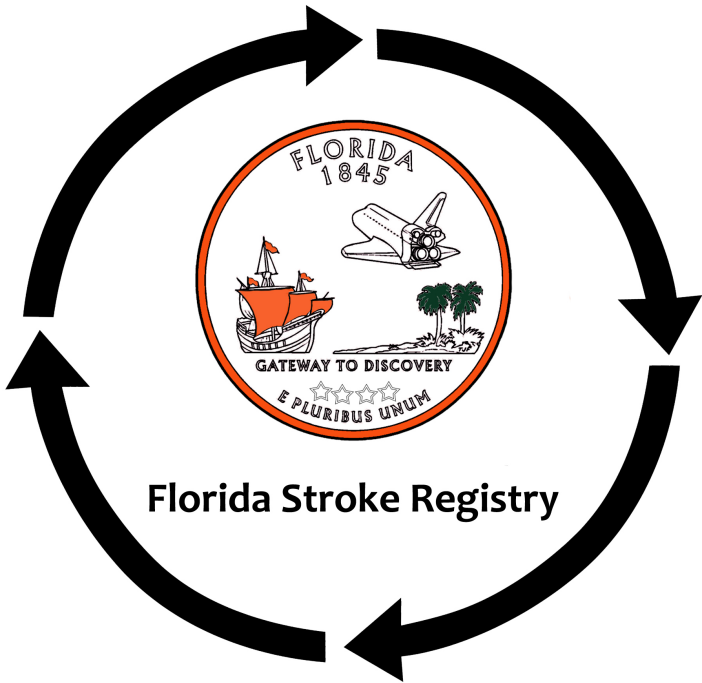


# Florida Stroke Registry Regional Dashboard

Space - 2020 - Q1



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# The Florida Stroke Registry Regional Dashboard

## Florida Stroke Registry

University of Miami, Dept of Neurology

### Space

Report Period: 2020 - Q1

Regional Dashboards provide a graphic report intended to serve as a self-monitoring, quality improvement, electronic tool displaying critical acute stroke care metrics (thrombolytic and endovascular performance and outcome measures) for hospitals within a specific county or region. The reports visually display hospital-specific de-identified data, as well as data from surrounding county hospitals participating in the Florida Stroke Registry (FSR) and the American Heart Association's Get With The Guidelines Stroke (GWTG-S) Program. The measures are also benchmarked against the county and the state.

The University of Miami FSR team provides the Regional Dashboards directly to the participating sites via password-protected, hospital-specific reports uploaded to the Florida Stroke Collaboration website:

<https://floridastrokecollaboration.org>

It is through continued hospital GWTG-S data submission, use of and feedback on the Regional Dashboards, and a proactive partnership between hospitals and respective EMS Medical Directors that Florida communities have an opportunity to improve the quality of stroke care within their region.

Please share these reports with your hospital Chief Executive Officer, Chief Medical Officer, and other appropriate hospital personnel. The UM FSR supports data transparency through collaboration in an effort to improve systems of stroke care.

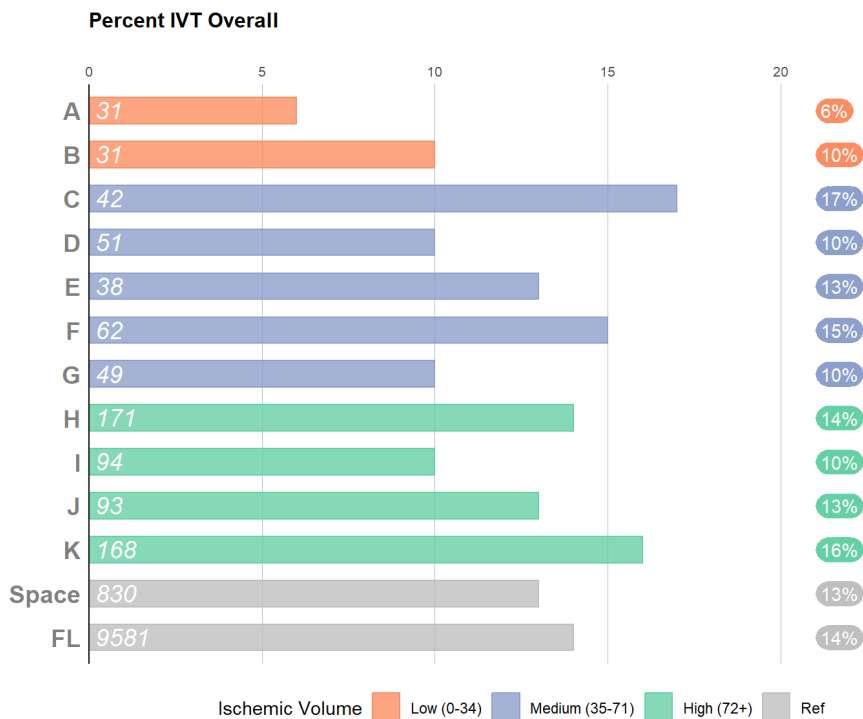
Thank you for your partnership,

**Jose G Romano, M.D.**

**Florida Stroke Registry Program Executive Director**

Contact: [flstrokeregistry@miami.edu](mailto:flstrokeregistry@miami.edu)

# 1. IV Thrombolysis (IVT) Overall



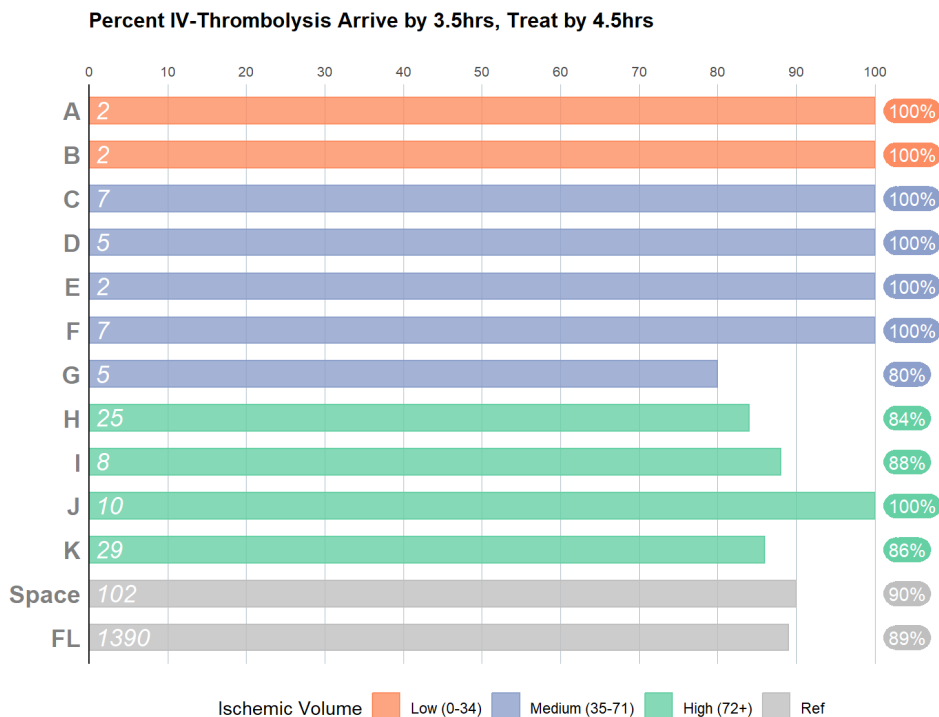
## Numerator:

IV-Thrombolysis initiated at this hospital.

## Denominator:

Includes ischemic stroke patients with data availability for PMT question "IV-Thrombolysis initiated at this hospital?" (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

## 2. Arrive by 3.5hrs Treat by 4.5hrs



### Definition:

Percent of acute ischemic stroke patients who arrive at the hospital  $\leq 3.5$  hours of onset and for whom IVT was initiated  $\leq 4.5$  hrs of onset.

### Numerator:

Patients who received IVT  $\leq 4.5$  hrs of onset.

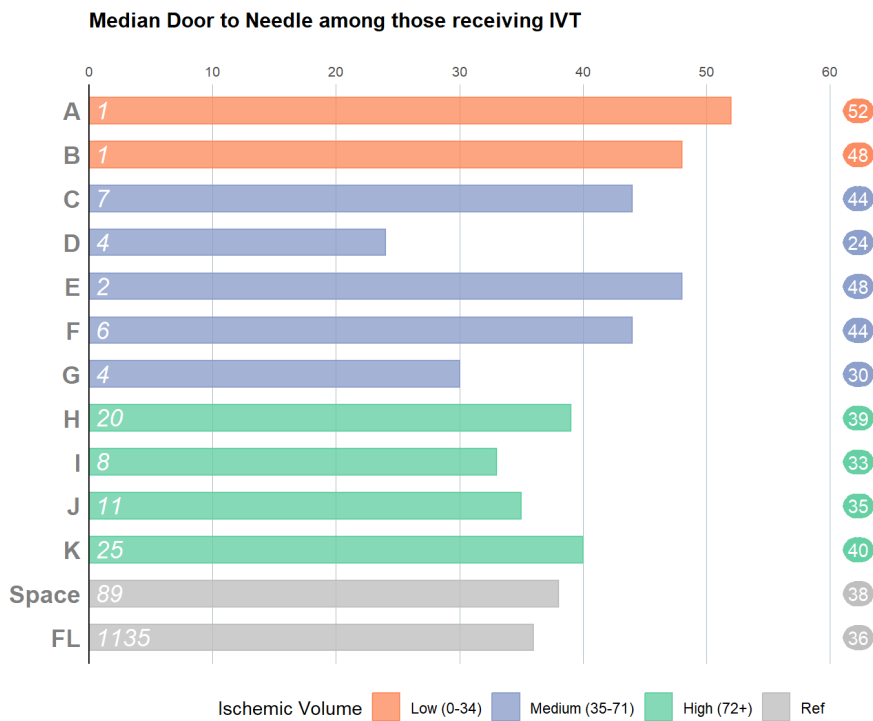
### Denominator:

Patients with a diagnosis of ischemic stroke.

### Exclusion Criteria:

Age  $< 18$  year old; clinical trial or elective carotid intervention; stroke occurred after hospital arrival (in ED/Obs/inpatient)); no stroke-related diagnosis; arrived more than 3.5 hrs past last known well; arrival time prior to onset time or undocumented; onset time undocumented; IVT time undocumented; arrived within 0-2 hrs of onset and meet exclusion criteria for 0-3hr and 3-4.5 hr treatment windows; arrived within 2-3.5 hrs and meet exclusion criteria for 3-4.5 hr treatment window; arrived within 3 hrs and meet IVT Contraindications or Warnings.

### 3. Door-to-Needle

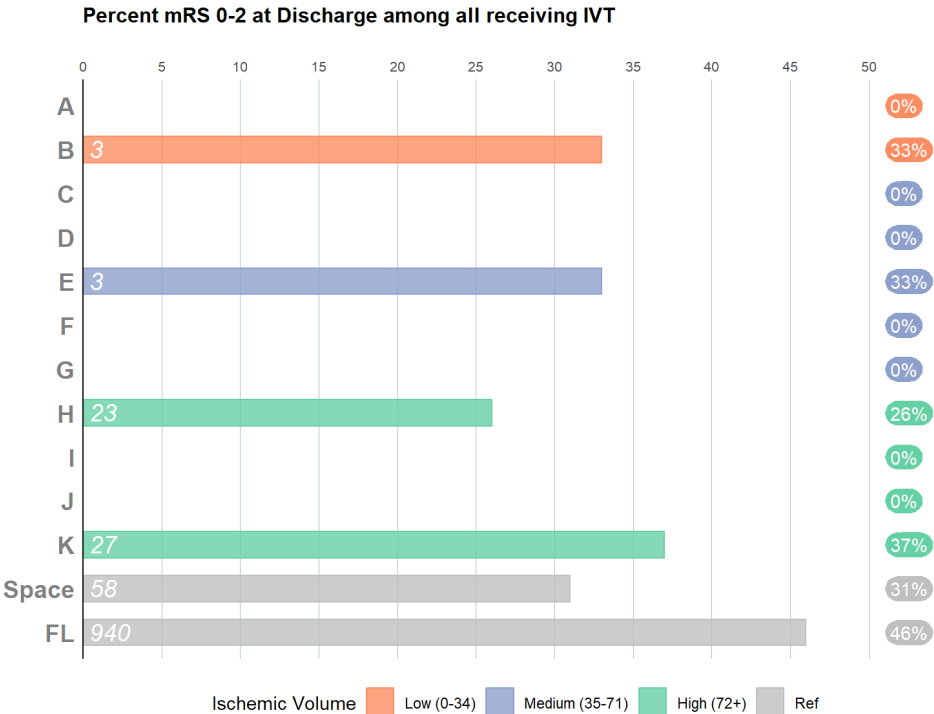


#### Numerator:

Includes ischemic stroke patients who received IV-Thrombolysis at this hospital (Excluded age < 18 year old; stroke occurred after hospital arrival (in ED/Obs/inpatient)); Patients whose date/time of ED arrival and/or date/time of thrombolytic administration are blank, not documented, or N/A.; Patients with a negative calculated time difference; Patients with a date Last Known Well but no time Last Known Well; Patients who received IV-Thrombolysis beyond 4.5 hours after Last Known Well; Patients with documented Eligibility or Medical reason for delay in treatment; clinical trial). (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

To calculate Door to Needle time, both arrival time and IV-Thrombolysis time must be precise (date and time not missing).

## 4. mRS 0-2 at Discharge



### Numerator:

Modified rankin score 0-2 at discharge.

### Denominator:

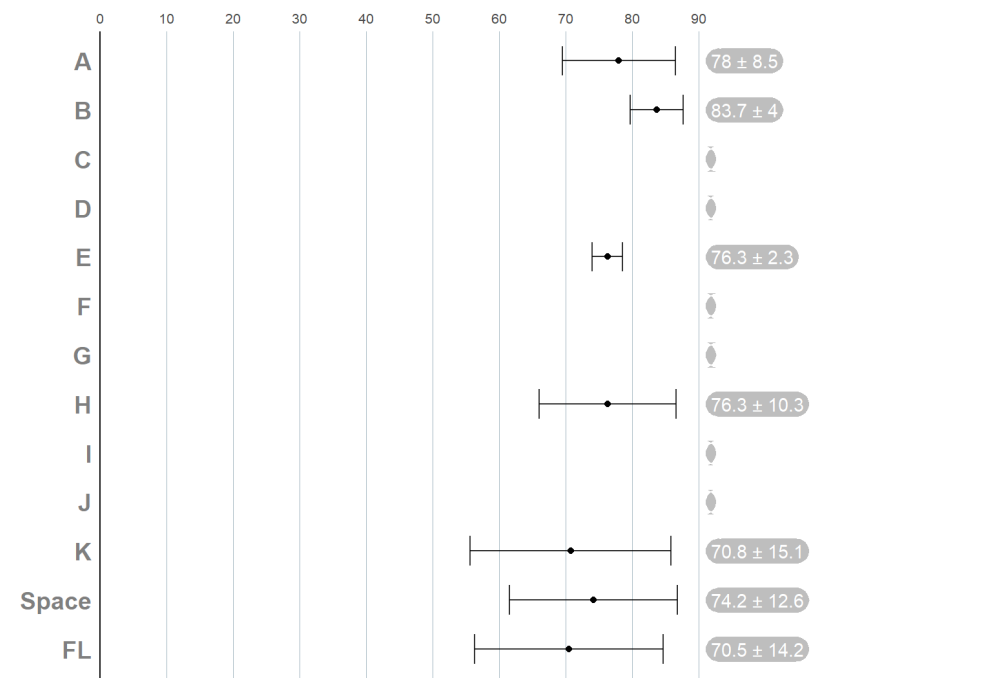
Includes ischemic stroke patients who received IV-Thrombolysis at this hospital with modified rankin score 0 to 6 at discharge (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

### Age/NIHSS Distributions:

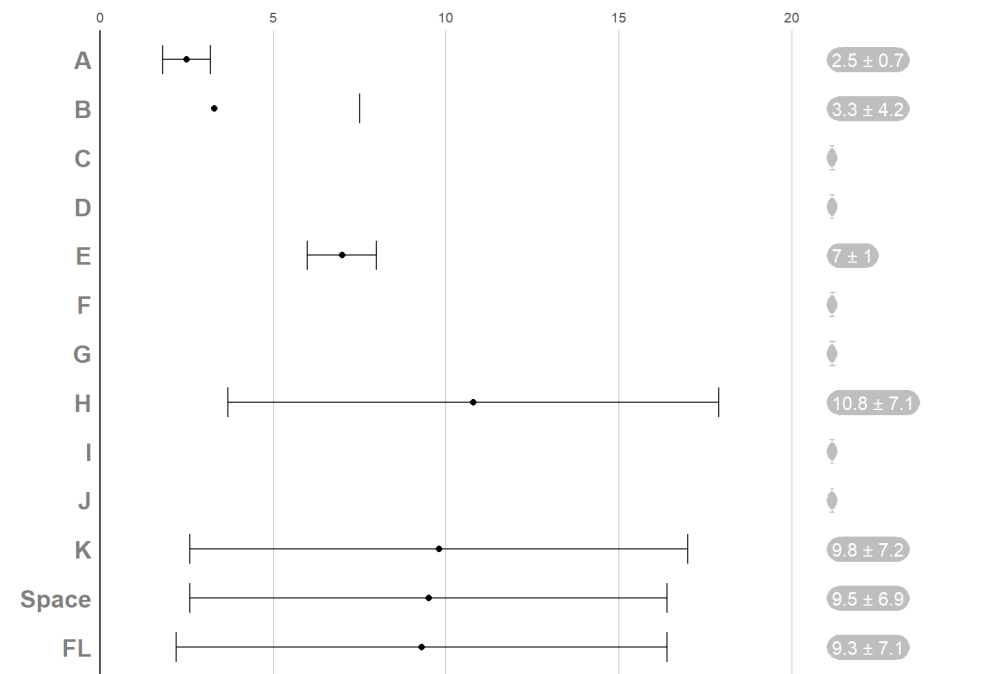
Under the "Age Dist" tab, listed are hospital, county, and state-level AGE (mean and standard deviation) among all receiving IV-Thrombolysis with mRS (0-2) at discharge.

Under the "NIHSS Dist" tab, listed are hospital, county, and state-level NIHSS (mean and standard deviation) among all receiving IV-Thrombolysis with mRS (0-2) at discharge.

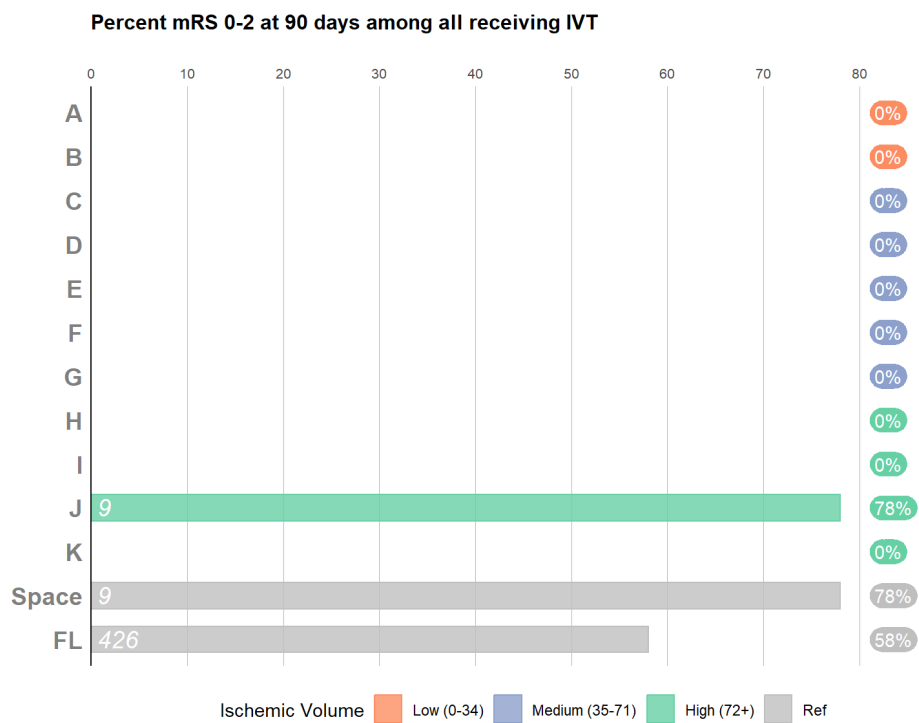
Mean Age Among Those Receiving IVT



Mean NIHSS Among Those Receiving IVT



## 5. mRS 0-2 at 90 Days



### Numerator:

is modified rankin score 0 to 2 at 90 days follow-up.

### Denominator:

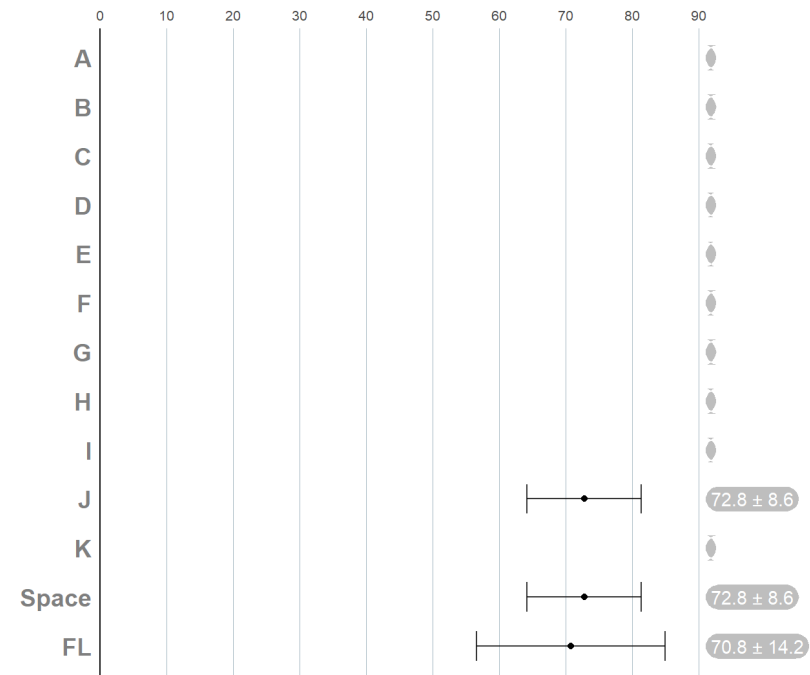
includes ischemic stroke patients who received IV-Thrombolysis at this hospital with modified rankin score 0 to 6 at 90 days follow-up (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

### Age/NIHSS Distributions:

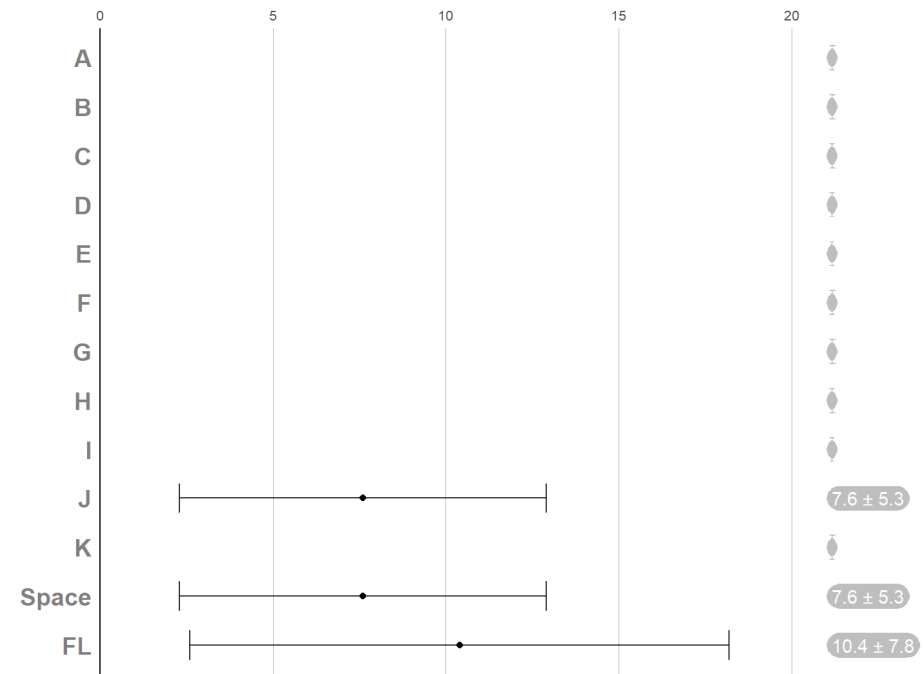
Under the "Age Dist" tab, listed are hospital, county, and state-level AGE (mean and standard deviation) among all receiving IV-Thrombolysis with mRS (0-2) at 90 days.

Under the "NIHSS Dist" tab, listed are hospital, county, and state-level NIHSS (mean and standard deviation) among all receiving IV-Thrombolysis with mRS (0-2) at 90 days.

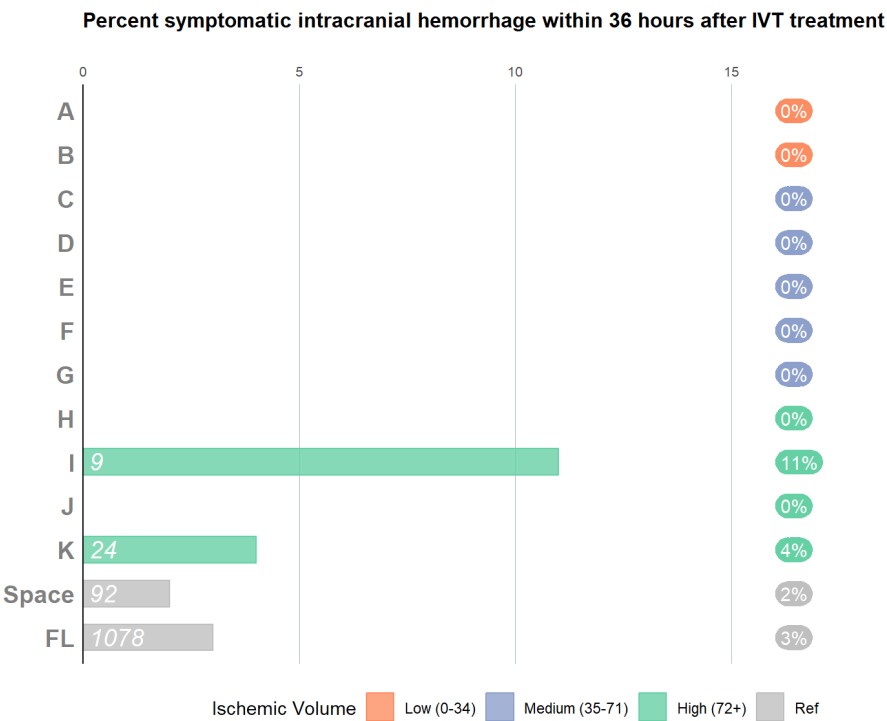
Mean Age Among Those Receiving IVT



Mean NIHSS Among Those Receiving IVT



## 6. Symptomatic Intracranial Hemorrhage



### Definition:

Ischemic stroke patients who develop a symptomatic intracranial hemorrhage  $\leq 36$  hours after the onset of treatment with IV thrombolytic (IV-Thrombolysis) therapy only.

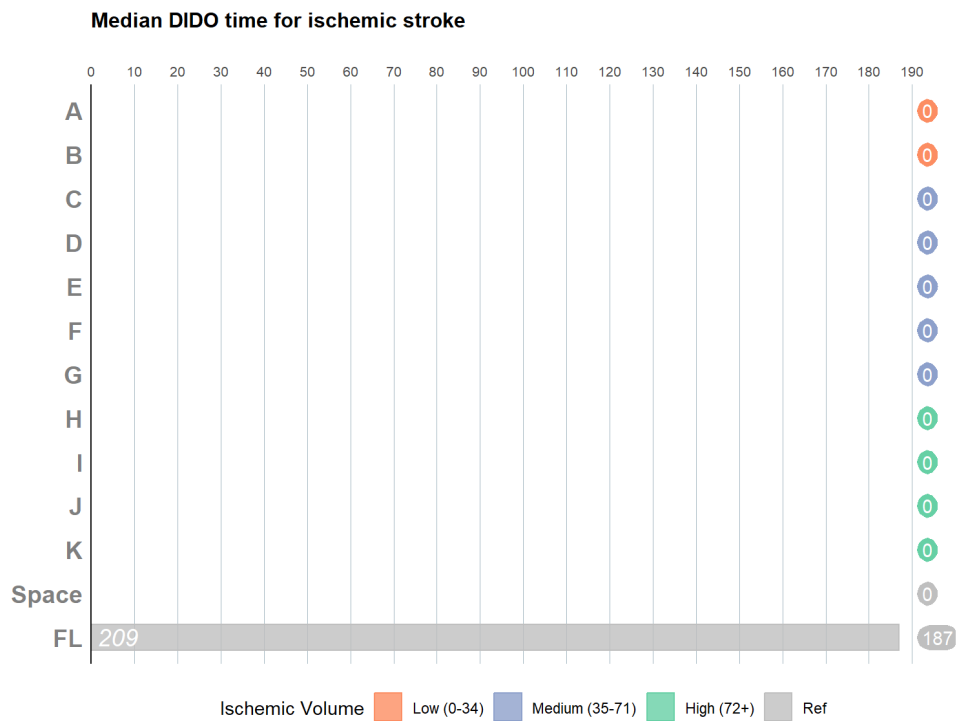
### Numerator:

Includes patients with Complications of Thrombolytic Therapy - Symptomatic intracranial hemorrhage within 36 hours after the onset of IV-Thrombolysis treatment.

### Denominator:

Includes patients with a primary stroke diagnosis of ischemic stroke who received IV-Thrombolysis therapy only at the indicated hospital. (Excluded age  $< 18$  year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

## 7. Median DIDO time for ischemic stroke



**Definition:**

Median minutes patients with confirmed ischemic/ICH stroke spent in the ED prior to transfer to a higher-level stroke center (e.g. PSC, CSC, etc.) for time-critical therapy.

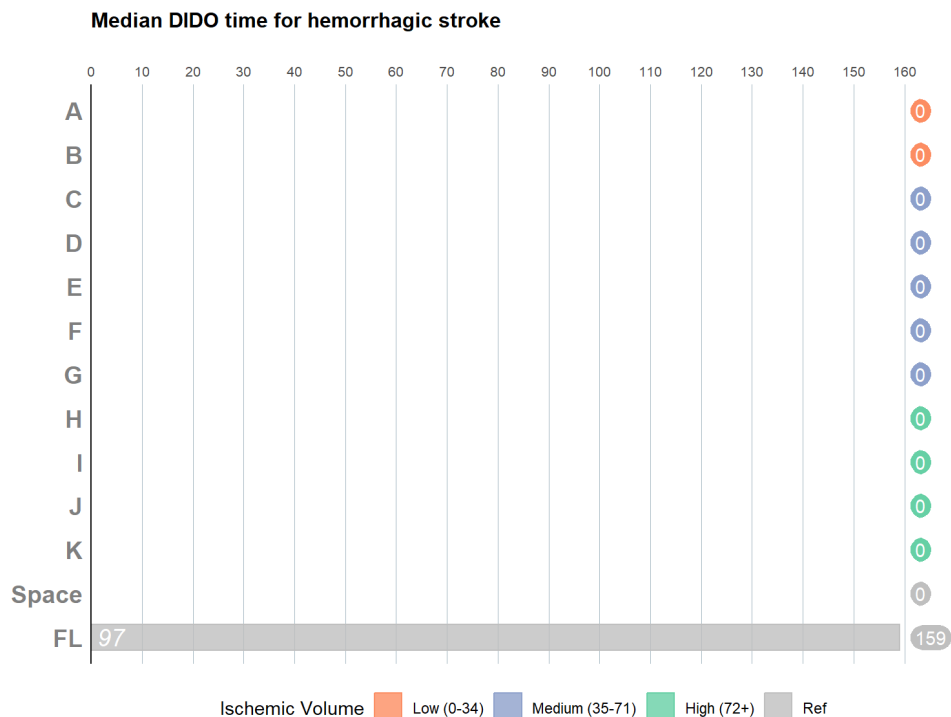
**Numerator:**

Time spent from arrival at the referral center to discharge from the referral center.

**Denominator:**

All patients in the Initial Patient Population who were transferred to a higher-level stroke center for time-critical therapy for Ischemic Stroke (evaluation for thrombolytic or EVT or post-thrombolytic care) or Hemorrhagic Stroke. Exclude patients that are Stroke occurred after hospital admission (in ED/Obs/inpatient); Patients who were transferred from another hospital; Undocumented time for Arrival to this hospital; Undocumented time for Discharge from this hospital; Negative calculated time for Discharge Date/Time from Arrival Date/Time; from Clinical Trial or Elective carotid intervention only.

## 8. Median DIDO time for hemorrhagic stroke



**Definition:**

Median minutes patients with confirmed ischemic/ICH stroke spent in the ED prior to transfer to a higher-level stroke center (e.g. PSC, CSC, etc.) for time-critical therapy.

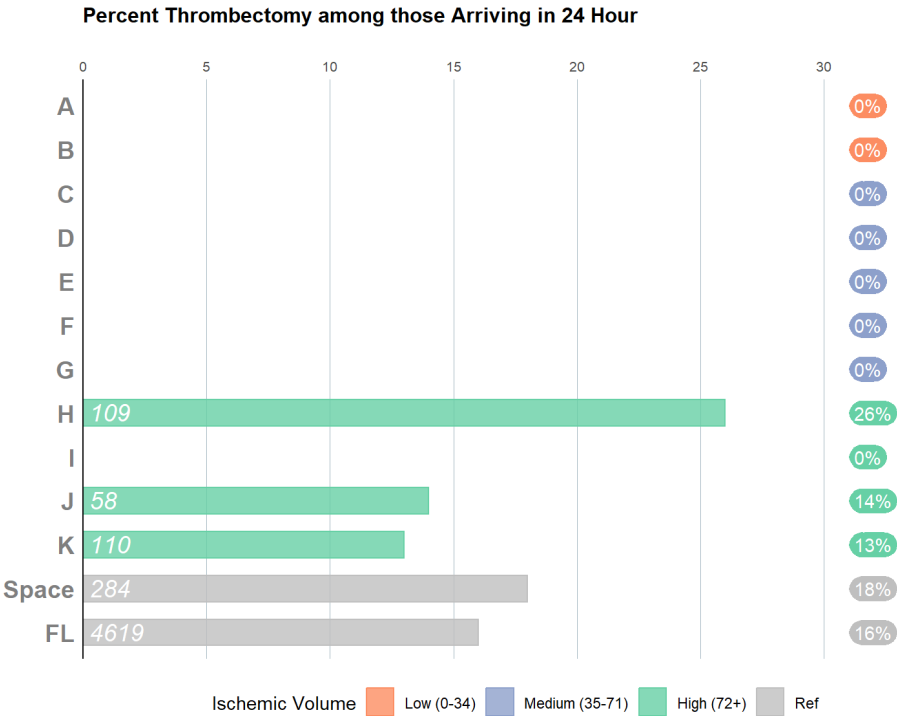
**Numerator:**

Time spent from arrival at the referral center to discharge from the referral center.

**Denominator:**

All patients in the Initial Patient Population who were transferred to a higher-level stroke center for time-critical therapy for Ischemic Stroke (evaluation for thrombolytic or EVT or post-thrombolytic care) or Hemorrhagic Stroke. Exclude patients that are Stroke occurred after hospital admission (in ED/Obs/inpatient); Patients who were transferred from another hospital; Undocumented time for Arrival to this hospital; Undocumented time for Discharge from this hospital; Negative calculated time for Discharge Date/Time from Arrival Date/Time; from Clinical Trial or Elective carotid intervention only.

# 9. Arrive in 24 Hours



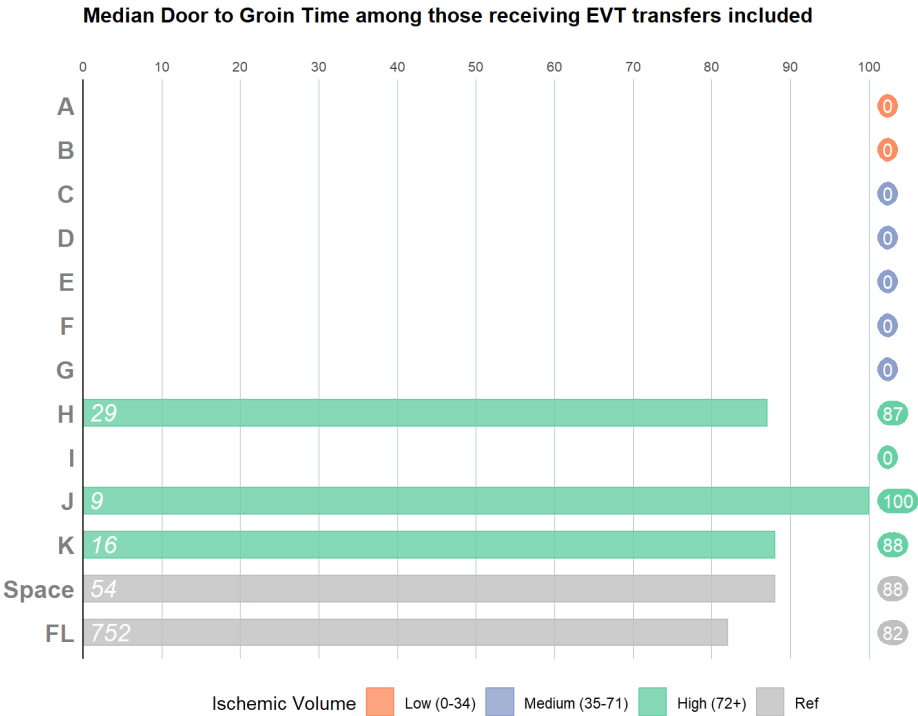
## Numerator:

EVT procedure initiated at this hospital using comprehensive tab variable "Mechanical endovascular reperfusion (MER) therapy at this hospital?"(high missingness) and "Catheter-based stroke treatment at this hospital?"

## Denominator:

Includes ischemic stroke patients arriving in 24 hours (excluding age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

# 10. Door-to-Puncture

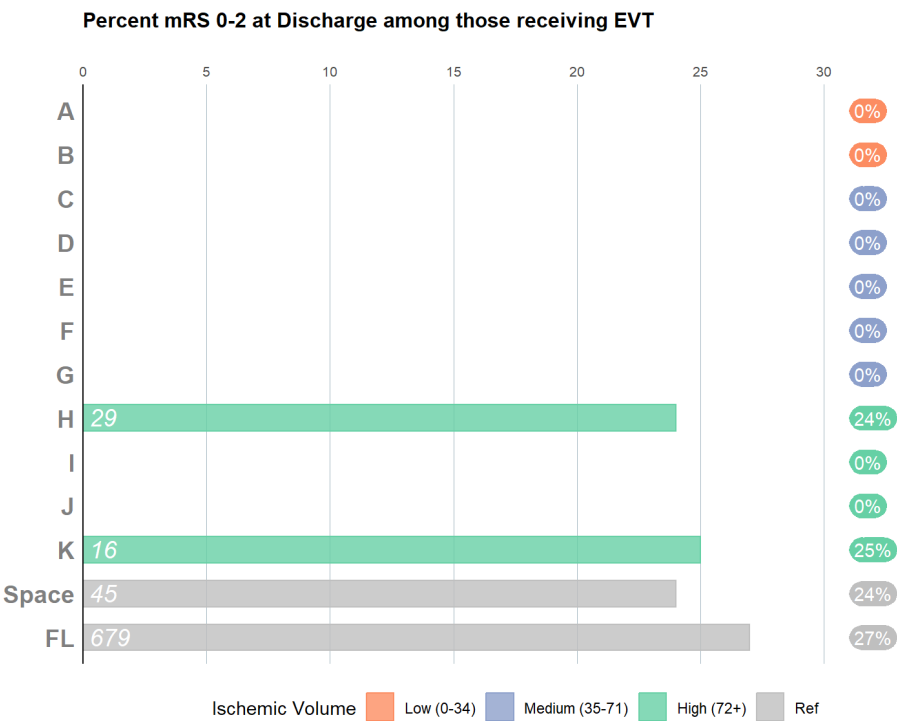


## Numerator:

Includes ischemic stroke patients with who received mechanical endovascular reperfusion therapy during the hospital admission. (Excluded age < 18 year old; stroke occurred after hospital arrival (in ED/Obs/inpatient)); Patients with date/time of arrival blank, not documented, or just MM/DD/YYYY; Patients with date/time of arterial puncture blank, unknown or just MM/DD/YY; Patients with negative calculated time to arterial puncture; Patients with length of stay > 120 days; Enrolled in a clinical trial as part of their treatment for stroke; Elective carotid intervention).

To calculate Door to Puncture time, both arrival time and Arterial puncture time must be precise (date and time not missing). Transfers ARE included in this analysis.

# 11. mRS 0-2 at Discharge



## Numerator:

Numerator is modified rankin score 0-2 at discharge.

## Denominator:

Includes ischemic stroke patients who received EVT at this hospital with modified rankin score 0 to 6 at discharge (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

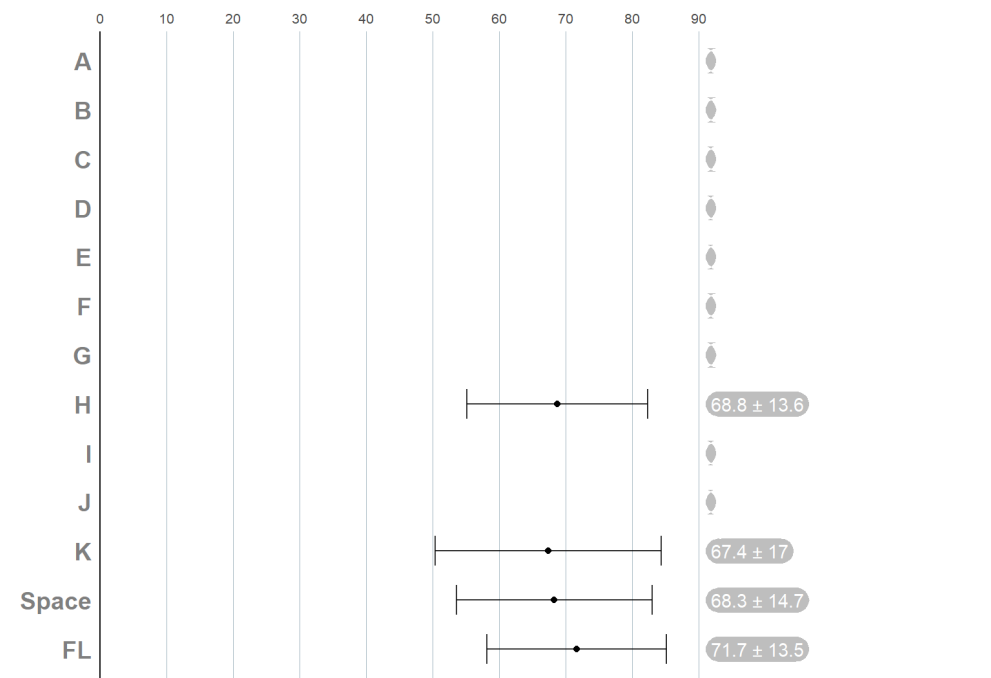
A denominator of "0" indicates that the specific metric was completely unavailable (not applicable) or missing for that hospital.

## Age/NIHSS Distributions:

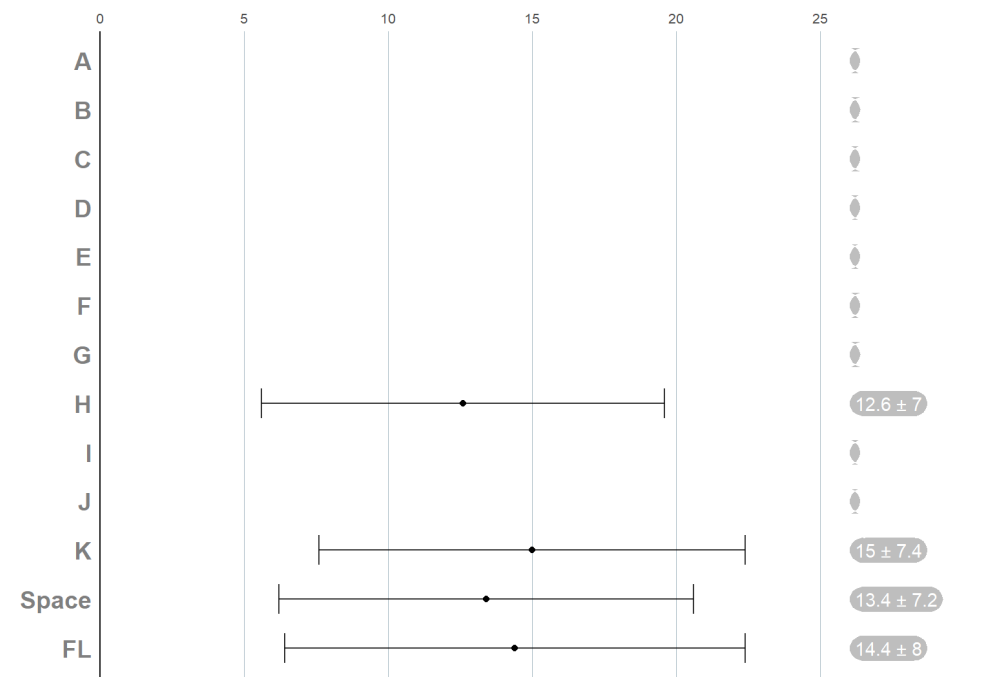
Under the "Age Dist" tab, listed are hospital, county, and state-level AGE (mean and standard deviation) among all receiving EVT with mRS (0-2) at discharge.

Under the "NIHSS Dist" tab, listed are hospital, county, and state-level NIHSS (mean and standard deviation) among all receiving EVT with mRS (0-2) at discharge.

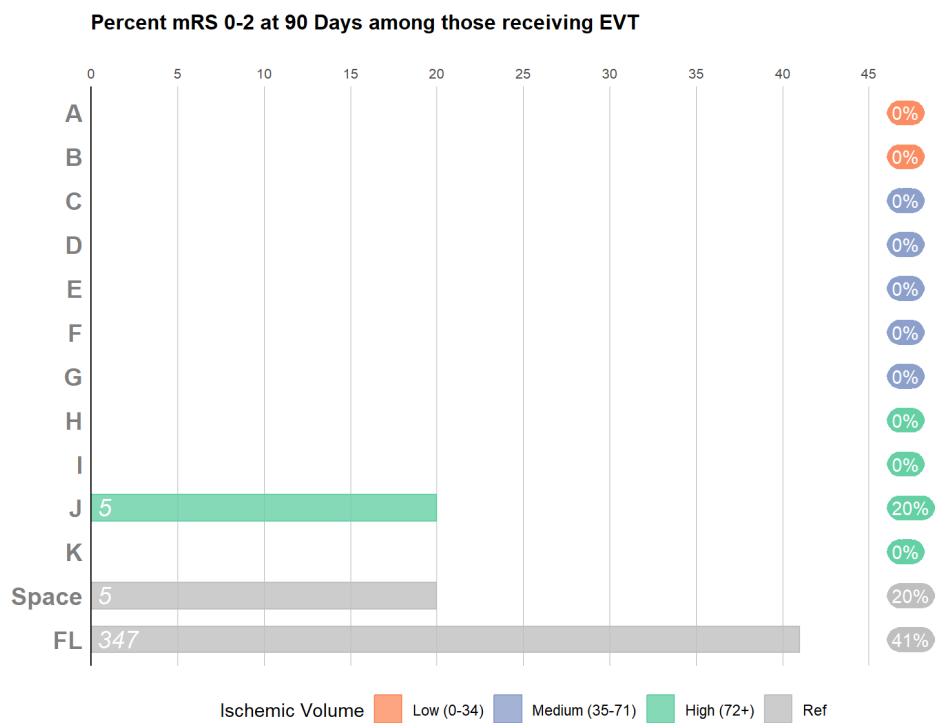
Mean Age RankinDischarge EVT



Mean NIHSS RankinDischarge EVT



## 12. mRS 0-2 at 90 Days



### Numerator:

Modified rankin score 0-2 at 90 day follow-up.

### Denominator:

Includes ischemic stroke patients who received EVT at this hospital with modified rankin score 0 to 6 at 90 days (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).

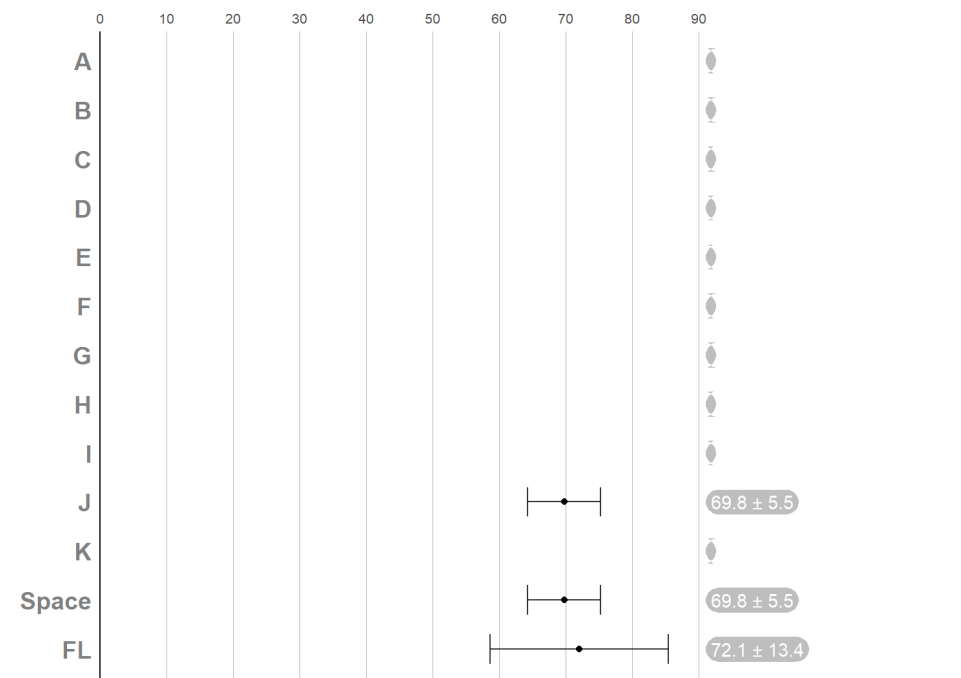
A denominator of "0" indicates that the specific metric was completely unavailable (not applicable) or missing for that hospital.

### Age/NIHSS Distributions:

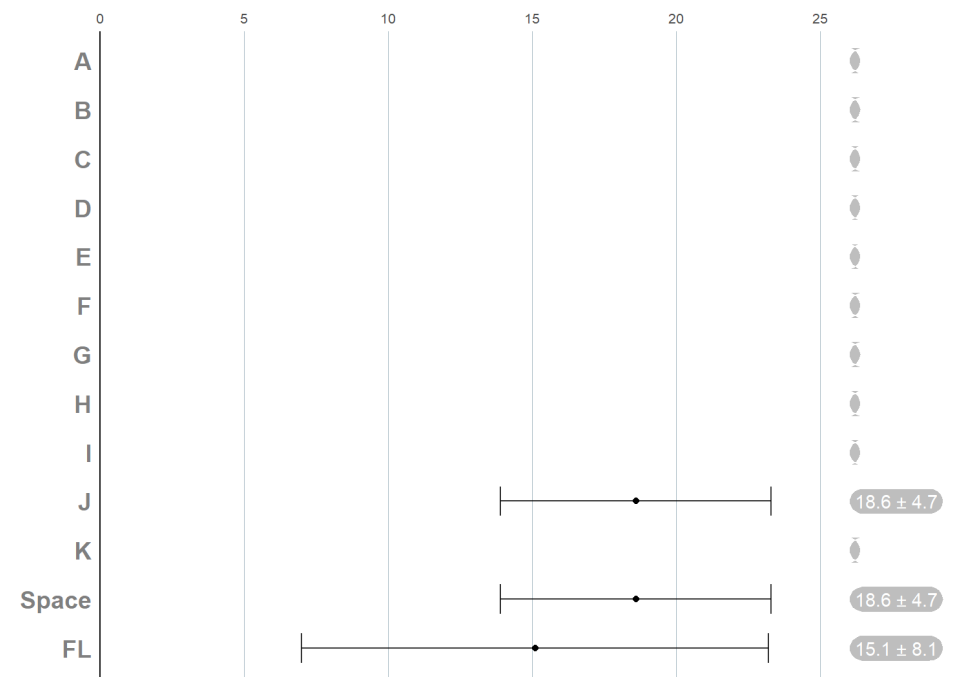
Under the "Age Dist" tab, listed are hospital, county, and state-level AGE (mean and standard deviation) among all receiving EVT with mRS (0-2) at 90 days.

Under the "NIHSS Dist" tab, listed are hospital, county, and state-level NIHSS (mean and standard deviation) among all receiving EVT with mRS (0-2) at 90 days.

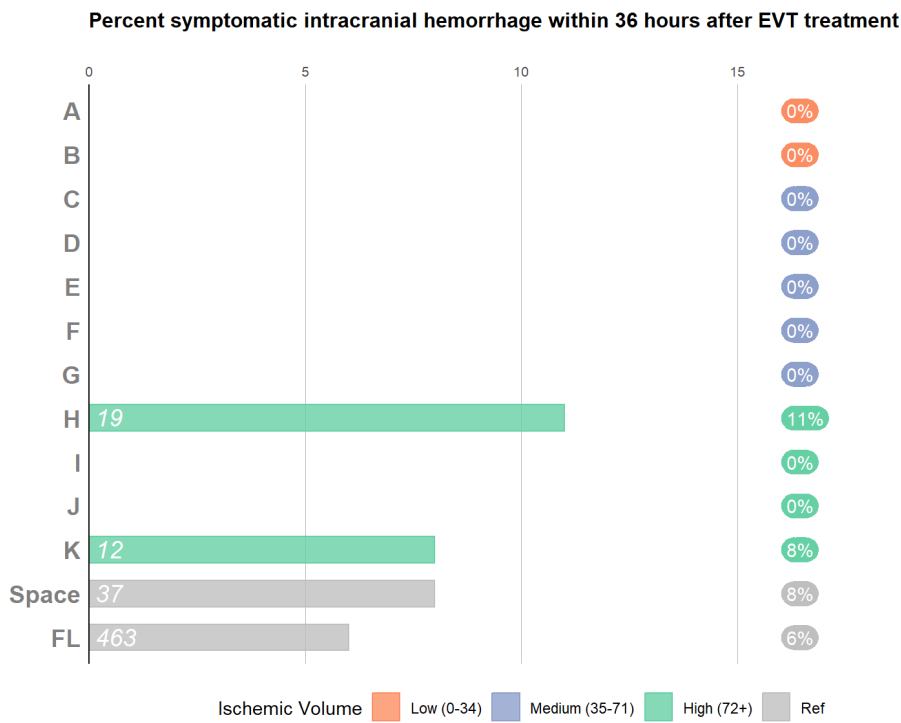
Mean Age RankinDischarge EVT



Mean NIHSS RankinDischarge EVT



### 13. Symptomatic Intracerebral Hemorrhage



#### Definition:

Ischemic stroke patients who develop a symptomatic intracranial hemorrhage  $\leq 36$  hours after the onset of treatment with IA thrombolytic (tPA) therapy or mechanical endovascular reperfusion therapy (MER).

#### Numerator:

Includes patients with Complications of Thrombolytic Therapy - Symptomatic intracranial hemorrhage within 36 hours after the onset of IA-tPA or MER treatment.

#### Denominator:

Includes patients with a primary stroke diagnosis of ischemic stroke who received IA-tPA or MER treatment only at the indicated hospital (Excluded age < 18 year old, clinical trial, stroke occurred after hospital arrival (in ED/Obs/inpatient)).