

# Race Against the Clock

Healthcare  
for  
what's  
next.

Artificial Intelligence Injects Even More Speed into Stroke Care

By Brian Justice



"I'm filled with gratitude for every member of my care team," said **Andy Streiter**, at home with his wife **Jamie** and baby son **Dylan**.

## Delivering You the Gold Standard in Stroke Care

Five NorthShore Hospitals—Evanston, Glenbrook, Highland Park, Swedish and Northwest Community—are designated Certified Stroke Centers. This recognition reflects the highest standard of care for stroke patients while meeting and exceeding critical quality performance measures designed to improve patient outcomes. Learn about these capabilities and meet our team at [northshore.org/d3](https://northshore.org/d3). To make an in-person or telehealth appointment at NorthShore Neurological Institute, please call (847) 492-5700 (Ext. 1261).

## Moment of Truth

Andy Streiter shares more about the journey he faced when hit with a sudden stroke. Watch the new video at [northshore.org/andysstory](https://northshore.org/andysstory).



WATCH A VIDEO

# A

loud slam, an observant wife and artificial intelligence now available at NorthShore helped save Andy Streiter's life.

Last August, the 48-year-old Wilmette staffing firm executive had just finished a morning workout on his exercise bike in his basement.

Health-conscious and athletic, Streiter had fully recovered from a heart procedure 18 months earlier. On his way upstairs, he eyed a package sitting on the front porch and opened the door to pick it up.

"Suddenly, I started to lose feeling on the left side of my body," Streiter recalled. Forgetting about the package, he made his way to the living room. The heavy door slammed behind him, and he collapsed on the sofa.



Neurosurgeon **Dr. Shakeel Chowdhry** is using artificial intelligence to further lessen stroke care response time.

The technology enhances the power of NorthShore's Stroke Center team through rapid detection and notification of suspected large vessel occlusion strokes, so specialists can make optimal treatment decisions.

Dr. Chowdhry and the care team can obtain imaging in under a minute once the patient arrives at the Emergency Department and determine the treatment needed before the patient even checks in.

"Viz.ai transmits brain CT images and vascular imaging faster to help those of us on the stroke team make lifesaving decisions that will lead to the best outcomes, including whether to administer the clot-busting drug tPA," said Dr. Chowdhry.

Tissue plasminogen activator (tPA) is the most widely known intravenous drug used and can actually reverse stroke if given to carefully selected patients within a few hours of

onset. According to Dr. Chowdhry, in cases like Streiter's that moved very fast, the clot can be removed before the tPA infusion is completed.

### MINUTES MATTER

In the operating room, Dr. Chowdhry and team quickly went to work using a minimally invasive catheter procedure through a large artery that begins in the upper leg. The procedure, known as a thrombectomy, not only removed the blood clot in Streiter's brain, but also unclogged the artery that led to the stroke in the first place. Within an astounding 13 minutes, he was out of surgery and on the rebound.

"That's a little on the fast side," noted Dr. Chowdhry, who holds an academic appointment at the University of Chicago Pritzker School of Medicine. "But reaching a stroke area in the brain within 30 minutes is becoming more common thanks to these technology advancements, which means we're able to save more lives like we did for Andy."

Streiter is amazed by the speed of his recovery. He was awake, alert and fully responsive two hours after the procedure and went home two days later. After a few weeks of physical and occupational therapy, Streiter was back on his bike and has returned to his busy work and family life.

"After two surgeries at NorthShore in two years, I'm filled with gratitude for every member of my care team," added Streiter. "They saved my life not once, but twice!"



**Andy Streiter** is back to regular exercise after suffering a sudden stroke last year.

### NO TIME TO WASTE

Streiter's wife Jamie was still in bed when she heard the door's loud thud. Puzzled, she accessed the security system on her phone and saw her husband lying halfway on the couch. "So, I rewound a little bit and watched the whole thing happen," she said, then ran downstairs and called **911**.

Paramedics arrived within minutes and quickly determined that Streiter had suffered a stroke. Approximately 30 minutes after his collapse, he was in surgery at NorthShore Evanston Hospital.

"I wasn't frightened because the stroke team members were very forthright with me," he said. "Everyone's bedside manner was amazing. They walked me through the entire process, advising me not to panic and reassuring me how lucky I was!"

Streiter was lucky, indeed. Timing is everything, especially when it comes to a stroke.

### FOCUSED ON FAST

"Our goal is to be as fast as possible," said NorthShore Neurological Institute Neurosurgeon Shakeel Chowdhry, MD. "That's why we need as much information as possible when a patient like Andy comes in by ambulance."

NorthShore is the first health system in Illinois to access critical patient information through a new FDA-approved, cloud-based artificial intelligence platform called Viz.ai.

## Act **FAST** to Spot a Stroke

Use the acronym **FAST** to spot stroke signs and know when to call **911**.

### FACE DROOPING

Does one side of the face droop or is it numb? Ask the person to smile. Is the person's smile uneven or lopsided?



### ARM WEAKNESS

Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?



### SPEECH

Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat a simple sentence.



### TIME TO CALL 911

If the person shows any of these symptoms, even if the symptoms go away, call **911** and get them to the hospital immediately.

