



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

Inpatient Quality Indicator 04 (IQI 04) Abdominal Aortic Aneurysm (AAA) Repair Volume

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Provider-Level Indicator

Type of Score: Volume

Prepared by:

Agency for Healthcare Research and Quality

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www.qualityindicators.ahrq.gov

DESCRIPTION

The number of hospital discharges with a procedure for abdominal aortic aneurysm (AAA) repair for patients 18 years and older or obstetric patients. Includes optional metrics for the number of discharges grouped by rupture status and procedure type.

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 rate for which the case qualifies. In the case of AAA Repair Volume 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

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with either

- 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 un-ruptured 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 un-ruptured 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 code: (PRAAARD)

I713 Abdominal aortic aneurysm, ruptured

Open AAA repair procedure codes: (PRAAAP)

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		

NUMERATOR STRATUM A (Open repair of ruptured AAA)

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any-listed ICD-10-CM diagnosis codes for ruptured AAA (see above) and any-listed ICD-10-PCS procedure code for open AAA repair (see above).

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

NUMERATOR STRATUM B (Open repair of unruptured AAA)

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any-listed ICD-10-CM diagnosis codes for un-ruptured AAA (see above) and any-listed ICD-10-PCS procedure codes for open AAA repair (see above).

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

NUMERATOR STRATUM C (Endovascular repair of ruptured AAA)

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any-listed ICD-10-CM diagnosis codes for ruptured AAA (see above) and any-listed ICD-10-PCS procedure codes for endovascular AAA repair (see above).

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

NUMERATOR STRATUM D (Endovascular repair of unruptured AAA)

Discharges, for patients ages 18 years and older or MDC 14 (pregnancy, childbirth, and puerperium), with any-listed ICD-10-CM diagnosis codes for un-ruptured AAA (see above) and any-listed ICD-10-PCS procedure codes for endovascular AAA repair (see above).

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

NUMERATOR EXCLUSIONS

Exclude cases:

- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)