Seizures/seizure disorders/epilepsy

ICD-10-CM

Clinical overview

Disclaimer

This document is intended for physicians and office staff. The information here is not intended to serve as official coding or legal advice.

All coding should be considered on a case-by-case basis and should be supported by medical necessity and the appropriate documentation in the medical record.

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.

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

Idiopathic: Arising spontaneously or from an obscure or unknown cause.

Provoked seizure (aka acute symptomatic seizure): A single seizure that is provoked by a direct insult to the brain (such as trauma, low blood sugar, low blood sodium, high fever, alcohol or drug abuse).

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.

The terms "seizures" and "epilepsy" are sometimes used interchangeably, however, 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 brain activity.
- 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 (especially in children)
- 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, local or localization-related 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.
   Types of generalized seizures include:
   - **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
- Computerized tomography (CT) scan, positron emission tomography (PET) scan and magnetic resonance imaging (MRI) to check for abnormalities in brain structure

Treatment

The goal of treatment for epilepsy and seizure disorders is to achieve a sustained seizure-free status with no side effects. Treatment options include:

- Elimination or treatment of underlying cause, if known
- Identification and avoidance of triggers
- Dietary changes
- Anti-epileptic drugs (AEDs)
  The initiation phase of drug therapy is the process of identifying the best AED to achieve seizure-free status with no adverse side effects. Once this goal is met, many patients can be maintained on an AED for many years in a seizure-free state (maintenance therapy).
- Various types of surgical intervention
- Implantation of vagus nerve or brain stimulator

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Best documentation practices for physicians

Subjective

In the subjective section of the office note, document the presence or absence of current symptom(s) related to seizure, seizure disorder, epilepsy, etc.

Objective

The objective section should document current associated physical exam findings and related diagnostic test results.

Assessment

Specificity: In the final assessment, spell out the seizure(s), seizure disorder or epilepsy diagnosis in full.

- Document the particular type of seizure(s), seizure disorder or epilepsy to the highest level of specificity with all appropriate descriptors (e.g., idiopathic, symptomatic, intractable, clonic, grand mal, partial complex, etc.).
- Include the current status of seizures, seizure disorder or epilepsy (stable, controlled on Keppra, improved, worsening, historical with no recurrence, etc.).

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 Sz – generalized tonic-clonic seizures. The meaning of an abbreviation can sometimes be determined based on context; however, this is not always true.

Best practice:

- The initial notation of a condition should be spelled out in full with the abbreviation in parentheses. For example: "Temporal lobe epilepsy (TLE)". Subsequent mention of the condition can then be made using the abbreviation.
- The diagnosis should be spelled out in full in the final diagnostic statement with a clear description of the particular type of seizure(s), seizure disorder or epilepsy that is present.

Current versus historical:

- Do not describe current seizure(s), 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 seizure(s) as current if the condition has resolved, has not recurred and is no longer being treated.

Terms of uncertainty:

- Do not use terms that imply uncertainty ("probable," "apparently," "likely," "consistent with," etc.) to describe current, confirmed seizure(s), 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.

Treatment plan

Document a specific and concise treatment plan for seizure(s), seizure disorder or epilepsy.

- Clearly link medications to the seizure or epilepsy diagnosis.
- Outline 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.

Electronic health record (EHR) issues

"Other" and unspecified codes with descriptions:
Some electronic health records insert ICD-10-CM codes with corresponding descriptions into the assessment section of the office note to represent the final diagnosis. For example:

"G4Ø.89 Other seizures"

"G4Ø.9Ø9 Epilepsy, unspecified, not intractable, without status epilepticus"

These are vague descriptions and incomplete diagnoses.

- Codes titled "other" or "other specified" are for use when the medical record provides a specific diagnosis description (i.e., a specific type of seizure or epilepsy) for which a specific code does not exist.
- The "other" ICD-10-CM code with description should not be used, by itself, as a final diagnosis without clear documentation that specifies the particular "other" type of seizure(s) or epilepsy.
- Unspecified diagnosis descriptions should be used only when sufficient clinical information is not known or available to the provider at the time of the encounter.

Mismatch between final diagnostic statement and EHR-inserted diagnosis code with description: Another scenario that causes confusion is one in which the assessment section of an office note documents a provider-stated diagnosis PLUS an EHR-inserted diagnosis code with description that does not match or may even contradict the stated diagnosis. Example:

> **Assessment: Partial complex epilepsy localized to the right temporal lobe**
> G4Ø.1Ø9 Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, without status epilepticus

Here the final diagnosis in bold in the assessment is **Partial complex epilepsy localized to the right temporal lobe**, which codes to G4Ø.2Ø9, Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with *complex* partial seizures, not intractable, without status epilepticus.

The EHR-inserted diagnosis code with description that follows, however, is G4Ø.1Ø9, Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with *simple* partial seizures, not intractable, without status epilepticus.

This can lead to confusion regarding which diagnostic statement is correct and which diagnosis code should be reported. Documentation elsewhere in the record does not always provide clarity.

To avoid confusion and ensure accurate diagnosis code assignment, the provider's final diagnosis must either

a) match the code with description; OR
b) it must classify in ICD-10-CM to the EHR-inserted diagnosis code with description.

Note: ICD-10-CM is a statistical classification; it is not a substitute for a healthcare provider's final diagnostic statement. It is the provider's responsibility to provide legible, clear, concise and complete documentation of each final diagnosis described to the highest level of specificity, which is then translated to a code for reporting purposes. It is not appropriate for healthcare providers to simply list a code number or select a code number from a list of codes in place of a written final diagnosis.

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Tips and resources for coders

Coding basics

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 the criteria for reporting the condition have been met and the physician agrees that a code should be added.

Category R56, Convulsions not elsewhere classified

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.

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

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

Febrile convulsion(s)	Fit(s)
Febrile seizure	Recurrent convulsions
Convulsion disorder	Seizure(s)
Post-traumatic convulsion(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, fifth and sixth 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 refractory)" and "treatment resistant" are equivalent to intractable. However, 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 convulsion(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.

- "Early post-traumatic seizures" are seizures that occur within one week of the initial trauma and are considered to be provoked (i.e., they have an immediately identifiable cause that is a direct result of the injury).
- Post-traumatic seizures code to R56.1, which ***Excludes 1*** post-traumatic epilepsy (G4Ø.-).

"Post-traumatic epilepsy", by contrast, is characterized by late seizures that occur more than a week after initial trauma.

- Late seizures are considered to be unprovoked.
- 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.

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Tips and resources for coders

Anti-seizure and anti-epileptic medications

- Many anti-seizure and anti-epileptic medications are used to treat conditions other than epilepsy or seizures. Coders cannot assume drugs classified as anti-seizure or anti-epileptic medications are being used to treat seizures or epilepsy when the linkage between the medication and diagnosis is not clearly documented in the medical record.
- As previously noted, many patients on maintenance therapy with anti-seizure and anti-epileptic medications achieve long-term seizure-free status. Documentation that a patient on maintenance drug therapy has been seizure-free for an extended period does not mean the patient no longer has epilepsy or a seizure disorder.

Coding examples

Example 1	
Medical record	Past medical history includes "seizures"
Medication list	Includes Topamax
Final assessment	Hypertension, hyperlipidemia, migraine headaches
ICD-10-CM codes	**I1Ø** Essential (primary) hypertension **E78.5** Hyperlipidemia, unspecified **G43.9Ø9** Migraine, unspecified, not intractable, without status migrainosus
Comments	No code is assigned for seizures, as this diagnosis is documented as a historical condition and is not supported as current. Topamax is an anti-seizure medication, but it is not linked to any particular diagnosis. Further, Topamax can be used to treat migraine headaches – a diagnosis documented in the final assessment.

Example 2	
Chief complaint	Presents with history of partial complex seizures. Reports no seizure activity for several years. Current seizure medications include carbamazepine 200 mg 1-1/2 tablets twice daily. Good medication compliance
Past medical history	Seizure disorder since 1995
Review of systems	All systems reviewed and negative.
Physical exam	Within normal limits.
Assessment	Partial complex seizures
Plan	Refill carbamazepine. Return in three months
ICD-10-CM code	**G4Ø.2Ø9** Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, without status epilepticus

Example 3	
Medical record documentation	62-year-old female presented this morning to the outpatient surgery unit for a laparoscopic cholecystectomy. In the surgery recovery area, she experienced slurred speech and confusion, followed by a generalized seizure. Slurred speech and confusion lasted about two minutes and then cleared. Patient denies and nursing staff reports no further neurological symptoms or seizure activity. Neurological exam is within normal limits. CT scan of the head with no significant abnormalities noted.
Assessment	Transient ischemic attack with associated seizure
Plan	Carotid ultrasound
ICD-10-CM codes	**G45.9** Transient cerebral ischemic attack, unspecified **R56.9** Unspecified convulsions

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; WebMD