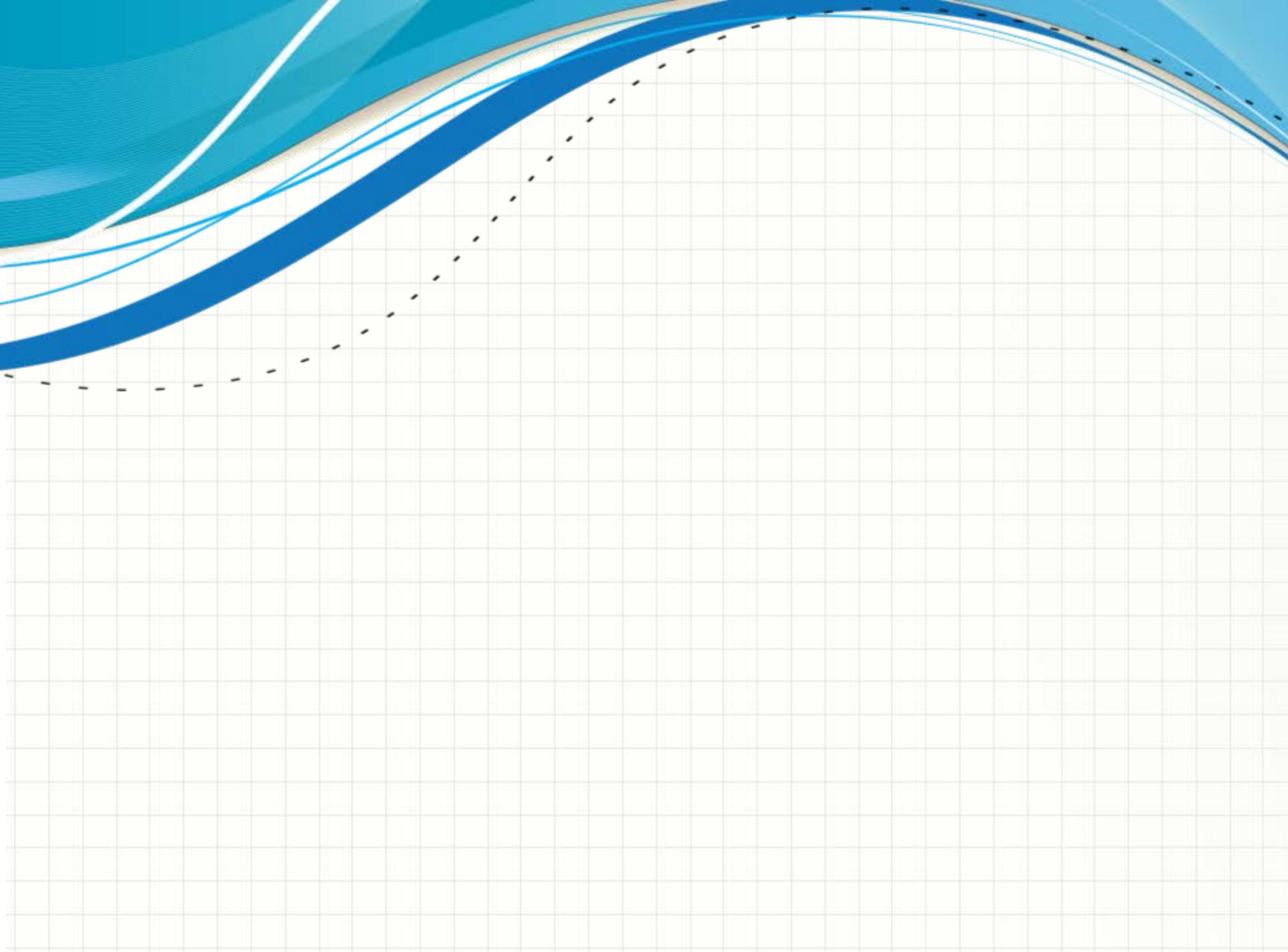


REDUCING THE SERIOUS IMPACT OF STROKE

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The Serious Impact of Stroke

- # 1 reason for long term disability
- 4th leading cause of death
- About **87%** of all strokes are [ischemic strokes](#), when blood flow to the brain is blocked.²
- Stroke costs the United States an estimated **\$36.5 billion** each year.² This total includes the cost of health care services, medications to treat stroke, and missed days of work.

Today's Objectives

- Recognize the **vision** and the need for improving stroke care, especially in rural areas
- Learn how **community education** can change the behavior of stroke victims and bystanders
- Identify how your health department can help reduce the impact of stroke and save lives

1 Challenge

- Illinois Hospitals are ready to respond with door to needle treatment in 60 minutes; but patients are arriving too late and fail to call 911
- **#1 Answer:**
- **Community Education**



PACT TO ACT FAST

- Main Thrust of Pact to Act FAST is to **change behavior** and increase the number of people who call 911 when stroke signs appear.
 - Less than half of acute stroke patients arrive via ambulance
 - Most stroke patients wait 6 hours or more to seek treatment for an acute stroke - IRREVERSIBLE
 - Majority of people arrive beyond the 3-4 hour window for tPA eligibility

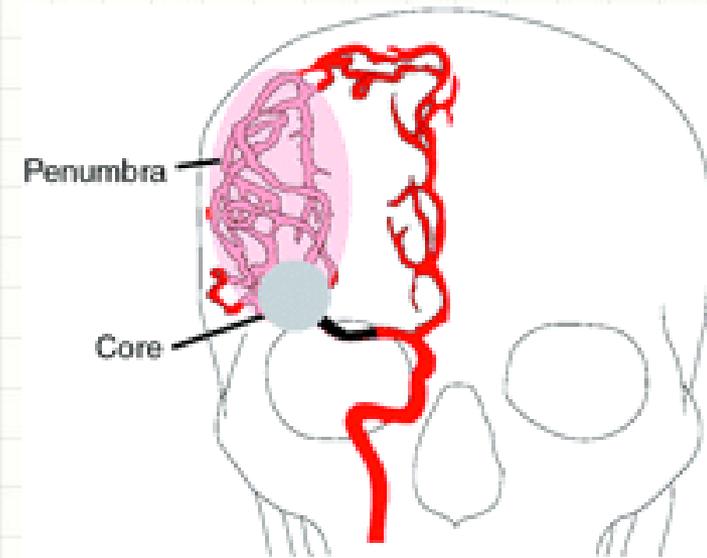
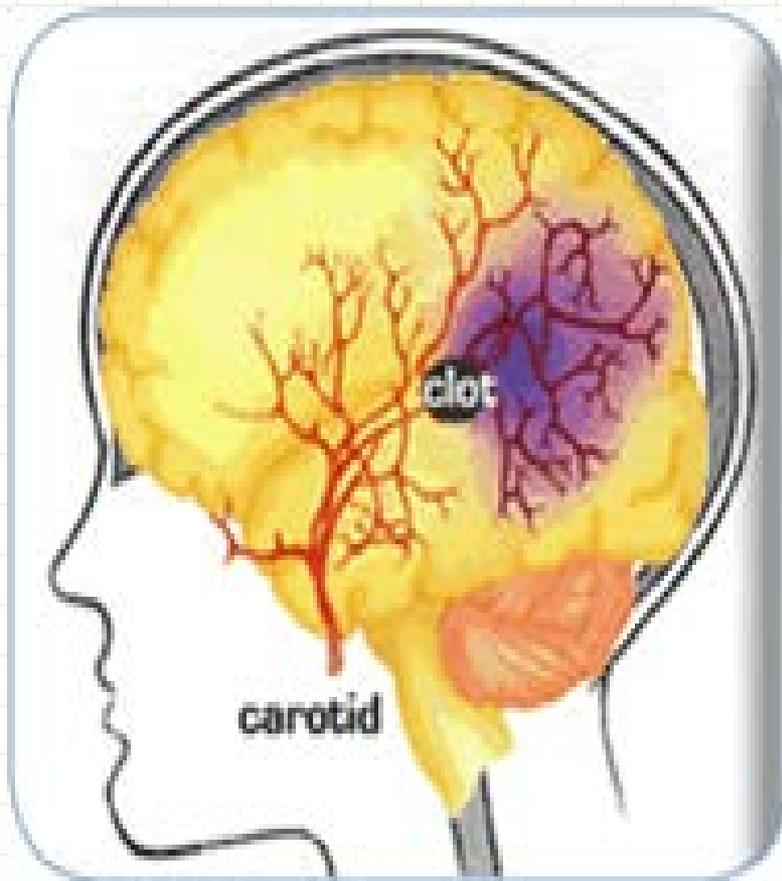


What is so urgent about stroke?

Time is Brain

- Seconds
- Minutes
- Too Late!
- Ischemic stroke produces a severe reduction of blood flow to the brain, which leads to cell death by a variety of mechanisms.
- Cell death occurs within minutes. This is the “core” of the infarct, and tissue rapidly undergoes irreversible injury.
- However, cells in the peripheral zones are supported by collateral circulation. This peripheral region, termed the “ischemic penumbra,” contains tissue that may be salvaged with prompt institution of the appropriate therapy

Brain Rapidly Dies without Oxygen

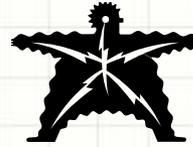


Time is Brain: By the minute

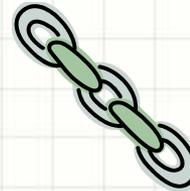
- Typical patient loses 1.9 million neurons each minute in which stroke is untreated.
- 14 Billion synapses are lost each minute
- 7.5 miles of myelinated fiber is lost

Time is Brain: By the Hour

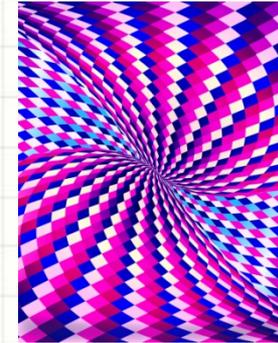
- 120 million neurons



- 830 Billion synapses



- 447 miles of mylenated fibers



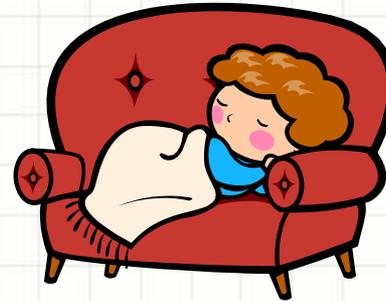
Right Side – Left Side Stroke Deficits

- **Right Brain**
if the stroke occurs in the brain's right side, the left side of the body (and the left side of the face) will be affected, which could produce any or all of the following:
 - Paralysis on the left side of the body
 - Vision problems
 - Quick, inquisitive behavioral style
 - Memory loss
- **Left Brain**
If the stroke occurs in the left side of the brain, the right side of the body will be affected, producing some or all of the following:
 - Paralysis on the right side of the body
 - Speech/language problems
 - Slow, cautious behavioral style
 - Memory loss
- **Brain Stem**
When stroke occurs in the brain stem, depending on the severity of the injury, it can affect both sides of the body and may leave someone in a 'locked-in' state. When a locked-in state occurs, the patient is generally unable to speak or achieve any movement below the neck

NINDS Quote

- *Because stroke injures the brain, stroke victims may have an impaired ability to communicate or to recognize the symptoms they are experiencing as a stroke the burden for quick, efficient action therefore, shifts to an alert bystander (e.g., family, friends, neighbors, coworkers) who must recognize symptoms associated with a stroke (National Institutes of Neurological Disorders and Stroke, 1999).*

Jack's Story



What is the PACT?

- Anytime, anywhere I observe a person with any of the FAST signs of stroke, I will call 911 immediately, even if the person says they want to wait. I know with stroke every second counts and with every second, the average stroke patient loses 32,000 brain cells.
- **A Pact is an agreement that is not to be broken**
- **Ask everyone to take the Pact Personal Pledge and know the signs:**
- F—FACE: Ask the person to smile. Does one side of the face droop?
- A—ARMS: Ask the person to raise both arms. Does one arm drift downward?
- S—SPEECH: Ask the person to repeat a simple phrase. Is their speech slurred or strange?
- T—TIME: If you observe any of these signs, call 9-1-1 immediately



Why Call 911: Key Advantages

- **Ambulance calls ahead to notify hospital that a stroke patient is in transit**
- **Pre-hospital notification allows the team members to meet the patient at the door and take them immediately to the CT Scanner**
- **For the patient, this avoids going to a room, getting registered, getting in a gown etc and means faster overall treatment: Time is Brain**
- **Ensures care during transit if the patient's condition worsens**
- **Ensures patient is taken to a hospital that is prepared to treat stroke within the national guidelines**
- **Call 911 – Don't Wait**

Pact to Act FAST Commitment

- **Make a Pact**
- **With Friends, Family, Coworkers and Others**
- PACT TO ACT FAST
-
- I know arriving by ambulance provides the safest and fastest way to get the patient to the closest and right hospital prepared to treat every stroke patient as a priority.
- I want to make a difference in the life of someone suspected of having a stroke so I will remember the FAST signs of stroke and recognize TIME is Brain so I need to act fast.
- I know stroke is an Emergency so I will call 911 even if the stroke patient objects.
- I know rapid intervention is crucial to the treatment of stroke and the person having the stroke is not the best one to decide when to call for help as they may be confused, afraid, or worried about costs.
- I know even in the rural areas, we have hospitals Designated by the State of IL as Stroke Ready Hospitals capable of providing the best care and treatment for stroke.
- I will stay aware of the FAST signs of stroke: Face-Arms- Speech and Time
- I know patients must arrive in time for treatment to reduce permanent brain damage.
-
- **I agree to Act Fast when I see someone with the sudden signs of stroke. As a bystander, I will call 911 immediately even if the stroke victim objects because I know Time lost is Brain lost.**
-
- I agree to follow the Pact Pledge: Your Name _____



Pact to Act FAST TEAM

- Health Departments
- 219 Rural Health Clinics
- 53 CAH and all other hospitals in the state
- Parish Nurses
- EMS: 329 rural agencies plus others
- Stroke Support Groups
- Now expanding to other states



Pact to Act FAST Target Audiences

- Schools
- Churches
- Work Places
- Community Organizations
- Small Businesses and Restaurants (posters)
- Other: scouts, grocery stores, stroke month events at our hospitals, senior centers



Resources Provided: Free!!

- On- Line Guidebook of recommended activities
- **Community Education PowerPoint**
- **Magnets**
- **Wallet Cards**
- **Individual Table Tents**
- **Display Table Easels with FAST signs**
- **Posters**
- **What Every Family Should Know Card**
- **Bookmarks**
- **Plan Ahead for Stroke, Fire & Tornado Card**
- **PACT Promise Cards**
- **Stroke Month Special Activities and materials**



Outcomes 2013

- Outreach to Counties: 72
- people signed the pledge: 20,600
- Shipped pieces of materials: 103, 000
- Track Outcomes by:
 - Quantity shipped
 - People reached
 - By county
 - By organization type reached
 - By team member type providing service



Measure Improvement with GWTG

- Percent of patients arriving within targeted time frame
- Percent of patients receiving tPA
- Percent who arrive by ambulance
- Overall outcomes for our hospitals to reflect the quality available to those who arrive in time

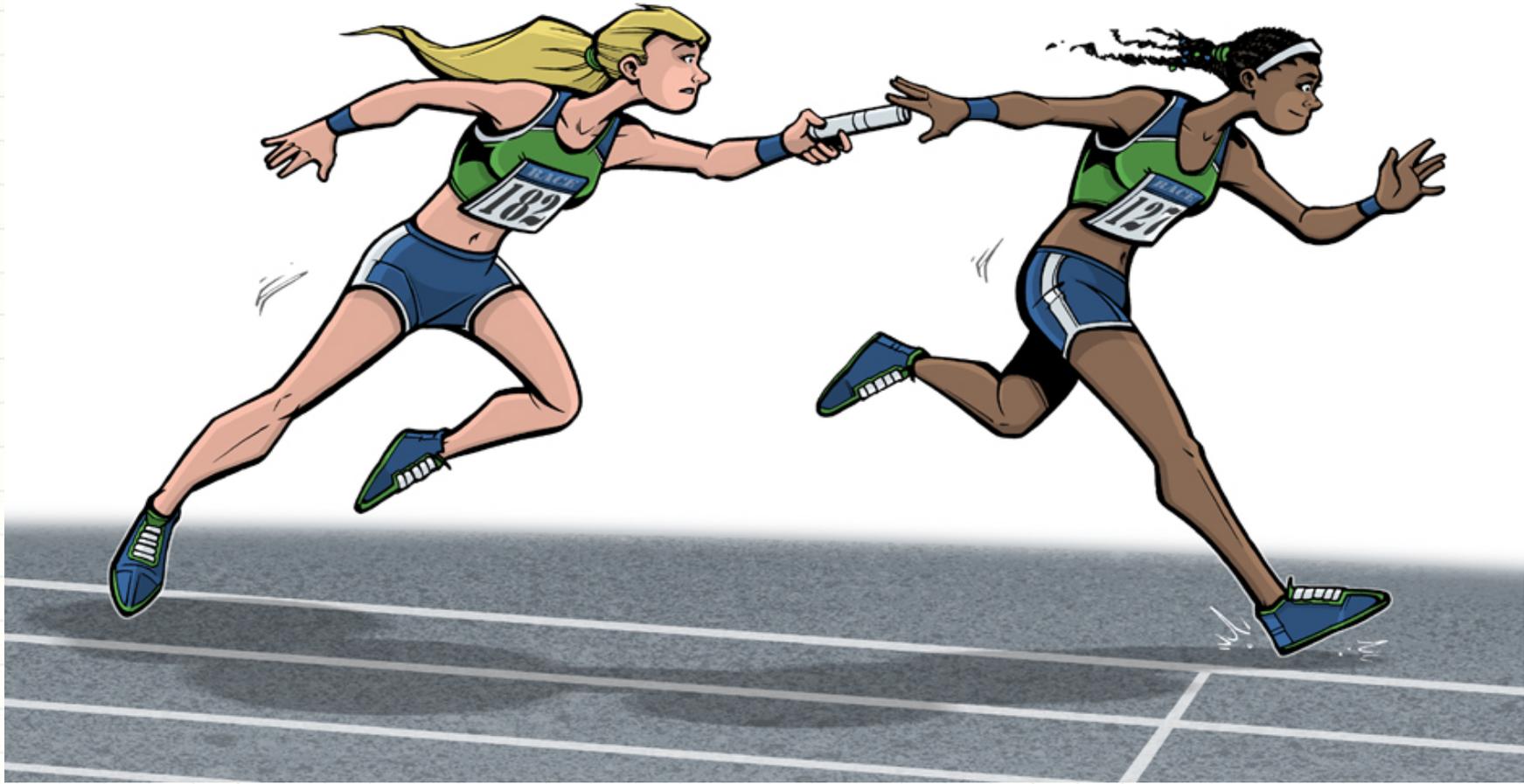


Measure Improvement with GWTG

- 2012-2013 Patients arriving by ambulance
 - 20% increase
- 2012-2013 Patients arriving in time for tPA
 - 20% increase



Team Effort- Collaborating with hospitals



Future Costs of Stroke Related Care

stroke.ahajournals.org 2013;44:2361

- 2012 to 2030: \$71.55 Billion to \$183.13 billion
- Lost Productivity costs: 33.65 billion to 56.54
- Our population is aging: Number of strokes doubles with each successive decade after the age of 55
- By 2030 about 4% of all American's will have suffered a stroke

We Need Your Help

May is Stroke Month- include Stroke in all your normally scheduled activities

Flu Clinics

WIC Classes

Classes for Women

Displays in your lobby or waiting area

Posters in meeting rooms

Strategy: Pass It On Challenge

Use the pledge cards as a challenge: Ask each one who signs the pledge to take 3 more and educate 3 family members, friends, co-workers, etc.

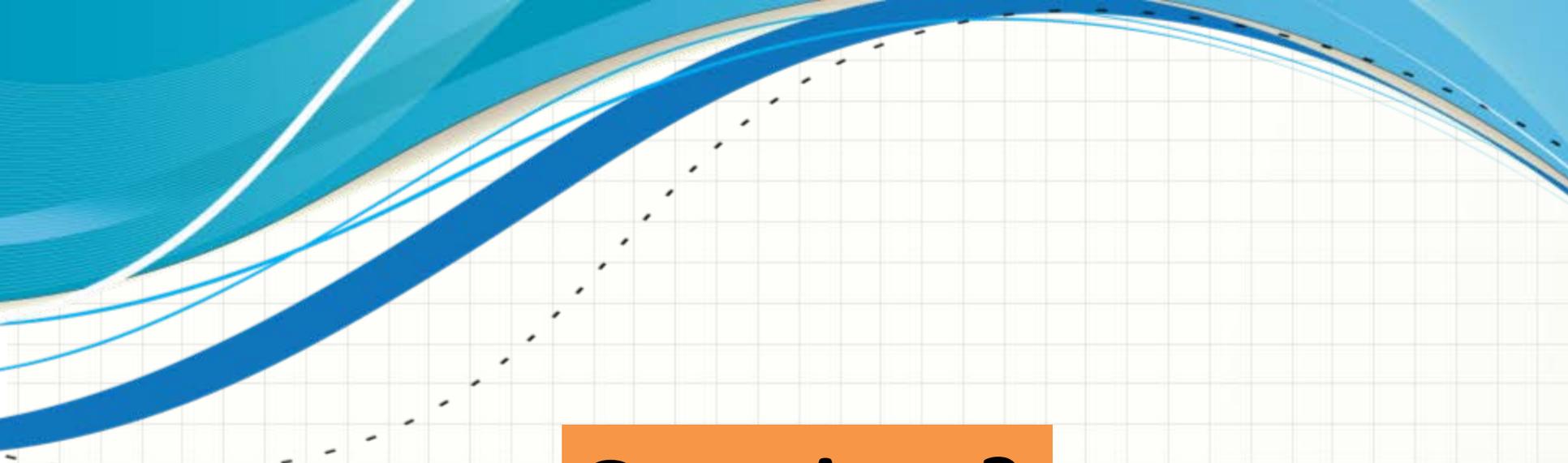
Ask your participants if they have a group they could present to using the Pledge Card and free materials as their guide.

Think outside of your workplace: Where can you take this message in your private, daily life

Make sure your partners know this free offer is available to them as well.

Why Give your time to Stroke

- Because Time is Brain
- Devastating Impact
- You can make a difference



Questions?