

Acute ischemic stroke quality indicators

Definitions and Reporting

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Purpose of this presentation

- Suggest methods for identifying patients with AIS (transferred, admitted, and in-hospital)
- Briefly overview the definitions for the 3 acute ischemic stroke (AIS) indicators
- Demonstrate the proposed data entry modules
- Q&A about the indicators or the data entry process

Special thanks to:

- VA Inpatient Evaluation Center (IPEC) staff:
 - Ron Freyberg
 - Rachel Rhude
 - Gregory Roth
- IPEC representatives are on the call to address any technical questions about the data entry or reporting process

Identifying patients with AIS

- Monthly report of ischemic stroke ICD-9 codes
- Active surveillance
 - ED log
 - Admission log
 - Neurology consult log
 - Transfer/Utilization Review log
- Monthly report using Reminder Dialog information or note titles
 - NIHSS, tPA checklist

Multiple methods of identification are strongly recommended!

VA AIS Indicators

- **Timely receipt of t-PA among eligible patients**
 - Presenting within 2 hours of symptom onset
 - Presenting between 2 and 3 ½ hours of symptom onset
- **Documentation of the NIH Stroke Scale score**
 - Within 45 minutes if t-PA eligible
 - Within 24 hours for all others
- **Dysphagia screening before oral intake**

t-PA indicator

- **% of eligible patients receiving t-PA in the correct time window**
 - 2 separate measures for those seen within 2 hours and those seen within 2 hours -3 ½ hours of symptom onset
 - ED presentations and in-hospital strokes
- **Denominators:** 1) Patients arriving within 2 hours, 2) Patients arriving from 2 hours 1 minute to 3 ½ hours of symptom onset
- **Excluded:**
 - Time from symptom onset > 3 ½ hours
 - Documented reason for no t-PA (contraindications)
 - Patient or family refusal
- **Patients eligible for t-PA at the time of transfer to another hospital for stroke care are eligible for this indicator**

t-PA indicator

- Numerator:
 - For patients within 2 hours of symptom onset, those for whom t-PA was started within 3 hours of symptom onset
 - For patients 2 hours 1 minute to 3 ½ hours of symptom onset, those for whom t-PA was started within 4 ½ hours of symptom onset

t-PA indicator

- Documentation of exclusions
 - Critical to correctly identifying the eligible population (the denominator)
 - Report the number excluded each month (only 1 exclusion per patient) due to:
 - Excess bleeding risk (NINDS criteria for 3 hours, ECASS III criteria for 4 ½ hours)
 - CT signs of infarct > 1/3 of MCA territory
 - Symptoms rapidly improving
 - Minor stroke (NIHSS < 3)
 - Patient/family refused
 - Other
- Other t-PA data collection for QI
 - Total number of patients receiving t-PA each month (IV or IA)
 - Number of patients in each of the 2 time windows who have a t-PA checklist documented

NIHSS indicator

- **% of patients with ischemic stroke with NIHSS documented**
 - Within 45 minutes for patients recognized within 2 hours of symptom onset
 - Within 24 hours for all others
- **Denominator: patients with ischemic stroke**
- **Excluded: Discharged prior to the end of hospital day 1**
 - Patients transferred for acute stroke care are not excluded and should have NIHSS completed prior to transfer

NIHSS indicator

- Numerator:
 - Documentation of NIHSS in correct time window
- Any documentation is acceptable:
 - CPRS note template/Reminder Dialog
 - Provider documentation of individual items or total score
 - Scanned paper copy of NIHSS done
- Timing: if not clearly documented use time that note containing the NIHSS was started

Dysphagia indicator

- **% of patients with ischemic stroke with dysphagia screening prior to oral intake (medications or food)**
- Denominator: patients with ischemic stroke and any oral intake during hospital stay
- Excluded:
 - No oral intake during entire hospital stay
 - Designated comfort measures only prior to any oral intake
 - Documented reason for no dysphagia screening prior to any oral intake

Dysphagia indicator

- Numerator: Patients with documented dysphagia screening before oral intake of food, fluids, or medication
- Any type of screening tool accepted by your facility is adequate:
 - Standard nursing questionnaire/checklist
 - Functional bedside test (e.g. 3 oz water swallow)
 - Formal SLP evaluation
 - Provider documentation that swallow was tested at bedside (e.g. “Swallowing was OK, will order PO meds.”)
 - Neurologic examination of cranial nerves alone (without mention of functional swallow testing) is not adequate
- Timing: if not clearly indicated, use time that note containing the dysphagia screen was started

Reporting Stroke Quality Indicators

- Monthly self-report to the VA Inpatient Evaluation Center (IPEC)
 - IPEC collects and reports a wide variety of inpatient (ICU and non-ICU) outcomes and quality data
 - E.g. ICU/ward adjusted 30-day mortality, ventilator-associated pneumonia rates, central line infections
- Data collection done via facility entry of monthly aggregate (not identifiable) data
 - E.g. number of patients seen within 2 hours of symptom onset
- Every site should have already identified their IPEC data entry person and sent this info to their VISN
 - In most cases, the local stroke team will play a large role in collecting the data, since it requires some specific clinical expertise, regardless of who will do the eventual data entry

IPEC Stroke module orientation

IPEC Data Management • Development System

home data views reports utilities

home > data > acute stroke measures

ADMIN log out get help

Enter data and click [save]

10.539 Cincinnati, OH

Thrombolytic Therapy

01 patients with acute ischemic stroke in "2 hour" group — see footnote (1) below

02 patients in "2 hour" group who received timely IV thrombolytic therapy — see footnote (2) below

03 patients with acute ischemic stroke in "3 1/2 hour" group — see footnote (3) below

04 patients in "3 1/2 hour" group who received timely IV thrombolytic therapy — see footnote (4) below

05 % rate of timely IV thrombolytic therapy for "2 hour" patient group

06 % rate of timely IV thrombolytic therapy for "3 1/2 hour" patient group

Other Thrombolysis Related Measures

07 patients in month who received tPA (see footnote (1) below)

08 patients in "2 hour" group for whom a tPA checklist was documented

09 patients in "3 1/2 hour" group for whom a tPA checklist was documented

(optional) Patients in "2 hour" group who received tPA (see footnote (1) below)

10a ...excess bleeding risk per NINDS

10b ...CT signs of infarct > 1/3 of MCA territory

10c ...symptoms rapidly improving

10d ...minor stroke (NIHSS < 5)

10e ...patient/family refused

10f ...some other reason

Dysphagia Screening Before Oral Intake — see footnote (5) below

save << >> refresh

go back

Department of Veterans Affairs

Click from data list on Acute Stroke Measures

Select VISN and facility

Link to help and to reports

Display of data entry status by month and year

Enter aggregate data as prompted

Save data when completed

Data facility and month...

network
10 Ohio

facility (see indicator key below)
538 Chillicothe, OH

	01	02	03	04	05	06	07	08	09	10	11	12
2012												
2011												
2010												
2009												
2008												
2007												
2006												
2005												
2004												
2003												

00=complete 00=pending 00=no data

no data for station 539 Cincinnati, OH

See the Stroke QUERI website for AIS

Sharepoint and SQUINT call links:

www.queri.research.va.gov/str/default.cfm

t-PA data entry

- Enter the number of patients within 2 hours. (1)
- Enter the number within 2 hours who received t-PA (2)
- Enter the number of patients between 2 and 3 ½ hours. (3)
- Enter the number between 2-3 ½ hours that got t-PA. (4)
- Enter t-PA exclusions (10 and 11 a-f)—**only 1 per patient!**
 - t-PA rates calculated for you for each time group. (5 - 6)
- Other data elements in 7-9: all patients receiving t-PA, and the number that had a t-PA checklist documented.

10.539 Cincinnati, OH		
Thrombolytic Therapy		
01		patients with acute ischemic stroke in "2 hour" group — see footnote (1) below
02		patients in "2 hour" group who received timely IV thrombolytic therapy — see footnote (2) below
03		patients with acute ischemic stroke in "3 1/2 hour" group — see footnote (3) below
04		patients in "3 1/2 hour" group who received timely IV thrombolytic therapy — see footnote (4) below
05		% rate of timely IV thrombolytic therapy for "2 hour" patient group
06		% rate of timely IV thrombolytic therapy for "3 1/2 hour" patient group
Other Thrombolysis Related Measures		
07		patients in month who received tPA (IV, IV-IA, IA) for acute ischemic stroke
08		patients in "2 hour" group for whom a tPA checklist was documented
09		patients in "3 1/2 hour" group for whom a tPA checklist was documented
Patients in "2 hour" Group Not Given tPA Due Primarily To...		
10a		...excess bleeding risk per NINDS criteria/tPA checklist
10b		...CT signs of infarct > 1/3 of MCA territory
10c		...symptoms rapidly improving
10d		...minor stroke (NIHSS score < 3)
10e		...patient/family refusal
:		
10g		...some other reason

NIHSS data entry

- Enter the total number of stroke patients cared for at your facility for at least one day. (14a)
- Enter the total number of stroke patients transferred for stroke care. (14b)
 - The total number of all stroke patients is summed for you (14)
- Enter the number with an appropriately timed NIHSS. (15)
 - The NIHSS rate is calculated for you.

NIH Stroke Scale (NIHSS) Documentation	
14a	total number of ischemic stroke patients cared for at your facility (admitted and in-hospital strokes, not transferred out for stroke care)
14b	total number of ischemic stroke patients transferred out from your facility for stroke care
14	total number of ischemic stroke patients
15	number of (14) with timely documentation of NIHSS score — see footnote (6) below
16	% rate of patients with with timely documentation of NIHSS score
notes (enter in yellow box below)	
<div style="border: 1px solid gray; height: 80px; width: 100%;"></div>	

Dysphagia data entry

- Enter the total number of stroke patients with oral intake and no other exclusions. (11) –include those transferred who have a medication by mouth prior to transfer!
- Enter the number with a dysphagia screen prior to oral intake. (12)
 - The dysphagia rate is calculated for you.

Dysphagia Screening Before Oral Intake – see footnote (5) below		
11		patients with ischemic stroke with any oral intake during hospital stay
12		number of (11) with a documented dysphagia screening performed before oral intake
13		% rate of patients with a documented dysphagia screening performed before oral intake
NIH Stroke Scale (NIHSS) Documentation		
14a		total number of ischemic stroke patients cared for at your facility (admitted and in-hospital strokes, not transferred out for stroke care)
14b		total number of ischemic stroke patients transferred out from your facility for stroke care
14		total number of ischemic stroke patients
15		number of (14) with timely documentation of NIHSS score – see footnote (6) below
16		% rate of patients with with timely documentation of NIHSS score
notes (enter in yellow box below)		

IPEC reports

- IPEC will generate reports for all facilities
 - This will require a period of “locking” data entry so they can generate reports without data changes occurring; data changes can be made later by contacting IPEC
 - Data can be corrected any time up until the quarterly lock-out period
 - Reports are run at a frequency determined by the Program Office...likely quarterly for AIS
- Facilities can generate their own reports whenever they like using the report feature

Getting Help

- Footnotes to data entry screens provide basic info
- A Help Document for the IPEC modules will be accessible from the data entry screen
 - This document will also be downloadable from the Stroke QUERI website
- Future SQUINT calls in July and beyond will feature more Q&A time for this issue
- Additional documents with indicator definitions and patient identification strategies are available on the AIS SharePoint

Suggestions

- Work with your local IRM staff and stroke team to put strategies in place to identify stroke patients
 - In July we will need to begin reporting data from June, so start identifying patients now!
- Develop a data collection tool with your stroke team
 - Key elements required for the quality indicators
 - Other elements that you are interested in tracking
 - See example on the AIS SharePoint site
- Meet with your IPEC report contact to plan communication strategies for timely data entry and resolving questions

Example tracking spreadsheet

AIS tracking

ID	Admit, in-house, or transfer	Symptom onset to arrival	NIHSS done-- Yes/No	Dysphagia Screen before oral-- Yes/no	tPA checklist-- Yes/no	Receive tPA-- Yes/no	Time to t-PA Rx	tPA exclusion reason	tPA Other exclusion notation	Other tPA (IA)- Yes/no

See the Stroke QUERI website for AIS Sharepoint and SQUINT call links:
www.queri.research.va.gov/str/default.cfm

Questions?

