

# Inpatient Quality Indicator 31 (IQI 31) Carotid Endarterectomy Mortality Rate

**July 2024**

**Hospital-Level Indicator**

**Type of Score: Rate**

**Prepared by:**

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

[qualityindicators.ahrq.gov](https://qualityindicators.ahrq.gov)

**DESCRIPTION**

In-hospital deaths per 1,000 discharges with a procedure for carotid endarterectomy (CEA), for patients ages 18 years and older. Excludes transfers to another hospital, and obstetric discharges.

*[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report in-hospital deaths per 1,000 hospital discharges.]*

**NUMERATOR**

Number of deaths (DISP=20) among discharges meeting the inclusion and exclusion rules for the denominator.

**DENOMINATOR**

Discharges, for patients ages 18 years and older, with any-listed ICD-10-PCS procedure code for carotid endarterectomy (**PRCEATP\***) .

## DENOMINATOR EXCLUSIONS

Exclude discharges:

- transferring to another short-term hospital (DISP=2)
- with a principal ICD-10-CM diagnosis code assigned to MDC 14 Pregnancy, Childbirth & the Puerperium (***Appendix B: MDC14PRINDX***)
- with a principal ICD-10-CM diagnosis code assigned to MDC 15 Newborns & Other Neonates with Conditions Originating in Perinatal Period (***Appendix B: MDC15PRINDX***)
- with an ungroupable DRG (DRG=999)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)
- with missing MDC (MDC=missing) when user indicates that MDC is provided

### [Appendix B — MDC 14 and 15 Principal Diagnosis Codes](#)

\* See below for code list

***Carotid endarterectomy procedure codes: (PRCEATP)***

03CH0Z6	Extirpation of matter from right common carotid artery, bifurcation, open approach	03CK0Z6	Extirpation of matter from right internal carotid artery, bifurcation, open approach
03CH0ZZ	Extirpation of matter from right common carotid artery, open approach	03CK0ZZ	Extirpation of matter from right internal carotid artery, open approach
03CJ0Z6	Extirpation of matter from left common carotid artery, bifurcation, open approach	03CL0Z6	Extirpation of matter from left internal carotid artery, bifurcation, open approach
03CJ0ZZ	Extirpation of matter from left common carotid artery, open approach	03CL0ZZ	Extirpation of matter from left internal carotid artery, open approach