

Virginia Stroke Care Quality Improvement Advisory Group, Coverdell Updates, Stroke Registry Data, and Hospital Inventory Survey Results

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VIRGINIA STROKE REGISTRY UPDATES

Virginia Legislation Mandates a Stroke Registry

Enacted January 1, 2019: Be it enacted by the General Assembly of Virginia: 1. That the Code of Virginia is amended by adding in Article 2.1 of Chapter 4 of Title 32.1 a section numbered 32.1-111.15:1 as follows: § 32.1-111.15:1. Department responsible for stroke care quality improvement; sharing of data and information.

- A. The Department shall be responsible for stroke care quality improvement initiatives in the Commonwealth. Such initiatives shall include:
1. Implementing systems to collect data and information about stroke care in the Commonwealth in accordance with subsection B;
- B. The Department shall implement systems to collect data and information related to stroke care (i) that are nationally recognized data set platforms with confidentiality standards approved by the Centers for Medicare and Medicaid Services or consistent with the Get With The Guidelines-Stroke registry platform from hospitals designated as comprehensive stroke centers, primary stroke centers, or acute stroke-ready hospitals and emergency medical services agencies in the Commonwealth and (ii) from every primary stroke center with supplementary levels of stroke care distinction in the Commonwealth. **Every hospital designated as a comprehensive stroke center, primary stroke center, or primary stroke center with supplementary levels of stroke care distinction shall report data and information described in clauses (i) and (ii) to the Department. The Department shall take steps to encourage hospitals designated as acute stroke-ready hospitals and emergency medical services agencies to report data and information described in clause (i) to the Department.**

<https://lis.virginia.gov/cgi-bin/legp604.exe?181+ful+CHAP0276>

ESO Stroke Platform - Collaboration between VDH Office of Family Health Services and Office of EMS (OEMS)

- ESO HDE—Health Data Exchange for EMS
 - Free to hospitals but will have an IT cost to configure and receive EMS runsheets automatically into EHR and share outcomes with EMS partners
- ESO will allow reporting of stroke data for ALL hospitals in Virginia without cost
- ESO Analytics will be available to stroke coordinators for performance improvement analysis with EMS data points
- ESO Patient Tracker will be available to stroke coordinators to access EMS runsheets

Virginia Stroke Registry Design

- **Phase 1: June 2021 - May 2023**
 - 13 Hospitals Targeted for initial Data Submission to CDC
 - All Comprehensives or Thrombectomy-Capable
 - 40+ Hospitals for subsequent Data Submissions to CDC
 - Relies on those hospitals who already have AHA/ASA GWTG
 - Get With The Guidelines - Stroke Database for hospitals
- **Phase 2: June 2023 and onward**
 - Stand-alone registry that will allow all hospitals to participate regardless of prior stroke registry usage
 - Additional focus on uncertified stroke facilities and smaller hospitals
 - Health Data Exchange allowing for EMS and hospital patient record linkage

CDC Coverdell Data Submission Timeline

- February 15, 2022
 - Data Collected from October 2021 to December 2021 (3 months)
 - VDH Requested to submit in April and granted until June to submit
- June 15, 2022
 - Data Collected from January 2022 to April 2022 (4 months)
- October 15, 2022
 - Data Collected from May 2022 to August 2022 (4 months)
- February 15, 2023
 - Data Collected from September 2022 to December 2022 (4 months)

Virginia Stroke Registry CDC Submissions

June 15, 2022

Pilot Phase: 13 invited hospitals

- **5 Hospitals Submitted by deadline**
- 3 hospitals uploaded data in June
- 5 other hospitals were working through process

October 15, 2022

**Expansion to primary stroke centers:
Total 48 invited hospitals**

- **12 hospitals submitted by deadline**
- 18 are working through the process
- 7 have not requested Coverdell layer to be activated
- 9 have layer active but did not submit
- 2 could not submit due to error messages

Phase 2: Virginia Stroke Registry Build

- Build Group meeting every other week
- Plan to have it ready to test in January 2023
 - Have one beta test site volunteered
 - Looking for at least one other
- Plan to go fully functional by May-June 2023

- Will be a stand-alone data entry stroke registry free of cost
- Will allow aggregation of data from EMS and VDH such as EMS runs, patient transfers, deaths, readmissions, etc



EMS STROKE SURVEY UPDATE

2022 EMS Stroke Survey

- **40% Response Rate from EMS agencies**
- Met with EMS leadership in September to discuss findings
 - Received Suggestions for integration of EMS collected data
- Will report out to State EMS Advisory Board in February
- Will share EMS Survey Findings/White Paper at VSSTF in April, based upon approval by the State EMS Advisory Board



Virginia has 83 hospitals and 23 free-standing emergency departments that were included in survey

2022 HOSPITAL STROKE SURVEY

STROKE SURVEY BACKGROUND AND DEVELOPMENT

Background: Development of Survey

- VDH convened a work group to develop a survey in 2019
 - Georgia and Wisconsin surveys from prior Coverdell cycles used
 - Chose Georgia survey template
 - Virginia survey added additional questions in areas such as Telestroke, Community Health Workers, Stroke Survivor Groups, Post-Discharge Transitions of Care
 - Tabled due to Covid-19 outbreak
- Virginia received Coverdell funding in June 2021 and hospital survey is a requirement and aligns with gathering information requirement for stroke legislation
 - Rough draft created and vetted by multiple hospitals
 - Added Free-Standing EDs to survey

Survey Outreach and Response Rate

- Outreach
 - Survey introduced at the April VSSTF meeting and attendees invited to respond
 - April email sent to all known hospital and/or FSED representatives
 - Stroke Coordinators or designated stroke RN were target audience
 - Additional emails sent in May
 - Further outreach in June to locate contacts at hospitals who did not respond
 - Last record submitted August 7, 2022
 - One survey per facility

**Total 93
survey
responses
obtained:
88%
response
rate**

VIRGINIA HOSPITAL STROKE SURVEY RESPONSES

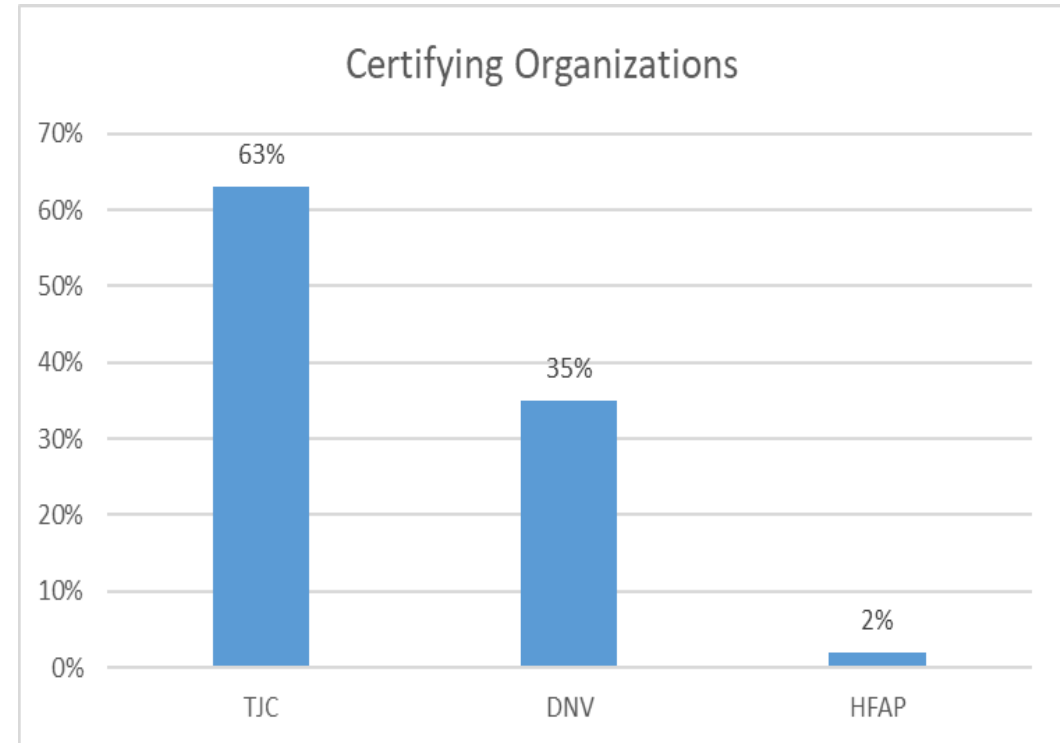
Stroke Certification

Stroke Certification

65% are stroke certified

At the time of the survey:

- 8 Comprehensive Stroke
- 2 Thrombectomy Capable
- 1 Primary Stroke Center Plus
- 39 Primary Stroke
- 10 Acute Stroke Ready



- The Joint Commission
- DNV (Det Norske Veritas)
- HFAP (Healthcare Facilities Accreditation Program)

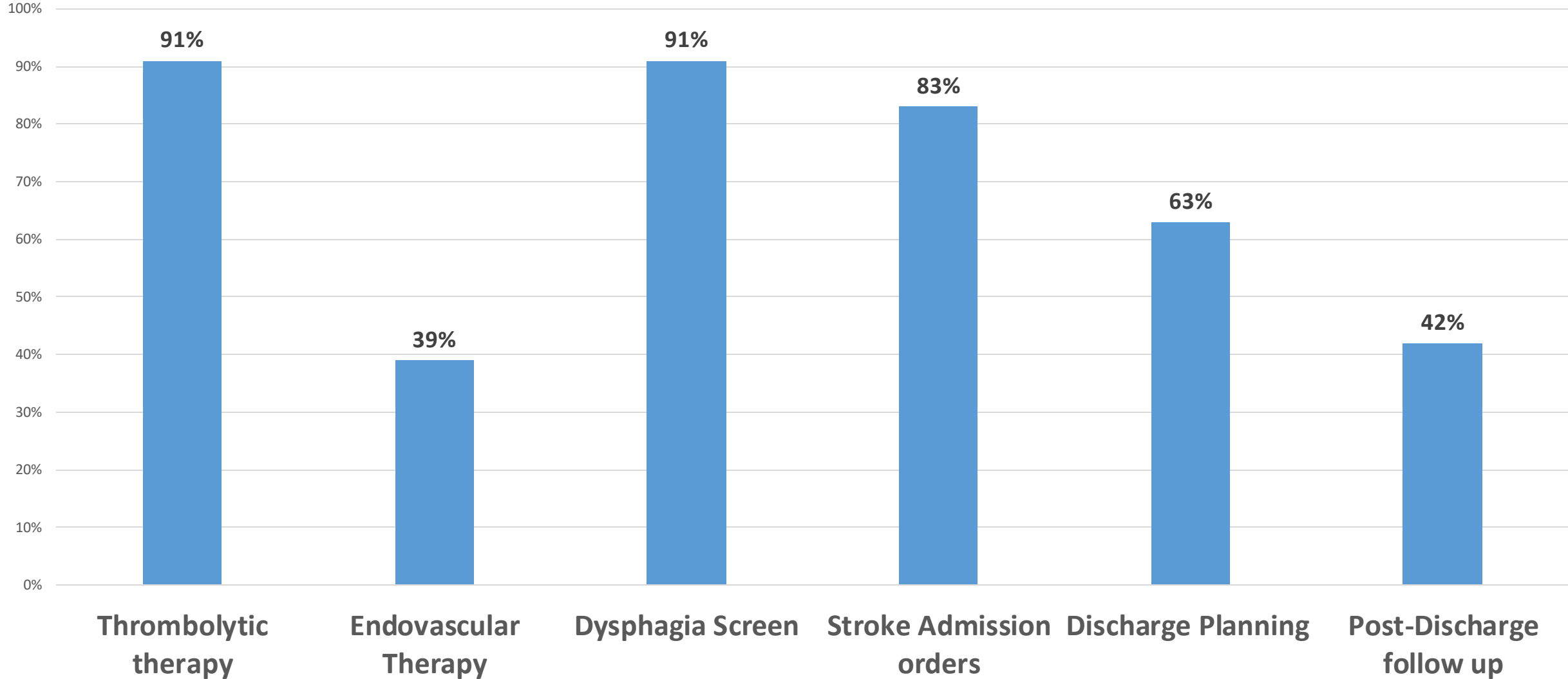
Non-Stroke Certified Facilities

- 35% (33) respondents are not stroke certified
- 8 intend to pursue certification within the next year
 - 7 hospitals
 - 1 FSED
- 14 Hospitals responded that they do not plan to pursue stroke certification within the next year
 - 15% of all respondents

Acute Stroke Team

- 82% (76) have a designation stroke team
- 18% (17) do not have a designated stroke team
 - 13 Hospitals and 4 FSEDs
- 99% have written stroke protocols for emergent stroke care
 - 1 hospital does not, not stroke certified

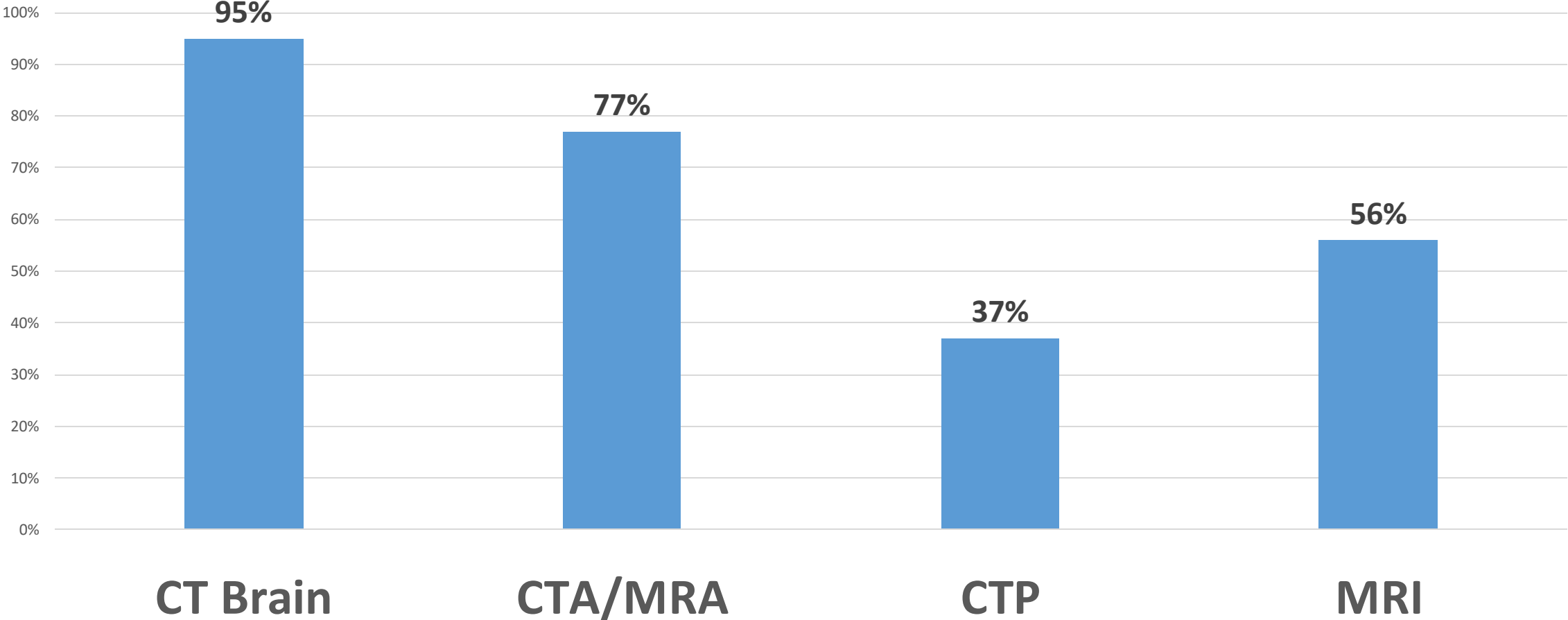
Written Protocols for Stroke Care



- More than one response could be chosen

Brain Imaging >75% of time for all respondents

Acute Stroke Imaging



Telestroke

- 54% (50) of respondents use teleneurology because they do not have in-house neurologists
- 27% (25) use teleneurology when in-house neurology is not available
- 12% (11) have 24/7 in-house neurology coverage
- 8% (7) have no access to a neurology telemedicine provider

- Of the 75 that use Teleneurology
 - 69% are both video and phone
 - 27% are video only
 - 4% are phone only

Advanced Hospital Capabilities

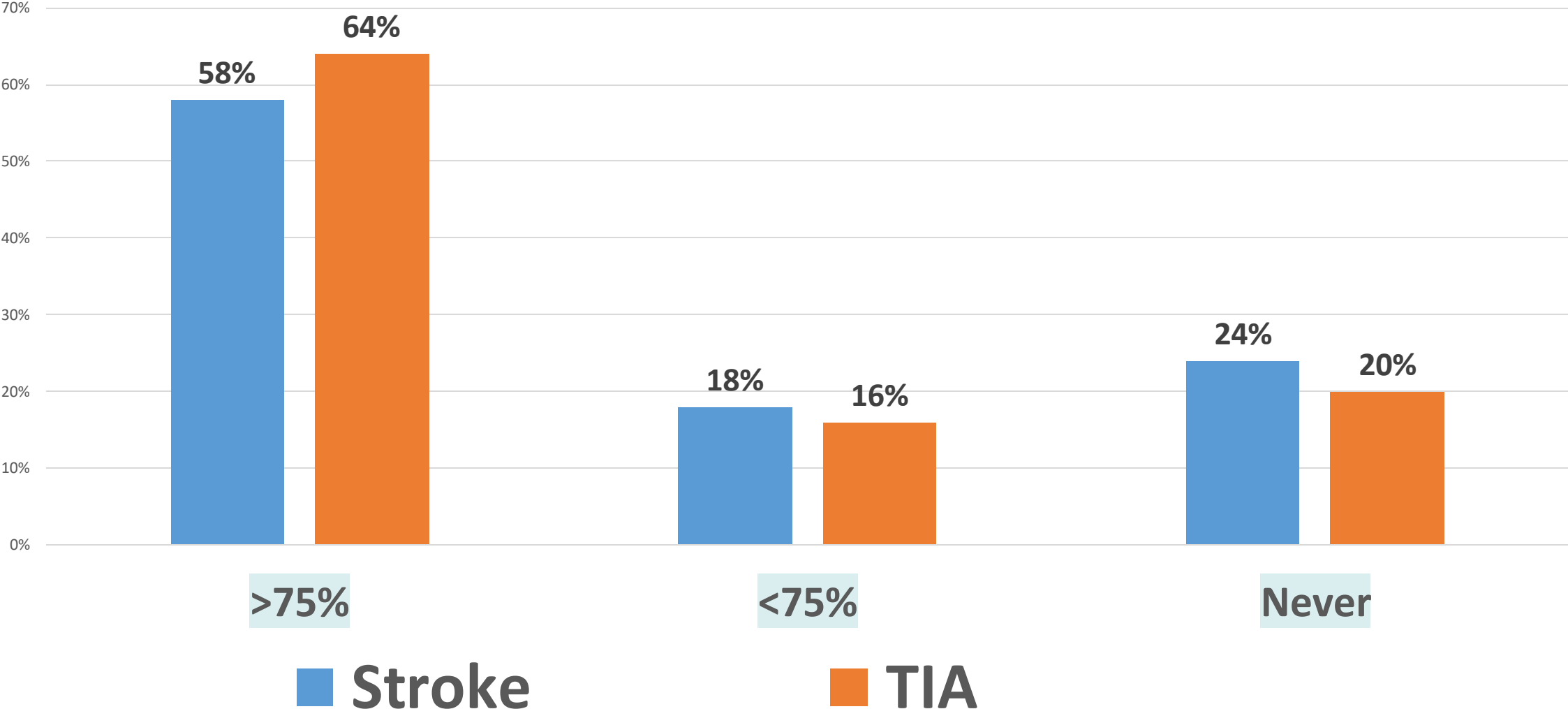
ENDOVASCULAR

- 17% (16) facilities offer this services
- All offer it 24/7

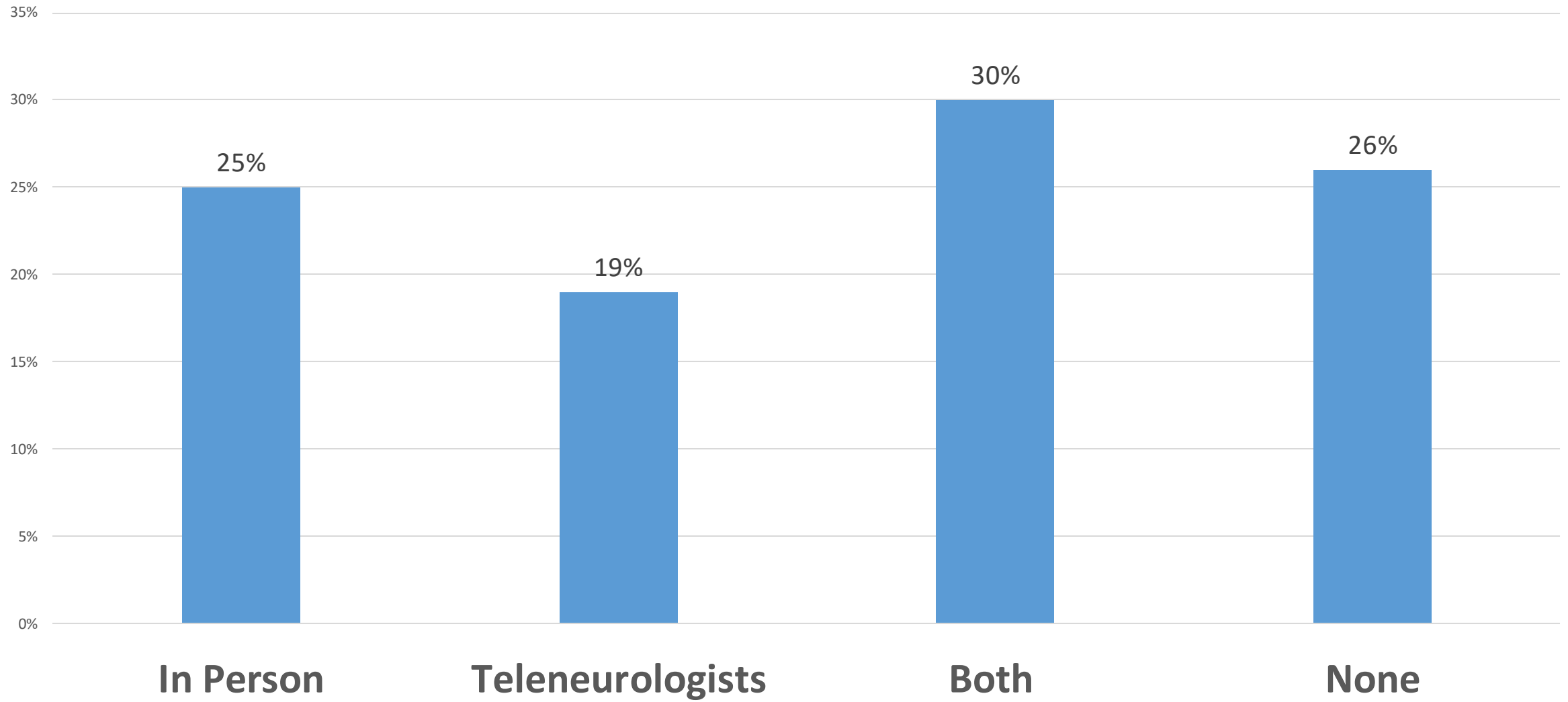
NEUROSURGERY

- 33% (31) offer this service
- 26 are 24/7
- 5 are other than 24/7

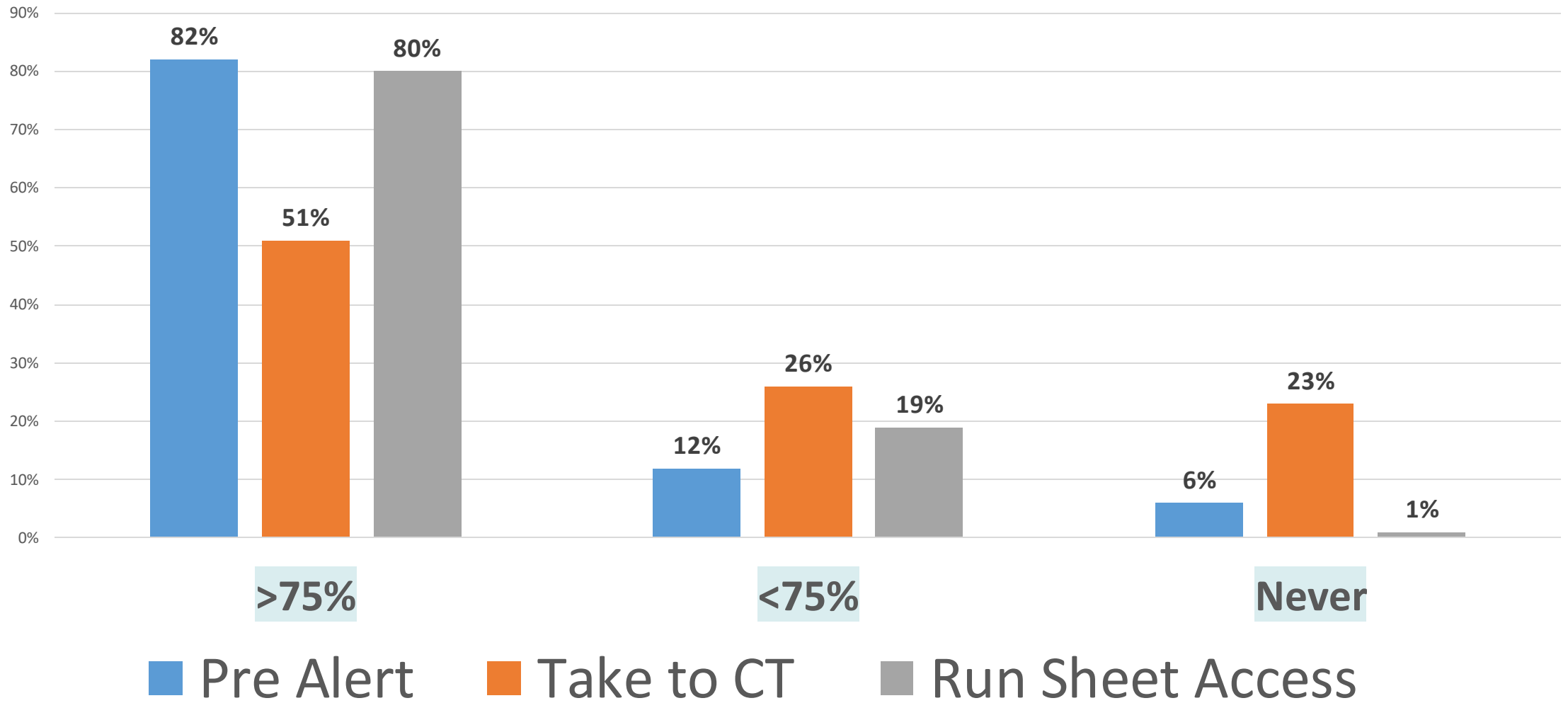
Patient Admissions



Neurologists for Admitted Patients

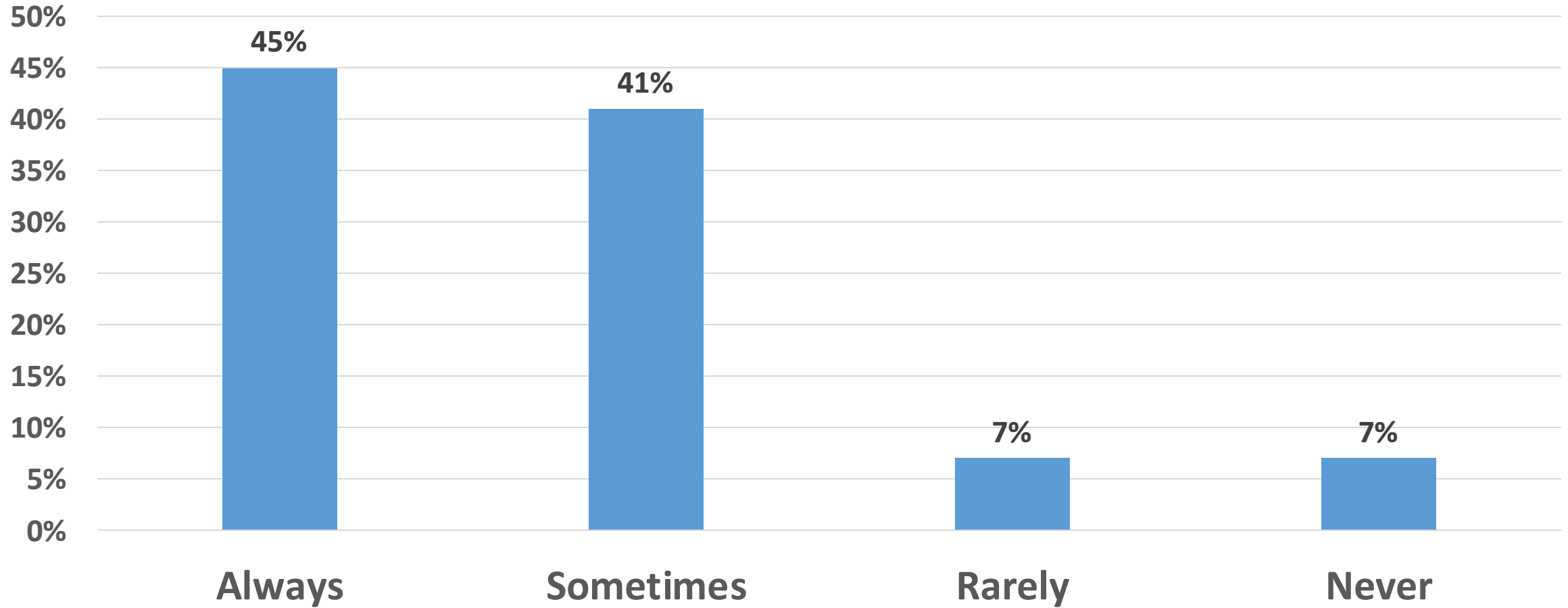


EMS Protocols



88% receive patients via EMS

EMS runs into the patient's medical record



Feedback to EMS Agencies: 77%

- 77% by email
- 73% in person
- 23% by phone
- 9 facilities have EMS liaison who assists
- 79% of thrombolytic/endo
- 53% brought by EMS with Stroke Diagnosis at Discharge
- 23% do not have process to provide feedback to EMS

Transitions of Care/Caregiver Resources

Referral Tracking System

- Only 15% have

Transitions of Care Summary

- Only 53% always use

Community Resources

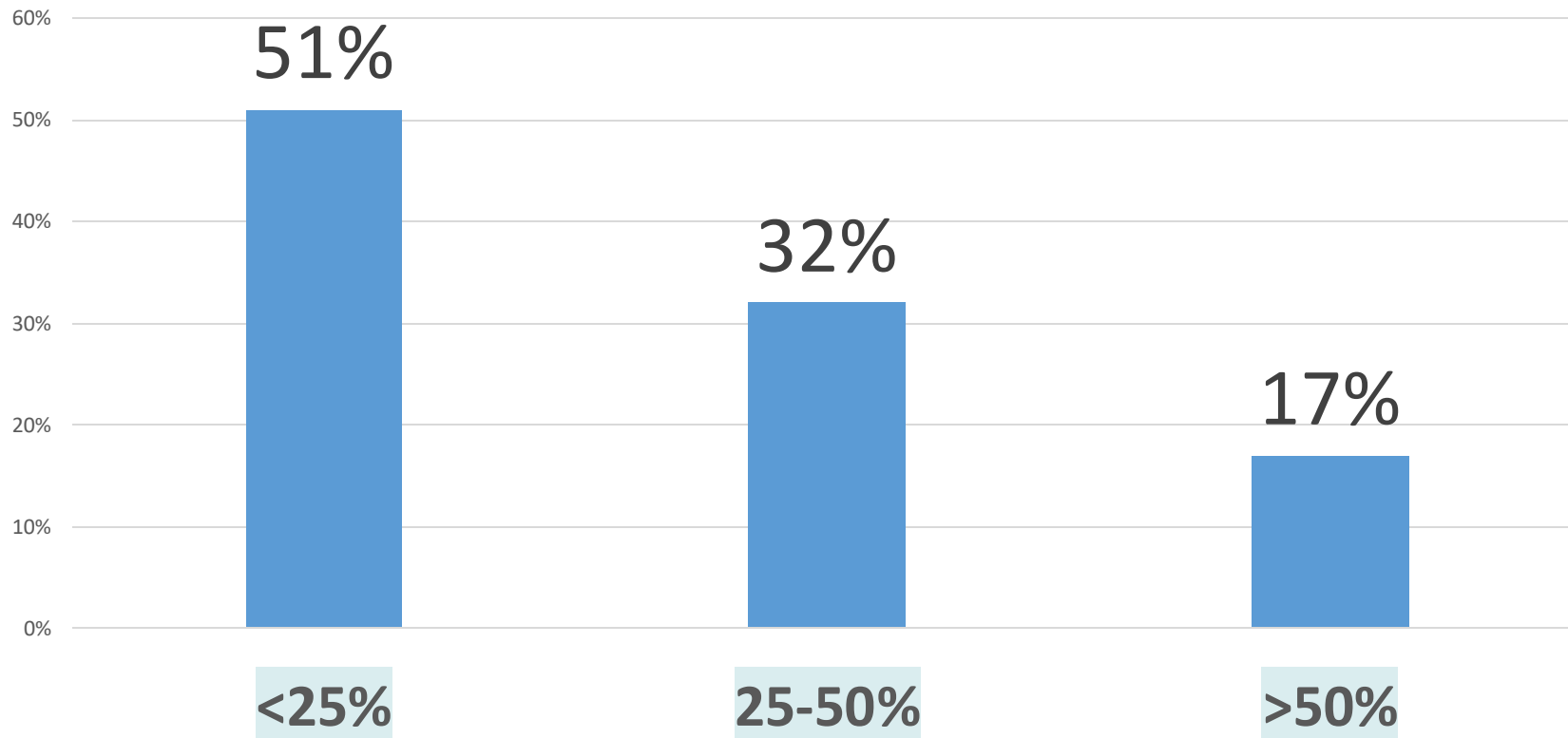
- 93% refer always or sometimes

Education, Support or Resources to Caregivers

- 96% provide always or sometimes
- 32 respondents have Stroke Survivor or Caregiver support groups

Post-Discharge Phone Calls - 45% Make Calls

Patients Reached



- Timing of Calls
 - 1-7D - 49%
 - 8-14D - 12%
 - 15-30D - 7%
 - >30D 32%

Stroke Quality and Performance Improvement

- **89% have a Stroke Committee**
- **Stroke Registry**
 - 74% use a tool for a stroke registry (GWTG, Premier, Excel)
 - **26% of facilities have no stroke registry of any kind**
- **73% have Performance Improvement Implementation**
 - **82% have seen improved care**

Process Improvement Projects—66 Write Ins

- Acute Stroke Management:
 - Changing to Tenecteplase
 - Improve Stroke Triage/Recognition
 - Added/Changed Teleneurology
- Improving Care Times
 - Door to Thrombolytic
 - Door to CT/Lab
 - Door to Groin Puncture
 - Door to Transfer
- Standardization of care
 - Order Sets/Order Set Usage
 - Neurology Exam
 - Documentation
 - Updating Guidelines
 - Patient Care
- Radiology
 - Adding New Software to read
 - Adding CTP
 - Changing Radiology process

Community Education, Resources and Disparities in Care

- 73% have provided community education
- 53% have a process to identify populations at highest risk of stroke events
 - 64% use Community Health Needs Assessment
 - 36% use their stroke registry
- Disparities of Care for high risk or post-stroke patients
 - 39% monitor
 - 33% do not monitor
 - 28% do not know

80% of facilities
have no
community health
worker

Stroke Educational Supplies from VDH

- 11% have ordered
- 41% have not ordered
- 48% Unaware Available

**FREE, FREE, FREE
STROKE EDUCATIONAL
MATERIALS**

**Order Free VA Stroke
Smart Materials Here**



<https://www.vdh.virginia.gov/stroke/stroke-smart-virginia/>

Virginia Quit Now Tobacco Quitline

- 21% referred patients
- 46% had not referred patients
- 33% unaware of Virginia Quit Now

**FREE, FREE, FREE
PATIENT MATERIALS**



- <https://www.vdh.virginia.gov/tobacco-free-living/quit-now-virginia/>

2022 Hospital Stroke Survey NEXT STEPS

- Reported to CDC as requirement of grant
- Integrated into 2023 General Assembly Report
- Survey results will become part of feedback to hospitals
 - To be done in 2023
 - Will also integrate data from stroke registry
- Compare Hospital Survey data to EMS Survey Data
- Develop contacts at hospitals that did not respond
- Collect data regarding Stroke Support Groups for VDH website
- 2023 Survey
 - Will be shorter
 - Will incorporate more intuitive flow

Virginia Stroke Care Quality Improvement Advisory Group

- Same schedule as quarterly VSSTF meeting
- Allows stakeholder and public feedback
- Topics recently discussed:
 - VHHA Stroke Collaborative - April 2022
 - Disparities of care in Virginia communities - July 2022
- Today's Focus: Stroke Quality Improvement Process and Reporting to Hospitals - Oct 2022
 - Compared multiple state's processes to assist in developing Virginia's statewide quality improvement process

Questions???

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