Patient Information

Patient Name: ________________________________
Admission Date: ______________________________
Discharge Date: ______________________________

Primary Care Physician: ________________________________
Name: ______________________________
Phone Number: ______________________________
Fax: ______________________________

Neurologist: ______________________________
Name: ______________________________
Phone: ______________________________
Fax: ______________________________

Other Specialist
Specialty: ______________________________
Name: ______________________________
Phone: ______________________________
Fax: ______________________________

If you have received this education brochure after being diagnosed with a TIA please be advised this is for informational purposes only. Your physician will be able to provide you with specific information regarding your diagnosis.
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If you have any questions or concerns, please contact our Stroke & Chest Program Coordinator at 201-383-1070 or 201-781-1023.
Purpose of this Booklet

This information does not replace any information or treatment you receive from your doctors, nurses or other members of your healthcare team. It is meant as a supplement to help you more fully understand the information you are currently receiving on your condition, treatment and rehabilitation.

Preparation, education and good communication are essential to the success of the treatment process. The goal is for you to understand:

- What to expect every step of the way
- What you need to do in each phase
- How to incorporate positive lifestyle changes

Remember this is only a guide! Your doctors, nurses or therapists may add or change some of the recommendations. Always take their recommendations first, and ask questions if you are unsure of any information. Keep this booklet as a hand reference.

Patient Education Stroke Prevention and Recovery

**ISCHEMIC STROKE**

**General Information:**

*What is an ischemic stroke?*
An ischemic stroke occurs when blood is suddenly blocked and cannot flow to your brain. The block is usually caused by a blood clot that gets stuck in a narrow blood vessel. When oxygen cannot get to an area of the brain, tissue in that area may get damaged. Damage to an area of the brain causes loss of body functions controlled by that area.

*What is a hemorrhagic stroke?*
A hemorrhagic stroke happens when a blood vessel in your brain bursts. This may happen if the blood vessel wall is weak, or if the blood clot damages the blood vessel. Blood then flows out of the vessel and damages brain tissue.
What are the signs and symptoms of an ischemic stroke?
Signs or symptoms may begin suddenly and worsen quickly. One of more of the following may appear minutes or hours after a stroke and worsen quickly:

- Severe headache
- Blurred or double vision, or vision loss
- Numbness, tingling, weakness, or paralysis on 1 side of your body
- Trouble walking or communicating
- Dizziness, confusion, or fainting

How is an ischemic stroke diagnosed?
Your healthcare provider and radiology technician will ask about your symptoms and when they started. He/she will ask if you have any medical conditions. The following tests help your healthcare provider know where the stroke happened, and how much damage you have.

- **CT or MRI scan:** Pictures of your skull and brain are taken. Dye may sometimes be given to help the pictures show up better. If you have ever had any allergic reaction to contrast dye, it is important to let your healthcare provider know. Do not enter the MRI room with metal. Metal can cause serious injury, so it is important to tell your healthcare provider if you have a metal implant.
- **Arteriography:** X-rays are taken of your arteries to look for blood flow blockage.

How is ischemic stroke treated?

- **Medicines:** You may need to take medicine to break up blood clots or to prevent them from forming. You may also need medicine to treat diabetes, depression, high cholesterol, or blood pressure problems. You may need medicine to decrease the pressure in your brain, reduce pain, or prevent seizures.
- **Rehabilitation:** Rehabilitation is an important part of treatment. Physical therapists strengthen your arms, legs and hands. You learn exercises to improve your balance and movement to decrease the risk of falling. Occupational
therapists teach you new ways to do daily activities, such as getting dressed. A speech therapist helps you relearn or improve your ability to talk and swallow.

- **Ventilator:** You may need to get oxygen through a ventilator if your stroke affects your ability to breathe. A tube is put into your airway through your nose, mouth or an incision in your neck. The ventilator gives you oxygen through the tube.

- **Surgery:** You may need to have a tube placed in your skull. The tube drains extra fluid and checks the pressure in your brain. You may also need surgery to widen arteries or to place a filter into a blood vessel. Surgery can improve blood flow and prevent blood clots.

- **Bladder and bowel training:** You may have trouble controlling when you urinate or have bowel movements. This training can help your skin stay clean and dry, and help prevent skin breakdown.

- **Swallow Therapy:** A therapist can help you learn safe ways to swallow to prevent coughing and choking.

- **Pressure Stockings:** These are long, tight stockings that put pressure on your legs to promote blood flow and prevent clots. You may need to wear pressure stockings before or after surgery or if you have poor circulation.

- **Pneumatic boots; Inflatable boots are put on your legs:** These boots are connected to an air pump. The pump tightens and loosens different areas of the boots. This helps improve blood flow to prevent clots.

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**What increases my risk of an ischemic stroke?**

- You are at least 55 years old
- You are a man
- You are African American
- You are a woman and use birth control pills, or you take hormone replacement medicine
- You are pregnant or had a baby within the past 6 weeks
- Your father or mother had a stroke, or you had a low birthweight
• You have high blood pressure, blood vessel disease, or sickle cell anemia that is not being treated
• You have atrial fibrillation, diabetes, or another heart condition

**What can I do to decrease my risk of a stroke?**

- **Manage health conditions:** High blood pressure, diabetes, and high cholesterol can all increase your risk of stroke. Take your medicine as directed. Follow your healthcare provider’s instructions to check your blood pressure and blood sugar levels. Write the numbers down to show him/her.

- **Eat healthy foods:** Healthy foods can help prevent or manage high blood pressure, high cholesterol, and diabetes. Eat foods that are low in fat, cholesterol, salt and sugar. Eat at least 5 servings of fruit and vegetables each day. Eat foods that are high in potassium such as potatoes and bananas. If you take warfarin, it works best when you eat about the same amount of vitamin K each day. Vitamin K is found mainly in leafy green vegetables. Ask your healthcare provider for a list of other foods that contain vitamin K.

- **Reach or stay at a healthy weight:** Weight loss can decrease your blood pressure and your risk of stroke. Ask your healthcare provider how much you should weigh and how to lose weight safely. Ask your healthcare provider how often you should exercise and which exercises to do. You will need to exercise carefully after a stroke so you do not fall.

- **Limit Alcohol:** Men should limit alcohol to 2 drinks per day. Women should limit alcohol to 1 drink per day. A drink of alcohol is 12 ounces of beer, 5 ounces of wine, or 1-1/2 ounces of liquor.

- **Do not use street drugs or smoke cigarettes:** Your risk of stroke increases if you use drugs such as cocaine, or you smoke cigarettes. Ask your healthcare provider for help if you are having trouble quitting.
**What are the risks of an ischemic stroke?**
You may get blood clots that can break loose and travel to your lungs or brain. You may have another stroke or go into a coma. You may be paralyzed on one or both sides of your body. You may not be able to care for yourself or live alone. You are at greater risk of falling. You may develop muscle shortening or bedsores. Even with treatment, you may have lasting problems talking, thinking or moving your body. Without treatment, your risk for another stroke increases. You may die from a stroke.

**How can I tell if someone is having a stroke?**
Know the F.A.S.T test to recognize the signs of a stroke:

**F = Face:** Ask the person to smile. Drooping on one side of the mouth or face is a sign of a stroke.

**A = Arms:** Ask the person to raise both arms. One arm that slowly comes back down or cannot be raised is a sign of stroke.

**S = Speech:** Ask the person to repeat a simple sentence that you say first. Speech that is slurred or sounds strange is a sign of stroke.

**T = Time:** Call 911 if you see any of these signs. This is an emergency.

**When should I contact my healthcare provider?**
Contact your healthcare provider if:

- Your blood pressure is higher or lower than you were told it should be.
- You have skin tears, or sores on your heels, head, or buttocks, from lying in bed.
- You have bowel movement problems.
- You have questions or concerns about your condition or care

**When should I seek immediate care?**
Seek care immediately or call 911 if:

- You have a seizure.
- You have double vision or vision loss.
- You are bleeding from your rectum or nose.
• Your arm or leg feels warm, tender, and painful. It may look swollen and red.
• You have chest pain that spreads to your arms, jaw and back
• You suddenly feel dizzy, lightheaded, and have shortness of breath.
• You have chest pain when you take a breath or cough. You may cough up blood.
• You have weakness or numbness in your arm, leg or face.
• You are confused and have problems speaking or understanding speech.
• You have a severe headache, or loss of balance or coordination.

While you are here:
Informed consent is a legal document that explains the tests, treatments or procedures that you may need. Informed consent means you understand what will be done and can make decisions about what you want. You give your permission when you sign the consent form. You can have someone sign this form for you if you are not able to sign it. You have the right to understand your medical care in words you know. Before you sign the consent form, understand the risks and benefits of what will be done. Make sure all your questions are answered.

IV: You may need an IV to give you medicine or liquids if you cannot swallow. Some IV lines can also be used to collect blood samples.

Tests:
• Blood Tests: You may need routine blood tests while you are being treated for your stroke. If you are getting medicine to prevent blood clots, you may need extra tests. These tests can tell healthcare providers if you are getting the right amount of this medicine. If you are on a ventilator, you may need blood gas tests to check your oxygen level.
• Arteriography: X-rays are taken of your arteries (blood vessels) to look for blood flow blockage.
• **Carotid Ultrasound:** This test uses sound waves to show the blood flow in your carotid arteries. The carotid arteries are blood vessels in your neck that carry blood to your brain. A carotid ultrasound checks for narrow or blocked carotid arteries.

• **Swallow study:** X-rays are taken as you swallow certain foods and drinks. This test shows if food and liquids travel to your stomach correctly.

**Monitoring:**

**Oxygen:** Your oxygen levels will be monitored. If needed, you will be given extra oxygen if your level drops too low.

**Neurologic Exam:** A neurologic exam can provide important information on how well your brain works after an injury or illness. A healthcare provider will check how your pupils (black dots in the center of each eye) react to light. They may check your memory and how easily you wake up. Your hand grasp and balance may also be tested.

**Intake and output:** Your healthcare provider may need to know the amount of liquid you are getting and how much you are urinating. A foley catheter may be placed in your bladder to drain your urine into a bag. The catheter will be removed as soon as possible to prevent infection.

**ICP monitor:** A small tube is put through your skull and connected to a screen. Healthcare providers use the ICP monitor to keep ongoing measurement of the pressure inside your skull.

**Feeding Tubes:** You may need a feeding tube if you cannot swallow food or liquids well. The tubes may also be used to let air or fluids out of your stomach.

• **NG tube:** A nasogastric tube (NGT) goes from your nose to your stomach

• **G Tube:** A “gastric” tube (“G” tube or “PEG” tube) is placed from outside of your body into your stomach. Other types of tubes that you may need:

• **J Tube:** a J tube is put through a small incision in your abdomen. The end of a J tube goes into your small intestine.
• **GJ tube:** A GJ tube goes into both your stomach and small intestine.

**Surgery:**
• **Ventriculostomy:** A tube is placed into your skull to drain extra fluid. This tube also checks the pressure in your brain.
• **Craniotomy:** A healthcare provider removes blood from your brain or fixes a damaged blood vessel.
• **Carotid endarterectomy:** This surgery widens the arteries so that blood can flow through more easily.
• **Blood vessel filter:** You may need a filter placed in your blood vessel to prevent complications of a blood clot from your leg (DVT).

**After you leave:**

**Medicines:**
• **Antiplatelets:** These prevent blood clots from forming. Aspirin is an antiplatelet. If you are told to take aspirin, do not take acetaminophen (aka Tylenol) or ibuprofen (aka Advil, Motrin) instead. Do not take more or less aspirin than directed.
• **Anticoagulants:** You may need to take an anticoagulant to prevent blood clots. Anticoagulants prevent blood clots by thinning the blood. Warfarin is an anticoagulant. Take your medicine exactly as directed. Tell your primary healthcare provider if you forget to take it, or if you took too much. Anticoagulants may cause you to bleed or bruise more easily. Use a soft toothbrush and an electric shaver. Wear medical alert jewelry or carry a card that says you take an anticoagulant. Tell all healthcare providers, including your dentist, that you take this medicine.
• **Other medicine:** You may need medicine to treat diabetes, depression, high cholesterol, or blood pressure problems. You may need medicine to decrease the pressure in your brain, reduce pain or prevent seizures.
• **Take your medicine as directed:** Call your primary healthcare provider if you think your medicine is not helping or if you have
side effects. Tell him if you are allergic to any medicines. Keep a list of the medicines, vitamins and herbs you take. Include the amounts, and when and why you take them. Bring the list or the pill bottles to follow up visits. Carry your medicine list with you in case of an emergency.

Follow up with your primary healthcare provider or neurologist as directed:

You may need to come in for regular tests of your brain function. If you are taking warfarin, you will need to come in for regular blood tests. Your INR levels will also need to be checked. These tests help make sure you are taking the right amount of warfarin. Write down your questions so you remember to take them during your visits.

For support and more information:

National Stroke Association
9707 E. Easter Lane
Centennial, CO 80112
Phone 1-800-787-6537
Web address: http://www.stroke.org

FOOD & NUTRITION SERVICES
As a patient here at HackensackUMC at Pascack Valley your diet will be ordered by the practitioner responsible for your care, be it the neurologist, your own physician, or a nurse practitioner. The order may be NPO-Nothing By Mouth-or a Dysphagia Diet, which focuses on providing food which enhances your ability to swallow. If you do not have a swallowing problem, the diet will focus on how your food choices can help you to manage medical problems such as Hypertension, Diabetes, or High Cholesterol. You will be visited at bedside by a representative from Food & Nutrition Services to obtain your food choices for the day, and for breakfast the following day. The choices are entered into the computer system, but if you change your mind or want something between meals, you can call the Diet Office. A registered dietitian is available to assist you prior to discharge on your diet prescription so you will have detailed instructions on what you are allowed to eat at home. When you go home you may also call the dietitian for further advice.
REHABILITATION SERVICES

The rehabilitation process depends on factors such as the presentation of the stroke (functional limitations) and the location and size of the stroke (the affected area in the brain).

Most people require therapy before regaining independence and safety with a regular daily routine at home.

Rehabilitation services may include:

- Physical Therapy: assess and assist functional mobility such as walking, bed mobility, leg function.
- Occupational Therapy: assess and assist cognitive abilities, self-care, and upper extremity function.
- Speech Language Pathologist: assess and assist difficulties speaking, understanding, and/or swallowing.

The rehabilitation process usually begins in the hospital and may continue in one or several of the following locations: an acute rehabilitation facility, sub-acute rehabilitation facility, in your home or at an outpatient facility.

Family contribution to the Rehabilitation Process

1. Encourage attention to and movement of the affected side by:
   - Placing objects on the weaker side (call bell should always be placed on the unaffected side and within reach of patient’s strong hand).
   - Encourage skin stimulation on the affected side by softly rubbing arm, leg and face, applying lotion, or wet wash cloth.
   - Using the strong arm and hand to touch the affected side on the arm leg and face.

2. Protect the affected side by using pillows and towels for positioning.

3. Support the whole arm including wrist and hand on pillow, keeping the hand in a slightly open position.
   - Support the ankle in 90 degrees of flexion when patient is lying on their back.
Promoting Your Recovery and Safety at Home

- Emphasize use of the weaker side with all activities
- Use a walker or cane during walking activities as recommended by your therapist.
- If necessary, have someone else walk with you in order to ensure your safety.
- Arrange for culinary services (i.e. meal delivery to your home or someone else cooking for you) if cooking activities are hard to perform.
- Promote safety at home by providing adequate lighting in the rooms and hallways. Arrange for obstacle-free space for passage.

Our goal is to promote the highest level of independence based on your injury or illness.

**RECOVERY**

Since medications play an important role in your ongoing treatment and recovery, knowing how your medicines work will give you a better understanding of why they are necessary in your treatment.

**Anticoagulants:**

- **Coumadin** - prevents blood clots from forming or growing larger in your blood and blood vessels
- **Lovenox** - prevents blood clots by stopping the formation of substances that cause clots.

**Antiplatelet Medications:**

- **Aspirin** - helps to reduce the tendency for blood to form clots
- **Plavix** - helps keep platelets from sticking together and forming clots

**Blood Pressure Medications: ACE Inhibitors and ARBS** - help to keep blood vessels from narrowing

**Calcium Channel blockers** - help to widen arteries
**Beta Blockers**—help to reduce the harmful effects of stress hormones on the heart.

**Diuretics**—help to remove excess water and salt from the body.

**Cholesterol Medications:**

**Statin**—help to lower the amount of “bad” cholesterol in the blood to reduce the buildup of plaque in the artery walls which may rupture, leading to clot formation.

This guide was designed to help you and your family during your recovery. The websites below can also be helpful in providing you further information and support during your recovery.

**American Stroke Association:** [www.strokeassociation.org](http://www.strokeassociation.org)

**National Stroke Association:** [www.stroke.org](http://www.stroke.org)

**Power to End Stroke:** [www.powertoendstroke.org](http://www.powertoendstroke.org)

**National Institute of Neurological Disorders and Stroke:** [www.ninds.nih.gov](http://www.ninds.nih.gov)

**American Heart Association:** [www.americanheart.org](http://www.americanheart.org)

**Notes/Questions for Your Doctors**

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