Clinical Research & Quality Activities of the Society for Vascular Surgery

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The Society for Vascular Surgery (SVS)

• Mission – “to advance excellence and innovation in vascular health through education, advocacy, research and public awareness”
• The premier professional vascular surgery society in North America with >3600 members
• Traditionally an academic focus but recently more balanced between academic and private practice
• SVS members have been a part of ACS NSQIP since its inception
• SVS recently established a set of clinical research priorities to guide policy decisions for next 5 yrs
• SVS recently launched a quality initiative
SVS Clinical Research Priorities

- SVS membership surveyed to identify clinical issues for which better evidence was needed
- Expert panel of ~30 SVS thought leaders convened to prioritize results of membership survey
- Priorities ratified by SVS Board in June 2012
- Top 3
  1. Define optimal management of asymptomatic carotid stenosis
  2. Define optimal management of intermittent claudication
  3. Determine initial best strategy for critical limb ischemia
• Patterned after the successful Vascular Study Group of New England (VSGNE; www.vsgne.org)

• Organized as a Patient Safety Organization (PSO) as authorized by the Patient Safety Act of 2005.

• PSO’s are registered with and monitored by AHRQ

• Allows sharing of identified data with a central repository that provides de-identified benchmarking independent of the informed consent process or IRB approval
Distinguishing Features of the SVS VQI (1)

- Self-reporting of consecutive (all) procedures in 8 areas
- Sites are not required to participate in all 8 areas
- Online web-based entry
- Completion of reporting audited by examination of billing records
- Reporting required at discharge of initial procedure and at one year (long-term follow-up)
- Longer follow-up expected for EVAR

- Carotid endarterectomy (CEA)
- Carotid stenting (CAS)
- Open AAA repair (oAAA)
- Endovascular AAA repair (EVAR)
- Complicated EVAR/TEVAR
- Lower extremity bypass (LEB)
- Peripheral vascular intervention (PVI)
- Hemodialysis
- Amputation (in preparation)
Distinguishing Features of the SVS VQI (2)

- Organized as a consortium of regional quality groups
  - Semi-annual meetings
  - Focused on identifying variation in practice and outcomes to facilitate quality improvement
  - Benchmark reporting to members similar to that used by ACS NSQIP
  - Focused on dissemination of best practices
- Facilitates participation in CMS PQRS
- Satisfies CMS requirements for CAS registry
- Satisfies ABS requirements for MOC
The Importance of Long-term Follow-up in Vascular Surgical Quality Assessment

• The greatest value in most vascular surgical procedures lies in the achievement of some clinical result that endures over time
  – Stroke prevention
  – Prevention of AAA rupture
• Knowing that you or your institution are achieving results consistent with benchmark RCT’s requires long-term follow-up
• Meeting SVS clinical research priorities without expensive RCT’s will require reliably collected registry data
Stroke Prevention

Symptomatic carotid disease

• Surgical
• Medical

Stroke Prevention

Asymptomatic carotid disease

ACAS, JAMA, 1995
Mortality after AAA Repair

The Power of a Regional Approach to Quality Improvement

VSGNE Experience
How Accurate is Self-Reporting?

**Lower Extremity Bypass**

- **PREVENT III (RCT)**
  - 1404 CLI patients
    - Median ABI 0.4
    - 75% with tissue loss
    - 65% bypasses to tibial arteries
  - Peri-op (30 d) outcomes
    - Mortality = 2.7%
    - Major Morbidity = 17.6%
  - One Year Outcomes
    - Overall graft patency = 80%
    - Limb salvage = 89%
    - Overall survival = 84%

- **VSGNE***
  - 2306 pts undergoing infrainguinal bypass
    - 75% CLI
    - 60% to popliteal artery
  - Peri-op Mortality = 2%
  - One Year Outcomes
    - Overall graft patency = 78%
    - Limb salvage = 88%
    - Overall survival = 89%

*Vascular Study Group of New England
Current Status of SVS VQI

- more than 175 participating centers
- 8 regional quality groups
- more than 1000 participating physicians
- more than 50,000 cases
ACS NSQIP & SVS VQI - Competitors?

Patient → Intervention → Outcome

ACS NSQIP  SVS VQI
ACS NSQIP & SVS VQI are Complementary

• ACS NSQIP
  – Comprehensive multi-system risk profiling
  – Intense scrutiny of diverse peri-operative outcomes
  – Excellent short-term clinical outcomes are the platform for high-quality long-term outcomes

• SVS VQI
  – Focused on vascular-specific risk factors & outcomes
  – Of necessity, includes longer term follow-up
  – VQI registry data can be used to meet SVS clinical research priorities
Thank you!