

# Three Cost-Saving Discoveries for Stroke Care

*Stroke is the primary cause of disability in the United States, affecting many people during their working years. It is also a major contributor to global mortality. The devastating personal and financial impacts of strokes are staggering. Healthcare administrators and providers continue to pose the question, "How can we decrease expenses while maintaining high levels of care?". Though there is no simple solution, the National Institute of Health (NIH) reports three cost-saving discoveries for stroke care.*

## Key Takeaways

- Stroke is the primary cause of disability, causing significant financial and personal loss.
- Unhealthy lifestyles, lack of understanding and inefficient systems make addressing rising stroke events challenging.
- People can recognize and respond to symptoms that merit a 911 call by utilizing the BE FAST acronym.
- Many healthcare systems have modified ED systems to help increase efficiency, improve outcomes, and reduce healthcare costs.
- Telehealth and observation units provide fast evaluation and the proper intensity of monitoring for patients at risk of a stroke.

## Global expenditures for stroke interventions

According to the NIH, ischemic strokes account for 87% of all stroke incidences, causing approximately 700,000 events annually in the United States. These ischemic stroke events cost more than \$22 billion in direct care expenses. The World Stroke Organization estimates that expenditures for direct and indirect stroke interventions **cost nations worldwide an equivalent of \$700 billion U.S. dollars annually**. Over the past 30 years, stroke events have increased 70%, and stroke-related mortality rates have risen 40%.

While the path to improvement can feel daunting, research indicates that healthcare systems can decrease expenditures while maintaining quality care. The key is to improve efficiency, provide outpatient stroke care, and utilize technological innovations.

## Problems with stroke care

The problem with stroke care is multifactorial. Poor cardiovascular health with an unwillingness to change lifestyle pervades many individuals' lives. Numerous people would not recognize stroke symptoms. Others do not understand that stroke symptoms merit a 911 call. This lack of knowledge prevents many from responding quickly.

Inefficient systems postpone prompt evaluation and treatment. Additionally, 25% of strokes are recurrent, making deciphering stroke mechanisms imperative. The problems physicians face in addressing the increasing stroke incidences are significant. These **tensions and statistics call for novel approaches to stroke prevention and intervention.**

## Cost-saving discoveries for stroke care

With medical expenses rising to unsustainable levels, many organizations are evaluating their systems. With evidence-based changes, organizations aim to reduce costs while delivering quality care.

### Improve efficiencies in two key areas

Intravenous tissue plasminogen activator (IV tPA) is recommended for treating stroke symptoms. The Food and Drug Administration (FDA) approves this medication up to three hours after symptom onset. The national and international guidelines allow IV tPA up to four and a half hours after symptoms begin. The prompt administration of tPA significantly reduces adverse outcomes. However, the delay of treatment is common. Some causes of delays include:

1. Lack of public education regarding stroke symptoms
2. Postponed prehospital emergency care
3. Delays within the emergency department

### Improve efficiency in the public arena

The NIH calls for better public education. People need to know the stroke symptoms, so they can respond quickly. The acronym BE FAST helps people recognize a stroke. Consequently, this knowledge increases efficiency, reduces personal loss and improves outcomes.

- **B**alance: decreased coordination or dizziness
- **E**yes: blurred or double vision
- **F**ace: face drooping or uneven smile
- **A**rms: weakness or numbness in one arm
- **S**peech: slurred speech
- **T**ime: It's time to call 911; this is a medical emergency!

When people notice these symptoms, they should instinctively know to call 911.

### Improve efficiency in the hospital

Hospitals enhance efficiency in their emergency departments (EDs) by addressing systems that delay the treatment of patients presenting with stroke symptoms. So, how can hospitals enhance efficiency?

EDs can improve communication efficiency by utilizing ambulance transport time for preregistration. Neurologists can also use this time to obtain a clinical history. This preparation allows patients to bypass triage and go directly for a CT scan. Additionally, ED staff must be ready to perform lab studies essential for thrombolysis decision-making.

Stroke is a medical emergency, requiring swift evaluation and intervention. Everyone needs to understand the symptoms and be ready to respond quickly.

## Consider alternatives to inpatient care

A transient ischemic attack (TIA) temporarily decreases blood flow to part of the brain. People who experience a TIA are at a higher risk of having a stroke. This fact necessitates evaluation and monitoring.

Traditionally, hospitals have admitted these patients. However, new evidence indicates that **observation units or TIA clinics are safe alternatives with reduced healthcare costs**. Observation units are typically extensions of the ED. According to NIH, an accelerated diagnostic protocol in an observation unit produces safe TIA care with a \$1,643 cost reduction per patient.

These alternatives give patients with a TIA the proper intensity and location of care. Consequently, hospitals can avoid admitting patients at low risk of a recurrent event. This strategy decreases stress for patients and lowers healthcare expenses for stroke care.

## Utilize telehealth technology

Advancements in telehealth capabilities have grown exponentially. However, one of the most significant telehealth contributions is in acute stroke neurology. Patients can receive prompt guidance and treatment with early access to a neurologist.

These audiovisual interactions deliver a quick evaluation and facilitate the treatment of more patients with tPA. Telehealth services allow for direct-to-home discharges, reducing the need for long-term rehabilitation stays. This cost reduction adds up. The **NIH estimates a savings of \$44,000 per hospital annually**.

## Decreasing costs while maintaining quality stroke care

Strokes can occur in a moment and without warning. These devastating neurological events cause personal and financial havoc. As stroke incidences rise, medical expenses associated with stroke care continue to increase. However, implementing these cost-saving techniques can improve efficiency and patient outcomes.

<Facility Name> understands that time is of the essence when it comes to stroke treatment. Our medical staff deliver efficient stroke care. We **strive to get your patients what they need for**

**optimal neurological health.** To learn more about our capabilities, check out our website at <Facility Website>. Or click the "Refer" button to get started.

## Resources

"Stroke Care Costs and Cost-Effectiveness to Inform Health Policy." AHA: Stroke, 2022, Stroke Care Costs and Cost-Effectiveness to Inform Health Policy | Stroke.

"How to save \$1 trillion." World Stroke Organization, 2022, How to save \$1 trillion | World Stroke Organization.

"Cost-saving innovations for acute ischemic stroke and transient ischemic attack." NIH: National Library of Medicine, 2014, Cost-saving innovations for acute ischemic stroke and transient ischemic attack - PMC.