Target Stroke: Gold Plus Honor Roll CY ‘21

Rate Measure Achievement

- Anticoag for Afib/Aflutter: 100%
- Antithrombotics at Discharge: 100%
- Early Antithrombotics: 100%
- IV r-tPA by 3.5 treat by 4.5: 100%
- Smoking Cessation: 100%
- VTE Prophylaxis: 100%

Achieved 85% or higher in all AHA GWTG stroke achievement measures

Quality Measure Achievement

- Dysphagia Screen: 100%
- Stroke Education: 100%
- Rehab Considered: 100%
- DTN < 60 Min: 75%
- LDL Documented: 100%
- NIHSS Reported: 100%

Achieved 75% or higher with four or more of the AHA GWTG Quality Measures for over two years
2021 Stroke Statistics

MT = Mechanical Thrombectomy
r-tPA = Intravenous IV Alteplase

2021

MT Only  tPA + MT  tPA Only
52      21      37

2021 N = (497)

- Ischemic Stroke: 352
- Intracerebral Hemorrhage: 38

107
Carotid Artery Procedure (CAP) Complication Rate

2020-2022 CY LUMC Carotid Artery Procedure (CAP) Stroke & Mortality Rate Within 30 Dates Post Procedure

- 6\% (4 Cases, N = 62) - The Joint Commission Requirement < 6\%

- 0.2\% (1 Case, N = 41) - The Joint Commission Requirement < 3\%

Rate of stroke or death within 30 days post CAP (symptomatic cases)

Rate of stroke or death within 30 days post CAP (asymptomatic cases)
VTE Prophylaxis

- This graph describes the percentage of stroke patients who had treatment to prevent the development of blood clots in the legs or lungs by day two of hospital stay.

- Stroke patients are at risk for developing blood clots, or venous thromboembolism (VTE), so it’s important that they have treatment to prevent these conditions early in their hospital stay.
Antithrombotics at Discharge

• This graph describes the percentage of stroke patients who were discharged home from the hospital on a medication to prevent blood clot formation (antithrombotic therapy).

• Patients who have had an ischemic stroke should be discharged on some type of medication to prevent blood clot formation to help lower risk of another stroke in the future.
Anticoagulation for Atrial Fibrillation

- Patients with atrial fibrillation have an irregular heartbeat.

- Atrial fibrillation is one of the top risk factors for stroke. Ischemic stroke patients with atrial fibrillation are at increased risk of having another stroke. When treated with medications, called anticoagulants, or blood thinners, the risk of stroke is significantly lower in these patients.

- This graph shows the percentage of ischemic stroke patients with atrial fibrillation prescribed anticoagulation, or blood thinners.
In an ischemic stroke, time is brain.

The “clot busting” medication, tPA, can be given to eligible stroke patients to possibly reverse the effects of stroke. However, this medication must be started within three hours of the start of stroke symptoms to have the highest chance of working.

This graph shows the percentage of eligible ischemic stroke patients who came to LUMC within two hours of stroke symptom onset and received tPA within the three-hour timeframe.
Antithrombotic by Hospital Day 2

- Ischemic stroke patients are at risk for developing blood clots.
- It is recommended for these patients to receive medications (antithrombotic therapy) to prevent blood clots from forming by the end of the second day of hospital stay. This medication helps to lower the risk of the patient having another stroke in the future.
- This graph shows the percentage of ischemic stroke patients who were given antithrombotic therapy by the end of the second day of hospital stay.
• Low-density lipoprotein (LDL) is often called “bad” cholesterol.

• This bad cholesterol can clog arteries and put patients at a higher risk for stroke or heart attack. It is recommended that stroke patients with increased LDL be prescribed cholesterol lowering medications or statins. These medications are proven to lower cholesterol and lower the risk of future stroke and heart attack.

• This graph shows the percentage of ischemic stroke patients who were given statins when they were discharged from the hospital.
Stroke patients are at a higher risk of having another stroke.

It is important that stroke patients and their families know stroke risk factors, warning signs, and understand the importance of calling an ambulance to get to the hospital as quickly as possible.

This graph shows the percentage of stroke patients who received stroke education before discharge from the hospital.
Rehabilitation Assessment

- Stroke is one of the leading causes of disability in the United States.
- Stroke patients should be evaluated as soon as possible to see if they may need physical, occupational, or speech rehab therapies.
- This graph shows the percentage of stroke patients who were assessed for the need for rehabilitation therapies.

Higher is better

<table>
<thead>
<tr>
<th></th>
<th>Q2 2021</th>
<th>Q3 2021</th>
<th>Q4 2021</th>
<th>Q1 2022</th>
<th>Q2 2022</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>100</td>
<td>100</td>
<td>100</td>
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Complication Rates 2020-2022

All Cause Death within 72 Hours of Endovascular Procedure

<table>
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<th>Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>5% (n=4)</td>
<td>1% (n=1)</td>
<td>8% (n=2)</td>
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Periprocedural Stroke and Death Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>1% (n=1)</td>
<td>1% (n=1)</td>
<td>8% (n=2)</td>
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</table>

Total Eligible Cases

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>80</td>
<td>73</td>
<td>26</td>
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*2022 Data through June 30th, 2022*
Outcomes After Mechanical Thrombectomy

Q1 2020 – Q2 2022 (N = 181)

Post-Treatment Reperfusion Grade of mTICI 2B or Greater

92% (n=166)

- Ischemic stroke patients may be eligible for a surgical procedure to remove the clot that is blocking blood flow to the brain

- A score, called a TICI score is given between 0 and 3 to describe how successful the procedure was, or much of the vessel in the brain was able to be perfused again

- A TICI score of 2B or greater is considered to be successful re-perfusion

*2022 Data through June 30th, 2022