MDC 1: DISEASES AND DISORDERS OF THE NERVOUS SYSTEM

ALTERED MENTAL STATUS

Altered mental status (AMS) is a **symptom** that almost always needs to be clarified. It is standard medical jargon that you will find frequently documented through records with no clear explanation as to cause and often without a clarifying diagnosis. It is not a CC or MCC and often does not reflect the SOI or intense resources needed to care for these patients. For example:

- The elderly woman who is briefly confused in the ER and who is pleasant
- The young man who overdosed who had to be moved closer to the nursing station
- The old man who is hitting and biting people and requires restraints, a vest, and IV Haldol

Patients like these patients require tremendous amounts of care, and their AMS extends their hospital stay by multiple days. If it appears that your patient is experiencing something more serious or specific than AMS—and it meets the definition of secondary diagnosis—consider querying. Some alternatives to AMS include:

- Encephalopathy
- Acute delirium
- Drug-induced delirium
- Acute confusional state
- Dementia with behavioral disturbance
- Hallucinations
- Coma.

MS-DRG 948—Signs and Symptoms without MCC

WHAT IF AMS IS YOUR PRINCIPAL DIAGNOSIS?

It is very rare that AMS will end up being your PDX. However, if it does, you will be taken to high-risk MS-DRG 948—signs and symptoms without an MCC. Even the name alone sounds high-risk! If you see this developing in the record you are reviewing, consider querying for a cause or explanation of the AMS.

ENCEPHALOPATHY

The definition of **encephalopathy** is "disease, damage, or malfunction of the brain. In general, encephalopathy is manifested by an *altered mental state* that is sometimes accompanied by physical changes. Although numerous causes of encephalopathy are known, the majority of cases arise from infection, liver damage, anoxia, or kidney failure…depending upon the cause and severity of the condition, symptoms may range from mild alterations in mental status to severe and potentially fatal manifestations." (MedicineNet, 2015)

A significant indicator for encephalopathy is that it improves once the cause is corrected. It is also not a minor condition; this patient's confusion will not easily be corrected with 2L of oxygen. These patients require substantial care that is more than a "normal" patient requires. Here are some possible clinical indicators, risk factors, and treatments this patient may be experiencing.

Possible Clinical Indicators: AMS, confusion, disorientation, performing activities that are unsafe and that the patient would not usually perform, aggressive and/or violent behavior, hitting and/or biting, "not acting like themselves," changed or changing Glasgow coma scale (GCS) score, dementia patients "much worse than their baselines"

Possible Risk Factors: Current illness (particularly infection, sepsis, liver disease, hypoxia, or cardiac arrest), severe electrolyte disturbances, history of dementia, nursing home or long-term acute care (LTAC) resident, cancer, malnutrition, history of alcoholism or other drug abuse

Possible Treatment: IV medications (Haldol, Ativan), scans (head CT, brain MRI), moving the patient closer to the nursing station, restraints, withholding any altering medications (such as those for pain), oxygen, having a sitter at the bedside, correcting any electrolyte disturbances, and treating the current illness

Providers and CDI staff frequently receive the following question from coding professionals: "Can my patient have both a dementia and an encephalopathy?" The answer: Yes, your patient may possibly have both. If a demented patient always recognizes his or her spouse and children and knows their favorite show comes on Tuesdays at 6 p.m., and all of a sudden doesn't recognize their family and is **much more confused than baseline**, this could possibly be an encephalopathy. If the patient receives treatment, and they return to his or her baseline, this could be an encephalopathy.

ICD-10: Encephalopathy		
Diagnosis	**Code(s)**	**CC or MCC?**
Alcoholic encephalopathy with associated alcohol abuse	G31.2, F10.10	-
Post-radiation encephalopathy (codes to "other specified disorders of the brain")	G93.89	-
Hypertensive encephalopathy	I67.4	CC
Hypoxic encephalopathy/anoxic brain damage	G93.1	CC
Wernicke's encephalopathy	E51.2	CC
Encephalopathy (toxic) due to drug (specify drug)	G92, T******	MCC
Metabolic encephalopathy	G93.41	MCC
Toxic encephalopathy	G92	MCC
Septic encephalopathy (codes to metabolic encephalopathy)	G93.41	MCC
Encephalopathy, unspecified	G93.40	MCC
Delirium, unspecified (codes to disorientation)	R41.0	-
Delirium, postoperative	F05	CC
Confusion (codes to disorientation)	R41.0	-
Altered mental status	R41.82	-
Hallucinations, unspecified	R44.3	CC
Dementia with behavioral disturbance	F03.91	CC

COMA

CAUTION

A **coma** is defined as a deep state of unconsciousness in which a patient is unable to or cannot respond to verbal or tactile stimuli. They cannot open their eyes, obey commands, or speak understandable words. There are several causes of coma, the most frequent of which include trauma and cardiac arrest. You often will see terms like "patient obtunded" or "patient in a stupor" in the documentation. These are symptoms and refer to non-comatose levels of unconsciousness. Documentation of coma is frequently forgotten; however, this coma is often a severity driver that needs to be identified, particularly in patients who could possibly expire. Comatose patients can wake up but many of them go on to expire. The definition of a coma is a Glasgow Coma Scale (GCS) score of **less than or equal to 8.**

Encephalopathy can be a high-risk diagnosis post-discharge.

Encephalopathy is a high-risk diagnosis by auditors. It has been under scrutiny for being over-documented and/or fraudulently queried (much like severe protein-calorie malnutrition). Because of this, be sure that your query is ***strong*** *and that your patient meets criteria for this diagnosis, which can often be difficult due to the broad definition of the concept.*

Glasgow Coma Scale		
Behavior	**Response**	**Score**
Eye Opening Response	Spontaneously To speech To pain No response	4 3 2 1
Best Verbal Response	Oriented to time, place, and person Confused Inappropriate words Incomprehensible sounds No response	5 4 3 2 1
Best Motor Response	Obeys commands Moves to localized pain Flexion withdrawal from pain Abnormal flexion (decorticate) Abnormal extension (decerebrate) No response	6 5 4 3 2 1
Total Score	Best Response **Comatose Client** Totally Unresponsive	15 **8 or less** 3

A GCS score can be captured in ICD-10. None of the scores are CCs or MCCs. However, these scores can help prove that coma is a legitimate diagnosis and worthy of capturing and final coding. Documentation of coma is frequently an MCC.

CODING GUIDELINE **_AHA CODING CLINIC FOR ICD-10_ (1ST Q ICD-10 2014, PAGES 19-20)**

GCS SCORING "IN THE FIELD"

ICD-10-CM provides codes to identify the Glasgow coma scale (GCS) score. When the patient presents with a traumatic brain injury (TBI), these codes are used in conjunction with the specific codes describing the TBI.

QUESTION: If the emergency medical technician (EMT) documents the patient's initial GCS score in the field, can the EMT's documentation be used? Coders are concerned that there is no official advice or guideline that allows use of non-physician documentation for the Glasgow coma scores. These scores are typically documented by personnel other than physicians. What documentation can be used for determining the ICD-10-CM Glasgow coma score code?

ANSWER: It would be appropriate to use the pre-hospital report containing the EMT's documentation, and other non-physician documentation to determine the Glasgow coma score.

ICD-10: Coma		
Diagnosis	**Code(s)**	**CC or MCC?**
Coma, unspecified (include any associated skull fracture or intracranial injury present)	R40.20	MCC
Hepatic coma, acute	K72.01	MCC
DKA with diabetic coma	E13.11	MCC
Myxedema coma	E03.5	MCC
Persistent vegetative state	R40.3	CC
Unconsciousness, NOS* **New classification in ICD-10. Be careful with this documentation.*	R40.20	MCC
Stupor, semicoma, somnolence	R40.1, R40.0	-

CEREBRAL EDEMA AND BRAIN COMPRESSION

"MASS EFFECT" AND "MIDLINE SHIFT"

There are many disease processes that result in cerebral edema and brain compression, including trauma, stroke, hemorrhage, and tumors. Both cerebral edema and brain compression consist of brain swelling that is caused by some type of intracranial pressure. This swelling can prevent blood from flowing to the brain, which deprives it of the oxygen it needs to function. It can also block fluids from leaving the brain and cause shifts in the ventricles (often referred to as a "midline shift" or "mass effect" on CT or MRI). Death will result if it is severe, and the patient does not receive immediate intervention. Symptoms include some type of alteration of consciousness, speech problems, severe headache, and possibly uneven pupil size.

You may see this documented as "mass effect" or "midline shift," often only in CT or MRI findings. It may never be mentioned in the documentation. This diagnosis is crucial to capture, as these patients are extremely ill and this is a vast severity driver. These terms not only do not accurately describe the severity of your patient but also **codes do not exist for midline shift or mass effect.**

Possible Clinical Indicators: "Midline shift" or "mass effect" on CT or MRI, altered mental status, severe headache, speech issues, coma

Possible Risk Factors: Cerebral trauma or infarction/hemorrhage, abscess, tumor, sepsis, hypoxia

Possible Treatment: High-dose IV steroids ("gold standard" for treatment) often IV decadron, corticosteroids, hypertonic saline, mannitol, hyperventilation, keeping the head at 30°, possible hypothermia, or placement of a drain or other surgical intervention with ICP monitoring