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### **PURPOSE**

1. Facilitate in the diagnosis of seizure disorder.
2. Aid in the determination of portion or location of affected area by previous stroke, head injury, or brain tumors
3. Rule out or confirm presence of brainwave abnormalities in symptoms such as dizziness, sudden weakness, blackout spells, amnesia, staring episodes, and sleep paralysis.
4. Confirmation of brain death.

### **OBJECTIVE:**

To provide information about the health and functions of the brain that will aid the Physician on his/her diagnosis of management.

### **RESPONSIBLE PERSON:**

EEG Technicians, Nurses, Residents on-duty, Attending Physician.



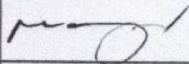


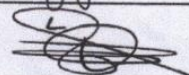

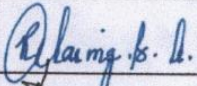
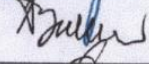



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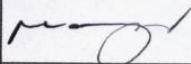


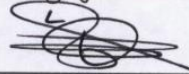

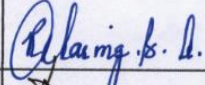
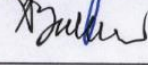
**APPROVAL:**

	Name/Title	Signature	Date
Prepared by:	SHIRLEY B. MALAGA, RMT, RTRP, MPH RTS Supervisor		4/21/2020
Verified:	KONRAD JAN ESCOBIA, RN Emergency Department Manager		4/21/2020
	HANNAH KHAY TREYES, RN, MN OIC Chief Nurse		06/11/2020
Reviewed:	BERNIE B. SIASON Internal Quality Analyst Non Patient Care		06/11/2020
	DENNIS C. ESCALONA, MN, FPSQua Quality Assurance Supervisor		06/11/2020
Recommending Approval:	ROSARIO D. ABARING, RN, MAN, PhD Ancillary Division Officer		06/02/2020
	HENRY F. ALAVAREN, MD, FPSMID Total Quality Division Officer		6/11/20
Final approved:	GENESIS GOLDI D. GOLINGAN President and CEO		06/15/2020




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## **PROCEDURE**


### **Preparation of the patient:**

1. Check order or request from the physician.
2. Shampoo hair prior to the test. Do not apply conditioner, oil, spraynet, cream, pomade, or gel.
3. Instruct to eat a full meal. Avoid, for approximately eight (8) hours prior, caffeine-containing food and drinks such as coffee, tea, cola, and chocolates.
4. Ask patient not to sleep at all, the night before the test, or sleep less by going to bed late and getting up earlier than usual. Also, avoid taking naps in the morning of the test.
5. Check or verify physician's order to ascertain taking of certain medications such as sedatives, tranquilizers, muscle relaxants, sleeping aids, or anti-epileptic drugs.
6. Schedule patient according to his/her convenience, and availability of room and technician.

### **Procedure Proper**

1. Perform hand hygiene and wear appropriate Personal Protective Equipment (PPE)
2. Prepare the equipment, material, and special requests or needs of the patient.
3. Introduce self and explain the procedure to the patient and/or significant others.
4. Instruct and assist patient to lie down on the hospital bed.
5. Place 21 EEG electrodes on patient's scalp according to the 10-20 international system, using an electroconductive paste. Electrocardiogram (ECG) leads are also placed on the chest wall.
6. Start the EEG machine and monitor tracing quality to ensure signals are artifact-free and make appropriate adjustments.
7. Instruct patient to lie still with eyes closed, most of the time, during the recording and should not talk unless there is a need.
8. Document movements and other interferences on the recording.
9. Brain activity is recorded on the EEG machine for approximately 30 minutes.
10. Ask patient to open eyes and look straight, then close eyes again.




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11. Proceed with activation procedures:

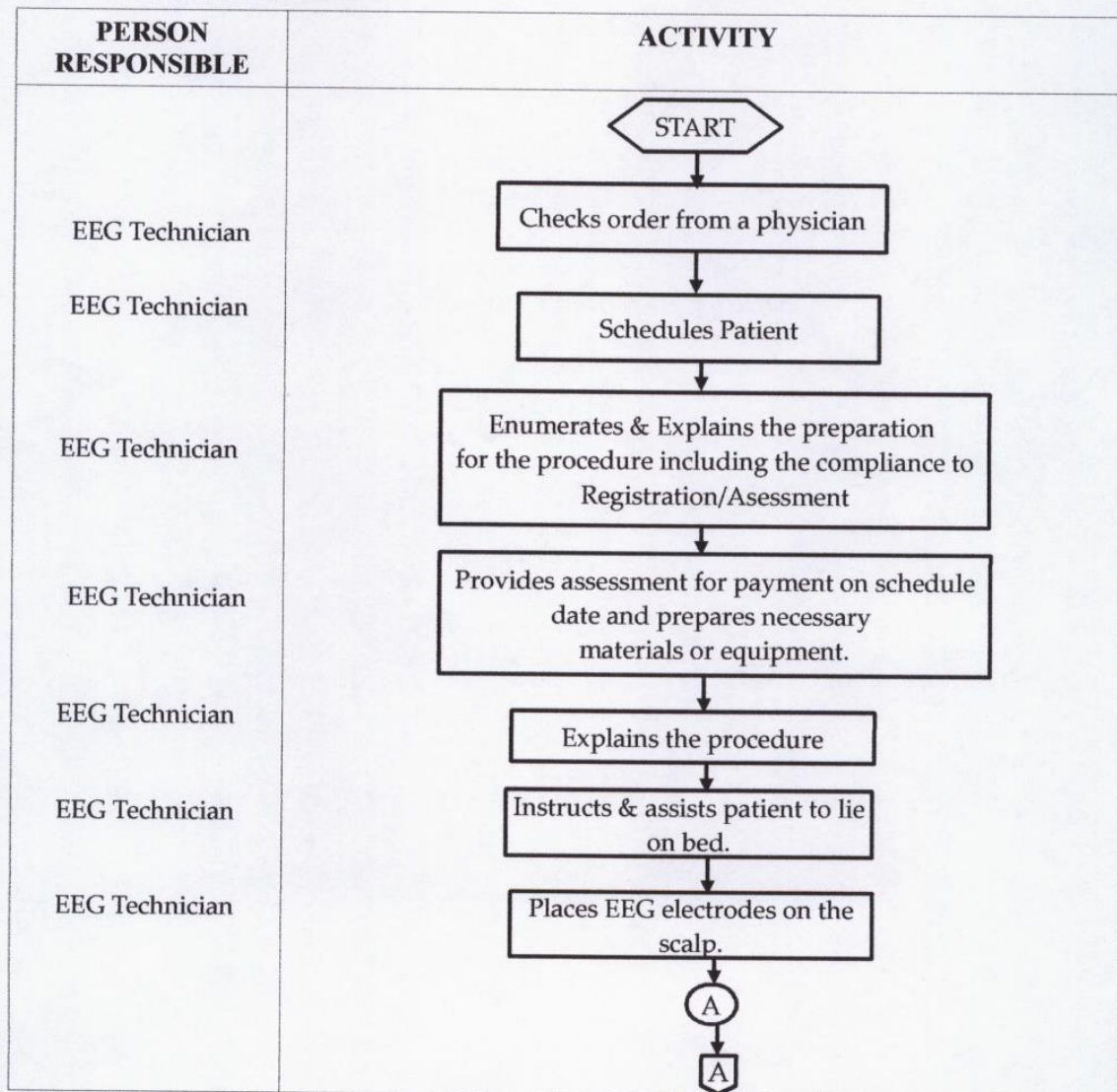
- Photoc stimulation – deliver intermittent flashes of light by the use of a stroboscopic lamp, producing bright flashes of diffused light given at varying rates up to 5-25 flashes per second. This procedure compares the photic driving response on the two sides of the brain, and attempt to elicit epileptiform activity.
- Hyperventilation – instruct patient to breathe deeply and quickly for at least three (3) minutes, with eyes closed. Monitor patient's performance, note quality of effort, and status.
- Sleep – instruct patient to lie still and keep eyes close. Provide an atmosphere conducive for sleeping. For patients with suspected or known convulsive disorder, record of at least 25 minutes of sleep is required.

12. Terminate recording and remove all electrodes carefully.

13. Inform patient that an official result will be released within a maximum of three (3) working days for inpatients and outpatients.

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### **FLOWCHART: Outpatient**



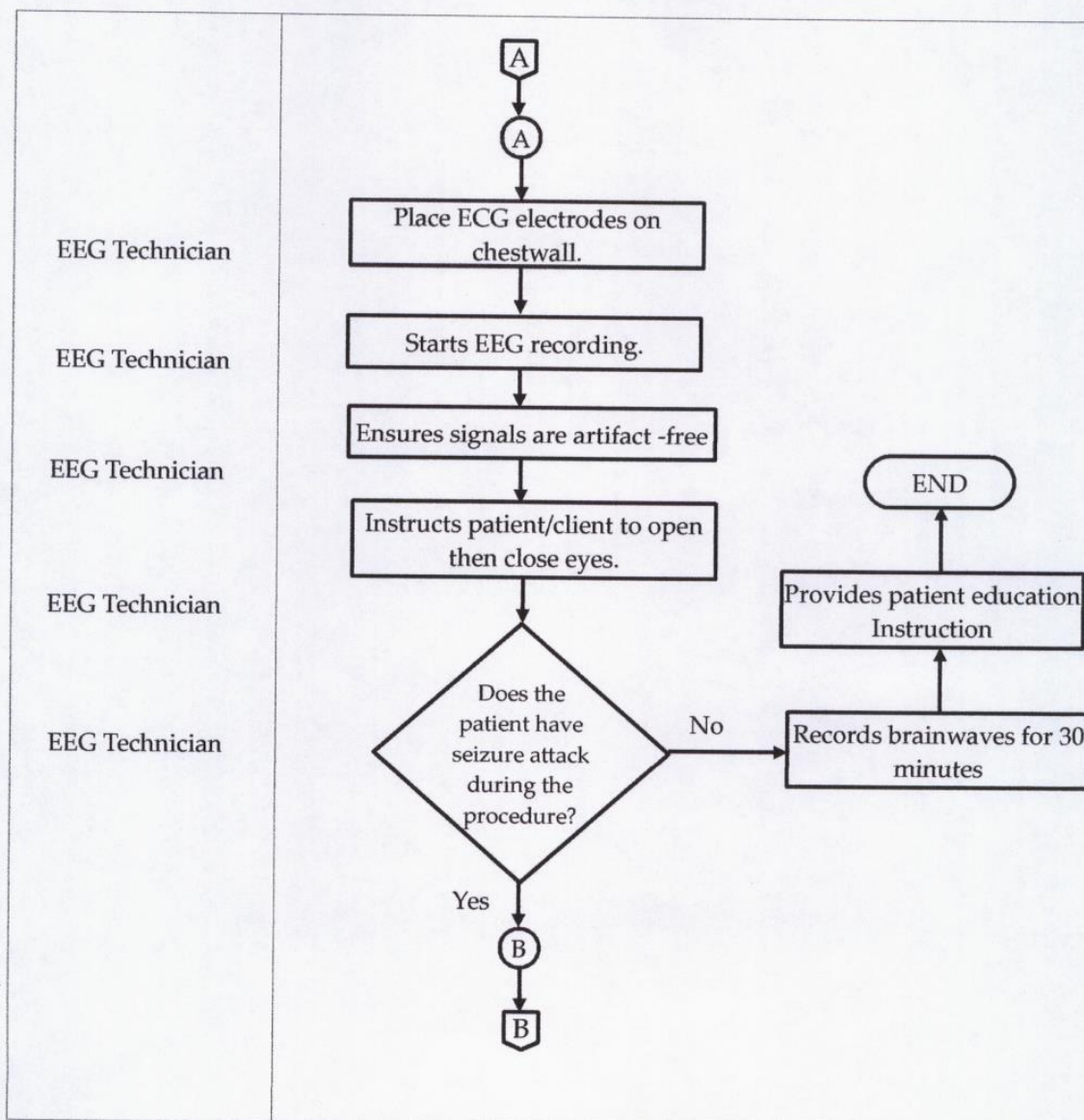




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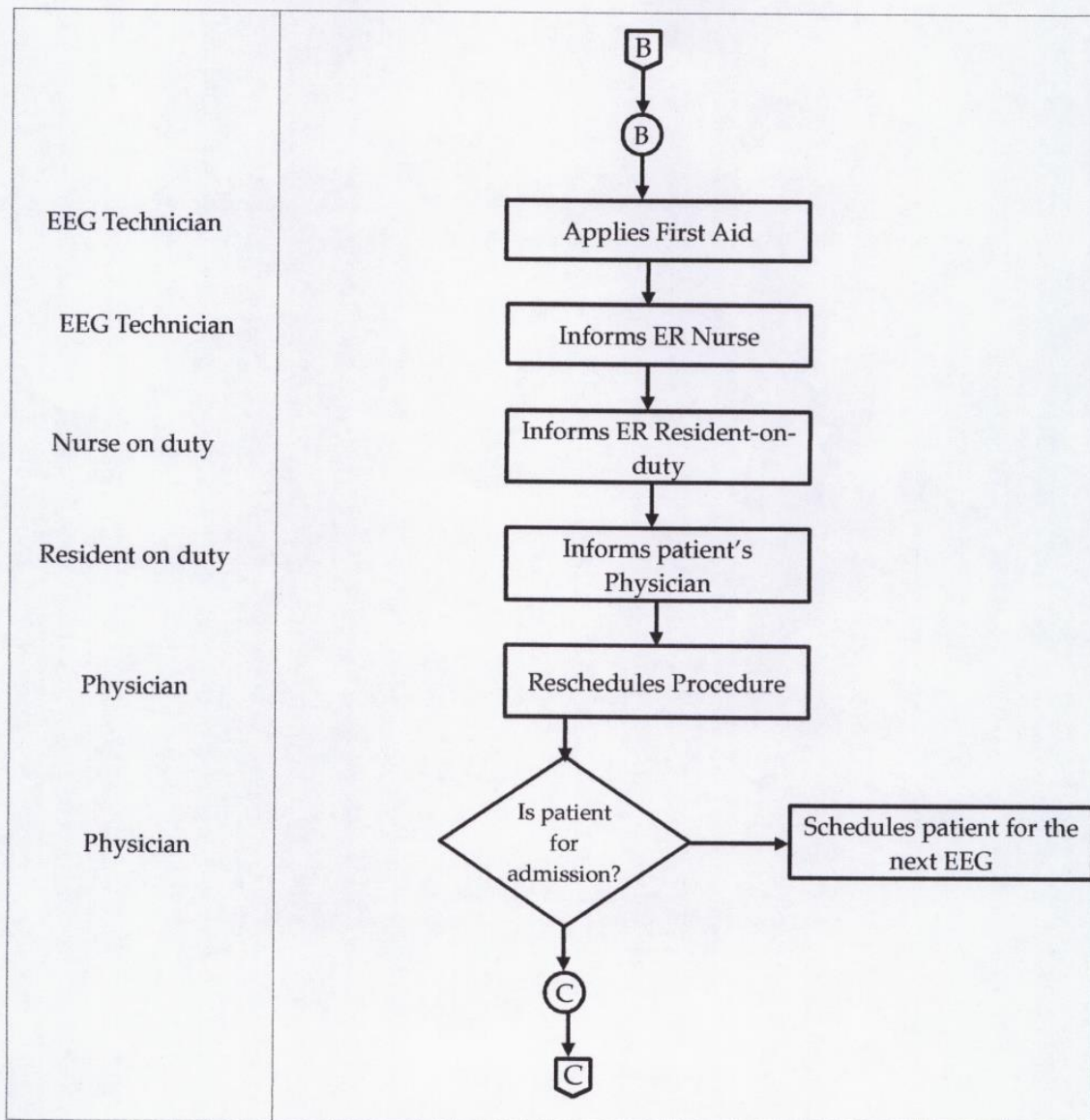
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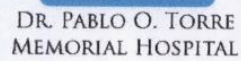


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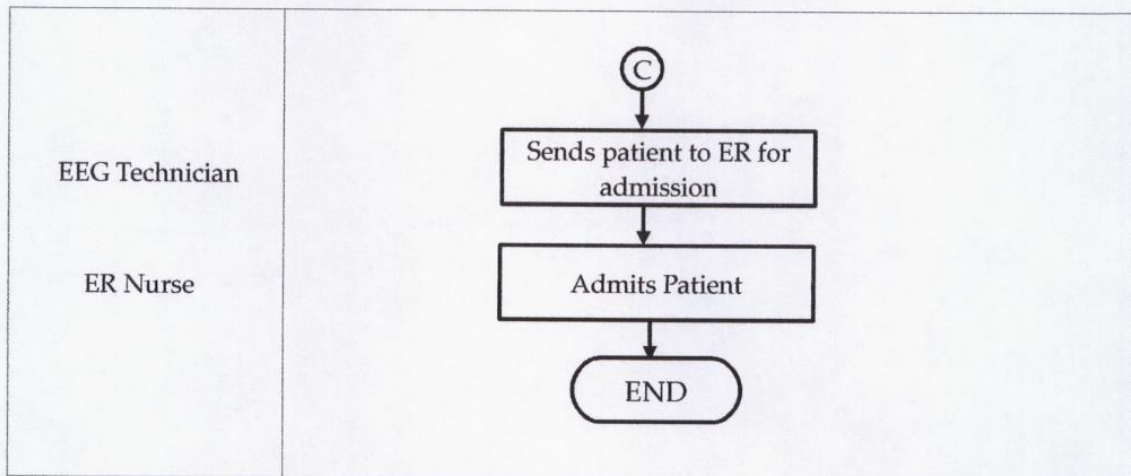







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