OE/S NATIONAL REGISTRY

# PAD Terms and Definitions

**BASELINE:**

**POA**: Power of Attorney

**Medical History:**
**CAD**: Coronary Artery Disease (includes hx CABG and/or coronary stent(s) or PCI)
**CHF**: Congestive Heart Failure
**CKD**: Chronic Kidney Disease
**COPD**: Chronic obstructive pulmonary disease
**CVA**: Cerebrovascular Accident
**TIA**: Transient Ischemic Attack
**EF**: Ejection Fraction
**LE**: Lower Extremity
**MI**: Myocardial Infarction
**Major Amputation**: Above Knee Amputation (AKA) or Below the Knee Amputation (BKA)
**Minor Amputation**: Below the Ankle, including forefoot or toe(s)
**Patient Reason**: (e.g. patient refusal)
**Medical Reason**: (e.g. allergy/contraindication)
**System Reason**: (e.g. vaccine not available)

**Chronic Kidney Disease Classification:**
**Class I**: Kidney damage with normal kidney function (GFR ≥90)
**Class II**: Kidney damage with mild loss of kidney function (GFR 89-60)
**Class IIIa**: Mild to moderate loss of kidney function (GFR 59-44)
**Class IIIb**: Moderate to severe loss of kidney function (GFR 44-30)
**Class IV**: Severe loss of kidney function (GFR 29-15)
**Class V**: Kidney failure (GFR <15)

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**Patient Medications**
**On Medication**: Patient has a current prescription (pill count on hand is >1 or prescription end date is not specified or greater than today or is started today
**Antiplatelet Medications (common)**:
Aspirin, Clopidogrel, Prasugrel, Ticagrelor
**Anticoagulation Medications (common):**
Heparin, Enoxaparin (Lovenox), Dalteparin (Fragmin), Coumadin (Warfarin), Rivaroxaban (Xarelto), Davigatran (Pradaxa), Apixaban (Eliquis), Vorapaxar (Zontivity)
**Claudication/CLI Medications (common):**
Cilostazol (AKA Pletal), Pentoxifylline (AKA Trental)
**Statin Medications (common):**
Atorvastatin (Lipitor), Fluvastatin (Lescol, Lescol XL), Lovastatin (Mevacor, Altoprev), Pravastatin (Pravachol), Rosuvastatin (Crestor), Simvastatin (Zocor), Pitavastatin (Livalo)

**Non-Statin Lipid Lowering Medication (categories):**
Bile Acid-binding resins, Fibrates, Omega-3s, PCSK9 inhibitors
**Beta-Blocker Medication(s):**
Metoprolol (Lopressor and Toprol), Carvedilol (Coreg), Atenolol (Tenormin), Propranolol (Inderal), Nebivolol (Bystolic), Bisoprolol (Zebeta)

****Physician Attestation for Documenting Patient Medications:** Physician attests to documenting, updating or reviewing a patient's current medications using all immediate resources available on the date of encounter. **This list must include ALL known prescriptions, over-the counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosages, frequency and route of administration.**

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**PRE-PROCEDURE**

**Rutherford Classification:**
**0**: Asymptomatic: documented PAD, without symptoms of claudication or ischemic pain
**1**: Mild claudication: ischemic limb muscle pain that does not limit walking or limits walking only after >2 blocks (>600 feet or 2 football fields)
**2**: Moderate claudication: ischemic limb muscle pain that limits walking to 1-2 blocks (300 to 600 feet or 1-2 football fields)
**3**: Severe claudication: ischemic limb muscle pain that limits walking to <1 block (<300 feet or 1 football field)
**4**: Ischemic rest pain: pain in the distal foot at rest thought to be due to limited arterial perfusion
**5**: Minor tissue loss: non-healing ischemic ulcer on distal leg or focal gangrene with diffuse pedal ischemia
**6**: Major tissue loss: ischemic gangrene extending above TM level, functional foot no longer salvageable without extensive revascularization efforts

**WIfI Wound Grade Definitions:**
**1**: Shallow: presence of small shallow ulcer on distal leg or foot, with any exposed bone being limited to distal phalanx (ie, minor tissue loss, limb salvage possible with simple digital amputation [1 or 2 digits] or skin coverage)
**2**: Deep: presence of deeper full-thickness ulcer or necrosis (gangrene) on distal leg or foot with exposed bone, joint or tendon, or shallow heel ulcer without involvement of the calcaneus (ie. major tissue loss, salvageable with 3 or greater digital amputations or standard TMA plus skin coverage)
**3**: Extensive: presence of extensive deep ulcer or necrosis (gangrene) of forefoot or midfoot with exposed bone, joint, or tendon, or full-thickness heel ulcer with/without involvement of calcaneus (ie, extensive tissue loss; salvageable only with complex foot reconstruction or nontraditional TMA [eg, Chopart or Lisfranc amputation])

**WIfI Ischemia Definitions:**
**0**: ABI ≥0.80, Ankle systolic pressure >100 mm Hg and TP, TcPO2 ≥60 mm Hg;
**1**: ABI 0.6-0.79, Ankle systolic pressure 70-100 mm Hg and TP, TcPO2 40-59 mm Hg
**2**: ABI 0.4-0.59, Ankle systolic pressure 50-70 mm Hg and TP, TcPO2 30-39 mm Hg;
**3**: ABI ≤0.39, Ankle systolic pressure <50 mm Hg and TP, TcPO2 <30 mm Hg

**WIfI foot Infection Grade Definitions:**
**0**: No symptoms or signs of infection
**1**: Infection present and at least two of following: local swelling or induration, erythema >0.5 to greater than 2 cm around ulcer, local tenderness or pain, local warmth, or purulent discharge; other causes of an inflammatory response of the skin have been excluded (eg. gout, fracture)
**2**: Local infection present as defined for grade 1 but extends >2 cm around ulcer or involves structures deeper than skin and subcutaneous tissues (eg, abscess, osteomyelitis, septic arthritis, fasciitis); no clinical signs of systemic inflammatory response
**3**: Local infection present as defined for grade 2, but clinical signs of systemic inflammatory response are present with 2 or more of the following: temperature >38"C or <36"C; heart rate >90 beats/min, respiratory rate >20 breaths/min, or PaCO2 <32 mmHg; white blood cell count >12,000 or <4000 cells/mm3, or >10% immature band forms present

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**Procedure Indications:**
**Acute Limb Ischemia**: Acute (<2 wk), severe hypoperfusion of the limb characterized by these features: pain, pallor, pulselessness, poikilothermia (cold), paresthesias, and paralysis
**Claudication**: Fatigue, discomfort, cramping, or pain of vascular origin in muscles of lower extremities that is consistently induced by exercise and consistently relieved by rest (within 10 min).
**Critical Limb Ischemia (CLI)**: Chronic (≥2 wk) ischemic rest pain, non-healing wound/ulcers, or gangrene in 1 or both legs attributable to objectively proven arterial occlusive disease
**Maintenance of Patency**: Procedure performed in a patient to maintain patency of an arterial conduit
**Minor Tissue Loss**: Non-healing ulcer, focal gangrene w/ diffuse pedal ischemia perfusion in asymptomatic pt. or in routine basis (not entirely driven by symptoms)
**Major Tissue Loss**: Extending above transmetatarsal level; functional foot no longer salvageable
**PSV**- Peak Systolic Velocity
**Prevention of Aneurysm Complication**: Procedure performed in asymptomatic patient with aneurysm to prevent complications i.e.: repair of AAA Type 2 endoleak
**Treatment of Symptomatic Aneurysm**: Procedure performed in a symptomatic patient with aneurysm

**Exercise Program Definitions:**
**Structured:** Planned program that provides individualized recommendations for type, frequency, intensity, and duration of exercise. **Includes 2 types:**
*Supervised*: Program takes place in a hospital or outpatient facility. Uses intermittent walking exercise as treatment modality. Can be standalone or within a cardiac rehabilitation program. Program directly supervised by qualified healthcare provider(s). Training is performed for a min 30–45 min/session; sessions are performed at least 3x/wk for a min of 12 wk (24-34). Training involves intermittent bouts of walking to moderate-to-max claudication, alternating w/ periods of rest. Warm-up and cool-down periods precede and follow each session of walking.
*Structured community- or home-based exercise program:* Program that takes place in personal vs. clinical setting. Program is self-directed with guidance of healthcare providers who prescribe exercise regimen similar to that of supervised program. Patient counseling ensures patients understand how to begin, maintain, and progress difficulty of the walking (by increasing speed or distance). Program may incorporate behavioral change techniques, such as health coaching and/or use of activity monitors.
**Unstructured:** None of the above applies

## PROCEDURE DATA

### ASA Classification Definitions:

**ASA 1**: A normal healthy patient
**ASA 2**: A patient with mild systemic disease
**ASA 3**: A patient with severe systemic disease
**ASA 4:** A patient w/ severe systemic disease that is a constant threat to life
**ASA 5:** A moribund patient not expected to survive without the operation

### Sedation Definitions:

**Minimal sedation:** Drug-induced state during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilatory and cardiovascular functions are unaffected.
**Moderate (conscious) sedation:** drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.
**Deep sedation:** Drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.
**General anesthesia:** Drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

### Calcification of target lesion treated:

**Focal:** <180° (1 side of vessel) and less than one-half of the total lesion length
**Mild:** <180° and greater than one-half of the total lesion length
**Moderate:** ≥180° (both sides of vessel at same location) and less than one-half of the total lesion length
**Severe:** >180° (both sides of the vessel at the same location) and greater than one-half of the total lesion length

**Acute Technical Success:** Acute technical success for peripheral revascularization is defined as the achievement of either (1) If lesion was stented, is there <30% residual stenosis? or (2) If lesion treated by angioplasty, atherectomy, is there <50% residual stenosis by angiography at the end of the procedure (and without flow-limiting arterial dissection or hemodynamically significant translesional pressure gradient <10 mm Hg) for endovascular revascularization (modified from the FDA CDISC definition).

**Procedure Success:** Acute procedural success for peripheral revascularization is defined as both acute technical success and absence of major adverse events (e.g., death, stroke, MI, acute onset of limb ischemia, index bypass graft or treated segment thrombosis, and/or need for urgent/emergent vascular surgery) within 72 h of the index procedure.

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## COMPLICATIONS:

**Severe Adverse Event:** defined as event resulting in death, life-threatening, hospitalization (initial or prolonged), Disability or permanent damage, or required intervention to prevent permanent damage or impairment.

### Complication Severity Definitions:

**Mild:** not requiring treatment
**Moderate:** Resolved with treatment
**Severe:** Inability to carry on normal activities and required professional medical attention