

Vascular Quality Initiative

Value of Participation

Quality Improvement Can Lead to Reduction in Cost

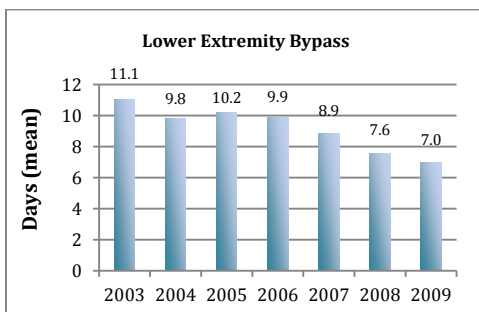
SVS VQI provides benchmarked reports of key quality measures for high impact vascular procedures to drive regional quality improvement. This system leverages the power of a national vascular database with the value of smaller regional groups where practice changes can be implemented. VQI is patterned on concepts developed and tested by the Vascular Study Group of New England (VSGNE) since 2003. Similar regional groups are now being developed around the country, under the SVS VQI.

Elderly patients with peripheral vascular disease place a disproportionate cost burden on hospital care because vascular procedures are resource intensive and these patients are at high risk for complications. Reducing complications, readmissions, and length of stay (LOS) is critical to providing cost-effective care.

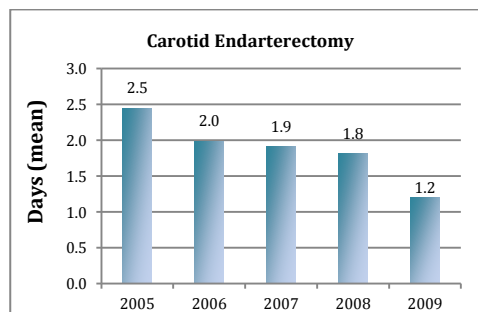
The following are examples of quality improvement across the VSGNE region since 2003:

- To reduce operative risk, preoperative medications of known benefit have been prescribed (beta-blockers increased from 68% to 88% and statins from 53% to 89%)
- In-hospital mortality has been reduced for Open Abdominal Aortic Aneurysm (AAA) repair (from 5% to 2% for elective procedures and from 39% to 28% for ruptured aneurysms)
- Use of less invasive Endovascular AAA repair has increased from 36% to 75% for elective cases and the complication of endoleak has decreased from 32% to 24%
- Patching during Carotid Endarterectomy has increased from 84% to 100%, which has eliminated recurrent carotid stenosis at one year follow-up

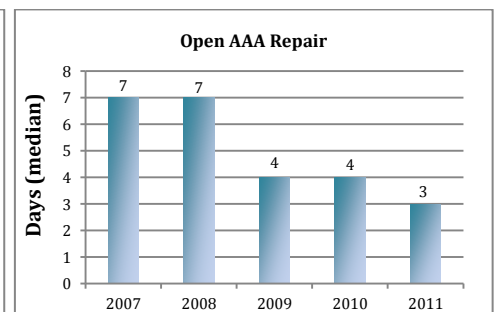
Quality improvements such as these should translate directly into hospital cost reduction. Examples of cost saving per admission estimated by LOS reductions in VSGNE and the Carolinas regional groups are:



Decrease in LOS for Lower Extremity Bypass = estimated savings of \$80,800 per admission, using HCUP mean cost of \$19,700 per day*



Decrease in LOS for Carotid Endarterectomy = estimated savings of \$12,400 per admission, using HCUP mean cost of \$9,549 per day*



Decrease Intensive Care Unit days for Open Ruptured AAA repair = estimated savings of \$128,300 per admission, using HCUP mean cost of \$32,083 per day*

* Source: HCUP Nationwide Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP). 2007-2009. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nisoverview.jsp.