

# Coma Definition

## Spectrum of Altered Level of Consciousness & Responsiveness

- Severe: Coma
- Moderate: Obtundation / stupor
- Mild: Lethargy / somnolence

## Clinical circumstances

- Trauma
- CVA / brain hemorrhage
- End-stage dementia / degenerative brain diseases
- Severe metabolic/physiologic disturbances (e.g., anoxia, hypothermia, diabetes, severe electrolyte imbalance, many others)
- Organ failure (e.g. hepatic or uremic coma)
- Encephalitis/meningitis
- Medications, drugs and toxins

# Glasgow Coma Scale (GCS)

Objective measure of consciousness and responsiveness

Prognostic significance in trauma only

Valid objective measure in all circumstances

Total score 3 to 15

- Eye opening: 1 to 4
- Verbal response: 1 to 5
- Motor response: 1 to 6

Diagnostic correlation:

- Total score 3-8: Coma
- Total score 9-12: Obtundation/stupor
- Total score 13-14: Lethargy / somnolence

# Glasgow Coma Scale (GCS)

<b>Eye Opening</b>	Spontaneous	4	
	Verbal Command	3	
	<b>To pain</b>	2	<b>MCC</b>
	<b>None</b>	1	<b>MCC</b>
<b>Verbal</b>	Oriented	5	
	Confused but answers questions	4	
	Inappropriate, words discernible	3	
	<b>Incomprehensible speech</b>	2	<b>MCC</b>
	<b>None</b>	1	<b>MCC</b>
<b>Motor</b>	Obeys commands	6	
	Purposeful movement to pain	5	
	Withdraws (reflexive) from pain	4	
	Abnormal (spastic) flexion	3	
	<b>Extensor (rigid) response</b>	2	<b>MCC</b>
	<b>None</b>	1	<b>MCC</b>

# Coding Guidelines

## Documentation

- Coma
- Unconsciousness
- Persistent vegetative state

## GCS

## Excludes 1 Note

## Official Coding Guidelines

# Coding Guidelines

## Coma (MCC) requires diagnosis by provider

- Unconsciousness coded as coma
  - Must be prolonged
  - Not transient like seizure or concussion
- Persistent vegetative state coded as a CC: query for coma

## GCS

- No requirement for documentation of “coma”
  - But need something that makes the GCS pertinent (e.g., altered mental status)
- Code from scoring sheet by any healthcare professional
  - Examples: nurse, pre-hospital EMS
- Use lowest score obtained
- Do not code total score if components coded
- Lowest 2 scores of each component are MCCs

# Coding Guidelines

Excludes 1 note for R40-R46 which includes coma and GCS when they are **part of a pattern** of a mental disorder (F01-F99).

- Psych conditions, dementia, intellectual disability, as well as alcohol and drug use, abuse, dependence, intoxication, etc.
- Not excluded in these conditions when due to something else
- Not excluded from poisoning, adverse effect or toxic effect
- Not excluded from conditions other than F01-F99 such as severe metabolic and physiologic disturbances or infections like encephalitis/meningitis

# Official Coding Guidelines



Section I.C.18.e: *“The coma scale codes (R40.2-) **can be used** in conjunction with traumatic brain injury codes, acute cerebrovascular disease or sequelae of cerebrovascular disease codes. These codes are primarily for use by trauma registries, but **they may be used in any setting** where this information is collected. The coma scale codes should be sequenced after the diagnosis code(s)”*

Does not prohibit use in other situations such as:

- Drug overdose
- Severe electrolyte imbalance
- Encephalitis

Remember Excludes 1 note for mental disorders

# Hepatic Encephalopathy

ICD-10 assigns to hepatic failure with or without coma  
5 pairs of codes:

- NOS
- Alcoholic
- Due to drugs
- Acute/subacute
- Chronic

With coma is MCC

- Appears to require a diagnosis of coma or unconsciousness?
- Other significant manifestations seem to be excluded from “with coma”?
  - Agitation, disorientation, confusion, asterixis

ICD-10 changes to include hepatic encephalopathy without coma  
are being considered



# Physician Education

Encourage awareness

Stress importance of GCS

Establish organizational process for recording GCS in record of all patients with altered level of consciousness

ACDIS commercial educational tool:

**CDI for the Clinician™**