Clinical overview

Definitions

- **Seizure**: An abnormal electrical discharge in the brain caused by clearly identifiable external factors that may be resolved or reversed (e.g., injury, high fever, substance abuse, metabolic disorders). An isolated seizure or an isolated episode of seizures without recurrence is not considered to be epilepsy.

- **Epilepsy, also known as seizure disorder**: A chronic brain disorder characterized by recurrent (two or more) seizures on more than one occasion that are not provoked by a clearly identifiable external factor. Epileptic seizures range from clinically undetectable to convulsions. The symptoms vary depending on the part of the brain involved in the epileptic discharge.
  - **Intractable epilepsy**: Epilepsy that does not respond to treatment.
  - **Status epilepticus**: A potentially life-threatening state in which a person experiences an abnormally prolonged seizure (any seizure lasting longer than five minutes) or does not fully regain consciousness between seizures. This condition represents a medical emergency.

- **Convulsion**: A sudden, uncontrollable and rapid shaking of the body caused by repeated contraction and relaxation of voluntary muscles.

Even though the terms “seizures” and “epilepsy” are sometimes used interchangeably, they are not one and the same. A seizure occurs when there is disorganized and chaotic electrical activity within the brain. This means a seizure is a sign or symptom of miscommunication between brain cells due to this abnormal electrical activity in the brain. By contrast, epilepsy (also called seizure disorder) is a precise medical condition that produces seizures affecting a variety of mental and physical functions. When a person has two or more unprovoked seizures, he or she is considered to have epilepsy.

Causes

The cause may be unknown (idiopathic). Known causes include, but are not limited to:

- Hereditary factors
- Traumatic brain injury
- Stroke or transient ischemic attack
- Congenital brain defects or birth injuries
- Drug overdose
- High fever
- Alcohol or drug abuse or withdrawal
- Brain infections, such as meningitis or encephalitis

Types of seizures/signs and symptoms

Seizures are divided into two major categories:

1) **Partial seizures** (also known as focal seizures) occur in just one part of the brain. They are frequently described by the area of the brain where they originate (e.g., focal frontal lobe seizure). Types:

   - **Simple partial seizure** – The person remains conscious but has altered emotions or sensations, such as sudden and unexplainable feelings of joy, anger, sadness, etc., or the person may hear, smell, taste, see or feel things that are not real.

   - **Complex partial seizure** – The person experiences altered or loss of consciousness, displaying strange, repetitious behaviors, such as blinks, twitches, mouth movements, etc. The person may experience auras (sensations that warn of an impending seizure).

2) **Generalized seizures** involve all of the brain. There are four types:

   - **Absence seizures (previously petit mal)** – brief loss of consciousness, staring, subtle body movements
   - **Myoclonic seizures** – jerks or twitches of the extremities
   - **Atonic seizures** – loss of muscle tone with sudden collapse or falling down
   - **Tonic-clonic seizures (previously grand mal)** – most intense symptoms, including loss of consciousness, stiffening and jerking of the body, loss of bladder control

Diagnostic tools

- Medical history and physical exam
- Electroencephalogram (EEG) (tests for abnormal electrical activity in the brain)
- Blood tests to check for metabolic imbalances
- Neuropsychological testing
- CT scan, PET scan and MRI to check for abnormalities in brain structure

Treatment

- Treatment or elimination of underlying cause, if known
- Medications (anticonvulsants)
- Identification and avoidance of triggers
- Dietary changes
- Various types of surgical intervention
- Implantation of vagus nerve or brain stimulator
**Documentation tips for physicians**

**Abbreviations**
A good rule of thumb for any medical record is to limit – or avoid altogether – the use of abbreviations. Commonly used abbreviations include SZ – seizure; AS – absence seizure; TLE – temporal lobe epilepsy; MTLE – medial temporal lobe epilepsy; and GTC – generalized tonic-clonic seizures. The meaning of an abbreviation can sometimes be determined based on context; however, this is not always true.

- Best practice is to always clearly spell out and fully describe the particular type of seizure, seizure disorder or epilepsy that is present.

**Subjective**
- In the subjective section of the office note, document the presence or absence of any current symptom related to seizure, seizure disorder, epilepsy, etc.

**Objective**
In the objective section of the office note, document:
- Any current associated physical exam finding
- Any related diagnostic test result

**Final assessment/impression**
- As noted above, best practice is to always clearly spell out and fully describe the particular type of seizure, seizure disorder or epilepsy that is present.
- Do not describe current seizure, seizure disorder or epilepsy as “history of.” In diagnosis coding, the phrase “history of” means the condition is historical and no longer exists as a current problem.
- Do not document past seizures as current if they have resolved, have not recurred and are no longer being treated.
- Do not use terms that imply uncertainty (“probable,” “apparently,” “likely,” “consistent with,” etc.) to describe a current, confirmed seizure, seizure disorder or epilepsy.
- Do not document suspected and unconfirmed seizures, seizure disorder or epilepsy as if the condition were confirmed. Document signs and symptoms in the absence of a confirmed diagnosis.
- Document the current status of seizures, seizure disorder or epilepsy (stable, improved, worsening, historical with no recurrence, etc.).

**Treatment plan**
Document a specific and concise treatment plan for seizure, seizure disorder or epilepsy.
- Clearly link medications to the seizure or epilepsy diagnosis.
- Document planned diagnostic testing.
- If referrals are made or consultations requested, the office note should indicate to whom or where the referral or consultation is made or from whom consultation advice is requested.
- Document when the patient will be seen again.

**Documentation and coding examples**

<table>
<thead>
<tr>
<th>Example 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical record documentation</strong></td>
</tr>
<tr>
<td><strong>Medication list</strong></td>
</tr>
<tr>
<td><strong>Final assessment</strong></td>
</tr>
<tr>
<td><strong>ICD-10-CM codes</strong></td>
</tr>
<tr>
<td><strong>Comments</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final diagnosis</strong></td>
</tr>
<tr>
<td><strong>ICD-10-CM code</strong></td>
</tr>
</tbody>
</table>
There are many different types of seizures, convulsions and epilepsy. Accurate code assignment is dependent on review of the entire medical record and the specific description of the condition. This is followed by location of the appropriate code in the alphabetic index and verification of the code in the tabular list with application of all instructional notes as appropriate.

Multiple abbreviations may be used to refer to seizures, seizure disorder, epilepsy, etc. A diagnosis code should not be assigned unless the meaning of the abbreviation is clear.

A diagnosis of epilepsy can have serious legal and personal implications for the patient (for example, inability to obtain a driver’s license); therefore, a code for epilepsy must not be assigned unless the record clearly identifies the condition as such.

When the physician mentions a history of seizure in the workup but does not include any mention of seizures in the diagnostic statement, no code should be assigned unless clear documentation indicates that the criteria for reporting the condition have been met and the physician agrees that a code should be added.

Seizures or convulsions that are not identified as epilepsy or as a seizure disorder classify to category R56.

Category R56 appears in the tabular list of the ICD-10-CM manual under Chapter 18 – Symptoms, Signs and Abnormal Clinical and Laboratory Findings.

- Chapter 18 includes symptoms, signs and abnormal results of clinical or other investigative procedures and ill-defined conditions for which no diagnosis classifiable elsewhere is recorded.
- Category R56 requires fourth and fifth characters to specify the particular types of seizures or convulsions.

Some of the terms that classify to the sign/symptom category R56 are:

- Febrile convolution(s)
- Febrile seizure
- Convulsive disorder
- Post-traumatic convolution(s)
- Fit(s)
- Recurrent convulsions
- Seizure(s)

Category G4Ø, epilepsy and recurrent seizures

Category G4Ø appears in the tabular list of ICD-10-CM under Chapter 6 – Diseases of the Nervous System.

- Conditions in category G4Ø represent specific and precise diagnoses rather than a sign or symptom of another ill-defined disease or condition.
- Fourth and fifth characters are added to specify the particular type of epilepsy or recurrent seizures and whether the condition is intractable and with or without status epilepticus.

Terms such as “pharmacoresistant (pharmacologically resistant),” “poorly controlled,” “refractory (medically)” and “treatment resistant” are considered equivalent to intractable. The coder should not assume the condition is intractable from general statements in the record.

Some of the terms that classify to the epilepsy and recurrent seizures category G4Ø are:

- Seizure disorder
- Epileptic seizure(s)
- Epileptic attack
- Epileptic fit
- Epileptic convolution(s)
- Epilepsy

Post-traumatic seizures/post-traumatic epilepsy

A post-traumatic seizure is an initial or recurrent seizure that occurs during the acute phase following a traumatic brain injury and has no other known cause.

- Post-traumatic seizures code to R56.1, which Excludes1 post-traumatic epilepsy (G4Ø.-)

Post-traumatic epilepsy is characterized by late seizures that occur more than a week after initial trauma. Late seizures are considered to be unprovoked, while early seizures (those occurring within a week of trauma) are considered to be provoked (those with an immediately identifiable cause, i.e., a direct result of the injury).

- For post-traumatic epilepsy, assign the appropriate epilepsy code based on the documented description followed by the appropriate code to report the traumatic condition with sequela.

Anti-epilepsy and anti-seizure medications

Many medications are used to treat conditions other than epilepsy or seizures. A coder cannot make assumptions when reviewing the medication list.

References: American Academy of Neurology; American Hospital Association Coding Clinic; Centers for Disease Control and Prevention; Epilepsy Foundation; ICD-10-CM and ICD-10-PCS Coding Handbook; ICD-10-CM Official Guidelines for Coding and Reporting; Mayo Clinic; MedlinePlus; Merck Manual; National Institute of Neurological Disorders and Stroke