

Stroke Care Quality & Outcomes

 **WVU Rockefeller**
Neuroscience Institute

WVU Medicine Ruby Memorial Hospital is a Comprehensive Stroke Center, the highest level of stroke care designation awarded by The Joint Commission. This means our hospital has the doctors, technology, and experience needed to care for people with serious and complex strokes.

Ruby Memorial Hospital has also earned Gold Plus recognition from the American Heart Association/American Stroke Association's Get With the Guidelines®–Stroke program, which recognizes hospitals that consistently follow nationally established stroke care standards to deliver the best care possible.

STROKE CARE IN 2025

In calendar year 2025, this Comprehensive Stroke Center treated 880 patients with serious stroke conditions. This included:

- 604 ischemic strokes, caused by a blood clot
- 217 hemorrhagic strokes, caused by bleeding in the brain
- 59 transient ischemic attacks (TIAs), often called “mini-strokes”

DOOR-TO-NEEDLE TIME

Door-to-needle time measures how quickly patients receive clot-busting medication after arriving at the hospital. National guidelines recommend treatment within 60 minutes.

At WVU Medicine Ruby Memorial Hospital:

- 94% of eligible patients were treated within 60 minutes
- Median door-to-needle time: 43 minutes

What this means for patients:

Faster treatment helps reduce brain injury and improves recovery after stroke.

HEMORRHAGIC COMPLICATIONS

A potential risk of clot-busting medication is bleeding in the brain (symptomatic intracranial hemorrhage). National rates are typically 2–6%.

At WVU Medicine Ruby Memorial Hospital:

- Hemorrhagic complication rate: 4.3%

What this means for patients:

Our team carefully balances speed and safety to provide effective, evidence-based stroke care.

COMPREHENSIVE CARE OUTCOMES

As a Comprehensive Stroke Center, we treat patients with the most complex conditions, some of which involve various types of surgeries.

MECHANICAL THROMBECTOMY

Some strokes are caused by large blood clots blocking major blood vessels in the brain. When this happens, doctors may perform a mechanical thrombectomy, a procedure that removes the clot and helps blood flow return to the brain.

During this period, 154 mechanical thrombectomy procedures were performed at Ruby Memorial Hospital.

Across the country, studies show that problems with this procedure happen less than 7% of the time. At Ruby Memorial Hospital, the complication rate was 6%.

Doctors measure how well blood flow returns using a score called TICl. A score of 2b or higher means blood flow was mostly or fully restored and usually leads to better recovery. At Ruby Memorial Hospital, 84% of patients had a TICl score of 2b–3, compared with the national average of 76%.

What this means for patients:

Patients treated at Ruby Memorial Hospital have a strong chance of successful clot removal and good blood flow returning to the brain, which helps support better recovery.

INTERVENTIONAL NEURORADIOLOGY DIAGNOSTIC PROCEDURES

Interventional Neuroradiologists perform specialized diagnostic procedures to evaluate conditions such as brain aneurysms, tumors, and blood vessel abnormalities. Nationally, complication rates are expected to be less than 1%.

During this period, 368 diagnostic procedures were performed at Ruby Memorial Hospital, with less than 1% resulting in complication.

What this means for patients:

These tests are very safe and help doctors make the right treatment decisions.

CAROTID ARTERY PROCEDURES AND OUTCOMES

Some strokes happen because the carotid arteries in the neck become narrow or blocked. These arteries carry blood to the brain. When needed, doctors may perform a carotid artery procedure to improve blood flow and lower the risk of stroke.

During this period, 211 carotid artery procedures were performed at WVU Medicine Ruby Memorial Hospital. National guidelines say these procedures should have very low complication rates. At Ruby Memorial Hospital, the complication rate less than 1%.

What this means for patients:

Carotid artery procedures at Ruby Memorial Hospital are carefully monitored to keep patients safe and help prevent future strokes.

STROKE QUALITY MEASURES - PERFORMANCE COMPARISON

These nationally recognized measures reflect how well hospitals provide timely, effective, and evidence-based stroke care.

Measure	What this means	WVU Medicine Ruby Memorial Hospital (%)	All Other Comprehensive Stroke Hospitals (%)
Defect-Free Stroke Care	The percentage of stroke patients who received all recommended stroke care measures during their hospital stay.	92%	93%
Blood Clot Prevention	The percentage of patients at high risk for developing blood clots due to limited mobility who received appropriate clot prevention treatment.	97%	97%
Antithrombotic Medication at Discharge (STK-2)	The percentage of patients prescribed medication to help prevent blood clots before leaving the hospital.	100%	100%
Anticoagulant at Discharge for Atrial Fibrillation/Flutter	The percentage of patients with atrial fibrillation or flutter who were prescribed a blood thinner to reduce stroke risk at discharge	100%	98%
IV Thrombolytic Therapy Within 3 Hours of Symptom Onset	The percentage of eligible patients who arrived at the Emergency Department within 3 hours of symptom onset and received IV thrombolytic treatment (tPA).	100%	94%
Antithrombotic Medication by End of Hospital Day 2	The percentage of patients prescribed medication to reduce stroke risk by the end of the second hospital day.	98%	97%
Statin Medication at Discharge	The percentage of patients prescribed a cholesterol lowering medication before hospital discharge	94%	95%
Stroke Education Provided	The percentage of patients who received stroke education, including risk factors, warning signs, medications, and follow up care, before discharge.	99%	97%
Assessment for Rehabilitation Services	The percentage of patients evaluated for the need for rehabilitation services (physical, occupational, or speech therapy) before discharge.	100%	100%
Dysphagia (Swallowing) Screening	The percentage of patients screened for safe swallowing before eating or drinking.	82%	87%
Door-to-IV Thrombolytic ≤ 60 Minutes	The percentage of eligible patients who received a clot busting medicine within 60 minutes of arriving at the Emergency Department	94%	96%

How to read this table:

This table shows how well WVU Medicine Ruby Memorial Hospital provides stroke care compared to other stroke centers across the country. Higher percentages mean patients are more often getting the care that is recommended.