Abdominal Aortic Aneurysm (AAA) Repair Volume
Technical Specifications

Inpatient Quality Indicators #4 (IQI #4)
AHRQ Quality Indicators™, Version 5.0
March 2015
Provider-Level Indicator
Type of Score: Volume

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-9-CM diagnosis codes for ruptured AAA and any-listed ICD-9-CM procedure code for open AAA repair; or
- any-listed ICD-9-CM diagnosis codes for un-ruptured AAA and any-listed ICD-9-CM procedure codes for open AAA repair; or
- any-listed ICD-9-CM diagnosis codes for ruptured AAA and any-listed ICD-9-CM procedure

codes for endovascular AAA repair; or
- any-listed ICD-9-CM diagnosis codes for un-ruptured AAA and any-listed ICD-9-CM procedure codes for endovascular AAA repair

ICD-9-CM Un-ruptured AAA diagnosis code:
4414   ABDOM AORTIC ANEURYSM

ICD-9-CM Ruptured AAA diagnosis code:
4413   RUPT ABD AORTIC ANEURYSM

ICD-9-CM Open AAA repair procedure codes:
3834	AORTA RESECTION & ANAST	3864	EXCISION OF AORTA
3844	RESECT ABDM AORTA W REPL		

ICD-9-CM Endovascular AAA repair procedure codes:
3971	ENDO IMPL GRFT ABD AORTA	3978	ENDOVAS IMPLN GRFT AORTA
3977	TEMP ENDOVSC OCCLS VESSEL		

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

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-9-CM diagnosis codes for ruptured AAA (see above) and any-listed ICD-9-CM procedure code for open AAA repair (see above).

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

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-9-CM diagnosis codes for un-ruptured AAA (see above) and any-listed ICD-9-CM procedure codes for open AAA repair (see above).

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

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-9-CM diagnosis codes for ruptured AAA (see above) and any-listed ICD-9-CM procedure codes for endovascular AAA repair (see above).

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

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-9-CM diagnosis codes for un-ruptured AAA (see above) and any-listed ICD-9-CM procedure codes for endovascular AAA repair (see above).

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

Denominator

Overall:

Not applicable.

Stratum A:

Not applicable.

Stratum B:

Not applicable.

Stratum C:

Not applicable.

Stratum D:

Not applicable.