



AHRQ Quality Indicators™ (AHRQ QI™) ICD-10-CM/PCS Specification Version 6.0

Inpatient Quality Indicator 11 (IQI 11) Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate

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Provider-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

www.qualityindicators.ahrq.gov

DESCRIPTION

In-hospital deaths per 1,000 discharges with abdominal aortic aneurysm (AAA) repair, ages 18 years and older. Includes metrics for discharges grouped by type of diagnosis and procedure. Excludes obstetric discharges and transfers to another hospital.

[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.]

Stratification of Indicator

The indicator is stratified into four groups by 1) type of AAA repair (open vs. endovascular) and 2) AAA rupture status.

Cases are assigned to strata according to a hierarchy based on mortality, with cases being assigned to the stratum with the highest mortality for which the case qualifies. In the case of AAA Repair Mortality the current hierarchy is as follows:

Strata hierarchy (listed from highest mortality to lowest mortality):

1. Stratum A (Open repair of ruptured AAA)
2. Stratum C (Endovascular repair of ruptured AAA)
3. Stratum B (Open repair of unruptured AAA)
4. Stratum D (Endovascular repair of unruptured AAA)

NUMERATOR OVERALL

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

Note: The indicator is stratified into four groups by 1) type of AAA repair (open vs. endovascular) and 2) AAA rupture status

NUMERATOR STRATUM A (Open repair of ruptured AAA)

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

NUMERATOR STRATUM B (Open repair of unruptured AAA)

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

NUMERATOR STRATUM C (Endovascular repair of ruptured AAA)

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

NUMERATOR STRATUM D (Endovascular repair of unruptured AAA)

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

DENOMINATOR OVERALL

Discharges, for patients ages 18 years and older, with the following

- any-listed ICD-10-CM diagnosis codes for ruptured AAA and any-listed ICD-10-PCS procedure code for open AAA repair; or
- any-listed ICD-10-CM diagnosis codes for unruptured AAA and any-listed ICD-10-PCS procedure codes for open AAA repair; or
- any-listed ICD-10-CM diagnosis codes for ruptured AAA and any-listed ICD-10-PCS procedure codes for endovascular AAA repair; or
- any-listed ICD-10-CM diagnosis codes for unruptured AAA and any-listed ICD-10-PCS procedure codes for endovascular AAA repair

Un-ruptured AAA diagnosis code: (PRAAA2D)

I714 Abdominal aortic aneurysm, without rupture

Ruptured AAA diagnosis codes: (PRAAARD)

I713 Abdominal aortic aneurysm, ruptured

Open AAA repair procedure codes: (PRAAARP)

04500ZZ	Destruction of Abdominal Aorta, Open Approach	04R007Z	Replacement of Abdominal Aorta with Autologous Tissue Substitute, Open Approach
04503ZZ	Destruction of Abdominal Aorta, Percutaneous Approach	04R00JZ	Replacement of Abdominal Aorta with Synthetic Substitute, Open Approach
04504ZZ	Destruction of Abdominal Aorta, Percutaneous Endoscopic Approach	04R00KZ	Replacement of Abdominal Aorta with Nonautologous Tissue Substitute, Open Approach
04B00ZZ	Excision of Abdominal Aorta, Open Approach	04R047Z	Replacement of Abdominal Aorta with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
04B03ZZ	Excision of Abdominal Aorta, Percutaneous Approach	04R04JZ	Replacement of Abdominal Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach
04B04ZZ	Excision of Abdominal Aorta, Percutaneous Endoscopic Approach	04R04KZ	Replacement of Abdominal Aorta with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

Endovascular AAA repair procedure codes: (PRAAA2P)

04U03JZ	Supplement Abdominal Aorta with Synthetic Substitute, Percutaneous Approach	04V04DJ	Restriction of Abdominal Aorta with Intraluminal Device, Temporary, Percutaneous Endoscopic Approach
04U04JZ	Supplement Abdominal Aorta with Synthetic Substitute, Percutaneous Endoscopic Approach	04V03DZ	Restriction of Abdominal Aorta with Intraluminal Device, Percutaneous Approach
04V00DJ	Restriction of Abdominal Aorta with Intraluminal Device, Temporary, Open Approach	04V04DZ	Restriction of Abdominal Aorta with Intraluminal Device, Percutaneous Endoscopic Approach
04V03DJ	Restriction of Abdominal Aorta with Intraluminal Device, Temporary, Percutaneous Approach		

DENOMINATOR EXCLUSIONS

Exclude cases:

- transferring to another short-term hospital (DISP=2)
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

DENOMINATOR STRATA

Note: The indicator is stratified into four groups by 1) type of AAA repair (open vs. endovascular) and 2) AAA rupture status

DENOMINATOR STRATUM A (Open repair of ruptured AAA)

Discharges, for patients ages 18 years and older, with any-listed ICD-10-CM diagnosis code for ruptured AAA (see above) and any-listed ICD-10-PCS procedure code for open AAA repair (see above).

DENOMINATOR STRATUM B (Open repair of unruptured AAA)

Discharges, for patients ages 18 years and older, with any-listed ICD-10-CM diagnosis code for unruptured AAA (see above) and any-listed ICD-10-PCS procedure code for open AAA repair (see above).

DENOMINATOR STRATUM C (Endovascular repair of ruptured AAA)

Discharges, for patients ages 18 years and older, with any-listed ICD-10-CM diagnosis code for unruptured AAA (see above) and any-listed ICD-10-PCS procedure code for endovascular AAA repair (see above).

DENOMINATOR STRATUM D (Endovascular repair of unruptured AAA)

Discharges, for patients ages 18 years and older, with any-listed ICD-10-CM diagnosis code for unruptured AAA (see above) and any-listed ICD-10-PCS procedure code for endovascular AAA repair (see above).