

Improvements in Stroke Care

What is a Stroke? A stroke is a “brain attack.” It can happen to anyone at any time. It occurs when blood flow to an area of the brain is cut off. When this happens brain cells are deprived of oxygen and begin to die. Stroke is an emergency. If you or someone you know is experiencing signs of a stroke, call 9-1-1 immediately. Every minute matters.

Olean General Hospital (OGH) applied for Stroke Center Designation with the New York State Department of Health in November, 2018. Stroke center designation requires hospitals to have a system in place to provide a basic level of acute stroke care as well as a transfer process for a neurosurgical assessment (**neurological assessment** is an evaluation of a person's nervous system, which includes the brain, spinal cord, and the nerves that connect these areas to other parts of the body) and/or further care if these services are not available at their hospital.

Designated centers are required to meet certain time frames which, when met, have been found to result in better outcomes for all stroke patients. Through the application process, OGH has focused on early recognition, activation of the stroke team, and implementation of evidence-based care.

When a patient presents by walking into the Emergency Department, calling 9-1-1 and arriving by ambulance, or as an inpatient with a sudden change in condition, the patient is triaged (seen by nurse) immediately. Based on the patient's presenting signs and symptoms a Code Stroke is initiated, triggering response by a stroke team. Stroke teams are made up of physicians, nurses, lab, and cardiopulmonary staff, all with specialized training in Stroke Care.

Bloodwork is obtained, and the physician assesses the patient within 10 minutes of arrival, using the National Institute of Health Science (NIH) Stroke Scale. The NIH Stroke Scale is a tool used to objectively quantify the impairment caused by a stroke.

The doctor then makes the decision whether to administer tPA, a medication which dissolves the clot and improves blood flow to the part of the brain being deprived of blood flow. The patient's blood sugar is tested if he or she has diabetes, and home medications are reviewed.

Before any water or oral medications are given, the nurse performs a dysphagia screen, a test to assure the patient is able to swallow.

The patient is then either admitted to OGH for assessment by a board certified neurologist or transferred for neurosurgical assessment and/or interventions.

Process Metrics

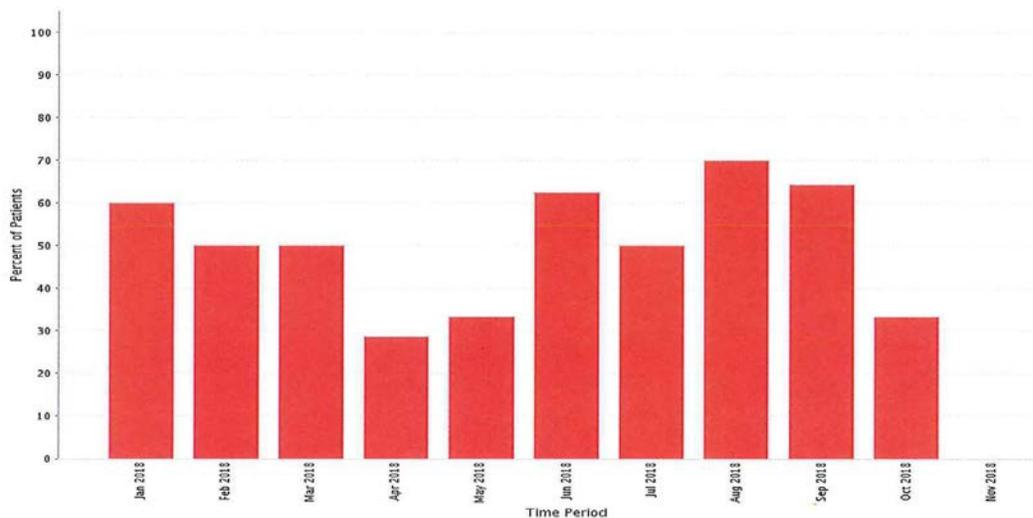
Several timeframes are measured to assure patients receive timely assessment and stroke care they include:

- Patient arrival to physician assessment (Goal less than 10 minutes)
- Last know well time
- Patient arrival to stroke team (Goal less than 15 minutes)
- Patient arrival to CT initiated (Goal less than 25 minutes)
- Patient arrival to CT read time (Goal less than 45 minutes)
- Patient arrival to tPA (Goal less than 60 minutes)
- Symptom to TPA (Goal less than 3 hours)

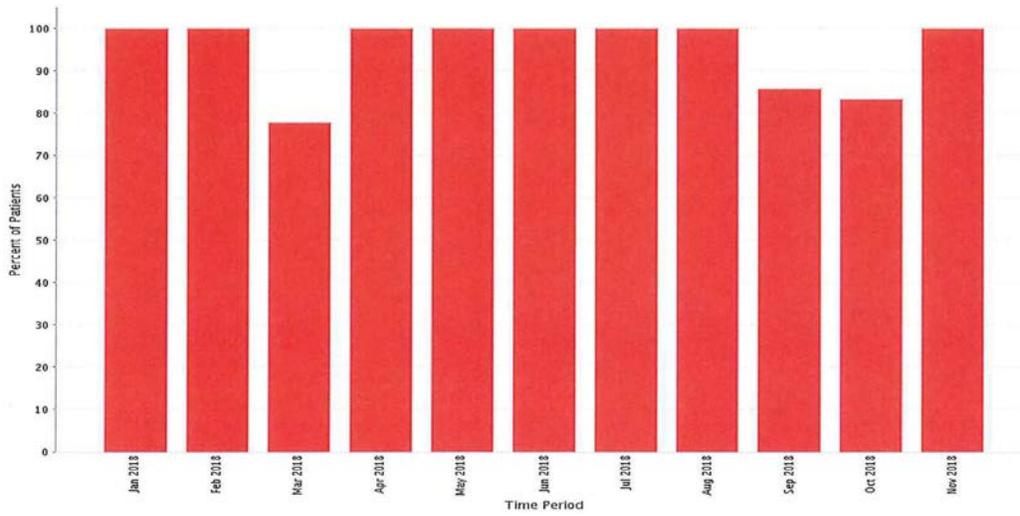
Quality Improvement Metrics Related to Stroke Care:

While preparing for stroke center designation, OGH has monitored several quality metrics:

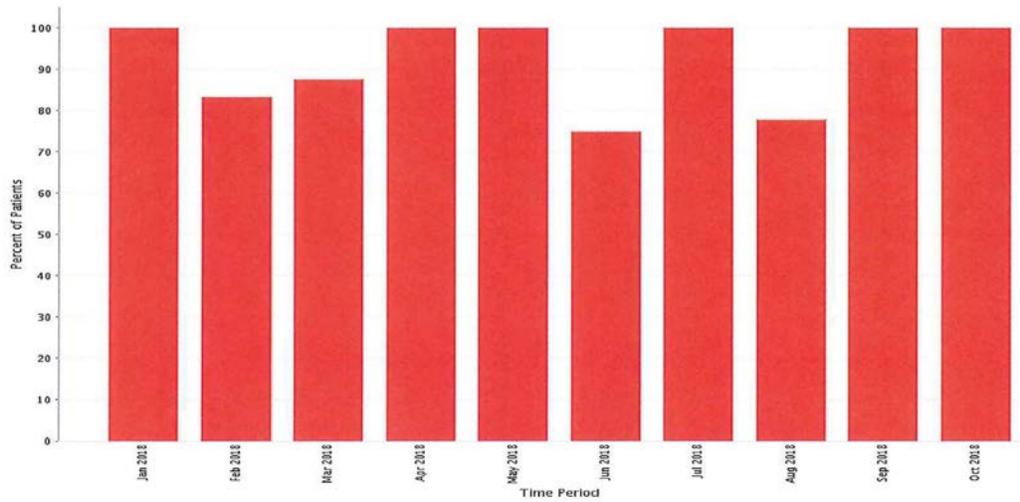
Dysphasia Screening (Patients tested for ability to swallow)



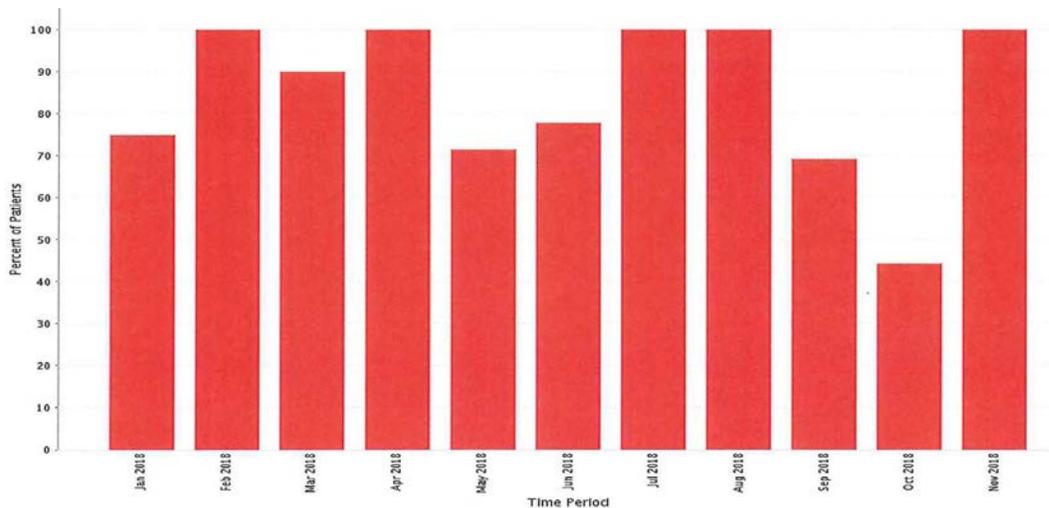
Stroke Patient Education



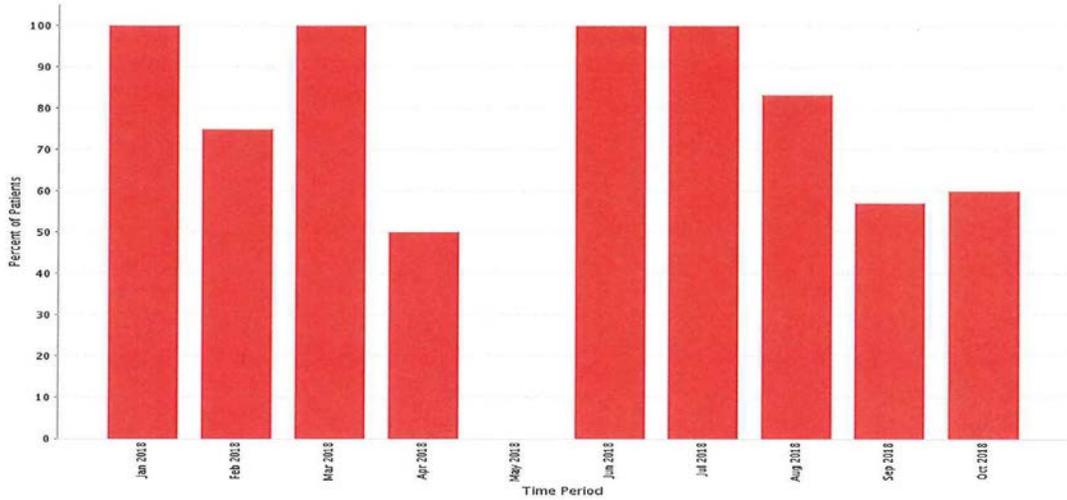
Rehabilitation Consideration



LDL ("Bad" Cholesterol) Documentation

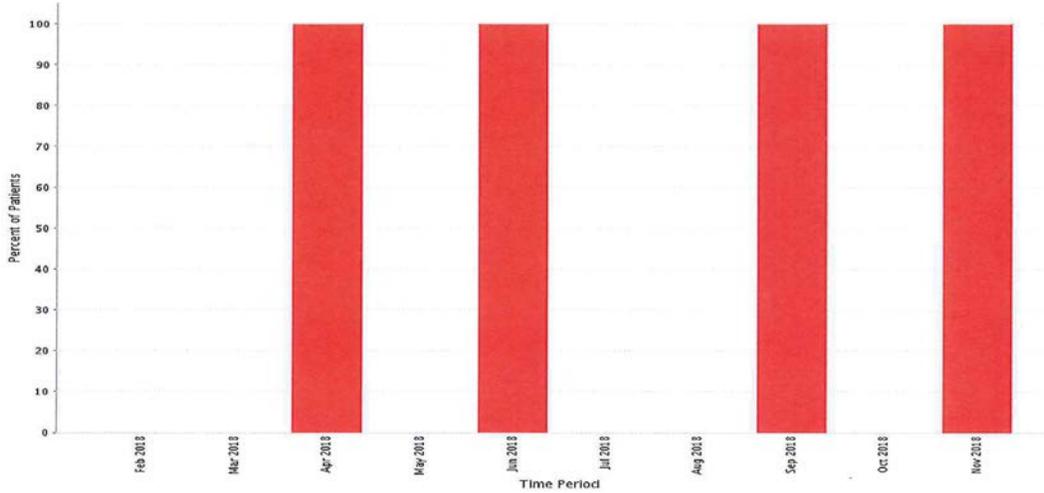


Intensive Statin Therapy (Drugs that can lower cholesterol)

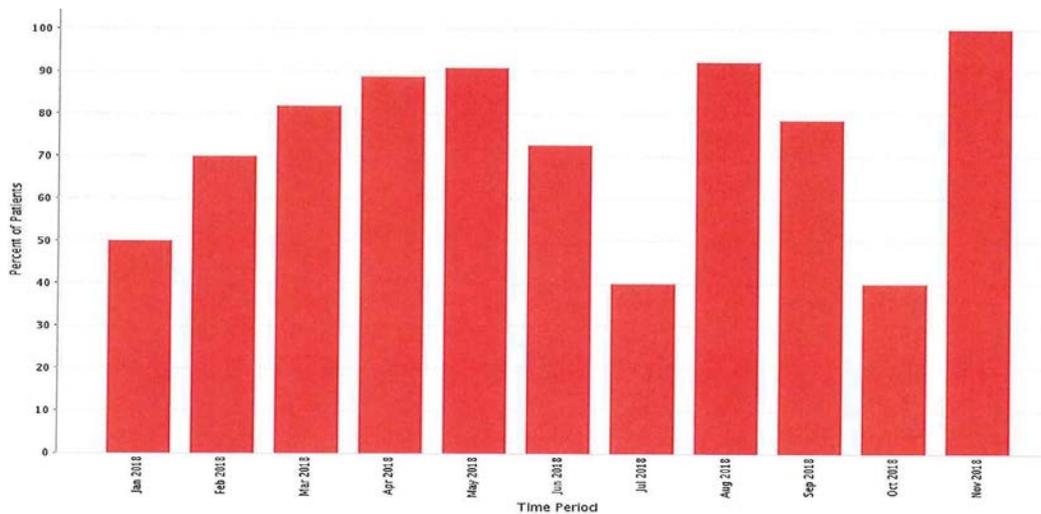


**IV rt-PA
Within**

3.5 Hrs. of Arrival (Documentation of the reason tPA was not given within 3.5 hrs))

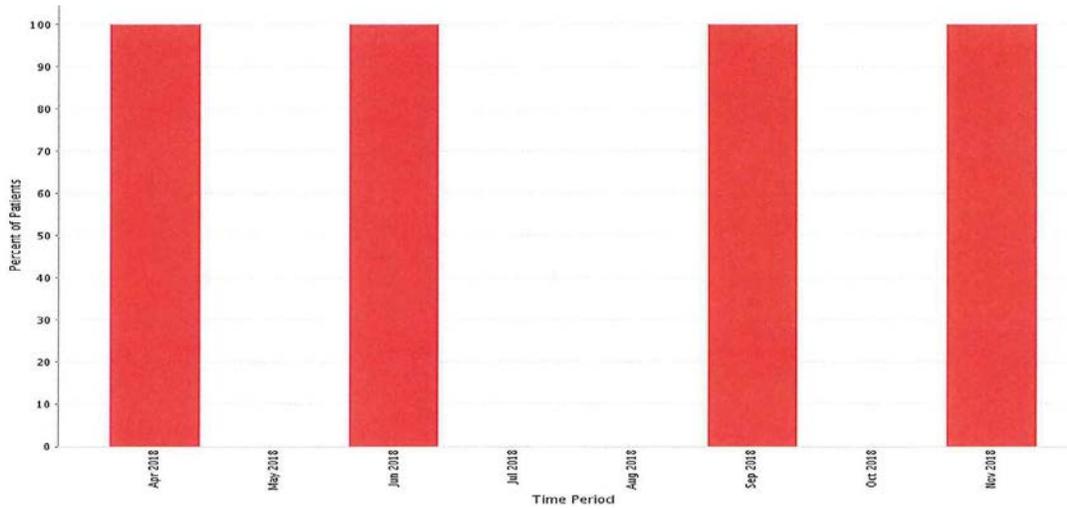


NIH Stroke Scale Reported (Doctor documented NIHS Stroke Scale)

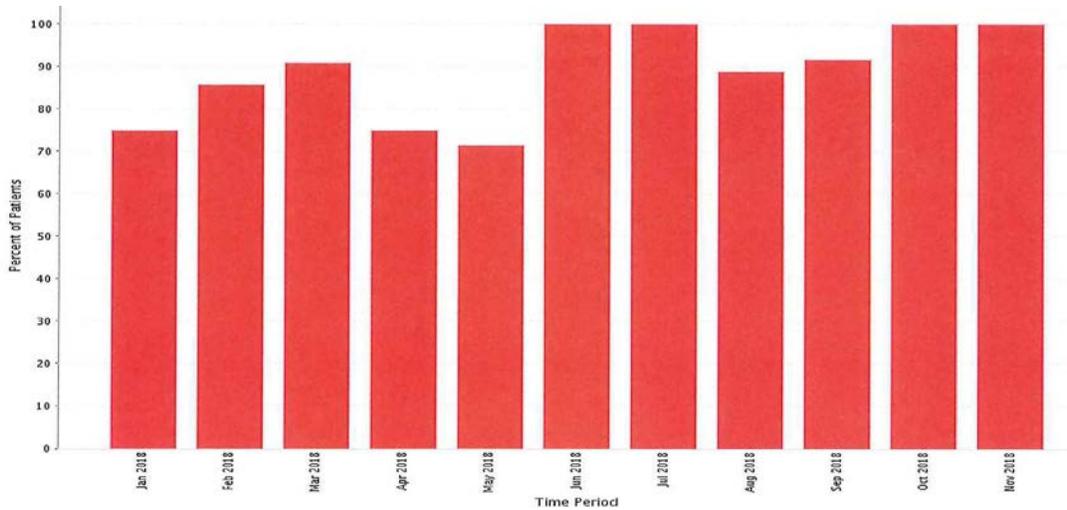


**IV rtPA
arrive in 2
hrs.**

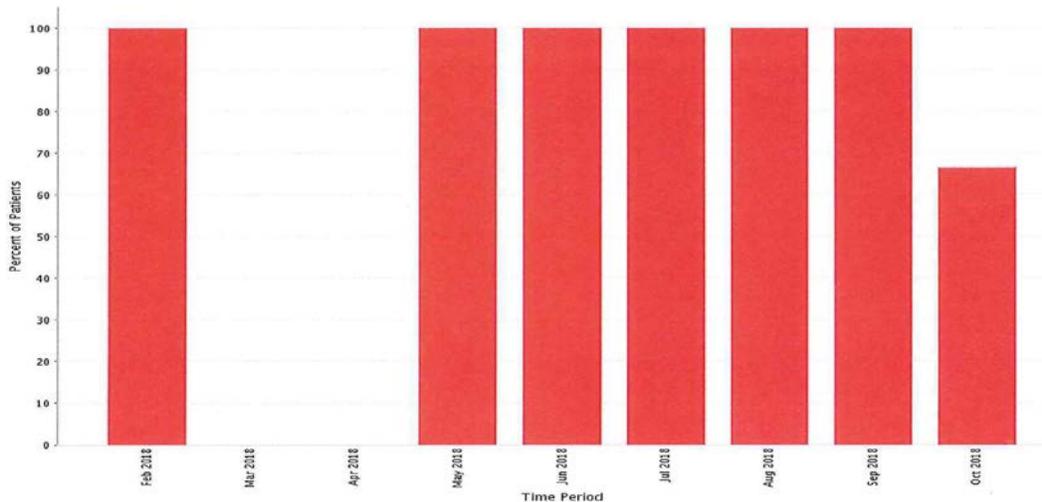
(Documentation of the reason TPA was not given within 2 hours)



Early Antithrombotic, VTE (Venous Thromboembolism) Prophylaxis, Antithrombotics (Agents that reduce formation of blood clots)



Anticoagulants (medicines that help prevent blood clots) for Atrial Fibrillation / Atrial Flutter



Statin (Drugs that can lower cholesterol) Prescribed at Discharge

