

Question: ICD-10-CM now has a coding option for hospitals to record a patient's Glasgow Coma Scale (GCS). To what extent is GCS recorded in the Inpatient Hospital Discharge Data and Outpatient Emergency Department Data?



Answer: The GCS is used to quantify levels of consciousness and the neurological status of patient's who have possibly sustained a brain injury (See **Table 1** below). ICD-10-CM has sixteen coding options for GCS (see **Table 2** below). In the newest FY2017 Inpatient Discharge Data, GCS was recorded on 4,145 patients who fell into 211 different DRGs. The Top 3 DRGs were patients with severe head trauma with coma > 1 hour, those with multiple significant trauma, and those with cerebral infarctions. The FY2016 Outpatient ED data includes GCS on 1,386 patients, some of the leading diagnoses included concussions, alcohol intoxication, and heroin overdose. Please note that the FY2017 inpatient data now includes data on the admitted patient's ED date and time of arrival. Eighty-five percent of inpatient admissions with GCS arrived through the ED. The absolute beauty of the data is that you will find on some patients the EMT field GCS, the ED arrival GCS and the hospital admission GCS which allows you to track across care settings levels of physiological deterioration or improvement.

Table 1. GCS Components

Glasgow Coma Scale		
BEHAVIOR	RESPONSE	SCORE
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score:	<i>Best response</i>	15
	<i>Comatose client</i>	8 or less
	<i>Totally unresponsive</i>	3

Table 2. ICD-10-CM Glasgow Coma Scale Coding Options

Diagnosis Code	Full Description
R4024	Glasgow coma scale, total score
R40241	Glasgow coma scale score 13-15
R40242	Glasgow coma scale score 9-12
R40243	Glasgow coma scale score 3-8
R402410	Glasgow coma scale score 13-15, unspecified time
R402411	Glasgow coma scale score 13-15, in the field [EMT or ambulance]
R402412	Glasgow coma scale score 13-15, at arrival to emergency department
R402413	Glasgow coma scale score 13-15, at hospital admission
R402420	Glasgow coma scale score 9-12, unspecified time
R402421	Glasgow coma scale score 9-12, in the field [EMT or ambulance]
R402422	Glasgow coma scale score 9-12, at arrival to emergency department
R402423	Glasgow coma scale score 9-12, at hospital admission
R402430	Glasgow coma scale score 3-8, unspecified time
R402431	Glasgow coma scale score 3-8, in the field [EMT or ambulance]
R402432	Glasgow coma scale score 3-8, at arrival to emergency department
R402433	Glasgow coma scale score 3-8, at hospital admission