

PATIENT EDUCATION PLAN: STROKE

LEARNING OBJECTIVES	CONTENT	RESOURCES/METHODS		EVALUATION
<p>1. Information regarding: Disease Process and/or Surgery Procedure</p>	<p>Based upon P/F/C expressed interest, use the information included in the stroke packet to explain the following information:</p> <ol style="list-style-type: none"> Define what a stroke is. A stroke is a sudden disruption in blood flow to the brain. The blood supply is cut off and brain cells are damaged. Body functions controlled by the area are impaired. Describe the type of stroke: <p>Ischemic - this is the most common type of stroke & it is caused by the blockage in an artery that decreases or stops blood flow to the brain. Atherosclerosis is a disease in which plaque build-up causes such a narrowing of the artery wall.</p> <p>Embolic - Is the blockage of an artery in the brain by a clot that has traveled from some other part of the body. The blockage does not allow the blood to flow past that point.</p> <p>Hemorrhagic - This type of stroke occurs when a blood vessel bursts in the brain or the vessel leaks blood into the brain tissue, allowing the amount of blood that is supposed to flow through the artery beyond that point to leak out into the brain.</p> Discuss the impairments of stroke in relation to the area of the brain affected. <p>The left side of the brain controls speech and language in most people. Impairments can be mild or great to these areas:</p> <ul style="list-style-type: none"> Weakness, paralysis or numbness on the right side of the body. Speech and other language difficulties. The inability to think or understand everything clearly. Swallowing problems. Difficulty seeing or blind spots. <p>The right side of the brain controls the ability to understand non-verbal Communication and the awareness of where things are around you.</p> <p>Symptoms include:</p> <ul style="list-style-type: none"> Weakness, paralysis or numbness on the left side of the body. Difficulty with tasks that require an ability to judge the distance of where objects are. Difficulty reading and writing. 	<p>Nurse</p> <p>Physician</p> <p>Stroke Packet</p> <p>CCTV</p> <p>Stroke Team</p> <p>Neuro Clinical Nurse Specialist</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Audio visual</p> <p>Discussion</p> <p>Discussion</p>	<p>P/F/C able to verbalize understanding of pathophysiology and type of stroke they have experienced and what to expect.</p>

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<p>1. Information regarding: Disease Process and/or Surgery Procedure</p> <p style="text-align: center;">(Continued)</p>	<ul style="list-style-type: none"> • Poor judgment, difficulty knowing what is safe to do. • Difficulty seeing to the left. • Quick movements, impulsive behavior. • Short attention span. • Difficulty problem solving and other thinking abilities. • Quick mood swings from high to low. • Anxiety, agitation. • Neglect/Inattention = denial/ignoring that problems on the one side of the body are real. (extreme may be not knowing the one side of the body is a part of you.) <p>The Brainstem-Controls many of the necessary body functions. Damage Can cause:</p> <ul style="list-style-type: none"> • Blood pressure and heart rate changes. • Breathing and swallowing problems. • Nausea &/or vomiting and/or movement • Changes in body sensation on one or more areas of the body. • Visual problems <p>The Cerebellum-Controls balance, coordination and reflexes. Damage can cause:</p> <ul style="list-style-type: none"> • Balance coordination = difficulty walking, eating, writing, etc. • Dizziness, nausea & vomiting. 			
<p>2. Diagnostics/Tests</p>	<p>Explain the applicable tests, test preparations and procedures to the P/F/C.</p> <ol style="list-style-type: none"> 1. CT scan-takes specialized films of the brain, the pictures enable the doctor to determine the type of stroke. 2. MRI/MRA scan-takes specialized films of the brain in detail that helps to identify the area of the brain affected. 3. Lab tests-to rule out other causes for the symptoms of stroke. (CBC, Chemistries, PT & PTT, UA) 4. EKG-to determine if the heart rate and rhythm type are a source of clots. 5. Chest x-ray-rule out respiratory infection (pneumonia) other causes for the symptoms of stroke. 	<p>Nurse</p> <p>Physician</p> <p>Radiologist</p> <p>Neurodiagnostic Lab</p> <p>Rehab Services</p> <p>Stroke Packet</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Written Materials</p>	<p>P/F/C able to identify 3 common tests/procedures used to diagnose their stroke.</p>

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<p>2. Diagnostics/Tests</p> <p style="text-align: center;">(Continued)</p>	<p>Other tests may also be ordered to include:</p> <ol style="list-style-type: none"> 1. Carotid Doppler-to determine carotid artery occlusion as a source for decreased blood supply to the brain. 2. 2D Echo-cardiogram-to determine cardiac source of emboli (clot). 3. Lumbar Puncture-to determine if cerebral spinal fluid is contaminated with blood, bacteria, virus or other cells which would explain the symptoms of stroke or verify the extent of a hemorrhagic stroke into the ventricles. 4. Cerebral Angiogram-used to give a clear view of the vessels involved in stroke. 5. EEG-to measure brain electrical activity which can help the doctor determine if there is seizure activity or not. 6. Fluoro-study-done by speech therapy, with barium, to determine extent and type of swallow difficulty. 7. TEE-View the heart closer with ultrasound. This test lets the doctor view the heart valves to see if there are any clots. 	CCTV	Audio Visual (See TV guide)	
<p>3. Medications/Pain Management</p>	<p>Discuss all medications currently prescribed. Include dosage, reason prescribed, administration instructions, side effects and symptoms to report to the physician/nurse.</p> <p>Anticoagulants: Heparin and Coumadin are used to prevent any further clotting, thereby preventing the stroke from progressing or a new stroke. Typically used when larger vessels are involved.</p> <p>One side effect is a higher potential for bleeding in the stroke area or other parts of the body. Blood tests will be done to keep the blood level where the doctor feels it is best for you. Let the nurse/doctor know if you have any bruising or bleeding going on.</p> <p>Antiplatelets: are used to decrease the stickiness of platelets, decreasing the chances of thrombus forming. You will need to let the nurse/doctor know about any side effect of bleeding in any part of the body.</p> <p>Calcium Channel Blockers: Nicardipine, Verapamil: cause the heart arteries to open up; it is used to control heart rhythm and sometimes blood pressure.</p>	<p>Nurse</p> <p>Physician</p> <p>Pharmacist</p> <p>Protocol for Pain Management</p> <p>CCTV</p> <p>Patient Rights and Responsibilities for Pain Management</p> <p>Stroke Packet</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Nursing Process Standard</p> <p>Audio Visual (See TV guide)</p> <p>Brochures</p> <p>Written Materials</p>	<p>P/F/C able to verbalize acceptance of medication regimen and demonstrate compliance with instructions associated with the medication therapy.</p> <p>Able to communicate pain rating, using age specific (e.g., 0 - 10 pain rating scale).</p> <p>Able to discuss methods of pain control prescribed, side effects to report, and responsibility for reporting unrelieved pain.</p>

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<p>3. Medications/Pain Management (Continued)</p>	<p>Nimodipine: to control brain blood vessel spasms.</p> <p>Calcium channel blockers can cause sudden changes in blood pressure or in heart rate. Nurses will be checking your blood pressure and heart rate regularly.</p> <p>Antihypertensives: Used to keep your blood pressure from getting too high and to keep up a good blood flow to the brain.</p> <p>PAIN MANAGEMENT: Discuss the following information with the P/F/C:</p> <ol style="list-style-type: none"> 1. Importance of requesting pain medication before pain occurs (if it can be predicted) and before it increases. 2. Use of the appropriate age specific pain rating scale (e.g., 0 – 10 is 0 = no pain and 10 = worst possible pain). 3. Goals for pain management based on patient’s diagnosis and activity expectations. Ask the patient what pain rating would be acceptable or satisfactory to him/her. This is the comfort (pain relief) goal. Emphasize to the P/F/C that satisfactory pain relief is a level of pain that is not distressing (e.g., noticeable but not bothersome), and that a pain rating equal to or less than that number should be maintained as much as possible. Be specific about the activities that accompany the pain rating goal e.g., one that enables the patient to sleep, eat and perform other required or desired physical activities. 4. Frequency of pain assessments e.g., explain that they will be asked to rate their pain at least once every eight hours, or more often as condition warrants. 5. Explain that pain rated above the comfort (pain relief) goal will trigger an analgesic dose increase, additional analgesic or other pain relief intervention. 			

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4. Nutrition/Hydration	<p>Discuss the need for adequate nutrition/hydration in the healing process. Sometimes when the inability to take in enough nutrients due to fatigue or poor swallow are present, other methods of nutrient delivery may be required. If swallow is impaired discuss that a swallow evaluation may be ordered to determine degree of impairment and recommend therapies.</p> <p>Nasogastric tube - explain that the NG tube is placed down one nostril and continued until it enters the stomach. A specific formula is run directly into the stomach to supplement/replace a normal diet.</p> <p>Textured diets - explain that when swallow is impaired there is a risk for food and liquids to enter the lungs and cause pneumonia. Texture modified diets may be recommended by therapists to assist in swallowing and prevent pneumonia.</p> <p><i>A special "thickener" is available through Nutritional Services to go home with the patient.</i></p> <p>IV fluids- may be given to provide enough hydration.</p>	<p>Nurse</p> <p>Physician</p> <p>Dietician</p> <p>Speech Therapist</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Discussion</p>	<p>P/F/C able to verbalize the importance of adequate nutrition and hydration.</p> <p>P/F/C can demonstrate/verbalize safety precautions for swallowing.</p>
5. Mobility/Activity	<p>Explain the importance of:</p> <p>Physical Therapy: it is required when strength and endurance are affected by the stroke. It will assist in learning:</p> <ul style="list-style-type: none"> • Safe transfer and mobility techniques. • Active ROM to prevent blood clots in the legs, skin breakdown, and muscle wasting. • Splinting to prevent contractures. <p><i>You may ask the family to bring in tennis shoes a size larger than usual to use as foot drop splint.</i></p> <p>Occupational Therapy: is required when new techniques are needed to accomplish everyday activities, such as: bathing, eating, dressing, etc.</p> <p>Speech and Swallow Therapy: To assist with making safe diet choices as well as work with speech difficulty related to stroke.</p>	<p>Nurse</p> <p>Physician</p> <p>Rehab Services</p> <p>Stroke Packet</p> <p>Nurse</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Written Materials</p> <p>Discussion</p>	<p>P/F/C will be able to verbalize and demonstrate safe mobility techniques.</p> <p>P/F/C will be able to verbalize the need for adequate amount of rest and activity.</p>

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5. Mobility/Activity (Continued)	Explain that rest is as important as mobility/activity. Daily activities need to be spread out to prevent over fatiguing. Healing takes place with a balance of rest and activity. Explain that fatiguing easily after a stroke can go on after discharge. The doctor may decide that further rehabilitation may be needed to build up endurance.			
6. Equipment	<p>Discuss all equipment involved with the patient’s care at bedside. Include function, purpose and return demonstration as appropriate for any of these that apply:</p> <p>IV- (Intravenous catheter): A small catheter placed in the blood vessel, in the hand or arm, to supply fluids/medications. It will be changed every 3 days. Patient/family need to inform staff if swelling, redness or pain is present</p> <p>Oxygen: <i>Is a medication.</i> It is delivered from a wall unit or tank through a tubing or mask to help keep the blood oxygen level up.</p> <p>Feeding Pump: Is a machine that delivers fluids (formula or other liquids) through tubing that connects to an NG/PEG tube, that goes from the nose to the stomach.</p> <p>Oral &/or Bronchial Suction: Suctioning can be done to assist with oral or lung secretions that patient cannot cough up or handle on their own. The set up is on the wall be the bedside. It has a meter and a canister to catch the secretions.</p> <p>Heart Monitor: Monitors the electrical activity of the heart. Leads are placed with sticky tabs onto the chest. The leads are then hooked up to the monitor (usually at the bedside). This monitoring is used by the doctor to see if the heart rhythm is normal.</p> <p>Blood Pressure Cuff: It is used to make sure blood pressure levels are normal and don’t go too high. A large cuff is wrapped around the arm, it is then pumped up. The nurse will use a stethoscope to listen to the pulse beat on the inside of the arm, while reading a meter on the wall, as the air is let out of the cuff and read. The automatic blood pressure monitor will inflate, read and deflate automatically.</p>	<p>Nurse</p> <p>Physician</p> <p>Speech Therapist</p> <p>Dietician</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Discussion</p>	<p>P/F/C will be able to describe the equipment used and the rationale.</p> <p>P/F/C can demonstrate correct and safe use of equipment.</p>

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<p>6. Equipment (Continued)</p>	<p>Pulse Oximetry: is attached with tape or clamp to the finger. The machine is connected to the line and reads the amount of oxygen circulating in the blood by percentage.</p> <p>Air Mattress: A vinyl mattress placed on top of the bed mattress. The mattress is then connected to a machine that continuously circulates air into/out of the mattress. Used to prevent pressure areas while on bed rest.</p> <p>FWW: A four legged, 3 sided, front wheeled, walking device. It can help to keep the unsteady ambulator steady, while gaining strength and stamina with ambulation.</p> <p>Tennis Shoe/Splints: Special splints for hands and feet are made from a fiberglass material and cloth. It keeps the hand or foot in a position that will help prevent and/or manage contractures. The tennis shoe (High Tops) can be utilized to prevent foot drop.</p> <p>Prafo Boot: To prevent foot drop as well as decrease the pressure on the heel while lying in bed.</p> <p>Foley Catheter: A tube that goes into the bladder to keep urine drained when the body physically can't do that. Tubing then is attached to a drainage bag. Washing around the tubing site needs to be done 3 times a day to prevent infection.</p>			
<p>7. Health Promotion and Prevention</p>	<p>Discuss the warning signs of stroke and when to notify physician:</p> <ul style="list-style-type: none"> • Sudden onset of numbness or tingling in arms or legs or face. • Sudden onset of weakness of your arms or legs or face. • Sudden inability to speak or express. • Slurring of speech. • Sudden or temporary loss of all or part of vision. • Sudden unsteadiness or dizziness with walking or movement. <p>Discuss the controllable risk factors for stroke:</p> <ul style="list-style-type: none"> • High blood pressure • Diet high in salt or cholesterol • Obesity • Inactivity 	<p>Nurse</p> <p>Physician</p> <p>Stroke Packet</p>	<p>Discussion</p> <p>Discussion</p> <p>Written Materials</p>	<p>P/F/C able to verbalize at least 3 warning signs of stroke.</p>

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<p>7. Health Promotion and Prevention (Continued)</p>	<ul style="list-style-type: none"> • Smoking • Excessive alcohol intake • Stress <p>If the patient is a smoker or uses tobacco products, ask if they are interested in learning how to quit. Discuss ways to quit smoking such as nicotine replacement therapy and stop smoking classes offered at Sutter. Encourage patient to discuss options with the doctor, healthcare provider, pharmacist, or smoking cessation coordinator. Discuss with the patient the importance of maintaining good standards for personal hygiene and grooming.</p>	Nurse	Discussion	<p>If patient is a smoker, verbalizes understanding of options available to quit smoking.</p> <p>Verbalize importance of maintaining good standards for personal hygiene and grooming.</p>
<p>8. Follow-Up Plan/Resources</p>	<p>Review information on Discharge Instruction Form with P/F/C. Make sure P/F/C understands the signs and symptoms to watch for and when to notify the physician. Remind the patient to continue with medications as prescribed and review any medications that require a lab level be drawn periodically.</p> <p><i>Discuss, when appropriate, the need for 24 hour care/supervision after discharge for safety reasons. Go over the necessary ADL care instructions with the family.</i></p>	<p>Nurse</p> <p>Physician</p> <p>Case Manager</p> <p>Discharge Instructions</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Form</p>	<p>P/F/C able to verbalize understanding of DC instructions.</p>
<p>9. Psychosocial</p>	<p>Evaluate effect of hospitalization/illness on the patient and family. Assess coping mechanisms and family dynamics. Reinforce to the patient and family that resources within the hospital are available to assist with coping during a crisis. Assist patient to contact resources as needed.</p>	<p>Nurse</p> <p>Chaplain</p> <p>Social Worker</p> <p>Patient Service Representative</p>	<p>Discussion</p> <p>Discussion</p> <p>Discussion</p> <p>Discussion</p>	<p>Verbalizes knowledge of resources that are available to provide assistance/support.</p>

SUTTER MEDICAL CENTER
SACRAMENTO

NURSING SERVICES

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References: xxxxx

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Cross-References: xxxxx

APPROVALS

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