Measure Title:

M2S 1: Procedures with statin and antiplatelet agents prescribed at discharge

Measure Description:

This measure estimates the frequency of procedures where a statin and antiplatelet agent was prescribed at discharge for any of the following procedures: Infra-Inguinal Bypass, Supra-Inguinal Bypass, Peripheral Vascular Intervention, Carotid Artery Stent, Carotid Endarterectomy, Thoracic and Complex EVAR, Endovascular AAA Repair, and Open AAA Repair.

Denominator:

All procedures captured in the Vascular Quality Initiative® Infra-Inguinal Bypass, Supra-Inguinal Bypass, Peripheral Vascular Intervention, Carotid Artery Stent, Carotid Endarterectomy, Thoracic and Complex EVAR, Endovascular AAA Repair, and Open AAA Repair Registries where the patient was at least 18 years old at the time of the procedure, and the patient was discharged alive during the reporting period.

Denominator Exceptions:

N/A

Denominator Exclusions:

Exclude procedures associated with patients who were not discharged on statins or antiplatelets due to a documented medical reason.

Numerator:

All procedures captured in the Vascular Quality Initiative® Infra-Inguinal Bypass, Supra-Inguinal Bypass, Peripheral Vascular Intervention, Carotid Artery Stent, Carotid Endarterectomy, Thoracic and Complex EVAR, Endovascular AAA Repair, and Open AAA Repair Registries where the patient was at least 18 years old at the time of the procedure, and the patient was discharged alive during the reporting period where a statin and antiplatelet agent were prescribed at discharge.

Measure Type:

Process

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 2: Amputation-free survival assessed at least 9 months following Infra-Inguinal Bypass for intermittent claudication

Measure Description:

This measure estimates freedom from amputation or death at least 9 months after Infra-Inguinal Bypass for intermittent claudication.

Denominator:

All procedures captured in the Vascular Quality Initiative® Infra-Inguinal Bypass Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication for the leg undergoing treatment during the calendar year prior to the reporting interval with at least 9 month follow up.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Infra-Inguinal Bypass Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication for the leg undergoing treatment during the calendar year prior to the reporting interval with at least 9 month follow up and who were alive and without minor or major amputation reported at a follow-up visit at least 9 months after the treatment

Measure Type:

Outcome

NQS Domain:

Patient Safety

Measure Title:

M2S 3: Infra-inguinal bypass for claudication patency assessed at least 9 months following surgery

Measure Description:

This measure estimates the frequency of graft patency assessment one year Infra-Inguinal Bypass.

Denominator:

All Infra-inguinal bypass procedures performed for claudication in Vascular Quality Initiative® Infrainguinal Bypass Registry during the calendar year prior to the reporting interval associated with patients who were at least 18 years old at the time of the procedure .

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure.

Numerator:

All Infra-inguinal bypass procedures performed for claudication in Vascular Quality Initiative® Infrainguinal Bypass Registry during the calendar year prior to the reporting interval associated with patients who were at least 18 years old at the time of the procedure and with at least 9 month follow up where graft patency was assessed at follow-up.

Rationale:

Patients with symptomatic peripheral arterial disease (PAD) secondary to atherosclerosis may present with intermittent claudication or critical limb ischemia. The first line of treatment for intermittent claudication due to PAD should be supervised walking exercise program to increase collateral circulation; however due to a uncertainty of the effect of this treatment revascularization, by an endovascular or surgical approach has often been performed to improve quality of life and limb salvage. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

Measure Type:

Process

NQS Domain:

Communication and Care Coordination

Measure Title:

M2S 4: Amputation-free survival assessed at least 9 months following Supra-Inguinal Bypass for claudication

Measure Description:

This measure estimates freedom from amputation or death at least 9 months after Supra-Inguinal Bypass for claudication.

Denominator:

All procedures captured in the Vascular Quality Initiative® Supra-Inguinal Bypass Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication in at least one leg during the calendar year prior to the reporting interval with at least 9 month follow up.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Supra-Inguinal Bypass Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication in at least one leg during the calendar year prior to the reporting interval with at least 9 month follow up who were alive and without minor or major amputation reported after the treatment.

Measure Type:

Outcome

NQS Domain:

Patient Safety

Measure Title:

M2S 5: Amputation-free survival at assessed at least 9 months following Peripheral Vascular Intervention for intermittent claudication

Measure Description:

This measure estimates freedom from amputation or death at least 9 months after Peripheral Vascular Intervention for intermittent claudication.

Denominator:

All procedures captured in the Vascular Quality Initiative® Peripheral Vascular Intervention Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication for the treated leg(s) undergoing Peripheral Vascular Intervention below external iliac during the calendar year prior to the reporting interval with at least at least 9 month follow up.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Peripheral Vascular Intervention Registry associated with patients who were at least 18 years old at the time of the procedure and with indication of claudication for the treated leg(s) undergoing Peripheral Vascular Intervention below external iliac during the calendar year prior to the reporting interval with at least at least 9 month follow up associated with patients who were alive and without minor or major amputation reported after the intervention.

Measure Type:

Outcome

NQS Domain:

Patient Safety

Measure Title:

M2S 6: Peripheral Vascular Intervention patency assessed at assessed at least 9 months following infrainguinal PVI for claudication

Measure Description:

This measure estimates the frequency of patency assessment at least 9 months following infrainguinal Peripheral Vascular Intervention for claudication.

Denominator:

All procedures captured in the Vascular Quality Initiative® Peripheral Vascular Intervention Registry for claudication distal to the external iliac during the calendar year prior to the reporting interval. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Peripheral Vascular Intervention Registry for claudication distal to the external iliac during the calendar year prior to the reporting interval with at least 9 month follow up where patency was assessed at follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Process

NQS Domain:

Communication and Care Coordination

Measure Title:

M2S 7: Ipsilateral stroke-free survival at assessed at least 9 months following Carotid Artery Stenting for asymptomatic procedures

Measure Description:

This measure estimates freedom from stroke or death at least 9 months after carotid artery stenting for asymptomatic carotid stenosis.

Denominator:

All procedures captured in the Vascular Quality Initiative® Carotid Artery Stenting Registry for asymptomatic carotid stenosis during the calendar year prior to the reporting interval with at least 9 month follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Carotid Artery Stenting Registry for asymptomatic carotid stenosis during the calendar year prior to the reporting interval with at least 9 month follow up which are free of either stroke or death (any cause) after index carotid artery stenting. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Outcome

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 8: Ipsilateral stroke-free survival assessed at least 9 months following isolated Carotid Endarterectomy for asymptomatic procedures

Measure Description:

This measure estimates freedom from stroke or death at least 9 months after carotid endarterectomy for asymptomatic carotid artery stenosis.

Denominator:

All procedures captured in the Vascular Quality Initiative® Carotid Endarterectomy Registry for carotid endarterectomy for asymptomatic disease during the calendar year prior to the reporting interval with at least 9 month follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. This measure also excludes combined Coronary Artery Bypass Graft procedures, and excludes combined proximal or distal intervention or other combined arterial procedures. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Carotid Endarterectomy Registry for carotid endarterectomy for asymptomatic disease during the calendar year prior to the reporting interval with at least 9 month follow up which are free of either stroke or death (any cause) after index carotid endarterectomy. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Outcome

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 9: Imaging-based maximum aortic diameter assessed at least 9 months following Thoracic and Complex EVAR procedures

Measure Description:

This measure estimates the frequency of imaging-based maximum aortic diameter assessment at least 9 months after Thoracic and Complex EVAR procedures.

Denominator:

All Thoracic and Complex EVAR procedures captured in Vascular Quality Initiative® Thoracic and Complex EVAR Registry during the calendar year prior to the reporting interval. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. This measure also excludes conversion to open.

Numerator:

All Thoracic and Complex EVAR procedures captured in Vascular Quality Initiative® Thoracic and Complex EVAR Registry during the calendar year prior to the reporting interval with at least 9 month follow up, where the follow up included a CT scan or MR documenting the maximum aortic diameter. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Process

NQS Domain:

Communication and Care Coordination

Measure Title:

M2S 10: Survival at least 9 months after elective repair of small thoracic aortic aneurysms

Measure Description:

This measure estimates freedom from death at least 9 months after elective repair of small thoracic aortic aneurysms in patients without a known connective tissue disorder.

Denominator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Thoracic and Complex EVAR Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 6 cm for women, or less than or equal to 6.5 cm for men at the index procedure, and with at least at least 9 month follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up that are not dead are excluded from this measure. Procedures associated with patients with a known connective tissue disorder are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Thoracic and Complex EVAR Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 6 cm for women, or less than or equal to 6.5 cm for men at the index procedure, and with at least 9 month follow up and who are alive. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Outcome

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 11: Imaging-based maximum aortic diameter assessed at least 9 months following Endovascular AAA Repair procedures

Measure Description:

This measure estimates the frequency of imaging-based maximum aortic diameter assessment at least 9 months after Endovascular AAA Repair procedures.

Denominator:

All Endovascular AAA Repair procedures captured in Vascular Quality Initiative® Endovascular AAA Repair Registry during the calendar year prior to the reporting interval. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. This measure also excludes procedures that were converted to open.

Numerator:

All Endovascular AAA Repair procedures captured in Vascular Quality Initiative® Endovascular AAA Repair Registry during the calendar year prior to the reporting where maximum aortic diameter was assessed during a follow up visit at least 9 months after surgery and who are alive. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Process

NQS Domain:

Communication and Care Coordination

Measure Title:

M2S 12: Survival at least 9 months after elective repair Endovascular AAA Repair of small abdominal aortic aneurysms

Measure Description:

This measure estimates freedom from death at least 9 months after elective repair of small abdominal aortic aneurysms.

Denominator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Endovascular AAA Repair Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 5.5 cm for women, or less than or equal to 6.0 cm for men at the index procedure, and with at least 9 month follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Endovascular AAA Repair Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 5.5 cm for women, or less than or equal to 6.0 cm for men at the index procedure, and with at least 9 month follow up and who are alive. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Outcome

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 13: Survival at least 9 months after elective Open AAA repair of small abdominal aortic aneurysms

Measure Description:

This measure estimates freedom from death at least 9 months after elective open repair of small abdominal aortic aneurysms.

Denominator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Open AAA Repair Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 5.5 cm for women, or less than or equal to 6.0 cm for men at the index procedure, and with at least 9 month follow up. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients lost to follow up are excluded from this measure. Procedures associated with missing key data elements that are required to calculate the outcomes measure will be excluded from this measure.

Numerator:

All elective procedures for aneurysm repair captured in the Vascular Quality Initiative® Open AAA Repair Registry during the calendar year prior to the reporting interval where maximum aortic diameter is less than or equal to 5.5 cm for women, or less than or equal to 6.0 cm for men at the index procedure, and with at least 9 month follow up who are alive. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Outcome

NQS Domain:

Effective Clinical Care

Measure Title:

M2S 14: Disease specific patient-reported outcome surveys for Varicose Vein procedures

Measure Description:

This measure estimates the frequency of disease specific patient reported outcomes assessments for varicose vein procedures during the reporting year.

Denominator:

All procedures captured in the Vascular Quality Initiative® Varicose Vein Registry during the reporting year. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Exclude procedures where the patient died prior to discharge. Procedures associated with patients lost to follow up are excluded from this measure.

Numerator:

All procedures captured in the Vascular Quality Initiative® Varicose Vein Registry during the reporting year that had patient reported outcomes recorded both prior to treatment and post-treatment during the reporting year. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Process

NQS Domain:

Person and Caregiver-Centered Experience Outcomes

Measure Title:

M2S 15: Appropriate management of retrievable IVC filters

Measure Description:

This measure estimates the frequency of IVC Filter procedures that used a retrievable filter, and were managed appropriately. Appropriate management is described as one of the following: (1) the IVC Filter was removed during the reporting year, or (2) the IVC filter was attempted to be removed during the reporting year, or (3) the patient was evaluated within three months of filter placement, and removal was not clinically indicated.

Denominator:

All retrievable IVC filter procedures captured in the Vascular Quality Initiative® Inferior Vena Cava Filter Registry during the reporting year. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Denominator Exceptions:

N/A

Denominator Exclusions:

Procedures associated with patients who could not be contacted for follow-up, or who refused filter removal at evaluation, will be excluded from the measure.

Numerator:

All retrievable IVC filter procedures captured in the Vascular Quality Initiative® Inferior Vena Cava Filter Registry during the reporting year associated with one of the following: (1) the IVC Filter was removed during the reporting year, (2) the IVC filter was attempted to be removed during the reporting year, or (3) the patient was evaluated within three months of filter placement, and removal was not clinically indicated. All procedures are associated with patients who were at least 18 years old at the time of the procedure.

Measure Type:

Process

NQS Domain:

Effective Clinical Care