Positive Value of VQI Initiatives

Larry W Kraiss MD
Chair, Governing Council
SVS Patient Safety Organization

• None

Mission:
To improve the quality, safety, effectiveness and cost of vascular health care by collecting and exchanging information.

Launched by SVS in 2011

Patient Safety Organization (PSO)

• A legal entity in the United States of America
• Allows collection and aggregation of protected health information without informed consent or IRB approval
• Only non-identifiable data is released by PSO
  – Patient, provider, hospital are anonymized in reports

358 Centers, 46 States + Ontario

VQI Participating Centers

358 Centers, 46 States + Ontario

Primary Procedures Captured
Total Procedure Volume

- Carotid Endarterectomy: 55,991
- Carotid Artery Stent: 8,847
- Endovascular AAA Repair: 22,305
- Open AAA Repair: 7,220
- Peripheral Vascular Intervention: 74,485
- infra-Inguinal Bypass: 25,874
- supra-Inguinal Bypass: 8,578
- Thoracic and Complex: 3,667
- Hemodialysis Access: 20,129
- Lower Extremity Amputations: 3,793
- IVC Filter: 3,793
- Varicose Vein: 1,675

VQI Total Procedure Volume

Growth of Participating Centers

VQI Participating Centers
How are VQI data used to improve quality?

COPI Reports

- Center Opportunity Profile for Improvement
- Focused on a specific clinical issue
- Risk-adjusted modeling
- Generates an Observed-to-Expected Metric
- Highlights center-specific opportunities to improve O/E

Surgical Site Infection Rate after Lower Extremity Bypass

<table>
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<tr>
<th>Variable</th>
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<th>P-value</th>
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<td>ABI &lt; 0.35</td>
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Kalish et al, SVS 2013

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Released COPI Reports

- Surgical Site Infection (SSI) following Lower Extremity Bypass
- Length of Stay (LOS) following routine CEA
- LOS following routine EVAR
- LOS following infra-inguinal bypass (6/2015)
In 17 of 77 centers with a large increase in use of chlorhexidine, SSI reduction was statistically significant.

49 of 141 centers reduced their LOS after CEA.

35 of 59 centers reduced their LOS after EVAR.
For the average VQI center performing 60 CEA and 30 EVAR, annual savings would amount to ~$200,000.

VQI participation is associated with higher rates of statin/antiplatelet administration over time.

For many centers and physicians, VQI participation has resulted in:
- Fewer Surgical Site Infections
For many centers and physicians, VQI participation has resulted in:

- Fewer Surgical Site Infections
- Reductions in length of stay for
  - CEA
  - EVAR
- Associated cost savings for their institution
- Improved prescription of life-extending statins/antiplatelet agents to patients after arterial intervention

Thank You!