R1ZZ Fluoroscopy of Intracranial Arteries using Low Osmolar Contrast
B31RYZZ Fluoroscopy of Intracranial Arteries using Other Contrast
B31RZZZ Fluoroscopy of Intracranial Arteries

APPENDIX VIII:
THE NEW JERSEY ACUTE STROKE REGISTRY FILE LAYOUT

Item	Variable name	Text Prompt	Field Type	Legal Values
A. Demographics				
1	HOSPTYPE*	Hospital Type	Numeric	1 = Primary 2 = Comprehensive 3 = Other
2	HOSPNUM*	Hospital Code (See Appendix I)	Numeric	0000-9999
3	TXFROM*	Hospital Transferred From Code	Numeric	0000-9999
4	MEDRECNO*	Medical Record Number	Character	Any 12 character codes used by hospital
5	LNAME*	Patient Last Name	Character	15 characters
6	FNAME*	Patient First Name	Character	10 characters
7	MI*	Middle Initial	Character	1 character
8	DOB	Date of Birth	Date	MM/DD/YYYY
9	SSNUM*	Social Security Number	Character	11 digits XXX-XX-XXXX
10	ZIP*	Patient's Zip Code	Character	5 digits
11	Sex	Gender	Numeric	1= Male 2= Female 3=Other/Unknown
12a	RACEA	Patient self-identified Race as White	Numeric	1 = Yes 0 = No
12b	RACEB	Patient self-identified Race as Black or African American	Numeric	1 = Yes 0 = No
12c	RACEC	Patient self-identified Race as Asian	Numeric	1 = Yes 0 = No
12d	RACED	Patient self-identified Race as American Indian or Alaska Native	Numeric	1 = Yes 0 = No
12e	RACEE	Patient self-identified Race as Native Hawaiian or Pacific Islander	Numeric	1 = Yes 0 = No
12f	RACEF	Patient self-identified Race was unable to determine (UTD)	Numeric	1 = Yes 0 = No
13	Hispanic	Hispanic or Latino Ethnicity	Numeric	1 = Yes 0 = No/UTD
14	Insurer	Health insurance status (Appendix II)	Numeric	1 = Blue Cross/ Blue Shield 2 = Commercial 3 = HMO 4 = Medicaid 5 = Medicare 6 = Self Pay 7 = Tricare (Champus) 8 = Uninsured/Indigent 9 = Other

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
B. Pre-hospital/Emergency Medical System (EMS) Data				
15	PlcOccur	Patient location when stroke was detected /symptoms were discovered	Numeric	1 = Not in a healthcare setting, 2 = Another acute care facility 3 = Chronic health care facility 4 = Stroke occurred after hospital arrival (in ED/obs/inpatient) 5 = Outpatient healthcare setting 9 = ND or Cannot be determined
16	ArrMode	How did the patient get to your hospital for treatment of their stroke	Numeric	1 = EMS from home or scene 2 = Private transportation/taxi/ other 3 = Transferred from another hospital 10= Mobile Stroke Unit 9 = ND or unknown
17	EMSRecD	Date call received by EMS or Mobile Stroke Unit	Date	MM= 1-12 DD= 1 – 31 YYYY= 20XX
18	EMSRecDND	Date not documented	Numeric	1=Yes 0 =No
19	EMSRecT	Time call received by EMS or Mobile Stroke Unit	Military Time	HH=00 - 24 MM=00 - 59
20	EMSRecTND	Time not documented	Numeric	1 = Yes 0 = No
21	EMSNote	EMS pre-notification to your hospital	Numeric	1 = Yes 0 = No/ND
C. Hospitalization				
22	EDTriagD	Date of arrival to Hospital/ED	Date	MM= 1 – 12 DD= 1 – 31 YYYY= 20XX
23	EDTriagT	Time of arrival to Hospital/ED	Military Time	HH=00 - 24 MM=00 - 59
24	ADMDATE	Hospital admission date	Date	MM= 1 -12 DD= 1 – 31 YYYY= 20XX
25	PlaceRcd	Where in your hospital was the patient first evaluated?	Numeric	1 = Emergency Department/Urgent care 2 = Direct Admit (DA) or direct to floor/unit 3 = Imaging suite prior to ED arrival or DA 9 = Cannot be determine
26	EDAdm	Was the patient admitted to your hospital?	Numeric	1 = Yes 0 = No, Not Admitted

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
27	NonAdm	If patient was Not Admitted to your hospital, reason why patient was not admitted	Numeric	1=Patient was transferred from your ED to another acute care hospital 2=Patient was discharged directly from ED to home or other location other than an acute care hospital 3=Patient left ED AMA 4=Patient died while in ED 5=Patient discharged from observation status without being admitted to the hospital 6=Other
28	PreDx	Presumptive hospital admission diagnosis	Numeric	1 = Intracerebral Hemorrhage 2 = Transient Ischemic Attack 3 = Subarachnoid Hemorrhage 4 = Stroke Not Otherwise Specified 5 = Ischemic Stroke 6 = No Stroke Related Diagnosis
29	Sxresolv	Did symptoms completely resolve prior to presentation?	Numeric	1 = Yes 0 = No 9 = ND
30	Weakness	Weakness or Paresis	Numeric	1 = Yes 0 = No/ND
31	AltLOC	Altered level of consciousness	Numeric	1 = Yes 0 = No/ND
32	Aphasia	Aphasia	Numeric	1 = Yes 0 = No/ND
33	AdmsysBP	If patient received IV alteplase, what was the first systolic blood pressure	Numeric	mmHg _____
34	AdmdiaBP	If patient received IV alteplase, what was the first diastolic blood pressure	Numeric	mmHg _____
35	AdmGlucose	If patient received IV alteplase, what was the first blood glucose	Numeric	mg/dL _____
36	AntiPlAdmYN	Antiplatelet medication prior to admission	Numeric	1 = Yes 0 = No/ND
37	AntiCoagAdmYN	Anticoagulation medication prior to admission	Numeric	1 = Yes 0 = No/ND
38	HBPAdmYN	Antihypertensive medication prior to admission	Numeric	1 = Yes 0 = No/ND
39	LipAdmYN	Cholesterol reducing medication prior to admission	Numeric	1 = Yes 0 = No/ND
40	DMAdmYN	Diabetic medication prior to admission	Numeric	1 = Yes 0 = No/ND
41	AmbStatA	Was patient ambulatory prior to the current stroke/TIA?	Numeric	1 = Able to ambulate independently w/or w/o device 2 = With assistance (from person) 3 = Unable to ambulate 9 = Not documented

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
D. Imaging				
42	ImageYN	Was brain imaging performed after arrival as part of initial evaluation?	Numeric	1 = Yes 0 = No/ND 2 = NC – if outside imaging prior to transfer or patient is DNR/CMO
43	ImageD	If Yes, Date of initial brain imaging	Date	MM= 1 – 12 DD= 1- 31 YYYY= 20XX
44	ImageDND	Date of initial brain imaging not documented	Numeric	1=Yes 0=No
45	ImageT	If Yes, Time of initial brain imaging	Military Time	HH= 00 – 24 MM= 00-59
46	ImageTND	Time of initial brain not documented	Numeric	1=Yes 0=No
47	ImageRes	Initial brain imaging findings	Numeric	1 = Hemorrhage 0 = No hemorrhage 9 = N/D or Not available
48	ImageResD	Date of brain image findings	Date	MM= 1 – 12 DD= 1 – 31 YYYY= 20XX
49	ImageResDND	Date of initial brain image findings not documented or unknown	Numeric	1 = Yes 0 = No
50	ImageResT	Time of brain image findings	Military time	HH:MM (military time)
51	ImageResTND	Time of initial brain image findings not documented or unknown	Numeric	1 = Yes 0 = No
E. Symptom Timeline				
52	LKWD	Date patient last known to be well	Date	MM= 1 – 12 DD= 1 – 31 YYYY= 20XX
53	LKWDND	Date last known well is unknown/not documented/UTD	Numeric	1=Yes 0=No
54	LKWT	Time last known to be well (to within 15 minutes of exact time is acceptable)	Military time	HH: 00 – 24 MM: 0 -59
55	LKWTND	Time last known well is unknown/not documented	Numeric	1=Yes 0=No
56	DiscD	Date patient was first discovered to have the current stroke or stroke like symptoms	Date	MM= 1 – 12 DD= 1 – 31 YYYY= 20XX
57	DiscDND	Date patient was discovered with symptoms unknown/not documented	Numeric	1=Yes 0=No

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
58	DiscT	Time patient was first discovered to have current stroke or stroke like symptoms (to within 15 minutes of exact time of discovery is acceptable)	Military time	HH= 0-24 MM= 0 - 59
59	DiscTND	Discovery time unknown/not documented	Numeric	1=Yes 0=No
60	NIHStrkSP	Was NIH Stroke Scale performed as part of the initial evaluation of the patient	Numeric	1=Yes 0=No/ND
61	NIHStrkS	If performed - NIH Stroke Scale total score recorded	Numeric	00 to 42
F. Thrombolytic Treatment				
62	TrmIVM	Was IV alteplase initiated for this patient at this hospital?	Numeric	1 = Yes 0 = No
63	TrmIVMD	If IV alteplase was initiated at this hospital or ED, date: initiated	Date	MM= 1- 12 DD= 1 -31 YYYY= 20XX
64	TrmIVMDND	Date initiated not documented or unknown	Numeric	1 = Yes 0 = No
65	TrmIVMT	If IV alteplase was initiated at this hospital or ED, time:	Military time	HH = 0 – 24 MM = 0 - 59
66	TrmIVMTND	Time initiated not documented or unknown	Numeric	1 = Yes 0 = No
67	TrmIVT	IV alteplase at an outside hospital or Mobile Stroke Unit	Numeric	1 = Yes 0 = No
68	TrmIAM	IA catheter-based reperfusion at this hospital	Numeric	1 = Yes 0 = No
69	TrmIAMD	If yes for IA catheter-based reperfusion, please record date	Date	MM = 1 – 12 DD = 1 – 31 YYYY = 20XX
70	TrmIAMDND	Date IA catheter-based reperfusion not documented or unknown	Numeric	1 = Yes 0 = No
71	TrmIAMT	If yes for IA catheter-based reperfusion, please record time	Military time	HH = 0 – 24 MM = 0 - 59
72	TrmIAMTND	Time IA catheter-based reperfusion not documented or unknown	Numeric	1 = Yes 0 = No
73	TrmIAT	IA catheter-based reperfusion at outside hospital	Numeric	1 = Yes 0 = No
74	TrmExp	Investigational or experimental protocol for thrombolysis	Numeric	1 = Yes 0 = No
75	ExpType	If yes to 74, please specify investigational/experimental thrombolysis	Text	Name investigational or experimental thrombolysis

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
76	Othtrial	Other investigative therapy for ischemic or hemorrhagic stroke (state added)	Numeric	1 = Yes 0 = No
77	ThrmCmp	Complications from Reperfusion Therapy (Thombolytic or MER)	Numeric	0 = None 1 = Symptomatic ICH within 36 hours (<36 hours) 2 = Life threatening, serious systemic hemorrhage within 36 hours 3 = Other serious complications 9 = Unknown/Unable to determine
78	ThrmCmpTX	Were there bleeding complications in a patient transferred after IV alteplase?	Numeric	1 = Yes & detected prior to transfer 2 =Yes but not detected after transfer 3 = UTD 9 = Not applicable

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
G. Non-Treatment with Thrombolytics				
79	ContraWarn	Documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV Thrombolytic in the 0-3 hr treatment window	Numeric	1 = Yes 0 = No
80	ContraWarn2	Documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV Thrombolytic in the 3-4.5 hr treatment window	Numeric	1 = Yes 0 = No
Exclusions (Contraindications)				
81, 81_2	NonTrtBl, NonTrtBl2	Active internal bleeding	Numeric	1 = Yes 0 = No
82, 82_2	NonTrtCT, NonTrtCT2	CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)	Numeric	1 = Yes 0 = No
83, 83_2	NonTrtHxHem, NonTrtHxHem2	History of intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation or aneurysm	Numeric	1 = Yes 0 = No
84, 84_2	NonTrtPlat, NonTrtPlat2	Acute bleeding diathesis (low platelet count, increased PTT, INR ≥ 1.7 or use of NOAC. This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)	Numeric	1 = Yes 0 = No
85, 85_2	NonTrtTr, NonTrtTr2	Recent intracranial or spinal surgery, significant head trauma or stroke in previous 3 months	Numeric	1 = Yes 0 = No
87, 87_2	NonTrtBP, NonTrtBP2	Elevated blood pressure (systolic >185 or diastolic >110 mmHg) despite treatment	Numeric	1 = Yes 0 = No
89, 89_2	NonTrtSuHem, NonTrtSuHem2	Symptoms may suggest subarachnoid hemorrhage	Numeric	1 = Yes 0 = No
89a, 89a_2	NonTrtAP NonTrtAP2	Arterial puncture at noncompressible site in previous 7 days	Numeric	1 = Yes 0 = No
92, 92_2	NonTrtG NonTrtG2	Blood glucose concentration <50mg/dL (2.7 mmol/L)	Numeric	1 = Yes 0 = No

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
Relative Exclusions (Warnings)				
91, 91_2	NonTrtNC, NonTrtNC2	Care team unable to determine eligibility	Numeric	1 = Yes 0 = No
94, 94_2	NonTrtOH, NonTrtOH2	IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival	Numeric	1 = Yes 0 = No
96, 96_2	NonTrtIL, NonTrtIL2	Life expectancy < 1 year or severe co-morbid illness or CMO on admission	Numeric	1 = Yes 0 = No
97, 97_2	NonTrtMI, NonTrtMI2	Recent myocardial infarction (within previous 3 months)	Numeric	1 = Yes 0 = No
98, 98_2	NonTrtPreg, NonTrtPreg2	Pregnancy	Numeric	1 = Yes 0 = No
99, 99_2	NonTrtFr, NonTrtFr2	Patient/family refused	Numeric	1 = Yes 0 = No
100, 100_2	NonTrtSM, NonTrtSM2	Stroke severity too mild (non disabling)	Numeric	1 = Yes 0 = No
88, 88_2	NonTrstS, NonTrtS2	Seizure at onset with postictal residual neurological impairments	Numeric	1 = Yes 0 = No
86, 86_2	NonTrtSurg, NonTrtSurg2	Major surgery or serious trauma within previous 14 days	Numeric	1 = Yes 0 = No
102a, 102a_2	NonTrtRecHem2	Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days)	Numeric	1 = Yes 0 = No
Hospital-Related or Other Factors:				
103, 103_2	NonTrtA, NonTrtA2	Delay in patient arrival	Numeric	1 = Yes 0 = No
104, 104_2	NonTrtDDx, NonTrtDDx2	Delay in stroke diagnosis	Numeric	1 = Yes 0 = No
105, 105_2	NonTrtTD, NonTrtTD2	In-hospital Time Delay, In-hospital Time Delay2	Numeric	1 = Yes 0 = No
106, 106_2	NonTrtIV, NonTrtIV2	No IV access	Numeric	1 = Yes 0 = No
107, 107_2	NonTrtOt, NonTrtOt2	Other (specify)	Text	Total 25 characters
H. Medical History				
108	MedHisAF	Atrial Fib/Flutter - history	Numeric	1 = Yes 0 = No
109	MedHisMI	Myocardial infarction (MI) or coronary artery disease (CAD) -history	Numeric	1 = Yes 0 = No
110	MedHisCS	Carotid stenosis - history	Numeric	1 = Yes 0 = No
111	MedHisPG	Current pregnancy or pregnancy or within 6 weeks after delivery or termination of pregnancy	Numeric	1 = Yes 0 = No
112	MedHisDM	Diabetes Mellitus - history	Numeric	1 = Yes 0 = No
113	MedHisDrug	Drugs - history	Numeric	1 = Yes 0 = No

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
114	MedHisDL	Dyslipidemia - history	Numeric	1 = Yes 0 = No
115	MedHisFMStk	Family history of stroke	Numeric	1 = Yes 0 = No
116	MedHisHF	Heart failure - history	Numeric	1 = Yes 0 = No
117	MedHisHRT	Hormone Replacement therapy	Numeric	1 = Yes 0 = No
118	MedHisHT	Hypertension -history	Numeric	1 = Yes 0 = No
119	MedHisMig	Migraine – history	Numeric	1 = Yes 0 = No
120	MedHisObesity	Obesity	Numeric	1 = Yes 0 = No
121	MedHisSTK	Prior Stroke	Numeric	1 = Yes 0 = No
122	MedHisTIA	History of TIA or VBI	Numeric	1 = Yes 0 = No
123	MedHisPVD	Peripheral vascular disease	Numeric	1 = Yes 0 = No
124	MedHisVP	Heart valve prosthesis	Numeric	1 = Yes 0 = No
125	MedHisRenal	Chronic renal insufficiency	Numeric	1 = Yes 0 = No
126	MedHisSS	Sickle cell disease	Numeric	1 = Yes 0 = No
127	MedHisSM	Smoking - history	Numeric	1 = Yes 0 = No
128	MedHisNone	None of the above	Numeric	1 = Yes 0 = No
129	HgtUnit	Patients height	Numeric	100–250 cms
130	WgtUnit	Patients weight	Numeric	25–250 kgs

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
I. In-hospital Procedures and Treatment				
Where was patient cared for? (#s 86-92)				
131	SUnitA	Neuro Admit	Numeric	1 = Yes 0 = No
132	SUnitB	Other Service Admit	Numeric	1 = Yes 0 = No
133	SUnitC	Stroke Consult	Numeric	1 = Yes 0 = No
134	SUnitD	No Stroke Consult	Numeric	1 = Yes 0 = No
135	SUnitE	In Stroke Unit	Numeric	1 = Yes 0 = No
136	SUnitF	Not in Stroke Unit	Numeric	1 = Yes 0 = No
137	CMO	When is the earliest time for CMO	Numeric	1 = Day of arrival or first day after arrival 2 = 2nd day after arrival or later 3 = Timing unclear 4 = ND/UTD 5 = Patient never on comfort measures only
138	AThr2Day	Antithrombotic therapy received by the end of hospital day 2	Numeric	1= Yes 0 = No/Not documented 2 = NC
139	DVTAmbul	Was patient ambulatory at the end of hospital day two?	Numeric	1=Yes 0=No 2=Not Documented
VTE Prophylaxis				
140	VTELDUHD	Low dose unfractionated heparin	Numeric	1 = Yes 0 = No
141	VTELMWH	Low molecular weight heparin	Numeric	1 = Yes 0 = No
142	VTEIPC	Intermittent pneumatic compression devices	Numeric	1 = Yes 0 = No
143	VTEGCS	Graduated compression stockings	Numeric	1 = Yes 0 = No
144	VTEXaI	Factor Xa Inhibitor	Numeric	1 = Yes 0 = No
145	VTEwar	Warfarin	Numeric	1 = Yes 0 = No
146	VTEVFP	Venous foot pumps	Numeric	1 = Yes 0 = No
147	VTEOXaI	Oral Factor Xa Inhibitor	Numeric	1 = Yes 0 = No
148	VTEND	No documented or none of above	Numeric	1 = Yes 0 = No

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
149	VTEDate	What date was the initial VTE administered after hospital admission?	Date	MM= 1 – 12 DD= 1 – 31 YYYY= 20XX
150	VTEDateND	Check if VTE prophylaxis administration date is unknown	Numeric	1=Yes 0=No
151	NoVTEDoc	If VTE prophylaxis administration not documented or none of the types of prophylaxis (fields 140- 147) apply, is there documentation why VTE was not administered	Numeric	1=Yes 0=No
152	OFXaVTEReason	Is there a documented reason for using Oral Factor Xa Inhibitor for VTE	Numeric	1=Yes 0=No
153	OtherAcoag	Other Therapeutic Anticoagulation	Numeric	1=Unfractionated heparin IV 2=Dabigatran (Pradaxa) 3=Argatroban 4=Desirudin (Iprivask) 5=Rivaroxaban (Xarelto) 6=Lepirudin (Refludan) 8=Apixaban (Eliguis) 0=Other Anticoagulant
154	NPO	Was the patient NPO throughout the entire hospital stay?	Numeric	1 = Yes 0 = No or Not documented
155	DysphaYN	Was patient screened for dysphagia prior to any oral intake?	Numeric	1 = Yes 0 = No/Not documented 2 = NC
156	IVHep*	IV therapeutic heparin administered	Numeric	1 = Yes 0 = No
157	Telemetric*	Was cardiac rhythm monitored continuously?	Numeric	1 = Yes 0 = No
J. Other in-hospital Complications				
158	DVTDocYN	Experience a DVT or pulmonary embolus (PE) during this admission?	Numeric	1 = Yes 0 = No/ND
159	PneumYN	Was patient treated for pneumonia during this admission?	Numeric	1 = Yes 0 = No 9 = NC
160	UTI	Treated for a urinary tract infection (UTI) during this admission?	Numeric	1 = Yes 0 = No/ND
161	UTIFoley	If treated for a UTI, did patient have a Foley catheter?	Numeric	1 = Yes, and patient had catheter in place on arrival 2 = Yes, but only after admission 0 = No 9 = Unable to determine

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
K. Discharge Data				
162	DATEDC	Date of discharge from hospital	Date	MM = 1 – 12 DD = 1- 31 YYYY = 20XX
163	ICDStDx	ICD-10-CM discharge diagnosis related to stroke (Appendix V)	Character	Valid ICD Code
164	ICDPrDx	Principal discharge ICD-10-CM diagnosis	Character	Valid ICD Code
165	DisDx	Clinical hospital diagnosis related to stroke that was ultimately responsible for this admission (Select only one item)	Numeric	1 = Subarachnoid hemorrhage 2 = Intracerebral hemorrhage 3 = Ischemic stroke 4 = Transient ischemic attack 5 = Stroke not otherwise specified 6 = No stroke related diagnosis 8 = Elective Carotid intervention only
166	DCWHERE	What was the patient's discharge disposition on the day of discharge (Select only one)	Numeric	1 = Home 2 = Hospice – Home 3 = Hospice – Health Care Facility 4 = Acute Care facility 5 = Other Health Care facility 6 = Expired 7 = Left Against Medical Advice (AMA) 8 = Not documented or Unable to Determine
167	OHFType	If discharged to another health care facility, what type of facility was it?	Numeric	1 = Skilled nursing facility 2 = Inpatient rehabilitation 3 = Long-term acute care facility or hospital 4 = Intermediate care facility 5 = Other
168	AmbStatD	Ambulation status at Discharge	Numeric	1 = Able to ambulate independently w/or w/o device 2 = With assistance (from person) 3 = Unable to ambulate 9 = Not documented
169	SmkCesYN	If history of smoking is checked yes on #127, was the adult patient or their care giver given smoking cessation advise or counseling during hospital stay?	Numeric	1 = Yes 0 = No or not documented in the medical record 2 = NC A documented reason exists for not performing counseling

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
Record lipid levels done within 48 hours of admission or within 30 days prior to admission.				
170	LipTotal	Total Cholesterol	Numeric	> 0 mg/dl
171	LipTri	Triglycerides	Numeric	> 0 mg/dl
172	LipHDL	HDL	Numeric	> 0 mg/dl
173	LipLDL	LDL	Numeric	> 0 mg/dl
174	LipND	Lipids ND	Numeric	1 = Yes 0 = No
175	LipNC	Lipids NC	Numeric	1 = Yes 0 = No
176	HbA1c	Glycosylated Hb	Numeric	> 0 %
177	HbA1Cnd	AIC ND (not documented)	Numeric	1 = Yes 0 = No
178	LipDisYN	Cholesterol reducing treatment prescribed at discharge	Numeric	1 = None prescribed ND 2 = None – contraindicated 3 = Statin 4 = Fibrate 6 = Other med 7 = Niacin 8 = Absorption Inhibitor 9 = PCSK9 Inhibitor
179	StatnNC	If statin was not prescribed, was there a documented reason for not prescribing a statin medication	Numeric	1 = Yes 0 = No
180	HBPTreat	Documentation antihypertensive medication was prescribed at discharge?	Numeric	1 = Yes 0 = No/ND 2 = NC
181	AthDscYN	Was antithrombotic (antiplatelet or anticoagulant) medication that is approved in stroke prescribed at discharge?	Numeric	1 = Yes 0 = No/ND 2 = NC
181a	AthDCMed	Was an antithrombotic medication not on the Antithrombotic Therapy Approved in Stroke inclusion list (an alternate antithrombotic medication) prescribed at discharge?	Numeric	1 = Yes 0 = No/ND
182	AthDCPlts	If patient was discharged o an antithrombotic medication, was it an antiplatelet?	Numeric	1 = Yes 0 = No/ND
183	AthDCCoag	If patient was discharged on an antithrombotic medication was it an anticoagulant?	Numeric	1=Yes 0=No/ND
184	AfibYN	Atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF), during this episode of care?	Numeric	1 = Yes 0 = No / Not documented
185	AfibRx	If a history of atrial fibrillation/flutter or PAF is documented was patient prescribed anticoagulation medication upon discharge?	Numeric	1 = Yes 0 = No / Not documented 2 = No, Contraindicated NC

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
Was there documentation that the patient and/or caregiver received education and/or resource materials regarding all of the following:				
186	EducRF	Risk factors for stroke	Numeric	1 = Yes 0 = No/ Not documented
187	EducSSx	Stroke warning signs and symptoms	Numeric	1 = Yes 0 = No/ Not documented
188	EducEMS	How to activate EMS for stroke	Numeric	1 = Yes 0 = No/ Not documented
189	EducCC	Need for follow-up after discharge	Numeric	1 = Yes 0 = No/ Not documented
190	EducMeds	Their prescribed medications	Numeric	1 = Yes 0 = No/ Not documented
191	RehaPlan	Is there documentation in the record that the patient was assessed for or received rehabilitation services	Numeric	1 = Yes 0 = No/ Not documented
192	Rehrecei	Received rehabilitation services during hospitalization	Numeric	1 = Yes 0 = No
193	Rehtrans	Transferred to rehabilitation facility	Numeric	1 = Yes 0 = No
194	Rehrefer	Referred to rehabilitation services following discharge	Numeric	1 = Yes 0 = No
195	Rehineli	Patient ineligible to receive rehabilitation services because symptoms resolved	Numeric	1 = Yes 0 = No
196	RehineliPP	Was patient ineligible to receive rehabilitation services due to impairment?	Numeric	1 = Yes 0 = No
197	mRSDone	Was Modified Rankin Scale done at discharge?	Numeric	1 = Yes 0 = No/ND
198	ModRank	If Modified Rankin was done at discharge, what was the score?	Numeric	0 = No Symptoms at all 1 = No significant disability despite symptoms; able to carry out all usual duties and activities 2 = Slight disability, unable to carry out previous activities, but able to look after own affairs without assistance 3 = Moderate disability, requiring some help, but able to walk without assistance 4 = Moderately severe disability, unable to walk without assistance and unable to attend to own bodily needs without assistance 5 = Severe disability; bedridden, incontinent and requiring constant nursing care and attention 6 = Dead

APPENDIX VIII (CONT.)

Item	Variable name	Text Prompt	Field Type	Legal Values
199	Reserved1			
200	Reserved2			
201	Reseverd3			
202	Reserved4			
203	Reserved5			
204	Reserved6			
205	Reserved7			
207	Reversed8			
208	Reserved9			
209	Reserved10			
210	Reserved11			
211	Reserved12			
212	Reserved13			
213	Reserved14			
214	Reserved15			

Appendix IX: The New Jersey Acute Stroke Registry / Summary of Coding Instruction Changes

Section	Item	Change
January 7, 2020 Updates		
Non-Treatment with Thombolytics	79. Are there documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV thrombolytic in the 0-3hr treatment window? [ContraWarn]	Updated notes for abstraction
Non-Treatment with Thombolytics	80. Are there documented Exclusions (Contraindication) or Relative Exclusions (Warnings) for not initiating IV Thrombolytic in the 3-4.5 hour treatment window? [ContraWarn2]	Updated notes for abstraction
Non-Treatment with Thombolytics	100. Stroke severity too mild, 0-3 hour window [NonTrtSM]	Updated data element description
Non-Treatment with Thombolytics	102. Rapid improvement, 0-3 hour window [NonTrtRI]	Removed data element from Relative Exclusions (warnings) added to Hospital Related or Other Factors
Non-Treatment with Thombolytics	100_2. Stroke severity too mild, 3-4.5 hour window [NonTrtSM2]	Updated data element description
Non-Treatment with Thombolytics	102_2. Rapid improvement, 3- 4.5 hour window [NonTrtRI2]	Removed data element from Relative Exclusions added to Hospital Related or Other Factors

Section	Item	Change
April 15, 2019 Updates		
Demographic Data	8. Patient Date of Birth [DOB]	Updated suggested data sources
Pre-hospital/Emergency Medical System (EMS) Data	16. How did your patient get to your hospital for treatment of his/her stroke? [ArrMode]	Added response option #10 = Mobile Stroke Unit
Pre-hospital/Emergency Medical System (EMS) Data	17. Date call received by EMS [EMSRecD]	Updated data element description
Pre-hospital/Emergency Medical System (EMS) Data	19. Time call received by EMS [EMSRecT].	Updated data element description
Pre-hospital/Emergency Medical System (EMS) Data	21. Was there EMS pre-notification to your hospital? [EMSNote]	Updated notes for abstraction
Hospitalization	24. Hospital admission date [ADMDATE]	Updated notes for abstraction Updated notes for priority data sources
Thrombolytic Treatment	67. IV tPA at an outside hospital [TrmIVT]	Updated data element description

APPENDIX IX (CONT)		
Thrombolytic Treatment	68. IA catheter-based reperfusion at this hospital? [TrmIAM]	Removed response option “2 = Attempted but Unable to Access Target Occlusion” Updated notes for abstraction
Thrombolytic Treatment	77. Complications from thrombolytic therapy	Updated field description Updated notes for abstraction
In-Hospital Procedures and Treatments	138. Was antithrombotic therapy received by the end of hospital day 2? [Athr2Day]	Updated notes for abstraction
In-Hospital Procedures and Treatments	139 Was the patient ambulatory by the end of hospital day 2? [DVTAmbul]	Updated notes for abstraction
In-Hospital Procedures and Treatments	140-148. What type of VTE prophylaxis was documented in the medical record?	Updated notes for abstraction Updated inclusion guidelines for abstraction
In-Hospital Procedures and Treatments	149-150. What date was the initial VTE prophylaxis administered after hospital admission?	Updated notes for abstraction
In-Hospital Procedures and Treatments	151. If not documented or none of the above types of prophylaxis apply, is there documentation why VTE prophylaxis was not administered at hospital admission? [NoVTEDoc]	Updated notes for abstraction Updated suggested data sources
In-Hospital Procedures and Treatments	152. Is there a documented reason for using Oral Factor Xa Inhibitor for VTE? [OFXaVTEReason]	Updated notes for abstraction Updated inclusion guidelines for abstraction
Discharge Data	164. Principal discharge ICD-diagnosis code [ICDPrDx]	Updated notes for abstraction Updated suggested data sources
Discharge Data	165. Clinical hospital diagnosis related to stroke that was ultimately responsible for the admission [DisDx]	Updated notes for abstraction
Discharge Data	166. What was the patient’s discharge disposition on the day of discharge? [DCWhere]	Updated notes for abstraction

APPENDIX IV (CONT)		
Discharge Data	169. If past medical history of smoking is checked as “Yes” on #127, was the adult patient or their caregiver given smoking cessation advise or counseling during the hospital stay? [SmkCesYN]	Updated notes for abstraction
Discharge Data	178. Cholesterol reducing treatment prescribed at discharge [LipDisYN]]	Updated notes for abstraction Added response option #9 = PCSK9 Inhibitor
Discharge Data	179. If statin was not prescribed, was there a documented reason for not prescribing a statin medication? [StatnNC]	Updated notes for abstraction Updated exclusion guidelines for abstraction
Discharge Data	180. Is there documentation that antihypertensive medication was prescribed at discharge? [HBPTreat]	Updated notes for abstraction
Discharge Data	181. Was antithrombotic (antiplatelet or anticoagulant) medication that is approved for stroke prescribed at discharge [AthDsnYN]?	Updated notes for abstraction
Discharge Data	186. Personal modifiable risk factors for stroke [EducRF]	Updated field name
Discharge Data	190. Their prescribed medications [EducMeds]	Updated notes for abstraction Updated exclusion guidelines for abstraction
Discharge Data	191. Is there documentation in the record that the patient was assessed for or received rehabilitation services? [RehabPlan]	Updated suggested data sources Updated excluded data sources Updated inclusion guidelines for abstraction
Appendix V.	Typical Stroke ICD-10-CM Codes	Updates two ICD-10-CM Ischemic Stroke Codes
Appendix VI.	Cholesterol Reducing Medications	Removed multiple cholesterol reducing medications Added several cholesterol reducing medications Added legend note
		Updated “tPA” references to “alteplase”

Section	Title	Change
October 1, 2016 Updates:		
Pre-Hospital/Emergency Medical System (EMS) Data	15. Where was the patient when the stroke was detected or when symptoms were discovered? [PlcOccur]	Updated response option 4 from "Stroke occurred while patient was an inpatient in your hospital" to "Stroke occurred after hospital arrival (in ED/obs/inpatient)", along with clarifying notes.
Thrombolytic Treatment	77. Complications of thrombolytic therapy [ThrmCmp]	Added the abstraction note, "If ALL #62 [TrmIVM], #67 [TrmIVT], #68 [TrmlAM] and #73 [TrmlAT] ARE ANSWERED "No", skip this element."
Non-treatment with Thrombolytics	79. Are there documented Contraindications or Warnings for not initiating IV thrombolytic in the 0-3hr treatment window: [ContrWarn]	Updated the data element description to "Are there documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV thrombolytic in the 0-3hr treatment window:" Updated clarifying notes for abstraction.
Non-treatment with Thrombolytics	80. Are there documented Contraindications or Warnings for not initiating IV Thrombolytic in the 3 – 4.5 hr treatment window: [ContrsWarn2]	Updated the data element description to "Are there documented Exclusions (Contraindications) or Relative Exclusions (Warnings) for not initiating IV Thrombolytic in the 3 – 4.5 hr treatment window:" Updated clarifying notes for abstraction.
Non-treatment with Thrombolytics	81. Active internal bleeding, ≤ 22 days [NonTrtBl]	Updated the data element description to "Active internal bleeding".
Non-treatment with Thrombolytics	82. CT findings (ICH, SAH, or major infarct signs) [NonTrtCT]	Updated the data element description to "CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)".
Non-treatment with Thrombolytics	83. History of intracranial hemorrhage or brain aneurysm or vascular malformation or brain tumor [NonTrtHxHem]	Updated the data element description to "History of intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation or aneurysm".
Non-treatment with Thrombolytics	84. Platelets <100,000, PTT> 40 sec after heparin use or PT >15 or INR > 1.7 or known bleeding diathesis [NonTrtPlat]	Updated the data element description to "Acute bleeding diathesis (low platelet count, increased PTT, INR ≥ 1.7 or use of NOAC). This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)".

Section	Title	Change
October 1, 2016 Updates:		
Non-treatment with Thrombolytics	85. Recent intracranial or spinal surgery, head trauma or stroke (<3 mo.) [NonTrtTr]	Updated the data element description to "Recent intracranial or spinal surgery, significant head trauma or stroke in previous 3 months".
Non-treatment with Thrombolytics	86. Recent surgery/trauma (<15 days) [NonTrtSurg]	Updated the data element description to "Major surgery or serious trauma within previous 14 days" and recategorized from tPA Exclusion (Contraindication) to tPA Relative Exclusion (Warning).
Non-treatment with Thrombolytics	87. SBP >185 or DBP >110 mmHg despite treatment [NonTrtBP]	Updated the data element description to "Elevated blood pressure (systolic >185 mmHg or diastolic >110 mmHg) despite treatment".
Non-treatment with Thrombolytics	88. Seizure at onset [NonTrtS]	Updated the data element description to "Seizure at onset with postictal residual neurological impairments" and recategorized from tPA Exclusion (Contraindication) to tPA Relative Exclusion (Warning).
Non-treatment with Thrombolytics	89. Suspicion of subarachnoid hemorrhage [NonTrtSuHem]	Updated the data element description to "Symptoms may suggest subarachnoid hemorrhage".
Non-treatment with Thrombolytics	89a. Arterial puncture at noncompressible site in previous 7 days [NonTrtAP]	Added this new data element.
Non-treatment with Thrombolytics	90. Advanced Age [NonTrtAG]	Removed this data element.
Non-treatment with Thrombolytics	92. Glucose <50 or > 400 mg/dl [NonTrtG]	Updated the data element description to "Blood Glucose concentration <50 mg/dL (2.7 mmol/L)".
Non-treatment with Thrombolytics	93. Increased risk of bleeding due to comorbid conditions [NonTrtROM]	Removed this data element.
Non-treatment with Thrombolytics	94. IV or IA tPA given at outside hospital [NonTrtOH]	Updated the data element description to "IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival".
Non-treatment with Thrombolytics	95. Left heart thrombus [NonTrtLHT]	Removed this data element.
Non-treatment with Thrombolytics	97. MI in previous 3 months [NonTrtMI]	Updated the data element description to "Recent acute myocardial infarction (within previous 3 months)".
Non-treatment with Thrombolytics	101. Stroke severity – Too Severe (e.g. NIHSS>22) [NonTrtSev]	Removed this data element.
Non-treatment with Thrombolytics	102a. Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days) [NonTrtRecHem]	Added this new data element.
Non-treatment with Thrombolytics	81_2. Active internal bleeding, ≤22days [NonTrtBl2]	Updated the data element description to "Active internal bleeding".

Section	Title	Change
October 1, 2016 Updates:		
Non-treatment with Thrombolytics	82_2. CT findings (ICH, SAH, or major infarct signs) [NonTrtCT2]	Updated the data element description to "CT demonstrates multilobar infarction (hypodensity >1/3 cerebral hemisphere)".
Non-treatment with Thrombolytics	83_2. History of intracranial hemorrhage or brain aneurysm or vascular malformation or brain tumor [NonTrtHxHem2]	Updated the data element description to "History of previous intracranial hemorrhage, intracranial neoplasm, arteriovenous malformation or aneurysm".
Non-treatment with Thrombolytics	84_2. Platelets <100,000, PTT> 40 sec after heparin use or PT >15 or INR > 1.7 or known bleeding diathesis [NonTrtPlat2]	Updated the data element description to "Acute bleeding diathesis (low platelet count, increased PTT, INR ≥ 1.7 or use of NOAC). This includes: Platelet count <100 000/mm^3; Heparin received within 48 hours resulting in abnormally elevated aPTT greater than the limit or normal; current use of anticoagulant with INR >1.7 or PT >15 seconds; current use of direct thrombin inhibitors or direct factor Xa inhibitors with elevated sensitive laboratory tests (such as aPTT, INR, platelet count, and ECT; TT; or appropriate factor Xa activity assays)"
Non-treatment with Thrombolytics	85_2. Recent intracranial or spinal surgery, head trauma or stroke (<3 mo.) [NonTrtTr2]	Recent intracranial or spinal surgery, significant head trauma or stroke in previous 3 months
Non-treatment with Thrombolytics	86_2. Recent surgery/trauma (<15 days) [NonTrtSurg2]	Updated the data element description to "Major surgery or serious trauma within previous 14 days" and recategorized from tPA Exclusion (Contraindication) to tPA Relative Exclusion (Warning).
Non-treatment with Thrombolytics	87_2. SBP >185 or DBP >110 mmHg despite treatment [NonTrtBP2]	Updated the data element description to "Elevated blood pressure (systolic >185 mmHg or diastolic >110 mmHg) despite treatment".
Non-treatment with Thrombolytics	88_2. Seizure at onset [NonTrtS2]	Updated the data element description to "Seizure at onset with postictal residual neurological impairments" and recategorized from tPA Exclusion (Contraindication) to tPA Relative Exclusion (Warning).
Non-treatment with Thrombolytics	89_2. Suspicion of subarachnoid hemorrhage [NonTrtSuHem2]	Updated the data element to "Symptoms may suggest subarachnoid hemorrhage".
Non-treatment with Thrombolytics	89a_2. Arterial puncture at noncompressible site in previous 7 days [NonTrtAP2]	Added this new data element.
Non-treatment with Thrombolytics	90_2. Advanced Age [NonTrtAG2]	Removed this data element.

Section	Title	Change
October 1, 2016 Updates:		
Non-treatment with Thrombolytics	92_2. Glucose <50 or > 400 mg/dl [NonTrtG2]	Updated the data element description to "Blood Glucose concentration <50 mg/dL (2.7 mmol/L)".
Non-treatment with Thrombolytics	93_2. Increased risk of bleeding due to comorbid conditions [NonTrtROM2]	Removed this data element.
Non-treatment with Thrombolytics	94_2. IV or IA tPA given at outside hospital [NonTrtOH2]	Updated the data element description to "IV or IA thrombolysis/thrombectomy at an outside hospital prior to arrival"
Non-treatment with Thrombolytics	95_2. Left heart thrombus [NonTrtLHT2]	Removed this data element.
Non-treatment with Thrombolytics	97_2. MI in previous 3 months [NonTrtMI2]	Updated the data element description to "Recent acute myocardial infarction (within previous 3 months)".
Non-treatment with Thrombolytics	101_2. Stroke severity – Too Severe (e.g. NIHSS>22) [NonTrtSev2]	Removed this data element.
Non-treatment with Thrombolytics	102a_2. Recent gastrointestinal or urinary tract hemorrhage (within previous 21 days) [NonTrtRecHem2]	Added this new data element.
In-hospital Procedures and Treatment	138. Was antithrombotic therapy received by the end of hospital day 2? [Athr2Day]	Included a new note to refer to Appendix III and Appendix IV for acceptable list of antithrombotics.
In-hospital Procedures and Treatment	148. What type of VTE prophylaxis was documented in the medical record	Added this paragraph in the Notes for Abstraction: Inclusion Guidelines for Abstraction: Refer to Appendix H, VTE Prophylaxis Inclusion Table of the Centers for Medicare & Medicaid Services and the Joint Commission *Specifications Manual for National Inpatient Quality Measures.*
In-hospital Procedures and Treatment	152. Is there a documented reason for using Oral Factor Xa Inhibitor for VTE? [OFXaVTEReason]	Updated the Inclusion Guidelines for Abstraction to include ICD-10-CM Principle/Other Diagnosis Code of I48.0, I48.1, I48.2, I48.3, I48.4, I48.91, and I48.92. Updated the Inclusion Guidelines for Abstraction to include ICD-10-CM Other Procedure Codes of total hip Replacement; partial hip Replacement; revision of hip Replacement, not otherwise specified; total knee Replacement; or revision of knee Replacement, not otherwise specified.
Discharge Data	164. Principal discharge ICD-diagnosis code (see Appendix V) [ICDPrDx]	Updated references from ICD-9-CM diagnosis code to ICD-10-CM diagnosis code.

Section	Title	Change
October 1, 2016 Updates:		
Discharge Data	165. Clinical hospital diagnosis related to stroke that was ultimately responsible for this admission (check only one item) [DisDx]	Updated references from ICD-9-CM diagnosis code to ICD-10-CM diagnosis code.
Discharge Data	181. Was antithrombotic (antiplatelet or anticoagulant) medication prescribed at discharge? [AthDscYN]	Updated the data element description to "Was antithrombotic (antiplatelet or anticoagulant) medication that is approved for stroke prescribed at discharge?"
Discharge Data	181. Was antithrombotic (antiplatelet or anticoagulant) medication that is approved for stroke prescribed at discharge? [AthDscYN]	Added Inclusion Tables to list antithrombotic medications considered "approved in stroke", and updated the abstraction notes to reference the Inclusion Table.
Discharge Data	181. Was antithrombotic (antiplatelet or anticoagulant) medication that is approved for stroke prescribed at discharge? [AthDscYN]	Added additional examples of reasons for not prescribing antithrombotic therapy approved in stroke at discharge.
Discharge Data	181a. Was an antithrombotic medication not on the Antithrombotic Therapy Approved in Stroke inclusion table (an alternate antithrombotic medication) prescribed at discharge? [AthDCMed]	Added this new data element.
Discharge Data	184. Was atrial fibrillation/flutter or paroxysmal atrial fibrillation (PAF) documented during this episode of care? [AFibYN]	Updated the Inclusion Guidelines for Abstraction by removing the reference to ICD-9-CM Other Diagnosis Codes and instead referencing the ICD-10-CM Other Diagnosis Codes of I48.0, I48.1, I48.2, I48.3, I48.4, I48.91, and I48.92.
Appendix III	Antiplatelet Medications	Revised Appendix III: Antiplatelet Medications.
Appendix IV	Anticoagulant Medications	Revised Appendix IV: Anticoagulant Medications.
Appendix V	Typical Stroke ICD-9-CM Codes	Updated Appendix V by removing ICD-9-CM Codes and replacing them with ICD-10-CM Codes.
Appendix VII	Carotid Intervention Procedures	Updated Appendix VII by removing ICD-9 Codes and replacing them with ICD-10 Codes.