



Vascular Surgery Report Dictionary

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All Vascular Surgeries

The demographic, patient history, and medication data listed below exists at the discharge level, not at the procedure level. In each of these, consider only discharges in which there was at least one Vascular Surgery procedure.

Demographics

Discharges

The total number of discharges that contain a vascular surgery procedure. The numerator and denominator are the same.

Average Age (mean, stdev)

Calculates the average (mean) age of patients as of the admission date. Compare the birthdate of each discharge with the admission date to compute the age of the patient at admission.

Male Gender

Numerator: The number of discharges with a VS procedure where the patient is male.

Denominator: The total number of discharges with a VS procedure.

Female Gender

Numerator: The number of discharges with a VS procedure where the patient is female.

Denominator: The total number of discharges with a VS procedure.

Race

Numerator: The number of discharges with a VS procedure of X race.

Denominator: The total number of discharges with a VS procedure.

Preadmission Living Location

Numerator: The number of discharges with a VS procedure with X Preadmission Living Location.

Denominator: The total number of discharges with a VS procedure.

Discharge Status

Numerator: The number of discharges with a VS procedure with X Discharge Status.

Denominator: The total number of discharges with a VS procedure.

Death

Data Abstraction Instructions:

Numerator: The number of discharges with a VS procedure where death is the discharge status.

Denominator: The total number of discharges with a VS procedure

Patient History

Ever Smoked

Numerator: The number of discharges with an elective VS procedure where the patient smoked at any time during their life.

Denominator: The total number of discharges with an elective VS procedure.

Current Smoker

Numerator: The number of discharges with an elective VS procedure where the patient smoked cigarettes, cigars, pipe, or chewed tobacco within one month prior to arrival to the hospital.

Denominator: The total number of discharges with an elective VS procedure.

Smoking Cessation

The Smoking Cessation section combines Pre-procedure Smoking Cessation and Smoking Cessation at Discharge.

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented before the hospital admission date, during the hospitalization or at the time of discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused to quit smoking prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused NRT prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Services

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Services

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused the referral to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pre-Procedure Smoking Cessation

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented prior to the date of admission.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused to quit smoking prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT) (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the provider recommended NRT prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT) (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the patient refused NRT prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Services (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Service (Pre-Procedure)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the patient refused the referral to a smoking counseling service prior to the date of admission.

Denominator: The total number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Smoking Cessation at DC

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused to quit smoking during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT) (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT) (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused NRT during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Services (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Services (Discharge)

Numerator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused the referral to a smoking counseling service during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Ever Smoked (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient smoked any time in their life.

Denominator: The total number of discharges with an elective VS or carotid procedure.

Exclusion from numerator and denominator: Death during procedure, death post-procedure, or death at discharge.

Current Smoker (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient smoked cigarettes, cigars, pipe, or chewed tobacco within one month prior to arrival to the hospital.

Denominator: The total number of discharges with an elective VS or carotid procedure.

Exclusion from numerator and denominator: Death during procedure, death post-procedure, or death at discharge.

Smoking Cessation (VS and Carotid)

The Smoking Cessation section combines Pre-procedure Smoking Cessation and Smoking Cessation at Discharge.

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented before the hospital admission date, during the hospitalization or at the time of discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice (VS and carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused to quit smoking prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT) (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT)(VS and carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused NRT prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Services (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Services (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused the referral to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission, during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pre-Procedure Smoking Cessation (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented prior to the date of admission.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the provider recommended the patient quit smoking prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco the patient refused to quit smoking prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT) (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT) (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused NRT prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Service (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Services (VS and Carotid, Pre-Procedure)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, chews tobacco and the patient refused the referral to a smoking counseling service prior to the date of admission.

Denominator: The total number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service prior to the date of admission.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Smoking Cessation at DC (VS and Carotid)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and at least 2 of 3 smoking cessation interventions (Physician-delivered advice, Nicotine replacement therapy, Referral to smoking counseling services) were implemented during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Physician Delivered Advice (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Physician Delivered Advice (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused to quit smoking during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended the patient quit smoking during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Nicotine Replacement Therapy (NRT) (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Nicotine Replacement Therapy (NRT) (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the patient refused NRT during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider recommended NRT during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Referral to Smoking Counseling Services (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Pt Refused Referral to Smoking Counseling Services (VS and Carotid, Discharge)

Numerator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco the patient refused the referral to a smoking counseling service during the hospitalization or at discharge.

Denominator: The number of discharges with an elective VS or carotid procedure where the patient currently smokes cigarettes, cigars, pipe, or chews tobacco and the provider referred the patient to a smoking counseling service during the hospitalization or at discharge.

Exclusion: Death during procedure, death post-procedure, or death at discharge.

Hypertension

Numerator: The number of discharges with a VS procedure where the patient has a history of hypertension.

Denominator: The total number of discharges with a VS procedure.

Diabetes Mellitus

Numerator: The number of discharges with a VS procedure where the patient has a history of any type of diabetes.

Denominator: The total number of discharges with a VS procedure.

Coronary Artery Disease (CAD)

Numerator: The number of discharges with a VS procedure where the patient has a history of CAD.

Denominator: The total number of discharges with a VS procedure.

Exercise Counseling at DC (PAD)

Numerator: The number of discharges containing an open bypass procedure where the patient received exercise counseling or education.

Denominator: The number of discharges containing an open bypass procedure.

Exclusions:

- Death in OR or post procedure

- Discharges with Wheelchair or Bedridden entered for Ambulation pre procedure.

Medications (admission, discharge)

Aspirin (adm)

Numerator: The number of discharges with an Open AAA, EVAR, or open bypass procedure where the patient is taking ASA within 30 days of hospital admission.

Denominator: The total number of discharges with an Open AAA, EVAR, or open bypass procedure.

Exclusions: A contraindication to ASA.

Aspirin (dis)

Numerator: The number of discharges with an Open AAA, EVAR, or open bypass procedure where ASA is ordered or continued at discharge.

Denominator: The total number of discharges with an Open AAA, EVAR, or open bypass procedure.

Exclusions: A contraindication to ASA.

Beta Blockers (adm)

Numerator: The number of discharges with an Open AAA, EVAR, or open bypass procedure where the patient is taking a beta blocker within 30 days of hospital admission.

Denominator: The total number of discharges with an Open AAA, EVAR, or open bypass procedure.

Exclusion: A contraindication to beta blockers.

Beta Blockers (dis)

Numerator: The number of discharges with an Open AAA, EVAR, or open bypass procedure where a beta blocker is ordered or continued at discharge.

Denominator: The total number of discharges with an Open AAA, EVAR, or open bypass procedure.

Exclusions: A contraindication to beta blockers.

Statin (adm)

Numerator: The number of discharges with an OAAA, EVAR, or Open bypass procedure where the patient is taking a statin within 30 days of hospital admission.

Denominator: The total number of discharges with an OAAA, EVAR, or Open bypass procedure.

Exclusion: A contraindication to statins.

Statin (dis)

Numerator: The number of discharges with an OAAA, EVAR, or open bypass procedure where a statin is ordered or continued at discharge.

Denominator: The total number of discharges with an OAAA, EVAR, or open bypass procedure.

Exclusions: A contraindication to statins.

Opioids

Opioids @ Admission (VS)

Numerator: The number of discharges with X procedure where the patient is taking an opioid within 30 days of hospital admission.

Denominator: The total number of X procedure.

This section is broken out by specific procedure type:

- EVAR
- Open AAA
- Bypass
- Open Thrombectomy

Opioids @ Discharge (VS)

Numerator: The number of discharges containing X procedure where an opioid is prescribed or continued at discharge.

Denominator: The total number of X procedure.

This section is broken out by specific procedure type:

- EVAR
- Open AAA
- Bypass
- Open Thrombectomy

New Opioid @ Discharge (VS)

Numerator: The number of discharges with X procedure where the patient was not taking an opioid at admission, but an opioid was prescribed at discharge.

Denominator: The total number of X procedure.

This section is broken out by specific procedure type:

- EVAR
- Open AAA
- Bypass
- Open Thrombectomy

Procedural Information

The procedural information below is reported out at the procedure level, not the discharge level for each individual procedure.

Pre Imaging Studies (EVAR)

Procedures EVAR

Numerator: The number of EVAR procedures. Denominator: The number of VS procedures.

CTA (abnormal / performed)

Numerator: The number of EVAR procedures that had an abnormal Computerized Tomographic Angiography (CTA) pre procedure.

Denominator: The total number of EVAR procedures where a CTA was performed pre procedure. Note: Pre procedure = the imaging

study was performed within 6 months prior to the procedure.

MRI/MRA (abnormal / performed)

Numerator: The number of EVAR procedures that had an abnormal MRI/MRA pre procedure.

Denominator: The total number of EVAR procedures where a MRI/MRA was performed pre procedure.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

Cardiac Stress Test

Numerator: The number of EVAR procedures that had cardiac stress test pre procedure.

Denominator: The total number of EVAR procedures.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Abnormal

Numerator: The number of EVAR procedures that had an abnormal Cardiac Stress Test pre procedure.

Denominator: The total number of EVAR procedures where a Cardiac Stress Test was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

EKG (abnormal / performed)

Numerator: The number of EVAR procedures that had an abnormal EKG pre procedure.

Denominator: The total number of EVAR procedures where an EKG was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Prior CABG

Numerator: The number of discharges with an EVAR procedure where a CABG was performed within 6 months prior to the EVAR.

Denominator: The total number of EVAR procedures.

Prior PCI

Numerator: The number of discharges with an EVAR procedure where a PCI was performed within 6 months prior to the EVAR.

Denominator: The total number of EVAR procedures.

Indications (EVAR)

Procedures EVAR

Numerator: The number of EVAR procedures.

Denominator: The total number of VS procedures.

Asymptomatic

Numerator: The number of EVAR procedures where the patient was Asymptomatic for AAA.

Denominator: The total number of EVAR procedures.

Note: There can be multiple indications per procedure.

Abdominal/Back Pain

Numerator: The number of EVAR procedures where the patient presented with Abdominal/Back Pain.

Denominator: The total number of EVAR procedures.

Note: there can be multiple indications per procedure.

Ruptured AAA

Numerator: The number of EVAR procedures with a Ruptured AAA.

Denominator: The total number of EVAR procedures.

Procedure Details (EVAR)

Procedures EVAR

Numerator: The number of EVAR procedures.

Denominator: The total number of VS procedures.

Maximum AAA Diameter (mean, stdev)

The average (mean) and standard deviation of Maximum AAA Diameter for EVAR procedures.

Exclusions:

- EVAR procedures performed for the indication of iliac aneurysm repair only.
 - EVAR procedures where a Maximum AAA Diameter value is not entered.
-

Graft Body Diameter (mean, stdev)

The average (mean) and standard deviation of Graft Body Diameter for EVAR procedures.

Exclusion: EVAR procedures where a value for Graft Body Diameter is not entered.

Graft Type

Numerator: The number of EVAR procedures that had X graft type implanted.

Denominator: The total number of EVAR procedures.

Graft Not Utilized (type)

Numerator: The number of EVAR procedures where a graft was not implanted.

Denominator: The total number of EVAR procedures.

Graft Configuration

Numerator: The number of EVAR procedures with X Graft Configuration.

Denominator: The total number of EVAR procedures.

Endoleak at Completion

Numerator: The number of EVAR procedures where there was an endoleak at completion.

Denominator: The total number of EVAR procedures.

Endoleak Type

Numerator: The number of X Endoleak Type.

Denominator: The total number of EVAR procedures where there was an Endoleak at Completion.

Conversion to Open

Numerator: The number of EVAR procedures where a Conversion to Open occurred.

Denominator: The total number of EVAR procedures.

Reason for Conversion to Open

Numerator: The number of X reason for Conversion to Open.

Denominator: The total number of EVAR procedures where a Conversion to Open occurred.

Pre Imaging Studies (Open AAA)

Procedures Open AAA

Numerator: The number of Open AAA procedures.

Denominator: The total number of VS procedures.

CTA (abnormal / performed)

Numerator: The number of Open AAA procedures that had an abnormal Computerized Tomographic Angiography (CTA) pre procedure.

Denominator: The total number of Open AAA procedures where a CTA was performed pre procedure.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

MRI/MRA (abnormal / performed)

Numerator: The number of Open AAA procedures that had an abnormal MRI/MRA pre procedure.

Denominator: The total number of Open AAA procedures where a MRI/MRA was performed pre procedure.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

Cardiac Stress Test

Numerator: The number of Open AAA procedures that had cardiac stress test pre procedure.

Denominator: The total number of Open AAA procedures.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Abnormal

Numerator: The number of Open AAA procedures that had an abnormal Cardiac Stress Test pre procedure.

Denominator: The total number of Open AAA procedures where a Cardiac Stress Test was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

EKG

Numerator: The number of Open AAA procedures that had an abnormal EKG pre procedure.

Denominator: The total number of Open AAA procedures where an EKG was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Prior CABG

Numerator: The number of discharges with an Open AAA procedure where a CABG was performed within 6 months prior to the Open AAA.

Denominator: The total number of Open AAA procedures.

Prior PCI

Numerator: The number of discharges with an Open AAA procedure where a PCI was performed within 6 months prior to the Open AAA.

Denominator: The total number of Open AAA procedures.

Indications (Open AAA)

Procedures Open AAA

Numerator: The number of Open AAA procedures.

Denominator: The total number of VS procedures.

Asymptomatic

Numerator: The number of Open AAA procedures where the patient was Asymptomatic for AAA.

Denominator: The total number of Open AAA procedures.

Note: There can be multiple indications per procedure.

Abdominal/Back Pain

Numerator: The number of Open AAA procedures where the patient presented with Abdominal/Back Pain.

Denominator: The total number of Open AAA procedures.

Note: there can be multiple indications per procedure.

Ruptured AAA

Numerator: The number of Open AAA procedures with a Ruptured AAA.

Denominator: The total number of Open AAA procedures.

Procedure Details (Open AAA)

Procedures Open AAA

Numerator: The number of Open AAA procedures.

Denominator: The number of VS procedures.

Maximum AAA Diameter (mean, stdev)

The average (mean) and standard deviation of Maximum AAA Diameter for Open AAA procedures.

Exclusions:

- Open AAA procedures performed for iliac aneurysm repair only.
 - Open AAA procedures where Not Documented was entered for Maximum AAA Diameter.
-

Conversion from Endovascular Repair

Numerator: The number of Open AAA procedures where a Conversion from Endovascular Repair occurred.

Denominator: The total number of Open AAA procedures.

Conversion from Endovascular Repair Timeframe

Numerator: The number of X timeframe that the conversion from endovascular repair took place.

Denominator: the total number of Open AAA procedures that had a Conversion from Endovascular Repair.

Graft Body Diameter (mean, stdev)

The average (mean) and standard deviation of Graft Body Diameter for Open AAA procedures.

Exclusion: Open AAA procedures where a value for Graft Body Diameter is not entered.

Graft Type

Numerator: The number of Open AAA procedures that had X graft type implanted.

Denominator: The total number of Open AAA procedures where a graft was implanted.

Proximal Clamp Position

Numerator: The number of X proximal clamp positions for Open AAA procedures.

Denominator: The total number of Open AAA procedures.

Pre Imaging Studies (Revasc / Bypass)

Procedures Revasc / Bypass

Numerator: The number of Open Bypass procedures.

Denominator: The total number of VS procedures.

CTA (abnormal / performed)

Numerator: The number of Open Bypass procedures that had an abnormal Computerized Tomographic Angiography (CTA) pre procedure.

Denominator: The total number of Open Bypass procedures where a CTA was performed pre procedure.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

MRI/MRA (abnormal / performed)

Numerator: The number of Open Bypass procedures that had an abnormal MRI/MRA pre procedure.

Denominator: The total number of Open Bypass procedures where a MRI/MRA was performed pre procedure.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

Cardiac Stress Test

Numerator: The number of Open Bypass procedures that had cardiac stress test pre procedure.

Denominator: The total number of Open Bypass procedures.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Abnormal

Numerator: The number of Open Bypass procedures that had an abnormal Cardiac Stress Test pre procedure.

Denominator: The total number of Open Bypass procedures where a Cardiac Stress Test was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

EKG (abnormal / performed)

Numerator: The number of Open Bypass procedures that had an abnormal EKG pre procedure.

Denominator: The total number of Open Bypass procedures where an EKG was performed pre procedure.

Note: Pre procedure = the test was performed within 6 months prior to the procedure.

Prior CABG

Numerator: The number of discharges with an Open Bypass procedure where a CABG was performed within 6 months prior to the Open Bypass.

Denominator: The total number of Open Bypass procedures.

Prior PCI

Numerator: The number of discharges with an Open Bypass procedure where a PCI was performed within 6 months prior to the Open Bypass.

Denominator: The total number of Open Bypass procedures.

Contrast cineangiography

Numerator: The number of Open Bypass procedures that had an abnormal contrast cineangiography pre procedure.

Denominator: The total number of Open Bypass procedures with a documented pre procedure contrast cineangiography.

Note: Pre procedure = the imaging study was performed within 6 months prior to the procedure.

Indications (Revasc / Bypass)

Procedures Revasc / Bypass

Numerator: The number of Open Bypass procedures.

Denominator: The total number of VS procedures.

Asymptomatic

Numerator: The number of Open bypass procedures where the patient was Asymptomatic for AAA.

Denominator: The total number of Open Bypass procedures.

Note: There can be multiple indications per procedure.

Claudication

Numerator: The number of Open Bypass procedures where the patient presented with Claudication.

Denominator: The total number of Open bypass procedures.

Note: There can be multiple indications per procedure.

Rest Pain

Numerator: The number of Open Bypass procedures where the patient presented with Rest Pain.

Denominator: The total number of Open Bypass procedures.

Note: There can be multiple indications per procedure.

Ulcer / Gangrene

Numerator: The number of Upper Extremity Open Bypass procedures where Ulcer / Gangrene is entered and the number of Lower Extremity Open Bypass procedures that have Wound (WIFI) entered.

Denominator: The total number of upper extremity and lower extremity open bypass procedures.

Note: There can be multiple indications per procedure.

Acute Limb Ischemia

Numerator: The number of Open Bypass procedures where the patient presented with Acute Limb Ischemia.

Denominator: The total number of Open Bypass procedures.

Note: There can be multiple indications per procedure.

Procedure Details (OT/Revasc / Bypass)

Procedures Open Thrombectomy

Numerator: The number of Open Thrombectomy procedures.

Denominator: The total number of VS procedures.

Procedures Revasc/Bypass

Numerator: The number of Open Bypass procedures.

Denominator: The total number of VS procedures.

Inflow

Aorto-Femoral

Numerator: The number of Open Bypass procedures that have a Graft Origin in the Aorta and a Graft Insertion or Graft Insertion #2 in a Femoral artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Femoral-femoral

Numerator: The number of Open Bypass procedures that have a Graft Origin in a Femoral artery and a Graft Insertion or Graft Insertion #2 also in a Femoral artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Axillary-femoral

Numerator: The number of Open Bypass procedures that have a Graft Origin in an Axillary artery and a Graft Insertion or Graft Insertion #2 in a Femoral artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Other Inflow

Numerator: The number of Open Bypass procedures that have a graft implanted in the axillary, aorta, or iliac arteries and the distal end of the graft does not extend beyond the profunda femoris.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Outflow

Femoral-Popliteal

Numerator: The number of Open Bypass procedures that have a Graft Origin in a Femoral artery and a Graft Insertion or Graft Insertion #2 in a Popliteal artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Femoral-Tibial

Numerator: The number of Open Bypass procedures that have a Graft Origin in a Femoral artery and a Graft Insertion or Graft Insertion #2 in a Tibial artery.

Denominator: The total number of Open Bypass Procedures where a graft was implanted.

Popliteal-Tibial

Numerator: The number of Open Bypass procedures that have a Graft Origin in a Popliteal artery and a Graft Insertion or Graft Insertion #2 in a Tibial artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Popliteal-Popliteal

Numerator: The number of Open Bypass procedures that have a Graft Origin in a Popliteal artery and a Graft Insertion or Graft Insertion #2 also in a Popliteal artery.

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Other Outflow

Numerator: The number of Open Bypass procedures where the Graft Insertion or Graft Insertion #2 is an upper or lower extremity artery.

Exclusions from the numerator:

The Graft Origin is in the following arteries

- Common Femoral Artery
- Superficial Femoral Artery
- Popliteal Artery

Denominator: The total number of Open Bypass procedures where a graft was implanted.

Vein Graft

Numerator: The number of Vein Grafts used for Open Bypass procedures.

Denominator: The total number of Open Bypass procedures.

Vein Graft Location

Numerator: The number of X Vein Graft Location.

Denominator: The total number of Open Bypass procedures that had a Vein Graft.

Prosthetic Graft

Numerator: The number of Prosthetic Grafts for Open Bypass procedures.

Denominator: The total number of Open Bypass procedures.

Prosthetic Graft Type

Numerator: The number of X Prosthetic Graft Type that was used for Open Bypass procedures.

Denominator: The total number of Open Bypass procedures where a Prosthetic Graft was implanted.

Intraoperative Graft Revision

Numerator: The number of Open Bypass procedures with a documented Intraoperative Graft Revision.

Denominator: The total number of Open Bypass procedures.

Additional concomitant procedures

Numerator: The number of Open Bypass procedures where an additional concomitant procedure was performed.

Denominator: The total number of Open Bypass procedures.

Type of Additional Concomitant Procedure

Numerator: The X type of additional concomitant procedure that was performed during an Open Bypass.

Denominator: The total number of Open Bypass procedures where an additional concomitant procedure was performed.

Outcomes

Outcomes in OR

Death in OR

Numerator: The number of VS procedures where a death occurred in the OR.

Denominator: The total number of VS procedures.

Note: For discharges with multiple procedures, death will only be counted once.

Myocardial Infarction

Numerator: The number of VS procedures where an MI occurred in the OR.

Denominator: The total number of VS procedures.

Cardiac arrest

Numerator: The number of VS procedures where a cardiac arrest occurred in the OR.

Denominator: The total number of VS procedures.

Note: For discharges with multiple procedures, cardiac arrest will only be counted once.

Stent/Graft Thrombosis

Numerator: The number of VS procedures where thrombus formed in a stent or graft during the procedure.

Denominator: The total number of VS procedures.

Note: For discharges with multiple procedures, stent/graft thrombosis is only counted once.

Unsuccessful Stent/Graft Thrombosis

Numerator: The number of VS procedures where a thrombosis that formed in a stent or graft during the procedure was treated unsuccessfully.

Denominator: The total number of VS procedures where a thrombosis that formed in a stent or graft during the procedure.

Transfusion (PRBC)

Numerator: The number of VS procedures where a patient had a Transfusion of PRBCs during the procedure.

Denominator: The total number of VS procedures.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

Note: For discharges with multiple procedures, transfusion is only counted once.

Outcomes Prior to Discharge

The outcomes that are measured in this section are outcomes that occurred post-procedure and before discharge.

Death

Numerator: The number of discharges containing a VS procedure where a patient died post-procedure and prior to discharge.

Denominator: The number discharges that containing a VS procedure.

Note: Deaths are counted once for discharges that have multiple procedures.

Myocardial Injury

Numerator: The number of discharges containing a VS procedure where a Myocardial Injury occurred post-procedure and before discharge.

Denominator: The number of discharges containing a VS procedure.

Infection/Sepsis

Numerator: The number of discharges with a VS procedure where an infection/sepsis developed post-procedure and before to discharge.

Denominator: The number of discharges with a VS procedure.

Note: Multiple Infection/Sepsis are only counted once per discharge.

Source of Infection/Sepsis

Numerator: The number of X source of Infection/Sepsis.

Denominator: The number of discharges with a VS procedure where an infection developed post-procedure and before discharge.

Stent / Graft Thrombosis

Numerator: The number of discharges with a VS procedure where a Stent/Graft Thrombosis occurred post-procedure and before to discharge.

Denominator: The number of discharges with a VS procedure.

Note: Multiple Stent/Graft Thrombosis are only counted once per discharge.

Unsuccessful

Numerator: The number of Stent/Graft Thrombosis that were treated unsuccessfully.

Denominator: The number of discharges with a VS procedure where a Stent/Graft Thrombosis occurred post-procedure and before to

Amputation (planned)

Numerator: The number of discharges with a VS procedure where an Amputation was performed post-procedure and before discharge.

Denominator: The total number of discharges with a VS procedure.

Note: Multiple options may be selected.

Location of Amputation

Numerator: The number of X location of amputation.

Denominator: The total number of discharges with a VS procedure where an amputation was performed post-procedure and before discharge.

TIA/stroke

Numerator: The number of discharges with a VS procedure where a patient had a TIA/Stroke post-procedure and before discharge.

Denominator: The number of discharges with a VS procedure.

Note: Multiple TIAs/-strokes are only counted once per discharge.

Bowel Ischemia

Numerator: The number of discharges with a VS procedure where Bowel Ischemia developed post-procedure and before discharge.

Denominator: The total number of discharges with a VS procedure.

Length of Stay (mean, stdev)

The average (mean) and standard deviation of length of stay for X procedure. Length of stay is calculated as date of discharge minus the date of admission.

Length of Stay Post-op (mean, stdev)

The average (mean) and standard deviation of the length of stay post-op for X procedure. The length of stay post-op is calculated as the date of discharge minus the procedure end date of the first procedure within a discharge.

CIN

Vascular Surgery CIN is calculated only for discharges with an EVAR procedure. EVAR discharges that have a ruptured AAA repair are excluded from the CIN measures.

Discharges w/ EVAR

Numerator: The number of discharges containing an EVAR procedure.

Denominator is the total number of discharges containing an Open AAA, EVAR, or Open Bypass procedure.

Exclusion: Procedures with a Ruptured AAA.

CIN Potential

Numerator: The number of discharges with an EVAR procedure that meet all the following criteria:

- A pre-procedure creatinine value is entered into the website
- A post-procedure creatinine (Peak, Discharge, or Post Discharge) value is entered into the website
- The patient does not have a history of renal transplant or kidney failure
- The patient did not die during the EVAR

- The EVAR was not performed for ruptured AAA repair.

Denominator: The total number of discharges with an EVAR procedure.

Missing Creatinine (pre)

Numerator: The number of discharges with an EVAR procedure where the pre procedure creatinine value is entered as Not drawn. EVAR procedures that have a Ruptured AAA are excluded from the numerator.

Denominator: The total number of discharges with a VS procedure.

Missing Creatinine (post)

Numerator: The number of discharges with an EVAR procedure where the post procedure peak creatinine, discharge creatinine, and post-discharge creatinine values for that EVAR procedure are all entered as "Not drawn". EVAR procedures that have a Ruptured AAA are excluded from the numerator.

Denominator: The total number of discharges containing an EVAR procedure.

CIN Excluded

EVAR procedures where the patient has a history of renal failure requiring dialysis or renal transplant (including failed transplants) are excluded from the CIN measure.

Hx Renal Failure req Dialysis

Numerator: The number of discharges with an EVAR procedure where the patient has a History of Renal Failure Currently Requiring Dialysis.

Denominator: The total number of EVAR procedure procedures.

Renal Transplant

Numerator: The number of discharges with an EVAR procedure where the patient has a history of a renal transplant. A history of failed renal transplants is included in this measure.

Denominator: The total number of EVAR procedures.

CIN

CIN is defined as a > 0.5 mg/dL increase of post procedure creatinine from pre-procedure creatinine.

Numerator: The number of discharges with an EVAR procedure with an increase of post procedure creatinine of >0.5 mg/dL.

Denominator: The number of discharges with an EVAR procedure.

Exclusions:

- the patient is on dialysis for renal failure pre procedure
- renal transplant
- death in OR
- ruptured AAA
- No value for pre-procedure creatinine
- No value for peak post procedure creatinine, discharge creatinine, or post-discharge creatinine

Creatinine (pre) >= 1.5

Numerator: The number of discharges with an EVAR procedure where the pre procedure creatinine value for the first EVAR procedure is >= 1.5.

Denominator: The total number of discharges with an EVAR procedure where a pre procedure creatinine value was entered for the first EVAR procedure.

Exclusions:

- Renal Failure Currently Requiring Dialysis
- Ruptured AAA

Post-Cr drawn for high risk patients (EVAR)

Numerator: The number of discharges with an EVAR procedure where the first EVAR procedure has a pre-procedure creatinine ≥ 1.5 and either a post procedure peak creatinine value, discharge creatinine value or post-discharge creatinine value was entered.

Denominator: The number of discharges with an EVAR procedure in which the first EVAR procedure has a pre-procedure creatinine ≥ 1.5 .

Exclusions:

- Renal Failure Currently Requiring Dialysis
- Death during the procedure
- No contrast was used during the procedure
- CO2 is entered for contrast type

Pre Procedure Hydration - High Risk Patients (EVAR)

Numerator: The number of discharges with an EVAR procedure that have a pre-procedure creatinine ≥ 1.5 and IV fluids (Saline, Lactated Ringer's, Other Hydration, or Sodium Bicarbonate) was administered pre procedure.

Denominator: The number of discharges with an EVAR procedure where the first EVAR procedure has a pre-procedure creatinine ≥ 1.5 .

Exclusions:

- Renal Failure Currently Requiring Dialysis
- Ruptured AAA

Transfusion

Pre procedure Hgb (mean, stdev)

The average (mean) and standard deviation of the pre-procedure Hgb value for all discharges with a VS procedure.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

Anemia (pre-procedure)

Numerator: The number of discharges with a VS procedure that have a pre-procedure hemoglobin value of < 13 for males, < 12 for females.

Denominator: The total number of discharges with a VS procedure.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

Reference:

<http://en.wikipedia.org/wiki/Anemia>

Post Procedure Nadir Hemoglobin (mean, stdev)

The average (mean) and the standard deviation for Post Procedure Nadir Hemoglobin values for discharges with a VS procedure.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

Transfusion PRBC (all discharges)

Numerator: The number of discharges with an Open AAA, EVAR, or Open Bypass procedure in which a post-procedure transfusion of PRBCs was given.

Denominator: The number of discharges with an Open AAA, EVAR, or Open Bypass procedure.

Note: Multiple Transfusions given during a discharge are counted once.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

All Discharges Transfused w/Hgb ≥ 8

Numerator: The number of discharges with an Open AAA, EVAR or, Open Bypass procedure where a post-procedure transfusion of PRBCs was given and the Hemoglobin value prior to the Transfusion is ≥ 8.0 .

Denominator: The number of discharges with an Open AAA, EVAR, or Open Bypass procedure where a post-procedure transfusion of PRBCs was given.

Exclusions:

- Ruptured AAA repair
- Indication of Trauma

Transfusion when Asymptomatic with Hgb ≥ 8.0 (Discharge level)

Numerator: The number of discharges with an Elective Open AAA, EVAR, or Open Bypass procedure that have a transfusion of PRBCs within 30 days of the procedure end date, the value of the hemoglobin prior to transfusion is ≥ 8.0 , and the patient is asymptomatic before the transfusion.

Denominator: The number of discharges with an Elective Open AAA, EVAR, or Open Bypass procedure that have a transfusion of PRBCs within 30 days of the procedure end date.

Exclusions from the denominator:

- Ruptured AAA repair
- Indication of Trauma

Vascular Surgery Key Indicators of Performance

This portion of the report contains the various QI goals set for vascular surgery. Specifics are included in each item definition.

Elective VS Discharges (OAAA, EVAR, OBP)

Numerator: The number of discharges in which the first procedure is an Elective Open AAA, EVAR, or Open Bypass procedure.

Denominator: The number of discharges in which the first procedure is an Elective Open AAA, EVAR, or Open Bypass procedure.

Total Elective Discharges (OAAA, EVAR, OBP, CEA, CAS)

Numerator: The number of discharges in which the first procedure is an Elective Open AAA, EVAR, Open Bypass, CEA, or CAS procedure.

Denominator: The number of discharges in which the first procedure is an Elective Open AAA, EVAR, Open Bypass, CEA, or CAS procedure.

Readmission for SSI (Procedure end to 30 Days)

Numerator: The number of discharges with an elective OAAA, EVAR, or Open Bypass procedure that have Readmission to Hospital for a graft infection or wound infection/dehiscence that is within 30 days of the procedure end date.

Denominator: The total number of discharges with an Elective OAAA, EVAR, or Open Bypass procedure.

Note: For discharges with multiple procedures, the discharge is included in the numerator and denominator if the first VS procedure (OAAA, EVAR, Open Bypass) in the discharge is an Elective procedure.

SSI Rate (Procedure end to 30 days)

Numerator: The number of discharges with an Elective Open AAA, EVAR or Open Bypass procedure that have a post procedure outcome of graft infection or Wound site infection within 30 days of the procedure end date.

Denominator: The total number of discharges with an Elective Open AAA, EVAR, or Open Bypass procedure.

Note: For discharges with multiple procedures, the discharge is included in the numerator and denominator if the first VS procedure (OAAA, EVAR, Open Bypass) in the discharge is an Elective procedure.

Chlorhexidine & Alcohol Skin Prep (Procedure level)

Numerator: The number of Elective Open AAA, EVAR, or Open Bypass procedures where the skin was prepped with Chlorhexidine & alcohol.

Denominator: The number of Elective Open AAA, EVAR, or Open Bypass procedures.

Exclusions: A contraindication to Chlorhexidine & alcohol.

Note: For discharges with multiple procedures, the discharge is included in the numerator and denominator if the first VS procedure (OAAA, EVAR, Open Bypass) in the discharge is an Elective procedure.

Antibiotic Redosing (Procedure level)

Numerator: The number of Elective Open AAA, EVAR, or Open Bypass procedures in which one of these things is true:

- Cefazolin was administered within 1 hour of skin incision, the procedure was >4.5 hr in length, and the Cefazolin was redosed at the 4 hour mark
- Clindamycin was administered within 1 hour of skin incision, the procedure was >6.5 hr in length, and the Clindamycin was redosed at the 6 hour mark.
- An Other antibiotic was administered pre-procedure and the procedure was >4.5 hr in length.

Denominator: The number of elective Open AAA, EVAR, or Open Bypass procedures in which one of these things is true:

- Cefazolin was administered within 1 hour of skin incisions, and the procedure was >4.5 hr in length
- Clindamycin was administered within 1 hour of skin incision and the procedure was >6.5 hr in length
- An Other antibiotic was administered pre procedure and the procedure was >4.5 hr in length.

Note: Antibiotics administered +/- 30 minutes of the redosing time are included.

Exclusions:

- Renal Failure Currently Requiring Dialysis
 - The patient is taking a scheduled antibiotic
-

Post-Op Myocardial Injury Rate (Procedure end to 30 days)

Numerator: The number of discharges with an Elective Open AAA, EVAR, Open Bypass, CEA, or CAS procedure where a STEMI or NSTEMI occurred within 30 days of the procedure end date.

Denominator: The total number of discharges with an Elective Open AAA, EVAR, Open Bypass, CEA, or CAS procedure.

Vascular Surgery Any Anti-Platelet at Discharge

Numerator: The number of discharges with an Open Bypass, CEA, or CAS procedure where an antiplatelet was ordered or continued at discharge.

Denominator: The number of discharges containing an Open Bypass, CEA, or CAS procedure. **Goal: >95%.**

Antiplatelets included in this measure:

- Aspirin
- Clopidogrel (Plavix)
- Prasugrel (Effient)
- Ticlopidine (Ticlid)
- Ticagrelor (Brilinta)
- Cilostazol (Pletal)

Exclusions:

- Death during the procedure or post procedure
- The patient was discharge to Hospice, An Other Acute Care Hospital, or Left AMA
- A contraindication to the medications above
- Indication of Trauma

Vascular Surgery Statin at Discharge

Numerator: Number of discharges with an Open Bypass, CEA, or CAS procedure where a statin was prescribed or continued at discharge.

Denominator: The total number of discharges with an Open Bypass, CEA, or CAS procedure.

Exclusions:

- An indication of peripheral aneurysm repair or trauma.
- The patient was discharged to an Other Acute Care Hospital or Left AMA.
- A death occurred during the procedure or after the procedure.
- A contraindication to a statin.

Goal >95%

Elective EVAR not discharged by post-op day 2

Numerator: The number of discharges with an elective EVAR procedure that has a post procedure LOS >3.

- Intra-operative and post-operative outcomes are excluded from the numerator only.

Denominator: The total number of discharges with an elective EVAR procedure.

Goal: <10%

Exclusions from the numerator and denominator:

- EVAR procedures that are performed concurrently with another VS or carotid procedure within the same discharge.
- EVAR procedures performed with a Fenestrated Graft.

Readmission - All Cause (Procedure end to 30 Days)

Numerator: The number of discharges with an Elective Open Bypass, EVAR, or Open AAA procedure that have a readmission to the hospital for the following outcomes within 30 days of the procedure end date:

- Lymph leak
- Wound infection/dehiscence
- Graft infection
- Anticoag complication

Denominator: The total number of discharges with an elective Open Bypass, EVAR, or Open AAA procedure.

EVAR Opioid naïve patients prescribed ≤ 4 opioid pills at discharge (P4P)

Numerator: Number of opioid naïve EVAR discharges with an opioid prescription at discharge of ≤ 4 pills.

Denominator: Number of opioid naïve EVAR discharges.

Exclusions from the numerator:

- EVAR discharges where Not Documented is marked for Quantity prescribed

Exclusions from the numerator and denominator:

- EVARs performed concurrently with another procedure
- Cutdowns
- A discharge status of death.

Please note: Opioid naïve is defined as no opioids taken by the patient >30 days before admission to the hospital.

Goal $\geq 70\%$.

CEA Opioid naïve patients prescribed ≤ 4 opioid pills at discharge (P4P)

Numerator: Number of opioid naïve CEA discharges with an opioid prescription at discharge of ≤ 4 pills. CEA discharges where Not Documented is marked for Quantity prescribed are excluded from the numerator.

Denominator: Number of opioid naïve CEA discharges.

Exclusions from the numerator and denominator:

- CEA performed concurrently with CABG.
- Discharge status of death.

Please note: Opioid naïve is defined as no opioids taken by the patient >30 days before admission to the hospital.

Goal $\geq 70\%$.

Vascular Surgery Goal Graphs

Each graphs will be a bar plot. On the x axis, each hospital is listed. On the y axis, X metric is listed.

The hospitals on the report graphs are blinded, meaning they are not listed by their hospital code number. For convenience, we also color the bar representing the specific hospital that pertains to that report.

If the metric has a goal, a horizontal line will be drawn on the graph to indicate where the goal lies.

Use of Chlorhexidine & Alcohol Skin Prep - Goal $\geq 90\%$

For each hospital, compute the percentage of procedures utilizing Chlorhexidine & Alcohol Skin Prep. This is the same as the definition for [Chlorhexidine & Alcohol Skin Prep](#) on the Vascular Surgery QI Goals page.

Goal $\geq 90\%$

Antibiotic Redosing - Goal 100%

For each hospital, compute the percentage of procedures that redosed antibiotics. This is the same as the definition for [Antibiotic Redosing](#) on the Vascular Surgery QI Goals page.

Goal 100%

Post-Op Myocardial Injury Rate - Goal \leq 3%

For each hospital, compute the percentage of discharges with a post-op Myocardial Injury. This is the same as the definition for [Post-Op Myocardial Injury \(Procedure End to 30 Days\)](#) rate on the Vascular Surgery Key Indicators of Performance page. **Goal < 3.0%**.

Vascular Surgery Any Anti-Platelet at Discharge - Goal \geq 95%

For each hospital, compute the percentage of discharges meeting the Any Anti-Platelet at discharge criteria . This is the same as the definition for [Vascular Surgery Any Anti-Platelet at Discharge](#) on the Vascular Surgery QI Goals page.

Goal \geq 95%

Vascular Surgery Statin at Discharge - Goal \geq 95%

For each hospital, compute the percentage of discharges meeting the Statin at discharge criteria . This is the same as the definition for [Vascular Surgery Statin at Discharge](#) on the Vascular Surgery Key Indicators of Performance page.

Goal \geq 95%

Post Creatinine Drawn - High Risk Patients (EVAR) - Goal \geq 75%

For each hospital, compute the percentage of discharges containing an EVAR with a pre procedure creatinine \geq 1.5 that had a post creatinine drawn. This is the same as the definition for [Post Creatinine Drawn - High Risk Patients \(EVAR\)](#) on the Vascular Surgery CIN page.

Goal \geq 75%

Elective EVAR not discharged by post-op day 2 - Goal <10%

For each hospital, compute the percentage of elective EVARs meeting the P4P criteria for LOS. This is the same as the definition for [Elective EVAR not discharged by post-op day 2](#) on the Vascular Surgery Key Indicators of Performance page.

Goal < 10%

EVAR Opioid naïve patients prescribed \leq 4 opioid pills at discharge (P4P) - Goal \geq 70%

EVAR Opioid naïve patients prescribed \leq 4 opioid pills at discharge (P4P) - Goal \geq 70%

For each hospital, calculate the percentage of discharges meeting the EVAR Opioid at discharge criteria. This is the same as the definition for [EVAR Opioid naïve patients prescribed \$\leq\$ 4 opioid pills at discharge \(P4P\)](#) on the Vascular Surgery Key Indicators of Performance page.

Goal \geq 70%

CEA Opioid naïve patients prescribed \leq 4 opioid pills at discharge (P4P) - Goal \geq 70%

CEA Opioid naïve patients prescribed \leq 4 opioid pills at discharge (P4P) - Goal \geq 70%

For each hospital, calculate the percentage of discharges meeting the CEA Opioid at discharge criteria. This is the same as the definition for [CEA Opioid naïve patients prescribed \$\leq\$ 4 opioid pills at discharge \(P4P\)](#) on the Vascular Surgery Key Indicators of Performance page.

Goal \geq 70%
