



Chapter: Hospital Operations
Subject: Seizure Management

Applicability: State Hospitals

Attachments:

- Attachment A – Seizure Observation Report
Attachment B – Seizure Types
Attachment C – Assessment, Diagnosis, and Treatment of an Individual who has had One or More Seizures
Attachment D – Management and Monitoring of an Individual with Epilepsy/Seizures
Attachment E - Care of an Individual During and After a Seizure
Attachment F - Documentation Requirements for Seizures

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POLICY

Hospitals operated by DBHDD ensure proper diagnosis, management, and monitoring of individuals who have seizures. These State Hospitals provide effective management that reduces the risk of injury to the individual from seizure recurrence and medication side effects. In most cases, the care of an individual who has seizures is the responsibility of Physicians who are not Neurologists. This policy and attached protocols are intended to guide these primary Physicians and other hospital staff in their treatment of the individual.

I. PHILOSOPHY

The Georgia state hospitals foster a medical practice in the area of seizure management that provides the individual with well formulated assessment and treatment with the goal of achieving optimal seizure control. Optimal control, however, does not mean an individual will be seizure free. The goals of effective control include the following:

- Minimizing adverse events such as falls and memory impairment from antiepileptic drugs.
• Preserving the individual's safety such as by reducing the risk of cardiac arrest and aspiration from a seizure.
• Achieving a level of seizure control sufficient to allow the individual to participate in rehabilitation with the goal of being discharged from the hospital.

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II. DEFINITIONS

Epileptic Seizure: A transient occurrence of signs and/or symptoms due to abnormal excessive or synchronous neuronal activity in the brain. This definition emphasizes that seizures are clinical phenomena and not purely electroencephalographic changes.

Epilepsy: A chronic condition characterized by recurrent epileptic seizures.

Epileptic Syndrome: An epileptic disorder characterized by similar features, including seizure type(s), precipitating factors, age of onset, etiology, neurologic and neuropsychological abnormalities, interictal and ictal EEG findings and neuroimaging findings. Often there is no exact cause or known etiology.

Status Epilepticus: Continuous or repetitive seizure activity persisting for more than 5 minutes.

Active Seizure Disorder: An individual with epilepsy has had at least one seizure in the previous 5 years, regardless of whether he/she has been under treatment.

Inactive Seizure Disorder: An individual has not had any seizures for a period of more than 5 years while off of all treatment.

III. CLASSIFICATION OF SEIZURE TYPE

A. The classification of the seizure type can be used to correctly establish the type of epilepsy and initiate appropriate treatment.

B. Classification of epilepsy type is based on:

1. The clinical description of the seizure frequency and severity
2. Personal history such as the occurrence of anoxia or head injury.
3. Electroencephalogram (EEG) pattern
4. Neuroimaging studies
5. Family history
6. Age of onset
7. Other clinical information.

C. Physicians/APRNs classify seizure types as per the International League Against Epilepsy, 1981). Refer to **Attachment B**.

IV. ASSESSMENT, DIAGNOSIS, AND TREATMENT OF AN INDIVIDUAL WHO HAS HAD ONE OR MORE SEIZURES

Recovery Planning Teams (RPTs) and Interdisciplinary Teams (IDTs) assess, diagnose, and treat individuals who have had one or more seizures in accordance with generally accepted professional standards. Refer to **Attachments C and D**.

V. MANAGEMENT DURING AND AFTER A SEIZURE

Hospital staff provide care of an individual during and after a seizure in accordance with generally accepted professional standards. Refer to **Attachment E**.

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VI. ANTICONVULSANT (ANTIEPILEPTIC) MEDICATIONS (AEDs)

- A. The responsibilities of the individual's primary Physician when using one or more AEDs include the following:
 1. Be familiar with the AED, including dosing, titration, and side effects;
 2. Obtain consultation from a Neurologist if there are any questions regarding the use of the AED;
 3. Titrate the dose and obtain any lab monitoring that is indicated for this agent; and
 4. Monitor for any potential side effects of the AED.
- B. Not all individuals who have a single seizure need to be started on medication immediately. It is strongly recommended to start treatment on all individuals at risk for recurrent seizures (e.g., individuals with developmental disabilities).
- C. The selection of an antiepileptic drug should be made after a review of the individual's medical history, other concurrent medications, age, and suspected seizure type.
- D. The relatively newer medications are preferred.
- E. In general it is best to avoid agents such as phenobarbital (and other barbiturates) and phenytoin (e.g., Dilantin) because of serious cognitive and other side effects.
- F. When the use of medications with known significant cognitive or other side effects (e.g., phenobarbital, phenytoin, and primidone) is necessary, documentation must include what efforts have been made to eliminate these medications, the results of these efforts, and the risk: benefit analysis regarding the continued use of these medications.
- G. Medication choice is to be based on the most appropriate drug for the seizure classification.
- H. Whenever possible, the goal is for monotherapy.
- I. When AED polypharmacy is necessary, the Physician and/or Neurologist will document in the medical record the rationale for the use of polypharmacy and what efforts have been made to reduce or eliminate polypharmacy.
- J. Drug interactions among the AEDs and between the AEDs and other medications must be evaluated and documented, with special emphasis on psychotropic medications, specifically addressing:
 1. Alteration in seizure threshold,
 2. Additive side effects,
 3. Interpretation of drug levels, and
 4. Implications for dose adjustment.
- K. Serum levels for those drugs with established therapeutic and toxic ranges will be monitored.
- L. At times, maintenance of sub-therapeutic or toxic levels may be justified, but this requires consultation by the Neurologist and careful documentation and follow-up.
- M. A therapeutic level exists when the individual is free of seizures and free of side-effects.
- N. Monitoring for actual and potential side effects of treatment will include, but not be limited to:
 1. Laboratory testing for the specific physiologic effects of each drug.
 2. A review by the primary physician of individuals receiving chronic anticonvulsant drugs for possible related osteoporosis and the need for prophylaxis.

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- O. Withdrawal of anticonvulsant medications will be considered for any individual who has been seizure free for two or more years. If medications are continued for these individuals, the rationale for this decision and a risk: benefit analysis must be documented. The decision shall be individualized considering such factors as:
1. Age of seizure onset (especially over 16 years)
 2. Seizure-free period (especially over 3 years)
 3. Abnormal neurological findings
 4. Presence of anatomical brain lesions
 5. History of status epilepticus
 6. Co-existing medical illness
 7. Individual's or guardian's preferences
 8. History of seizure severity and type especially:
 - a) unremitting epilepsy syndrome,
 - b) multiple seizure types, and
 - c) myoclonic or complex partial seizures
 9. Abnormal EEG (especially generalized spike-and-wave pattern)
 10. Family history of epilepsy
 11. Known symptomatic cause
 12. Severity of developmental disabilities

VII. DOCUMENTATION

- A. All seizures are documented using the **SEIZURE OBSERVATION REPORT, Attachment A**. This report is completed in its entirety according to **Attachment F**.
- B. If the primary Physician was not the Physician involved in the management of the individual who had the seizure, the Nurse flags the chart for the Attending Physicians review on the next regular business day.
- C. Following all necessary reviews, a copy of the Seizure Observation Report is sent to the Seizure Clinic Coordinator and the original is filed in the individual's medical record in the location designated by the file guide.
- D. In addition, the Nurse completes a Critical Incident Report for any injury sustained during the seizure, using the incident type "accidental injury".

VIII. INTEGRATION OF SEIZURE TREATMENT INTO RISK MANAGEMENT FUNCTIONS

- A. Individuals with high risk active epilepsy are reviewed by the hospital's Facility/Hospital Review Committee (FRC/HRC). The review considers, but is not limited to:
 1. Substantiation of the diagnosis;
 2. Medication number, choice, efficacy, interactions, side effects, and dosing schedule;
 3. Use of less desirable medications such as barbiturates and benzodiazepines;
 4. Any related medical issues, such as aspiration, hypotonia, constipation, drooling, and nutrition; and
 5. Efficacy of seizure control and possible need for specialty center referral.
- B. High Risk Epilepsy (defined in **Attachment C**, section 2) c.) differs from the High Risk categories related to seizures as defined in the DBHDD Risk Management Policy, 03-601 in that the Risk Management Policy indicates when an individual is at risk for having one or more seizures, whether or not the individual already has the diagnosis of

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epilepsy. High Risk Epilepsy indicates when a person who already has Epilepsy is at a high risk of complications and/or death as a result of this disease process.

IX. TRAINING

All staff having responsibility for care of the individuals served receive seizure management training in initial orientation and annually, at a minimum.

LEGAL REFERENCES:

Official Code of Georgia Annotated (O.C.G.A.) Section 37-4-122, 37-3-162, and 37-7-162.
Rules and Regulations of the State of Georgia 290-4-6-.02.

SEIZURE OBSERVATION REPORT

Name of Individual:	Name(s) of Observing Staff:
Individual's ID # :	
Individual's Living Unit:	Location of the Individual when Seizure Occurred:

Date and Time Seizure Started or Discovered:	@	<input type="checkbox"/> am	<input type="checkbox"/> pm
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Activity Before the Seizure:			
Check all that describe your observations of the individual right before the seizure started:	<input type="checkbox"/> Alert <input type="checkbox"/> Drowsy <input type="checkbox"/> Sleeping <input type="checkbox"/> Calm	<input type="checkbox"/> Hyperactive <input type="checkbox"/> Confused <input type="checkbox"/> Anxious	<input type="checkbox"/> Other (describe):
Describe what the individual was doing before the seizure occurred (what activity and what behavior):			
Did the individual experience a "warning sign" or aura before the seizure started? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Not known			
If yes, describe the warning sign or aura:			
Check all that describe the environment that the individual was in right before the seizure started:	<input type="checkbox"/> Noisy <input type="checkbox"/> Crowded <input type="checkbox"/> Hot	<input type="checkbox"/> Flashing lights <input type="checkbox"/> Other (describe):	
Did you see the beginning of the seizure? <input type="checkbox"/> No <input type="checkbox"/> Yes			
If yes, what did the start of the seizure look like?			

Activity During the Seizure:				
Number in the order in which they occurred during the seizure. Leave blank if they did NOT occur. If more than one occurred at the same time, give them the same number:	_____ Lost consciousness _____ Change in color _____ Bit tongue _____ Impaired speech _____ Drooling _____ Blinking eyes _____ Froth from nose or mouth	_____ Fell _____ Stared _____ Incontinent _____ Lip smack _____ Eyes rolled _____ Vomited _____ Cried out	Stiffness _____ R-arm _____ L-arm _____ R-leg _____ L-leg _____ Body arch _____ Eyes to Rt _____ Eyes to Lt	Jerking _____ R-arm _____ L-arm _____ R-leg _____ L-leg _____ R-face _____ L-face _____ All
Other activity – specify what was seen and in what sequence:				

Date and Time Seizure Ended:	@	<input type="checkbox"/> am	<input type="checkbox"/> pm
Length of Seizure:			

Activity After Seizure:				
Check all that describe your observations of the individual after the seizure ended:	<input type="checkbox"/> Confusion <input type="checkbox"/> Weak <input type="checkbox"/> Body ache	<input type="checkbox"/> Nausea <input type="checkbox"/> Vomiting <input type="checkbox"/> Headache	<input type="checkbox"/> Drowsy <input type="checkbox"/> Agitated <input type="checkbox"/> Combative	<input type="checkbox"/> Resumed activity <input type="checkbox"/> Slept: How long? _____ <input type="checkbox"/> Injury
<input type="checkbox"/> Other (describe):				

Additional Comments (any information that is clinically relevant):

Signature and Title of Staff Completing Report	Date	Time
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SEIZURE TYPES

1) Focal Seizure:

- a) Simple Partial: No alteration of consciousness. Examples of these seizures include sensory disturbances including “stomach sensations” or abnormal (motor) movements of limbs.
- b) Complex Partial: Alteration of consciousness is present. The alteration can be transient with minor confusion or be profound. These can progress from simple partial seizures or start with alteration of consciousness. May start with an “aura” or warning.
- c) Secondarily Generalized Tonic Clonic Seizures: This represents the spread of the seizure from one hemisphere to the entire brain.

2) Generalized Seizure:

These seizures begin simultaneously in widespread brain regions in both hemispheres. Consciousness is always impaired.

- a) Typical Absence Seizures: Characterized by sudden behavioral arrest, loss of awareness, and blank staring. They are usually brief (less than 5 to 30 seconds), and start and end abruptly.
- b) Atypical Absence Seizures: Less abrupt onset and end than typical absence. Seizures last longer than absence, typically between 10 to 45 seconds.
- c) Myoclonic Absence Seizures: Sporadic (isolated) jerking movements with no loss of awareness. There is an association of movements at 2 to 4 Hz with an EEG pattern of spike and wave or polyspike-and-wave discharges.
- d) Generalized Tonic-Clonic Seizures (GTCS; “Grand-mal Seizures”):
 - i) Begin with no warning (“aura”).
 - ii) May evolve from myoclonic or absence seizures.
 - iii) May begin abruptly.
 - iv) May result in loss of consciousness.
 - v) Tonic stiffening of the axial and limb movements, which may last 10 to 15 seconds.
 - vi) Respiration is depressed and the person may become cyanotic.
 - vii) Clonic movements of the limbs follow the tonic and can last seconds to minutes, and
 - viii) Autonomic changes of heart rate and blood pressure.
- e) Generalized Clonic Seizures: Similar to GTCS, but with no tonic component.
- f) Myoclonic Seizures: These are sudden, brief, contractions of muscles of the arms, legs, and face. Can lead to falls because the legs are involved.
- g) Tonic Seizures: Characterized by sustained contractions of muscles of axial and limb muscles.
- h) Atonic Seizures: Characterized by brief and diffuse loss of tone in postural muscles lasting for more than 1 to 2 seconds. Mild seizures can cause head drop which can cause the individual to drop objects. More severe seizures can lead to a total loss of tone. For this reason, these have sometimes been called “drop attacks”.

**PROTOCOL FOR THE ASSESSMENT, DIAGNOSIS, AND TREATMENT
OF AN INDIVIDUAL WHO HAS HAD ONE OR MORE SEIZURES**

1) INDIVIDUALS NOT PREVIOUSLY DIAGNOSED WITH SEIZURES/EPILEPSY

- a. When any member of the individual's Recovery Planning Team (RPT) or Interdisciplinary Team (IDT) makes an observation of a behavioral change whose etiology could be a seizure, the member will:
 - i. Make an entry in the individual's medical record with a description of the observed behavior, and
 - ii. Ensure that the Nurse and Physician/APRN are notified.
- b. Subsequently, the Physician/APRN will:
 - i. Complete and document a physical examination, including a neurologic examination, and document the reason that a seizure is suspected. For example: *"this individual who had a traumatic head injury at age 10 was witnessed by staff to have stiffness of his body. His examination is normal. A seizure is suspected because of the clinical behavior and his personal history of head injury."*;
 - ii. Obtain the minimum diagnostic tests of;
 - iii. Blood glucose and electrolytes;
 - iv. EEG; and
 - v. Neuroimaging - An MRI of the brain with "epilepsy cuts" is the preferred study. Alternatively, a CT of the head may be used if an MRI cannot be obtained.
- c. If the assessment and diagnostic tests do not support that the individual had a seizure, no further action beyond observation for additional occurrence of the suspect behavior is necessary.
- d. If the assessment and diagnostic tests suggest that the individual had a seizure, the Physician/APRN will:
 - i. Determine if treatment needs to be initiated immediately; and
 - ii. Refer the individual to a neurologist.

2) INDIVIDUALS PREVIOUSLY DIAGNOSED WITH SEIZURES/EPILEPSY

- a. All individuals with an **inactive seizure disorder** must receive an initial comprehensive assessment by the primary physician and the RPT/IDT. A decision is made to either:
 - i. Continue to observe the individual for recurrence alone; or
 - ii. Make a referral to a neurologist.
 - iii. In all cases, entries into the individual's medical record progress notes and diagnosis list must be made. This documentation must include:
 - iv. The diagnosis, in the following format – (type of seizure), inactive,
 - v. A description of the seizure type,
 - vi. The date of the last seizure,
 - vii. The results of the last EEG (with date), and
 - viii. The results of the last CT scan or MRI of the brain (with date).
- b. All individuals with an **active seizure disorder** must receive the following:
 - i. Initial and annual follow-up with a neurologist;
 - ii. A comprehensive seizure assessment that includes:
 - iii. A complete medical, family, and developmental history, and
 - iv. A complete physical and neurological examination;
 - v. A detailed history of the seizure including:
 1. Onset,
 2. Events before, during and after the seizure activity,

3. Frequency,
4. Severity,
5. Occurrence of status epilepticus, and
6. Episodes of apnea, or cardiac arrest;
- vi. A detailed history of anticonvulsant treatment including:
 1. drug type,
 2. drug dose,
 3. drug levels, and
 4. response to treatment and side effects;
- vii. Reports of specialized testing including:
 1. an electroencephalogram,
 2. EEG video monitoring,
 3. brain imaging, and
 4. additional laboratory testing.
- c. The additional designation of **“high risk”** is added to the diagnosis of Individuals who have the following:
 - i. Seizures refractory to antiepileptic drugs (i.e., 10 or more seizures a year);
 - ii. Polypharmacy with 3 or more anti-epileptic drugs, or 3 separate monotherapies that have not achieved adequate seizure control;
 - iii. A diagnostic uncertainty whether the seizures are epileptic or non-epileptic (i.e., psychogenic) in their etiology;
 - iv. History of Status Epilepticus (either convulsive or non-convulsive);
 - v. History of cardiac arrest, apnea, or autonomic instability with a seizure;
 - vi. Prolonged post-ictal state (i.e., more than 24 hours); and/or
 - vii. Presence of post-ictal paralysis (different from baseline) of any type.
- d. **Consultation with a Neurologist** is necessary in the following situations:
 - i. Annually on all individuals with an active seizure disorder;
 - ii. Consideration is being given to a vagal nerve stimulation or surgery;
 - iii. After every occurrence of Status Epilepticus;
 - iv. After hospitalizations related to seizures or medication side effects;
 - v. For deterioration in an individual’s functioning if the cause is either unknown or thought to be related to the seizure disorder; and/or
 - vi. For serious drug side effects necessitating discontinuation of anti-epileptic drugs.
- e. When **follow-up consultation** with the Neurologist is required, the assessment will be based on the following individualized factors at a minimum:
 - i. The seizure classification and frequency;
 - ii. History of status epilepticus;
 - iii. The presence of multiple medical disorders;
 - iv. The use of multiple anti-epileptic drugs;
 - v. The presence of neurologic and/or epileptic syndromes;
 - vi. The need for laboratory monitoring; and
 - vii. Identified factors that lower seizure threshold.

**PROTOCOL FOR THE MANAGEMENT AND MONITORING
OF AN INDIVIDUAL WITH EPILEPSY/SEIZURES**

- 1) The primary Physician, in consultation with the Neurologist, will develop a Medical Care Plan, directed at minimizing the effects of the seizures and their treatment on the individual's life. To the extent possible, the individual, family/guardian, and RPT/IDT members are included in this process. This plan of care must:
 - A. Address factors that lower seizure thresholds,
 - B. Provide guidance unique to that individual in the treatment and management of status epilepticus, and
 - C. Correct or modify any underlying medical co-morbidities or causes that could or would contribute to lowering the seizure threshold; and
 - D. Address the impact of the individual's seizures on his/her quality of life, including:
 - i. Hospitalizations
 - ii. Feeding problems, choking, and aspiration
 - iii. Days of missed mall groups and other treatments
 - iv. Need for adaptive supportive equipment
 - v. Medication side-effects including effects on skin and teeth
 - vi. Barriers to discharge,
 - vii. Self-esteem, and
 - viii. Other treatment considerations.
- 2) Consider the need for use of adaptive supportive equipment:
 - a. The use of adaptive supportive equipment and/or alteration or restriction of activities or the environment may be needed in order to ensure safety for the individual throughout his or her daily activities by:
 - i. reducing the risk of injury from falls or altered mental status, resulting in trauma;
 - ii. limiting exposure to events or circumstances that trigger seizures; or
 - iii. avoiding emotional injury from exceptional circumstances.
 - b. The use of these interventions:
 - i. must occur only after a thorough risk: benefit analysis involving the individual and significant others as appropriate; this risk: benefit analysis must include take into account the potential stigmatization intrinsic to the device and
 - ii. must follow established policy and procedure.
- 3) Consider Evaluation and Monitoring of the individual in an Epilepsy Center when:
 - a. There is uncertainty regarding diagnosis;
 - b. When a Vagal Nerve Stimulator (VNS) or epilepsy surgery is being considered.

PROTOCOL FOR THE CARE OF AN INDIVIDUAL DURING AND AFTER A SEIZURE

- 1) When **any staff member** observes an individual having a seizure, he or she will:
 - a) Immediately note the time of seizure onset or discovery, and what time-piece was used;
 - b) Remain calm, stay with the person, and call for assistance and a Nurse;
 - c) Have responding staff remove other individuals from the area; and
 - d) Have responding staff clear the immediate area of hard or sharp objects.

- 2) The **Nurse** will:
 - a) Immediately respond to the scene;
 - b) Ensure that the emergency cart and equipment (including glucometer and pulse oximeter) is brought to the scene;
 - c) Apply the pulse oximeter;
 - d) If the O₂ saturation reading is reliable (pulse is tracking), and the O₂ saturation is less than 93%, immediately apply oxygen;
 - e) If the pulse oximeter is not giving a reliable reading, apply oxygen unless contraindicated (severe COPD);
 - f) When administering oxygen, the primary principle to remember is to put it **ON** the person:
 - i. 1st choice for oxygen delivery device is the nasal cannula – at 1 – 5 liters/minute
 - ii. 2nd choice for oxygen delivery device is the simple mask at 5 – 10 liters/minute
 - iii. 3rd choice for oxygen delivery device, to be used in the event of respiratory arrest or significant compromise not corrected by above, is the bag-valve-mask at a flow rate of at least 15 liters/minute.
 - g) Suction as needed to remove secretions and/or emesis from the mouth/airway;
 - h) When lying down, turn the individual's head or body to one side to reduce the risk of aspiration;
 - i) Maintain the individual's airway, but **DO NOT** force anything into the mouth;
 - j) Loosen the individual's clothing around the neck, and loosen any constricting apparel;
 - k) Remove the individual's eyeglasses, as applicable;
 - l) Ensure that the individual is in a safe position and location:
 - i. If the individual is securely in a wheelchair, do not remove him or her;
 - ii. If the individual is sitting in an unsecured chair, gently assist him or her to the ground;
 - iii. When the individual is on the ground, place a pillow or other soft object under his or her head;
 - iv. Do not attempt to restrain the individual;
 - m) Obtain a blood sugar level using the glucometer;
 - n) IF the individual has a seizure-related **MEDICAL CARE PLAN** that specifies under what circumstances Ativan may be given IM, the nurse may administer this medication per the care plan;
 - o) Alternatively, if the Physician or APRN orders IM Ativan, the nurse will administer this medication consistent with Nursing Policy and Procedure;
 - p) IF Ativan is administered, continuous staff monitoring of the individual until he or she is fully awake and alert is required;
 - q) IF Ativan is administered, vital signs must be monitored per hospital protocol for sedation;
 - r) Remain with the individual until the seizure stops, noting the time (preferably on the same time-piece on which the start time was determined);
 - s) Obtain vital signs after the seizure has stopped and at least every 15 minutes until the individual is fully awake OR until the Physician orders otherwise;
 - t) Once the seizure subsides, ensure continued monitoring by staff, and document the event on the **SEIZURE OBSERVATION REPORT** (Attachment A);
 - u) Immediately notify, or direct other staff to notify, the Physician to report the following:
 - i. All seizure activity;
 - ii. The individual is not responsive to verbal and light tactile stimulation 5 minutes after the seizure has stopped;
 - iii. The individual sustained an injury during the seizure;
 - iv. The individual's pupils are unequal after the seizure has stopped, if different from baseline;
 - v. The individual has weakness or paralysis (not present at baseline) after the seizure has stopped;
 - vi. The individual has vomiting that continues 30 minutes after the seizure has stopped;
 - vii. The individual will not awaken 1 hour after the seizure;
 - viii. The individual goes into a progressively deeper sleep with time;
 - ix. The individual's seizure was different from the known baseline seizures;
 - x. The individual has never had a seizure before;
 - xi. If aspiration is suspected.

- 3) If **STATUS EPILEPTICUS** develops:
 - a) Activate the Code Blue and EMS systems per the Medical Emergency Response System (MERS);
 - b) Transfer the individual to the nearest acute care hospital via ambulance;
 - c) Ensure that staff who know the individual and the events surrounding the transfer accompany the individual to the acute care hospital.

- 4) **All staff** will:
 - a) Ensure that all other individuals in the area are safe;
 - b) Keep the atmosphere calm and quiet;
 - c) NOT offer food or beverages until the individual is fully awake.

- 5) The **Physician/APRN** will:
 - a) Personally evaluate any individual who has a seizure or suspected seizure, documenting that evaluation on the second/back page of the **SEIZURE OBSERVATION REPORT**;
 - b) Conduct and document in the medical record a neurologic examination after the seizure has stopped and the individual has recovered;
 - c) Immediately respond to the scene when notified of a prolonged seizure or status epilepticus;
 - d) In the event of status epilepticus, should the Physician or APRN instruct staff to NOT activate the Code Blue and EMS systems, or to cancel the Code Blue once activated, the Physician or APRN must document in the medical record his or her rationale, any treatment that was provided, a neurologic examination of the individual, any follow-up testing or consultations ordered, and any changes in treatment plan that were made.

- 6) **SPECIAL SEIZURE TYPES**
 - a) **COMPLEX PARTIAL SEIZURES**
 - i. Remember, the individual is not fully alert and is unaware of his or her actions, no matter how the person may appear;
 - ii. Do not try to stop the individual unless the person is in danger of injury or causing injury to others;
 - iii. Do not expect the individual to obey instructions;
 - iv. Do not approach the individual if he or she appears angry or aggressive;
 - v. Remove potentially harmful objects from the area of the individual;
 - vi. Gently lead the individual to a safe place, speaking to the person in a calm and reassuring voice;
 - vii. Follow instructions in 1 through 4 above.
 - b) **PARTIAL SEIZURES**
 - i. Remember, this type of seizure is NOT a medical emergency, even if the individual develops continuous partial seizures, as long as the seizure does not become generalized.
 - ii. Management is otherwise the same as for Complex Partial Seizures.

- 7) **PROLONGED TONIC-CLONIC SEIZURES**
 - a) When an individual has a prolonged tonic-clonic seizure, the physician and/or Advanced Practice Registered Nurse (APRN), along with the Nurse must assess the individual for the etiology of the prolonged nature of the seizure in order to provide problem specific treatment. If an etiology is identified, further evaluation or treatment can be directed to prevent recurrence.
 - b) If the individual has a history of a seizure disorder, consider:
 - i. Non-adherence with prescribed medical regimen
 - ii. Withdrawal seizures from anticonvulsants
 - iii. Breakthrough seizures
 - iv. A new onset seizure disorder presenting with a prolonged seizure.
 - v. The seizure may be secondary to medical, toxicologic, or structural problems such as:

◆ Hypoxic injury	◆ Hyponatremia
◆ Aspiration	◆ Hypertension
◆ Stroke syndromes	◆ Hypercalcemia
◆ Environmental triggers	◆ Hepatic encephalopathy
◆ Subarachnoid hemorrhage	◆ Hypomagnesia
◆ Intracranial tumor	◆ Infections
◆ Trauma	◆ Meningitis
◆ Toxicologic	◆ Brain abscess
◆ Metabolic	◆ Encephalitis
◆ Hypoglycemia	◆ CNS
◆ Hyponatremia	◆ Cysticercosis

PROTOCOL FOR THE DOCUMENTATION REQUIREMENTS FOR SEIZURES

- 1) Every time an individual has a seizure, the **SEIZURE OBSERVATION REPORT** (Attachment A) is completed (i.e., one report per seizure).
- 2) Any and all staff can and will complete Page 1 of the **SEIZURE OBSERVATION REPORT**. Do not leave any blank spaces; write "Not applicable" or "Not available" if necessary .
- 3) The person who witnessed the seizure will initiate the **SEIZURE OBSERVATION REPORT**. If this person cannot complete the form then he/she will verbally report the events to the unit Nurse who will then initiate and ensure completion of the form.
 - a) Enter the individual's name, ID #, unit, and location of the individual when the seizure occurred.
 - b) Enter the name(s) of staff who observed the seizure.
 - c) Enter the date and time that seizure began in the appropriate space.
 - d) Check whether the individual was alert, drowsy, sleeping, hyperactive (aka agitated), confused, anxious, or any other behavior prior to the seizure. If the beginning of the seizure was not observed, check "other" and write "not observed".
 - e) Write a brief statement describing what the individual was doing prior to the seizure (what activity and what behavior).
 - f) Check the box indicating whether or not the individual experienced a "warning sign" prior to the seizure and, if Yes, write a brief statement describing the "warning sign" or aura.
 - g) Check all of the boxes that describe the environment when the seizure occurred. If not on the list, check "other" and briefly describe the environment.
 - h) Indicate if the start of the seizure was witnessed and, if yes, describe what the start of the seizure looked like. *For example, "Mr. J. started staring out into space, turned his head to the right, and his left arm started shaking."*
 - i) Number, in order of occurrence, everything seen during the seizure. Use "other" and describe (with sequence number) items not included in the list.
 - j) Document the date and time that the seizure ended, using the same time-piece on which the start/discovery time was determined, and how long the seizure lasted (do not include the amount of time the individual slept after the seizure).
 - k) Document observed activity after the seizure, specifically noting how long the person slept.
 - l) Add any clinically relevant additional information. Sign, date, and time the report.
- 4) The licensed Nurse, utilizing the **SEIZURE OBSERVATION REPORT**, will document additional information:
 - a) Vital signs, including O2 saturation, indicating if this was measured on Room Air or on Oxygen (including rate and method of delivery);
 - b) Pupillary response after the seizure;
 - c) Level of consciousness after the seizure;
 - d) Blood glucose level;
 - e) The name of the Physician or APRN notified, with date and time notified;
 - f) Any and all treatment interventions that were used during and after the seizure, utilizing the check boxes and including the name and dose of any medications administered;
 - g) The disposition of the individual, including transfer information, with date and time;
 - h) Verify, and correct if needed, the time of the start/discovery of the seizure and the time of the end of the seizure.

- i) After reviewing all of the information provided in the report for completeness and accuracy, provide any additional comments on the observations required on Page 1 of the **SEIZURE OBSERVATION REPORT** form. Document your Nursing Assessment of the individual in the observation comments section. This serves as your progress note; and
 - j) List all instructions given to Direct Care Staff.
- 5) The Physician or APRN will document his or her assessment of the episode after reviewing all of the documentation on the **SEIZURE OBSERVATION REPORT** form, regardless of length of seizure:
- a) Indicate if this episode was actually a seizure;
 - b) Indicate the type of seizure; and
 - c) Provide any additional comments, including rationale for these decisions, brief statement of the results of the neurologic examination (documented in the progress notes) as well as rationale for disposition if not sent to the ER.
- 6) The Nurse will complete a Critical Incident Report for any injury sustained during the seizure, using the incident type “accidental injury”.
- 7) If the Attending Physician was not the Physician involved in the management of the individual who had the seizure, the Nurse will flag the chart for the Attending Physician’s review on the next regular business day.
- 8) Following all necessary reviews, a copy of the **SEIZURE OBSERVATION REPORT** is sent to the Seizure Clinic Coordinator and the original is filed in the individual’s medical record in the location designated by the file guide.