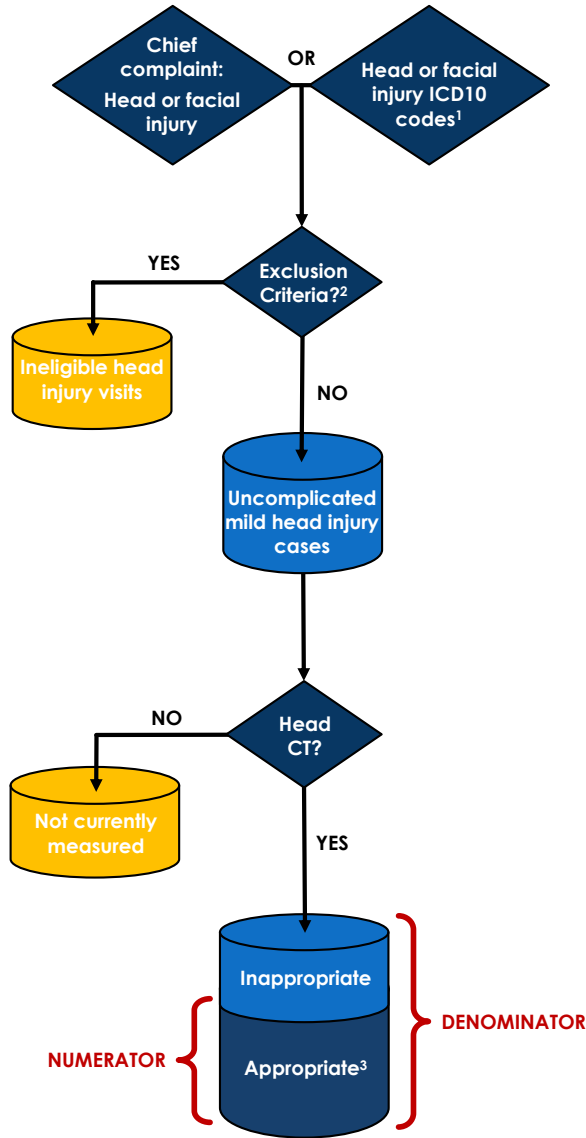


MEDIC
Adult Head Injury Measure Specification Flow Diagram
Ages ≥ 18 years old (adult)

Version 1.0



Reference: Stiell IG, et al. The Canadian CT Head Rule for patients with minor head injury. *Lancet* 2001;357:1391-1396.



¹ Any ICD10 code for head or facial injury (> 400 codes; e.g., concussion, abrasion, contusion, laceration, fracture, etc.)

² Denominator exclusions:

- GCS < 15[^]
- Injury > 24 hours
- Penetrating injury
- Trauma team activation case
- Focal neurologic deficit
- Pregnancy
- History of bleeding disorder
- Suspected presentation of non-accidental trauma (abuse)
- History of VP shunt
- History of brain mass/tumor
- Seizure related to the head injury
- On anticoagulant or antiplatelet medications
- History of cognitive deficits (e.g., dementia)

[^] Includes GCS < 15 documented at any point in ED visit. For ED visits with missing GCS data, the following are used as proxies for depressed GCS: documentation of altered mental status since the inciting injury, patient "not acting normally" according to parent or caregiver, worsening neurologic symptoms in the ED, or evidence of intoxication.

³ Head CT appropriateness criteria:*

- Suspected open or depressed skull fracture
- Any signs of basilar skull fracture[^]
- Vomiting ≥ 2 episodes
- Age ≥ 65 years old
- Amnesia
- Dangerous mechanism[@]
- Patient or family preference[#]

* This is the verbatim Canadian Head CT rule except for 2 criteria: (1) GCS score < 15 at 2 hours after injury is not included and (2) patient or family preference is added. Because of data limitations, GCS at 2 hours after injury is not able to be measured within the MEDIC registry. Therefore, all patients with GCS < 15 are removed as part of the initial denominator exclusion.

[^] Hemotympanum, 'raccoon' eyes, cerebrospinal fluid otorrhea/rhinorrhea, Battle's sign.

[@] Pedestrian struck by motor vehicle, occupant ejected from motor vehicle, fall from height >3 feet or 5 stairs.

[#] Patient or family preference is not a criteria of the original rule.

Head CT Appropriateness Measure:

Quality initiative measure reported as: % appropriate CT scans

$$\% \text{ appropriate} = \frac{\text{appropriate CTs}}{\text{total CTs}}$$

Denominator = ED visits of eligible minor head injury patients receiving head CT (CPT 70450)

Numerator = ED visits of patients receiving appropriate head CT