Mid-Atlantic Vascular Study Group

October 7, 2022
4 PM – 6:30 PM (ET)
Hybrid
Meeting Attendance Credit

Before we get started, please sign in.

1. Click “Participants” in the box at the top or bottom of your screen.
2. If your full name is not listed, hover next to your name and you’ll see “rename”.
3. Click and sign in.

If you can’t sign in, please email Leka Johnson at ljohnson@svspso.org and let her know the identifier you were signed in under (ex –LM7832 or your phone number).

**SPECIAL NOTE: Residents/Fellows must have an ACTIVE PATHWAYS user account to get attendance credit!!!

Sign in with your Full name, MD, Name of Institution
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>CE Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 pm</td>
<td>Welcome</td>
<td>No</td>
</tr>
<tr>
<td>4:05 pm</td>
<td>Regional Data Review – Dr. Faisal Aziz, MAVSG Medical Director</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Learning Objectives:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the VQI regional reports to establish quality improvement goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for the vascular patients (outcomes) and for their center (process).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Interpret and compare each centers’ VQI results to regional and national benchmarked data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Learn, through group discussion the VQI regional results to improve the quality of vascular health care by monitoring measurable performance indicators, SVS PSO evidence-based research, and outcomes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care.</td>
<td></td>
</tr>
<tr>
<td>5:05 pm</td>
<td>Regional QI Proposal – Dr. Faisal Aziz, MAVSG Medical Director</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Learning Objectives:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process).</td>
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</tr>
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<td></td>
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<td></td>
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<tr>
<td>Time</td>
<td>Topic</td>
<td>CE Credit</td>
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<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| 5:35 pm  | National VQI Update-Caroline Morgan, RN, PSO Director of Clinical Operations Learning Objectives:  
|          | • Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process).  
|          | • Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care. | Yes       |
| 6:05 pm  | AQC Update – Grace Wang, MD                                           | No        |
| 6:10 pm  | VQC Update – Tanya Flohr, MD                                          | No        |
| 6:15 pm  | RAC Update – Caitlin Hicks, MD                                         | No        |
| 6:20 pm  | Governing Council Update – Faisal Aziz, MD                             | No        |
| 6:25 pm  | Case Presentations                                                    | No        |
| 6:30 pm  | Open Discussion/Next Meeting/Meeting Evaluation                        | No        |
Welcome and Introductions

Abington Memorial Hospital
Adventist Healthcare Shady Grove Medical Center
Adventist Healthcare White Oak Medical Center
Artery and Vein Institute
Associates in Vascular Care
AtlantiCare Regional Medical Center
Baltimore Washington Medical Center
Bayhealth Medical Center
Bayshore Medical Center
Beebe Medical Center
Capital Health Medical Center-Hopewell
Capital Health Regional Medical Center
Chester County Hospital
Christiana Care
Cooper University Hospital
Deborah Heart and Lung Center
Doylestown Hospital
Einstein Medical Center Montgomery
Englewood Hospital and Medical Center
Evangelical Community Hospital
Geisinger Community Medical Center
Geisinger Medical Center
Geisinger Wyoming Valley Medical Center
Global Neuroscience Institute at Crozer
Guthrie Clinic
Hackensack University Medical Center
Heart Care Consultants, LLC
Holy Name Medical Center
Jersey Shore University Medical Center
JFK Medical Center
Johns Hopkins Bayview Medical Center
Lancaster General Hospital
Lehigh Valley Hospital
Main Line Health’s subsidiary - Riddle Hospital
Main Line Health’s subsidiary, Main Line Hospitals, Inc.
- Bryn Mawr Hospital
Main Line Health’s subsidiary, Main Line Hospitals, Inc.
- Lankenau Medical Center
Main Line Health’s subsidiary, Main Line Hospitals, Inc.
- Paoli Hospital
Medical Faculty Associates, Inc
Medstar Cardiology Associates
Medstar Franklin Square Medical Center
Medstar Georgetown University Hospital
Medstar Good Samaritan Hospital
Medstar Harbor Hospital
Medstar Montgomery Medical Center
Medstar Southern Maryland Hospital Center
Medstar Union Memorial Hospital
Medstar Washington Hospital Center
Mercy Fitzgerald
Mercy Medical Center
Meritus Medical Center
Morristown Medical Center
Nazareth Hospital
Newark Beth Israel Medical Center
Ocean Medical Center
Overlook Hospital
Penn Medicine Princeton Health
Penn Presbyterian Medical Center
Penn State Health Holy Spirit Medical Center
Penn State Health Milton S. Hershey Medical Center
Penn State Health St. Joseph's Medical Center
Pennsylvania Hospital
Pottstown Hospital
Riverview Medical Center
Rutgers, The State University of New Jersey for Robert
Wood Johnson Medical School
Saint Barnabas Medical Center
Southern Ocean Medical Center
St. Agnes Hospital
St. Francis Hospital - Wilmington
St. Luke's Hospital - Allentown Campus
St. Luke's Hospital - Anderson Campus
St. Luke's Hospital - Bethlehem Campus
St. Luke's Hospital - Monroe Campus
St. Luke's Hospital - Upper Buck Campus
St. Luke's Hospital - Warren Campus
St. Mary Medical Center
Suburban Hospital
The Johns Hopkins Hospital
The Reading Hospital and Medical Center
The Valley Hospital
Thomas Jefferson University Hospital
TidalHealth Guerrieri Heart and Vascular Institute
University of Maryland Medical Center
University of Pennsylvania
UPMC Western Maryland
Vascular Surgery Associates, LLC
Virtua Marlton Hospital
Virtua Mount Holly Hospital
Virtua Our Lady of Lourdes Hospital
WellSpan Surgery Center
WellSpan York Hospital
White Square Vascular Surgery

Total centers = 91
5 New Centers = 5
VQI Regional Quality Report

Fall 2022

This report is patient safety work product generated within the SVS PSO, LLC, and is considered privileged and confidential.

About the Report
The VQI Regional Quality Report is produced semiannually to provide centers and regions targeted, comparative results and benchmarks for a variety of procedures, process measures, and postoperative outcomes. The report is organized into separate reports that can be quickly accessed by clicking on the report names in the table of contents on the left.

For drill-down and data feedback on your center’s cases, click on “VQI Case Appendix” in the table of contents on the left.
Dashboard

The dashboard provides a high-level summarization of your center’s results for each of 27 reports, and gives both regional and VQI-wide benchmarks for comparison. The “Your Center” column gives the percentage of your center’s cases with the noted outcome. Numbers in parentheses give the number of cases with the outcome and the total number of cases meeting the inclusion criteria for that report. The “Your Region” and “VQI Overall” columns give the aggregate percentage of cases with the noted outcome, as well as the 10th, 25th, 50th (median), 75th, and 90th percentiles for centers in your region and VQI, respectively ([10th|25th|50th|75th|90th]).

Your center’s results are highlighted blue if your center is in the “top” 25th percentile for VQI Overall, and coral if your center is in the “bottom” 25th percentile for VQI Overall.

For details on a particular report, click on the report name in the table of contents on the left.

Legend: Blue = “Top” 25th percentile  Coral = “Bottom” 25th percentile

Note that procedure volume results are not highlighted.
<table>
<thead>
<tr>
<th>Procedure Group</th>
<th>Outcome</th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Procedure Volume</td>
<td>[7</td>
<td>26</td>
<td>180</td>
</tr>
<tr>
<td>Procedure Volume, All Years</td>
<td>Stroke/Death</td>
<td>2.4%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multiple</td>
<td>Long-Term Follow-up</td>
<td>69.9%[13</td>
<td>39</td>
<td>74</td>
</tr>
<tr>
<td>Discharge Medications</td>
<td>86.9%[79</td>
<td>84</td>
<td>91</td>
<td>96</td>
</tr>
<tr>
<td>TFEM CAS ASYMP</td>
<td>Stroke/Death</td>
<td>4.8%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TCAR ASYMP</td>
<td>Stroke/Death</td>
<td>0.7%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TCAR SYMP</td>
<td>Stroke/Death</td>
<td>2%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CEA ASYMP</td>
<td>Stroke/Death</td>
<td>1.1%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Postop LOS&gt;1 Day</td>
<td>19.8%[0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CEA SYMP</td>
<td>Stroke/Death</td>
<td>2%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Postop LOS&gt;1 Day</td>
<td>37.6%[11</td>
<td>23</td>
<td>38</td>
<td>50</td>
</tr>
<tr>
<td>EVAR</td>
<td>Postop LOS&gt;2 Days</td>
<td>20.5%[3</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Sac Diameter Reporting</td>
<td>54.6%[14</td>
<td>38</td>
<td>51</td>
<td>80</td>
</tr>
<tr>
<td>SVS AAA Diameter Guideline</td>
<td>Stroke/Death</td>
<td>75.7%[53</td>
<td>67</td>
<td>73</td>
</tr>
<tr>
<td>TEVAR</td>
<td>Sac Diameter Reporting</td>
<td>56.1%[0</td>
<td>33</td>
<td>58</td>
</tr>
<tr>
<td>OAAA</td>
<td>In-Hospital Mortality</td>
<td>4.1%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SVS Cell-Saver Guideline</td>
<td>Stroke/Death</td>
<td>97.4%[78</td>
<td>97</td>
<td>100</td>
</tr>
<tr>
<td>SVS Iliac Inflow Guideline</td>
<td>Stroke/Death</td>
<td>98.5%[94</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>PVI CLAUD</td>
<td>ABI/Toe Pressure</td>
<td>86.6%[57</td>
<td>70</td>
<td>86</td>
</tr>
<tr>
<td>INFRA CLTI</td>
<td>Major Complications</td>
<td>5.2%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SUPRA CLTI</td>
<td>Major Complications</td>
<td>3.1%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LEAMP</td>
<td>Postop Complications</td>
<td>10.2%[3</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>HDA</td>
<td>Primary AVF vs. Graft</td>
<td>82.4%[50</td>
<td>82</td>
<td>89</td>
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<tr>
<td>HDA</td>
<td>Ultrasound Vein Mapping</td>
<td>93.5%[88</td>
<td>88</td>
<td>93</td>
</tr>
<tr>
<td>HDA</td>
<td>Postop Complications</td>
<td>1.1%[0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IVCF</td>
<td>Filter Retrieval Reporting</td>
<td>NA(&lt;3 centers)</td>
<td>51.8%[12</td>
<td>28</td>
</tr>
</tbody>
</table>
About the Appendix

The Region Volume Appendix provides your region’s case volumes for each report. In addition, the number of centers with cases contributing to each report is given. Note that columns referencing complete cases are appropriately left blank for non-risk-adjusted reports.

<table>
<thead>
<tr>
<th>Report</th>
<th>Included Cases</th>
<th>Centers with Included Cases</th>
<th>Centers with at least 10 Included Cases</th>
<th>Complete Cases</th>
<th>Centers with Complete Cases</th>
<th>Centers with at least 10 Complete Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Volume</td>
<td>9018</td>
<td>67</td>
<td>57</td>
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<td></td>
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<tr>
<td>Procedure Volume, All Years</td>
<td>64280</td>
<td>75</td>
<td>70</td>
<td></td>
<td></td>
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<tr>
<td>Long-Term Follow-up</td>
<td>7273</td>
<td>55</td>
<td>45</td>
<td></td>
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<tr>
<td>Discharge Medications</td>
<td>8158</td>
<td>66</td>
<td>57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFEM CAS ASYMP: Stroke/Death</td>
<td>85</td>
<td>19</td>
<td>3</td>
<td>75</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>TFEM CAS SYMP: Stroke/Death</td>
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<td>6</td>
<td>97</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>TCAR ASYMP: Stroke/Death</td>
<td>441</td>
<td>47</td>
<td>19</td>
<td>417</td>
<td>46</td>
<td>18</td>
</tr>
<tr>
<td>TCAR SYMP: Stroke/Death</td>
<td>244</td>
<td>41</td>
<td>10</td>
<td>234</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>CEA ASYMP: Stroke/Death</td>
<td>799</td>
<td>39</td>
<td>26</td>
<td>772</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td>CEA ASYMP: Postop LOS&gt;1 Day</td>
<td>796</td>
<td>39</td>
<td>25</td>
<td>769</td>
<td>39</td>
<td>24</td>
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<tr>
<td>CEA SYMP: Stroke/Death</td>
<td>358</td>
<td>38</td>
<td>13</td>
<td>352</td>
<td>38</td>
<td>13</td>
</tr>
<tr>
<td>CEA SYMP: Postop LOS&gt;1 Day</td>
<td>356</td>
<td>38</td>
<td>13</td>
<td>350</td>
<td>38</td>
<td>13</td>
</tr>
<tr>
<td>EVAR: Postop LOS&gt;2 Days</td>
<td>508</td>
<td>27</td>
<td>21</td>
<td>486</td>
<td>27</td>
<td>19</td>
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<tr>
<td>EVAR: Sac Diameter Reporting</td>
<td>535</td>
<td>26</td>
<td>19</td>
<td></td>
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<tr>
<td>EVAR: SVS AAA Diameter Guideline</td>
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<td>123</td>
<td>14</td>
<td>3</td>
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<tr>
<td>OAAA: In-Hospital Mortality</td>
<td>293</td>
<td>17</td>
<td>10</td>
<td>273</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>OAAA: SVS Cell-Saver Guideline</td>
<td>308</td>
<td>17</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAAA: SVS Iliac Inflow Guideline</td>
<td>341</td>
<td>17</td>
<td>11</td>
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<td></td>
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<tr>
<td>PVI CLAUD: ABI/Toe Pressure</td>
<td>1618</td>
<td>36</td>
<td>27</td>
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<tr>
<td>INFRA CLTI: Major Complications</td>
<td>406</td>
<td>23</td>
<td>15</td>
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<td></td>
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<tr>
<td>SUPRA CLTI: Major Complications</td>
<td>84</td>
<td>11</td>
<td>2</td>
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<tr>
<td>LEAMP: Postop Complications</td>
<td>108</td>
<td>4</td>
<td>3</td>
<td></td>
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<td></td>
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<tr>
<td>HDA: Primary AVF vs. Graft</td>
<td>239</td>
<td>11</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HDA: Ultrasound Vein Mapping</td>
<td>277</td>
<td>11</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HDA: Postop Complications</td>
<td>277</td>
<td>11</td>
<td>8</td>
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<td></td>
<td></td>
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<tr>
<td>IVCF: Filter Retrieval Reporting</td>
<td>20</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Important Notes

- All results are based on data entered into the VQI as of July 31, 2022. Any subsequent changes or updates to data after that date will not be reflected in this report.
- Only cases submitted as complete in the PATHWAYS platform are reflected in this report.
- Procedure timeframes and inclusion/exclusion criteria are given at the top of each report. Cases are also excluded if outcomes are missing or not enough data was entered to determine whether the case met inclusion/exclusion criteria.
- Regions must have at least 3 centers with included cases for regional results to be displayed in tables and line charts.
- Regions must have at least 3 centers with at least 10 included cases per center for regional results to be displayed in bar charts. It is therefore possible for a region’s results to be displayed in tables and line charts, but not in bar charts.
- For risk-adjusted reports, regions must have at least 3 centers with at least 10 cases with complete data per center for regional results to be displayed in bar charts. It is therefore possible for a region’s results to be displayed in tables and line charts, but not in bar charts.
- In all graphics, "**" indicates a p-value <.05.
Important Updates

The following updates have been implemented to enhance and improve the Fall 2022 VQI Regional Quality Report:

• **New HDA Reports**
  Two new HDA reports, HDA: Ultrasound Vein Mapping and HDA: Postop Complications, are now provided.

Report-Specific Updates

The following report-specific updates have been implemented to enhance and improve the specified report(s):

• **CEA**
  Changed inclusion/exclusion criteria – Procedures with an unrelated return to the OR are now excluded from CEA ASYMP: Postop LOS>1 Day and CEA SYMP: Postop LOS>1 Day.
## Procedure Volume

Procedures performed between July 1, 2021 and June 30, 2022

Number of cases entered into the VQI, by registry and overall

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Your Center (N)</th>
<th>Your Region (N)</th>
<th>VQI Overall (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS (TFEM CAS &amp; TCAR)</td>
<td>1056</td>
<td></td>
<td>16303</td>
</tr>
<tr>
<td>CEA</td>
<td>1319</td>
<td></td>
<td>17399</td>
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<tr>
<td>EVAR</td>
<td>558</td>
<td></td>
<td>7434</td>
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<td>HDA</td>
<td>277</td>
<td></td>
<td>5569</td>
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<tr>
<td>INFRA</td>
<td>513</td>
<td></td>
<td>6568</td>
</tr>
<tr>
<td>IVCF</td>
<td>NA (&lt;3 centers)</td>
<td></td>
<td>1216</td>
</tr>
<tr>
<td>LEAMP</td>
<td>108</td>
<td></td>
<td>3141</td>
</tr>
<tr>
<td>OAAA</td>
<td>80</td>
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<td>1330</td>
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<tr>
<td>PVI</td>
<td>4572</td>
<td></td>
<td>44458</td>
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<td>SUPRA</td>
<td>91</td>
<td></td>
<td>1881</td>
</tr>
<tr>
<td>TEVAR</td>
<td>349</td>
<td></td>
<td>3319</td>
</tr>
<tr>
<td>Varicose Veins</td>
<td>70</td>
<td></td>
<td>6256</td>
</tr>
<tr>
<td>Overall (July 2021-June 2022)</td>
<td>9018</td>
<td></td>
<td>114874</td>
</tr>
<tr>
<td>Overall (July 2020-June 2021)</td>
<td>8620</td>
<td></td>
<td>122571</td>
</tr>
</tbody>
</table>
# Procedure Volume, All Years

Includes all procedures with procedure date through June 30, 2022

Number of cases entered into the VQI, by registry and overall

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Your Center (N)</th>
<th>Your Region (N)</th>
<th>VQI Overall (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS (TFEM CAS &amp; TCAR)</td>
<td></td>
<td>5349</td>
<td>76023</td>
</tr>
<tr>
<td>CEA</td>
<td></td>
<td>12838</td>
<td>176118</td>
</tr>
<tr>
<td>EVAR</td>
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<td>5583</td>
<td>71841</td>
</tr>
<tr>
<td>HDA</td>
<td></td>
<td>2436</td>
<td>69196</td>
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<td>INFRA</td>
<td></td>
<td>4874</td>
<td>73717</td>
</tr>
<tr>
<td>IVCF</td>
<td>NA (&lt;3 centers)</td>
<td></td>
<td>17227</td>
</tr>
<tr>
<td>LEAMP</td>
<td></td>
<td>836</td>
<td>24978</td>
</tr>
<tr>
<td>OAAA</td>
<td></td>
<td>919</td>
<td>16316</td>
</tr>
<tr>
<td>PVI</td>
<td></td>
<td>26485</td>
<td>324744</td>
</tr>
<tr>
<td>SUPRA</td>
<td></td>
<td>1411</td>
<td>23637</td>
</tr>
<tr>
<td>TEVAR</td>
<td></td>
<td>2551</td>
<td>24569</td>
</tr>
<tr>
<td>Varicose Veins</td>
<td></td>
<td>143</td>
<td>54445</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>64280</td>
<td>952811</td>
</tr>
</tbody>
</table>
Procedure Volume by Center in Your Region (Through June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

70 of 75 centers displayed

Procedure Volume Across VQI (Through June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

"Others" indicates centers that do not belong to a regional group.
Physician Specialties

Physician Specialties Across VQI (as of July 31, 2022, N=6185 Physicians)
Physician Specialties Across Your Region (as of July 31, 2022, N=464 Physicians)
Long-Term Follow-up

Procedures performed between July 1, 2019 and June 30, 2020

Includes CAS (TFEM CAS and TCAR), CEA, EVAR, HDA, INFRA, IVCF, LEAMP, OAAA, PVI, SUPRA, and TEVAR procedures only. Excludes procedures not eligible for long-term follow-up.

The table below gives the number of procedures meeting the inclusion criteria, and the percentage of those procedures with follow-up recorded between 9 and 21 months post-procedure.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
<td>778 (67%)</td>
<td>11723 (65%)</td>
<td></td>
</tr>
<tr>
<td>CEA</td>
<td>1374 (75%)</td>
<td>17767 (71%)</td>
<td></td>
</tr>
<tr>
<td>EVAR</td>
<td>583 (74%)</td>
<td>7058 (70%)</td>
<td></td>
</tr>
<tr>
<td>HDA</td>
<td>275 (94%)</td>
<td>7418 (72%)</td>
<td></td>
</tr>
<tr>
<td>INFRA</td>
<td>584 (70%)</td>
<td>7073 (72%)</td>
<td></td>
</tr>
<tr>
<td>IVCF</td>
<td>NA (&lt;3 centers)</td>
<td>1655 (75%)</td>
<td></td>
</tr>
<tr>
<td>LEAMP</td>
<td>NA (&lt;3 centers)</td>
<td>3270 (74%)</td>
<td></td>
</tr>
<tr>
<td>OAAA</td>
<td>82 (85%)</td>
<td>1163 (72%)</td>
<td></td>
</tr>
<tr>
<td>PVI</td>
<td>3095 (64%)</td>
<td>40085 (68%)</td>
<td></td>
</tr>
<tr>
<td>SUPRA</td>
<td>123 (83%)</td>
<td>2093 (72%)</td>
<td></td>
</tr>
<tr>
<td>TEVAR</td>
<td>269 (69%)</td>
<td>2848 (67%)</td>
<td></td>
</tr>
<tr>
<td>Overall (July 2019-June 2020)</td>
<td>7273 (70%)</td>
<td>102153 (69%)</td>
<td></td>
</tr>
<tr>
<td>Overall (July 2018-June 2019)</td>
<td>6665 (76%)</td>
<td>99531 (72%)</td>
<td></td>
</tr>
</tbody>
</table>
Long-Term Follow-Up by Center in Your Region (July 2019–June 2020)

- **Other centers in your region**
- **Your center**

45 of 55 centers displayed

*** Indicates center's rate differs significantly from the regional rate.

Long-Term Follow-Up by Region Across VQI (July 2019–June 2020)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region's rate differs significantly from the VQI rate.

“Others” indicates centers that do not belong to a regional group.
Discharge Medications

Procedures performed between July 1, 2021 and June 30, 2022

Includes CAS (TFEM CAS and TCAR), CEA, EVAR, INFRA, LEAMP, OAAA, PVI, SUPRA, and TEVAR procedures only. Antiplatelet is defined as ASA or P2Y12 inhibitor. Cases are excluded if (1) Discharge Statin = “No, for medical reason” OR (2) Both Discharge ASA = “No, for medical reason” AND Discharge P2Y12 inhibitor = “No, for medical reason” OR (3) An in-hospital death occurred.

The table below gives the number of procedures meeting the inclusion criteria, and the percentage of those procedures where patients received discharge medications.

<table>
<thead>
<tr>
<th>Number of Procedures at Your Center</th>
<th>Antiplatelet+Statin</th>
<th>Antiplatelet Only</th>
<th>Statin Only</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEAMP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAAA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PVI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEVAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your Center Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your Region Overall</td>
<td>8158</td>
<td>87%</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>VQI Overall</td>
<td>95682</td>
<td>87%</td>
<td>8%</td>
<td>3%</td>
</tr>
</tbody>
</table>
**Discharge Antiplatelet+Statin by Center in Your Region (July 2021–June 2022)**

- 100%
- 90%
- 80%
- 70%
- 60%
- 50%
- 40%
- 30%
- 20%
- 10%
- 0%

Centers (centers with <10 cases not shown)

- Other centers in your region
- Your center

57 of 66 centers displayed

*** indicates center’s rate differs significantly from the regional rate.

**Discharge Antiplatelet+Statin by Region Across VQI (July 2021–June 2022)**

**Regions (regions with <3 centers with at least 10 cases not shown)**

*** indicates region’s rate differs significantly from the VQI rate.
TFEM CAS ASYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes Transfemoral Carotid Artery Stenting (TFEM CAS) procedures performed on asymptomatic patients. Asymptomatic patients are patients with no ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Includes procedures utilizing a femoral, brachial, or radial approach. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or “Other” lesion types. Procedures with an approach other than femoral, brachial, or radial are also excluded.

The table below gives the number of TFEM CAS procedures (performed on asymptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of TFEM CAS procedures meeting inclusion criteria</td>
<td>85</td>
<td>2185</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>2.4%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>75</td>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>2.7%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>1.3%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.27</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.**
Stroke or Death after TFEM CAS for Asymptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
TFEM CAS SYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes Transfemoral Carotid Artery Stenting (TFEM CAS) procedures performed on symptomatic patients. Symptomatic patients are patients with an ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Includes procedures utilizing a femoral, brachial, or radial approach. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or “Other” lesion types. Procedures with an approach other than femoral, brachial, or radial are also excluded.

The table below gives the number of TFEM CAS procedures (performed on symptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of TFEM CAS procedures meeting inclusion criteria</td>
<td>105</td>
<td>2346</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>4.8%</td>
<td>3.9%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>97</td>
<td>2188</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>3.1%</td>
<td>3.7%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>4.3%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.8</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Stroke or Death after TFEM CAS for Symptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Stroke or Death after TFEM CAS for Symptomatic Patients in Your Region (July 2021–June 2022)

5 of 19 centers displayed
Rates shown are among cases with complete data. "**" indicates center's observed rate differs significantly from its expected rate.

Stroke or Death after TFEM CAS for Symptomatic Patients by Region Across VQI
(July 2021–June 2022)

Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among cases with complete data. "**" indicates region's observed rate differs significantly from its expected rate.
TCAR ASYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes TransCarotid Artery Revascularization (TCAR) procedures performed on asymptomatic patients. Asymptomatic patients are patients with no ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or “Other” lesion types. Procedures with an approach other than carotid percutaneous or carotid open are also excluded.

The table below gives the number of TCAR procedures (performed on asymptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of TCAR procedures meeting inclusion criteria</td>
<td>441</td>
<td>5589</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>0.7%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>417</td>
<td>5226</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>0.7%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>1.2%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.5</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Stroke or Death after TCAR for Asymptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
TCAR SYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes TransCarotid Artery Revascularization (TCAR) procedures performed on symptomatic patients. Symptomatic patients are patients with an ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or “Other” lesion types. Procedures with an approach other than carotid percutaneous or carotid open are also excluded.

The table below gives the number of TCAR procedures (performed on symptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of TCAR procedures meeting inclusion criteria</td>
<td>244</td>
<td>2901</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>2%</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>234</td>
<td>2745</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>2.1%</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>2.3%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>1</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Stroke or Death after TCAR for Symptomatic Patients by Year

- Your Center
- Your Region
- VQI Overall

Rates shown are observed rates among cases meeting inclusion criteria.
Stroke or Death after TCAR for Symptomatic Patients in Your Region (July 2021-June 2022)

- Other centers in your region
- Your center
- Observed
- Expected

Centers (centers with <10 complete cases not shown)

10 of 41 centers displayed
Rates shown are among cases with complete data. "***" indicates center's observed rate differs significantly from its expected rate.

Stroke or Death after TCAR for Symptomatic Patients by Region Across VQI (July 2021-June 2022)

- Observed
- Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)

Rates shown are among cases with complete data. "***" indicates region's observed rate differs significantly from its expected rate.
## CEA ASYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes Carotid Endarterectomy (CEA) procedures performed on asymptomatic patients. Asymptomatic patients are patients with no ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or “Other” arterial procedure.

The table below gives the number of CEA procedures (performed on asymptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of CEA procedures meeting inclusion criteria</td>
<td>799</td>
<td></td>
<td>9889</td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>1.1%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>772</td>
<td>9351</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>1.2%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>0.8%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.21</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Stroke or Death after CEA for Asymptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Stroke or Death after CEA for Asymptomatic Patients in Your Region (July 2021–June 2022)

Other centers in your region  Your center  Observed  Expected

Centers (centers with <10 complete cases not shown)

25 of 39 centers displayed
Rates shown are among cases with complete data. *** indicates center's observed rate differs significantly from its expected rate.

Stroke or Death after CEA for Asymptomatic Patients by Region Across VQI (July 2021–June 2022)

Observed  Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among cases with complete data. *** indicates region's observed rate differs significantly from its expected rate.
CEA SYMP: Stroke/Death

Procedures performed between July 1, 2021 and June 30, 2022

Includes Carotid Endarterectomy (CEA) procedures performed on symptomatic patients. Symptomatic patients are patients with an ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or “Other” arterial procedure.

The table below gives the number of CEA procedures (performed on symptomatic patients) meeting the inclusion criteria, and the observed and expected rates of in-hospital stroke or death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of CEA procedures meeting inclusion criteria</td>
<td>358</td>
<td>5030</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>352</td>
<td>4862</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data</td>
<td>1.9%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.85</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Stroke or Death after CEA for Symptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Stroke or Death after CEA for Symptomatic Patients in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center
- Observed
- Expected

Centers (centers with <10 complete cases not shown)

13 of 38 centers displayed

Rates shown are among cases with complete data. *** Indicates center's observed rate differs significantly from its expected rate.

Stroke or Death after CEA for Symptomatic Patients by Region Across VQI (July 2021–June 2022)

- Observed
- Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)

Rates shown are among cases with complete data. *** Indicates region's observed rate differs significantly from its expected rate.
CEA ASYMPP: Postop LOS>1 Day

Procedures performed between July 1, 2021 and June 30, 2022

Includes Carotid Endarterectomy (CEA) procedures performed on asymptomatic patients. Asymptomatic patients are patients with no ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or “Other” arterial procedure. Procedures where in-hospital death occurred with postoperative LOS≤1 day, or procedures with an unrelated return to the OR, are also excluded. Postoperative LOS is based on the midnight rule used for hospital billing.

The table below gives the number of CEA procedures (performed on asymptomatic patients) meeting the inclusion criteria, and the observed and expected rates of postoperative LOS>1 Day for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of CEA procedures meeting inclusion criteria</td>
<td>796</td>
<td>9863</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among procedures meeting inclusion criteria</td>
<td>19.8%</td>
<td>20.7%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>769</td>
<td>9323</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among cases with complete data</td>
<td>20.2%</td>
<td>20.9%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of LOS&gt;1 day among cases with complete data</td>
<td>20.8%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.72</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Postop LOS > 1 Day after CEA for Asymptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Postop LOS>1 Day after CEA for Asymptomatic Patients in Your Region (July 2021-June 2022)

Other centers in your region  Your center  Observed  Expected

Centers (centers with <10 complete cases not shown)

24 of 39 centers displayed
Rates shown are among cases with complete data. *** Indicates center’s observed rate differs significantly from its expected rate

Postop LOS>1 Day after CEA for Asymptomatic Patients by Region Across VQI (July 2021–June 2022)

Observed  Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among cases with complete data. *** Indicates region’s observed rate differs significantly from its expected rate
CEA SYMP: Postop LOS>1 Day

Procedures performed between July 1, 2021 and June 30, 2022

Includes Carotid Endarterectomy (CEA) procedures performed on symptomatic patients. Symptomatic patients are patients with an ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or “Other” arterial procedure. Procedures where in-hospital death occurred with postoperative LOS≤1 day, or procedures with an unrelated return to the OR, are also excluded. Postoperative LOS is based on the midnight rule used for hospital billing.

The table below gives the number of CEA procedures (performed on symptomatic patients) meeting the inclusion criteria, and the observed and expected rates of postoperative LOS>1 Day for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of CEA procedures meeting inclusion criteria</td>
<td>356</td>
<td>5007</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among procedures meeting inclusion criteria</td>
<td>37.6%</td>
<td>39.6%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>350</td>
<td>4838</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among cases with complete data</td>
<td>38%</td>
<td>39.7%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of LOS&gt;1 day among cases with complete data</td>
<td>39.1%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.7</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Postop LOS>1 Day after CEA for Symptomatic Patients by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Postop LOS>1 Day after CEA for Symptomatic Patients in Your Region (July 2021–June 2022)

Other centers in your region Your center Observed Expected

11 of 30 centers displayed
Rates shown are among cases with complete data. ** Indicates center’s observed rate differs significantly from its expected rate.

Postop LOS>1 Day after CEA for Symptomatic Patients by Region Across VQI
(July 2021–June 2022)

Observed Expected


Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among cases with complete data. *** Indicates region’s observed rate differs significantly from its expected rate.
EVAR: Postop LOS>2 Days

Procedures performed between July 1, 2021 and June 30, 2022

Includes Endovascular AAA Repair (EVAR) procedures. Excludes any procedure with ruptured aneurysm. Procedures where in-hospital death occurred with postoperative LOS≤2 days are also excluded. Postoperative LOS is based on the midnight rule used for hospital billing.

The table below gives the number of EVAR procedures meeting the inclusion criteria, and the observed and expected rates of postoperative LOS>2 Days for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of EVAR procedures meeting inclusion criteria</td>
<td>508</td>
<td>6924</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;2 days among procedures meeting inclusion criteria</td>
<td>20.5%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>486</td>
<td>6428</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;2 days among cases with complete data</td>
<td>21%</td>
<td>15.9%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of LOS&gt;2 days among cases with complete data</td>
<td>17%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.03</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.
Postop LOS>2 Days after EVAR by Year

Rates shown are observed rates among cases meeting inclusion criteria.
Postop LOS>2 Days after EVAR in Your Region (July 2021–June 2022)

Centers (centers with <10 complete cases not shown)

- Other centers in your region
- Your center
- Observed
- Expected

19 of 27 centers displayed
Rates shown are among cases with complete data. *** Indicates center’s observed rate differs significantly from its expected rate.

Postop LOS>2 Days after EVAR by Region Across VQI (July 2021–June 2022)

- Observed
- Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)

Rates shown are among cases with complete data. *** Indicates region’s observed rate differs significantly from its expected rate.
Polling Question 1
EVAR: Sac Diameter Reporting

Procedures performed between July 1, 2019 and June 30, 2020

Includes Endovascular AAA Repair (EVAR) procedures. Excludes patients who were converted to open or died within 21 months of surgery.

The table below gives the number of EVAR procedures meeting the inclusion criteria, and the percentage of those procedures where a sac diameter was reported between 9 and 21 months post-procedure.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of EVAR procedures meeting inclusion criteria</td>
<td>535</td>
<td>6497</td>
<td></td>
</tr>
<tr>
<td>Percentage with sac diameter reported between 9 and 21 months post-procedure</td>
<td>54.6%</td>
<td>55.5%</td>
<td></td>
</tr>
</tbody>
</table>
**EVAR Sac Diameter Reporting in Your Region (July 2019-June 2020)**

- **Other centers in your region**
- **Your center**

1. Geisinger Community Medical Center
2. Geisinger Medical Center
3. St. Luke’s Hospital - Bethlehem Campus
4. Penn Presbyterian Medical Center
5. Guthrie Clinic
6. Beebe Medical Center
7. Geisinger Wyoming Valley Medical Center
8. Cooper University Hospital
9. Penn State Health Milton S. Hershey Medical Center
10. University of Pennsylvania
11. Abington Memorial Hospital
12. Doylestown Hospital
13. Medstar Washington Hospital Center
14. Pennsylvania Hospital
15. Lancaster General Hospital
16. Medstar Franklin Square Medical Center
17. Englewood Hospital and Medical Center
18. Hackensack University Medical Center
19. Christiana Care

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19 of 26 centers displayed

***Indicates center’s rate differs significantly from the regional rate.
EVAR Sac Diameter Reporting by Region Across VQI (July 2019-June 2020)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region's rate differs significantly from the VQI rate.
EVAR: SVS AAA Diameter Guideline

Procedures performed between July 1, 2021 and June 30, 2022

Includes Endovascular AAA Repair (EVAR) procedures. Excludes any non-elective procedure. SVS AAA diameter guideline is ≥5 cm for Women and ≥5.5cm for men. If the patient has any iliac aneurysm, the guideline is considered met regardless of AAA diameter.

The table below gives the number of EVAR procedures meeting the inclusion criteria, and the percentage of those procedures meeting the SVS AAA diameter guideline.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of EVAR procedures meeting inclusion criteria</td>
<td>449</td>
<td>6156</td>
<td></td>
</tr>
<tr>
<td>Percentage meeting SVS AAA diameter guideline</td>
<td>75.7%</td>
<td>76%</td>
<td></td>
</tr>
</tbody>
</table>
EVAR SVS AAA Diameter Guideline in Your Region (July 2021–June 2022)

Other centers in your region  Your center

Centers (centers with <10 cases not shown)

18 of 26 centers displayed

*** Indicates center’s rate differs significantly from the regional rate.

EVAR SVS AAA Diameter Guideline by Region Across VQI
(July 2021–June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region’s rate differs significantly from the VQI rate.
TEVAR: Sac Diameter Reporting

Procedures performed between July 1, 2019 and June 30, 2020

Includes Thoracic Endovascular Aortic Repair (TEVAR) procedures for aneurysm or aneurysm from dissection. Excludes procedures where no aortic device was implanted or patients who were converted to open or died within 21 months of surgery.

The table below gives the number of TEVAR procedures meeting the inclusion criteria, and the percentage of those procedures where a sac diameter was reported between 9 and 21 months post-procedure.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of TEVAR procedures meeting inclusion criteria</td>
<td>123</td>
<td>1560</td>
<td></td>
</tr>
<tr>
<td>Percentage with sac diameter reported between 9 and 21 months post-procedure</td>
<td>56.1%</td>
<td>58.4%</td>
<td></td>
</tr>
</tbody>
</table>
TEVAR Sac Diameter Reporting in Your Region (July 2019–June 2020)

Other centers in your region
Your center

Centers (centers with <10 cases not shown)

3 of 14 centers displayed

*** Indicates center's rate differs significantly from the regional rate.

TEVAR Sac Diameter Reporting by Region Across VQI (July 2019–June 2020)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region's rate differs significantly from the VQI rate.
**OAAA: In-Hospital Mortality**

Procedures performed between July 1, 2018 and June 30, 2022

Includes Open AAA (OAAA) procedures. Excludes any patient with a ruptured aneurysm.

The table below gives the number of OAAA procedures meeting the inclusion criteria, and the observed and expected rates of in-hospital death for those cases.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of OAAA procedures meeting inclusion criteria</td>
<td>293</td>
<td>4641</td>
<td></td>
</tr>
<tr>
<td>Observed rate of In-Hospital Mortality among procedures meeting inclusion criteria</td>
<td>4.1%</td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>273</td>
<td>4320</td>
<td></td>
</tr>
<tr>
<td>Observed rate of In-Hospital Mortality among cases with complete data</td>
<td>4%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of In-Hospital Mortality among cases with complete data</td>
<td>4.4%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.88</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

*“Expected rate” is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. “Cases with complete data” include patients who have data on all of those factors.*
In-Hospital Death after OAAA by Year

Rates shown are observed rates among cases meeting inclusion criteria.
In-Hospital Death after OAAA in Your Region (July 2018–June 2022)

- Other centers in your region
- Your center
- Observed
- Expected

Centers (centers with <10 complete cases not shown)

Rates shown are among cases with complete data. "***" indicates center's observed rate differs significantly from its expected rate.

In-Hospital Death after OAAA by Region Across VQI
(July 2018–June 2022)

- Observed
- Expected

Regions (regions with <3 centers with at least 10 complete cases not shown)

Rates shown are among cases with complete data. "***" indicates region's observed rate differs significantly from its expected rate.
OAAA: SVS Cell-Saver Guideline

Procedures performed between July 1, 2018 and June 30, 2022

Includes Open AAA (OAAA) procedures. Excludes any patient with EBL≤500 ml. SVS cell-saver guideline is met if cell salvage or ultrafiltration device was used.

The table below gives the number of OAAA procedures meeting the inclusion criteria, and the percentage of those procedures meeting the SVS cell-saver guideline.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of OAAA procedures meeting inclusion criteria</td>
<td></td>
<td>308</td>
<td>4684</td>
</tr>
<tr>
<td>Percentage meeting SVS cell-saver guideline</td>
<td></td>
<td>97.4%</td>
<td>92.5%</td>
</tr>
</tbody>
</table>
OAAA Cell-Saver Guideline by Year

- Your Center
- Your Region
- VQI Overall
- Your Region (4-yr Rate)
OAAA Cell-Saver Guideline in Your Region (July 2018–June 2022)

Centers (centers with <10 cases not shown)

9 of 17 centers displayed

*** indicates center’s rate differs significantly from the regional rate.

OAAA Cell-Saver Guideline by Region Across VQI (July 2018–June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

*** indicates region’s rate differs significantly from the VQI rate.
OAAA: SVS Iliac Inflow Guideline

Procedures performed between July 1, 2018 and June 30, 2022
Includes Open AAA (OAAA) procedures. SVS iliac inflow guideline is met if preservation of flow was maintained to at least one internal iliac artery.

The table below gives the number of OAAA procedures meeting the inclusion criteria, and the percentage of those procedures meeting the SVS iliac inflow guideline.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of OAAA procedures meeting inclusion criteria</td>
<td></td>
<td>341</td>
<td>5264</td>
</tr>
<tr>
<td>Percentage meeting SVS iliac inflow guideline</td>
<td></td>
<td>98.5%</td>
<td>97.9%</td>
</tr>
</tbody>
</table>
OAAA Iliac Inflow Guideline in Your Region (July 2018–June 2022)

- 11 of 17 centers displayed
- "***" indicates center’s rate differs significantly from the regional rate.

OAAA Iliac Inflow Guideline by Region Across VQI (July 2018–June 2022)

- Regions (regions with <3 centers with at least 10 cases not shown)
- "***" indicates region’s rate differs significantly from the VQI rate.
PVI CLAUD: ABI/Toe Pressure

Procedures performed between July 1, 2021 and June 30, 2022

Includes Peripheral Vascular Intervention (PVI) procedures for mild, moderate, or severe claudication. “ABI/Toe Pressure Assessment” indicates at least one ABI or toe pressure assessment was made prior to PVI for the side of the procedure, or on both sides for bilateral and aortic procedures.

The table below gives the number of PVI procedures meeting the inclusion criteria, and the percentage of those procedures in which an ABI or toe pressure was assessed prior to PVI.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PVI procedures meeting inclusion criteria</td>
<td>1618</td>
<td>14529</td>
<td></td>
</tr>
<tr>
<td>Percentage with ABI/toe pressure assessment</td>
<td>80.6%</td>
<td>73.1%</td>
<td></td>
</tr>
</tbody>
</table>
ABI/Toe Pressure Assessment before PVI for Claudication by Year

- Your Center
- Your Region
- VQI Overall
ABI/Toe Pressure Assessment before PVI for Claudication in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center

27 of 36 centers displayed

*** indicates center’s rate differs significantly from the regional rate.

ABI/Toe Pressure Assessment before PVI for Claudication by Region Across VQI (July 2021–June 2022)

- G. Lakes
- Carolinas
- Virginia
- Michigan
- MidSouth
- New England
- Mid.Atlantic
- New York
- South Carolina
- Rocky Mtn
- So. Cal
- SoVONet
- Southwest

Regions (regions with <3 centers with at least 10 cases not shown)

*** indicates region’s rate differs significantly from the VQI rate.
INFRA CLTI: Major Complications

Procedures performed between July 1, 2021 and June 30, 2022

Includes Infrainguinal Bypass (INFRA) procedures for rest pain, tissue loss, or acute ischemia. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

The table below gives the number of INFRA procedures meeting the inclusion criteria, and the percentage of those procedures that resulted in in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of INFRA procedures meeting inclusion criteria</td>
<td>406</td>
<td>4929</td>
<td></td>
</tr>
<tr>
<td>Percentage with major complications</td>
<td>5.2%</td>
<td>4.9%</td>
<td></td>
</tr>
</tbody>
</table>
Major Complications after INFRA for CLTI by Year

Your Center  Your Region  VQI Overall
Major Complications after INFRA for CLTI in Your Region (July 2021-June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

15 of 23 centers displayed

*** Indicates center's rate differs significantly from the regional rate.

Major Complications after INFRA for CLTI by Region Across VQI (July 2021-June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region's rate differs significantly from the VQI rate.
SUPRA CLTI: Major Complications

Procedures performed between July 1, 2021 and June 30, 2022

Includes Suprainguinal Bypass (SUPRA) procedures for rest pain, tissue loss, or acute ischemia. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

The table below gives the number of SUPRA procedures meeting the inclusion criteria, and the percentage of those procedures that resulted in in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SUPRA procedures meeting inclusion criteria</td>
<td></td>
<td>64</td>
<td>1183</td>
</tr>
<tr>
<td>Percentage with major complications</td>
<td></td>
<td>3.1%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
Major Complications after SUPRA for CLTI in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

0 of 11 centers displayed

*** Indicates center’s rate differs significantly from the regional rate.

Major Complications after SUPRA for CLTI by Region Across VQI (July 2021–June 2022)

- Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region’s rate differs significantly from the VQI rate.
LEAMP: Postop Complications

Procedures performed between July 1, 2021 and June 30, 2022

Includes Lower-Extremity Amputation (LEAMP) procedures. Postoperative complications are defined as myocardial infarction, dysrhythmia, congestive heart failure, surgical site infection, renal complication, or respiratory complication.

The table below gives the number of LEAMP procedures meeting the inclusion criteria, and the percentage of those procedures that resulted in a postoperative complication.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of LEAMP procedures meeting inclusion criteria</td>
<td>108</td>
<td>3138</td>
<td></td>
</tr>
<tr>
<td>Percentage with postoperative complications</td>
<td>10.2%</td>
<td>11.7%</td>
<td></td>
</tr>
</tbody>
</table>
Postop Complications after LEAMP in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

3 of 4 centers displayed
*** Indicates center’s rate differs significantly from the regional rate.

Postop Complications after LEAMP by Region Across VQI (July 2021–June 2022)

- Carolinas
- Mid-Atlantic
- New York
- Up Midwest
- Virginia
- VQI
- Southeast

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region’s rate differs significantly from the VQI rate.
**HDA: Primary AVF vs. Graft**

Procedures performed between July 1, 2021 and June 30, 2022

Includes Hemodialysis Access (HDA) procedures. Excludes procedures where Access Type = Endo AVF or patients with a previous access procedure in the same arm.

The table below gives the number of HDA procedures meeting the inclusion criteria, and the percentage of those procedures that were primary AVF.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of HDA procedures meeting inclusion criteria</td>
<td></td>
<td>239</td>
<td>4524</td>
</tr>
<tr>
<td>Percentage with primary AVF</td>
<td></td>
<td>82.4%</td>
<td>82.1%</td>
</tr>
</tbody>
</table>
Primary AVF Access in Your Region (July 2021-June 2022)

Other centers in your region  Your center

Centers (centers with <10 cases not shown)

8 of 11 centers displayed

*** Indicates center’s rate differs significantly from the regional rate.

Primary AVF Access by Region Across VQI (July 2021-June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region’s rate differs significantly from the VQI rate.
HDA: Ultrasound Vein Mapping

Procedures performed between July 1, 2021 and June 30, 2022
Includes Hemodialysis Access (HDA) procedures.

The table below gives the number of HDA procedures meeting the inclusion criteria, and the percentage of those procedures with preoperative ultrasound vein mapping.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of HDA procedures meeting inclusion criteria</td>
<td>277</td>
<td>5565</td>
<td></td>
</tr>
<tr>
<td>Percentage with preoperative ultrasound vein mapping</td>
<td>93.5%</td>
<td>86.3%</td>
<td></td>
</tr>
</tbody>
</table>
Ultrasound Vein Mapping in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

8 of 11 centers displayed

*** Indicates center's rate differs significantly from the regional rate.

Ultrasound Vein Mapping by Region Across VQI (July 2021–June 2022)

- New England
- Mid-Atlantic
- Carolinas
- Southeast
- G. Lakes
- Midwest
- VQI
- Rocky Mtns.
- Virginia
- New York

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region’s rate differs significantly from the VQI rate.
HDA: Postop Complications

Procedures performed between July 1, 2021 and June 30, 2022
Includes Hemodialysis Access (HDA) procedures.

The table below gives the number of HDA procedures meeting the inclusion criteria, and the percentage of those procedures that resulted in an immediate postoperative complication. Postoperative complications are defined as bleeding, ischemic steal, ischemic monomelic neuropathy, access thrombosis, or other complication requiring reoperation.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of HDA procedures meeting inclusion criteria</td>
<td>277</td>
<td>5565</td>
<td></td>
</tr>
<tr>
<td>Percentage with immediate postoperative complications</td>
<td>1.1%</td>
<td>1.2%</td>
<td></td>
</tr>
</tbody>
</table>
Postop Complications after HDA in Your Region (July 2021–June 2022)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

8 of 11 centers displayed

*** Indicates center's rate differs significantly from the regional rate.

Postop Complications after HDA by Region Across VQI
(July 2021–June 2022)

Regions (regions with <3 centers with at least 10 cases not shown)

*** Indicates region's rate differs significantly from the VQI rate.
**IVCF: Filter Retrieval Reporting**

Procedures performed between July 1, 2019 and June 30, 2020

Includes Inferior Vena Cava Filter (IVCF) procedures. Excludes filters with permanent planned duration, patients who have expired, or patients where no follow-up was possible.

The table below gives the number of procedures meeting the inclusion criteria, and the percentage of those procedures in which the filter was reported as retrieved (or retrieval was attempted) at any time post-procedure. Because follow-up is critical for assessing filter retrieval, cases meeting the inclusion criteria are broken down into those with follow-up records (at least 1 follow-up record) and those without follow-up records.

<table>
<thead>
<tr>
<th>Number of IVCF procedures meeting inclusion criteria</th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number without follow-up records</td>
<td>NA (&lt;3 centers)</td>
<td>195</td>
<td>1023</td>
</tr>
<tr>
<td>Number with follow-up records</td>
<td>828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage with Filter Retrieval, or Attempt at Retrieval</td>
<td>51.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because No Follow-up Records Created</td>
<td>19.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because Not Clinically Indicated</td>
<td>18.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because Patient Declined</td>
<td>2.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because Lost to Follow-Up</td>
<td>3.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because Deemed Too Late for Removal</td>
<td>0.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because Planned Later Removal</td>
<td>4.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage not retrieved because No Reason Given</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IVC Filter Retrieval Reporting in Your Region (July 2019–June 2020)

Centers (centers with <10 cases not shown)

0 of 2 centers displayed

*** indicates center's rate differs significantly from the regional rate.

IVC Filter Retrieval Reporting by Region Across VQI (July 2019–June 2020)

Regions (regions with <3 centers with at least 10 cases not shown)

*** indicates region's rate differs significantly from the VQI rate.
Regional Improvement Projects
National VQI Update

Caroline Morgan, RN
Clinical Operations
Number of Participating Centers

949 VQI Centers
948 centers in North America
1 center in Singapore
Total Procedures Captured (as of 9/1/2022) | 995,265
---|---
Peripheral Vascular Intervention | 341,405
Carotid Endarterectomy | 180,241
Infra-Inguinal Bypass | 76,552
Endovascular AAA Repair | 74,980
Hemodialysis Access | 72,543
Carotid Artery Stent | 81,133
Varicose Vein | 56,222
Supra-Inguinal Bypass | 24,596
Thoracic and Complex EVAR | 26,267
Lower Extremity Amputations | 26,046
IVC Filter | 17,629
Open AAA Repair | 16,794
Vascular Medicine Consult | 757
Venous Stent | 100

VQI Total Procedure Volume

(Chart depicts past 8 years through August 31, 2022)

Total Procedure Volume reflects net procedures added to the registry for the month

1,000,000 Cases
9/14/2022
Save the Date!

2023 VQI Annual Meeting
June 13-14, 2023

Gaylord National Resort & Convention Center
National Harbor, MD (outside Washington, DC)
2023 VQI@VAM Call For Abstracts

Key Dates for both Quality Abstracts and Rapid Fire Abstracts

Abstract submissions begin - October 1, 2022
Abstract submission deadline - January 16, 2023

Quality Improvement Poster Session – June 13, 2023, Evening
Quality Improvement Podium Presentations – June 14, 2023, Morning
Rapid Fire Research Presentation – June 14, 2023, Afternoon
Visit the VAM Online Planner for access to all of the VQI@VAM videos!

1. Use the SVS login that you used to register for VQI@VAM.


3. Enjoy the recordings!
Welcome

Melissa Latus – Clinical Operations Program Manager

• Start Date July 11, 2022
• Cardiovascular Registered Nurse
• Registry experience ACS/NSQIP

Top Responsibilities:
Working with Registry Committees
RAC
Support for regional Meetings
Assist with answering Clinical Questions
Upcoming Infra/Supra Revisions

Highlights

• Help text for majority of select options.
• Addition of planned vs unplanned amputations
• Harmonization of variables across like registries
• Addition of WiFi variables
• Expanded Claudication variables
• Revision of Return to OR variable help text
• Cloning between Infra, Supra and PVI

• Additional questions – cmorgan@svspso.org
- Increased frequency of VQI PSO Webinars focused on registry releases/revisions
- Addition of Data Managers to Registry Committees
- Reminder: Regional Lead DM is a resource for VQI updates and questions

Additional questions – cmorgan@svspso.org
Reminder:
Visit VQI.org for the most current VQI Reporting Schedule

https://www.vqi.org/resources/reporting/
**DISCLAIMER:** This is a “living” calendar of events subject to frequent updates and changes. Please visit [https://www.vqi.org/resources/webinars-events/](https://www.vqi.org/resources/webinars-events/) for the most up to date listing of webinars and events.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Webinar Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/11/2022</td>
<td>2:00 PM ET</td>
<td>SVS PSO Quarterly Charter Focus Call</td>
</tr>
<tr>
<td>10/26/2022</td>
<td>2:00 PM ET</td>
<td>Help Text and Development Revision Webinar</td>
</tr>
<tr>
<td>Q4 2022 – Q1 2023</td>
<td>TBD</td>
<td>Infra / Supra Registry Revision Overview</td>
</tr>
<tr>
<td>11/29/2022</td>
<td>2:00 PM ET</td>
<td>New VQI Website Overview</td>
</tr>
<tr>
<td>January 31, 2023</td>
<td>1:00 PM ET</td>
<td>SVS VQI Quarterly Quality Improvement Educational Webinars</td>
</tr>
<tr>
<td>1/17/2023</td>
<td>2:00 PM ET</td>
<td>SVS PSO Quarterly Charter Focus Call</td>
</tr>
</tbody>
</table>
Please visit the PATHWAYS Support Tab/Training Schedule for upcoming events and to register for requested training

PATHWAYS 101: Introduction to PATHWAYS Functional Training – Twice per month (2nd & 4th Wednesdays)

PATHWAYS 102: Introduction to PATHWAYS Follow-up and Reporting Tools - Quarterly
A New VQI Website!

- A new VQI.org experience is coming!
- New look and feel, fresh content, and improved navigation.
- The site is expected to go live November.
Hashtag Projects

• Any new hashtag projects submitted as of July 18, 2022, must follow the # format seen below in order to have a BDS provided.

# [Tag: value]

• Multiple hashtags can be entered in the comments box if they are separated by at least one space.

• Project owners are responsible for ensuring that the tags and values are correctly entered.

• If keystroke errors occur, centers may revise the record accordingly and request a revised data set.
Des Moines University is the continuing education provider for this activity.

The attendance roster will be cross-referenced with those applying for CME/CE. Sign in correctly.

Each participant **MUST COMPLETE BOTH** the attendance attestation and the meeting evaluation from the URL site – one form.

You will have 7 days from the date of the meeting to complete the forms and **SUBMIT**.

Approximately 14 days from the meeting, Des Moines University will email you instructions on how to access your certificate.

PSO leadership is providing continuing education credit to you at no charge!

If you do not complete and submit the online forms within 7 days, continuing education credit cannot be awarded.
MEETING ATTENDANCE CREDIT

REMEMBER TO PSO:

• PUT your FULL NAME in Zoom to get credit for attendance and CME/CE credit (no exceptions will be made)

• SEND an email to ljohnson@svspso.org with names of group members that are sharing 1 device

• OFFICIALLY apply for CME/CE credit by clicking this link: https://dmu.co1.qualtrics.com/jfe/form/SV_1FBujFZKbYwrEh0

You only have 7 days to complete forms for CME/CE Credit.
NO EMAIL WILL BE SENT AS A REMINDER OR WITH THE CME/CE LINK
Quality Improvement Update
Fall 2022

Dr. Betsy Wymer, DNP, RN, CV-BC
Director Quality
Trainee Program

FIT Roadmap

Application Process: personal statement career interest/goal, project area, 2 LOR and letter of good standing from PD

Mentor matching: discuss goals, project ideas, career

Submission to Research Advisory Committee - and local IRB -> refinement as needed

Committee review/selection

Initial meetings with mentor and project selection -> milestone meetings

Data analysis and project write-up -> Publication and presentation

VQI @ VAM/awards selection including Jack Cronenwett MD scholarship
## 2022-2023 FIT List

<table>
<thead>
<tr>
<th>FIT Mentor</th>
<th>FIT Trainee</th>
<th>Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah Deery</td>
<td>Aarathi Minisandram</td>
<td>Maine Medical Center</td>
</tr>
<tr>
<td>Graham Roche-</td>
<td>Ben Li</td>
<td>Toronto General Hospital</td>
</tr>
<tr>
<td>Nagle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sara Zettervall</td>
<td>Blake Murphy</td>
<td>University of Washington Medical Center</td>
</tr>
<tr>
<td>Phil Goodney</td>
<td>Brianna Krafzik</td>
<td>Dartmouth Hitchcock Medical Center</td>
</tr>
<tr>
<td>Benjamin Brooke</td>
<td>Caronae Howell</td>
<td>The University of Arizona</td>
</tr>
<tr>
<td>Shihuan K Wang</td>
<td>Channa Blakely</td>
<td>UTMB Health</td>
</tr>
<tr>
<td>Danny Bertges</td>
<td>Christine Kariya</td>
<td>University of Vermont Medical Center</td>
</tr>
<tr>
<td>Adam Beck</td>
<td>Claire Motyl</td>
<td>University of Alabama Medical Center</td>
</tr>
<tr>
<td>Michael Murphy</td>
<td>Hanaa Dakour Aridi</td>
<td>IU Health - Methodist</td>
</tr>
<tr>
<td>Edward Gifford</td>
<td>Laura Healy</td>
<td>Hartford Hospital/University of Connecticut</td>
</tr>
<tr>
<td>Eleftherios Xenos</td>
<td>Lauren Grimsley</td>
<td>UK Healthcare</td>
</tr>
<tr>
<td>Kyla Bennett</td>
<td>Leah Gober</td>
<td>University of Wisconsin Hospitals and Clinics Authority</td>
</tr>
<tr>
<td>Karan Garg</td>
<td>Rae Rokosh</td>
<td>NYU Langone Health</td>
</tr>
<tr>
<td>Beau Hawkins</td>
<td>Razan Elsayed</td>
<td>OU Medical Center</td>
</tr>
<tr>
<td>Leila Mureebe</td>
<td>Roberto Loanzon</td>
<td>Duke University Health System</td>
</tr>
<tr>
<td>Nikoloas Zacharias</td>
<td>Srihari Kumar Lella</td>
<td>Massachusetts General Hospital</td>
</tr>
</tbody>
</table>
Trainee Program

• January 2023 - Next Trainee application and JLC Award Submission

• February 28, 2023 – Deadline for Trainee Applications and JLC Award Submissions

• March-April 15, 2023 – Review of Applicants and Scoring by SRC

• April 15-May 30, 2023 – Review and Ranking of JLC Award Submissions

• June 2023 – Announcement of FIT Trainees and JLC Awards

Participation Awards

2022 PARTICIPATION AWARDS PROGRAM

The four domains for the 2022 Participation Awards criteria:

Domain 1 – LTFU – 40% weighted
Domain 2 – Regional Meeting Attendance – 30% weighted
Domain 3 – QI Project – 20% weighted
Domain 4 – Registry Subscriptions – 10% weighted

The final score is calculated as follows:

Total points = 4 x LTFU score + 3 x Attendance score + 2 x QI score + 1 x registry score
Participation Points Update

- **Domain – Regional Meeting attendance – 30% weighted**
- Credit will be given for remote attendance since virtual and hybrid meetings will be an option for the 2022 meetings due to the ongoing COVID pandemic.
- Each regional meeting will be scored on a 0–3-point scale:
  - For centers with 3 or more MDs, 1 point for each **MD attending**, up to a max of 3 points
  - If site has only 2 MDs and 1 **MD attends**, 2 points
  - If site has <3 MDs and all **MDs attend**, 3 points
  - **Support staff (Fellows, Residents, Physician Assistants, Nurse Practitioners, et. al., -those with an ACTIVE Pathways account) will receive a maximum of 1 point regardless of MD attendance. Ex – if 1, 3, or 5... support staff at a center attends a meeting, the center will get 1 point.**
  - Regional medical directors and regional lead data managers will each receive one additional point, for a maximum of 6 regional meeting attendance points.
  - **The host site will get 1 extra point this includes on-site and/or off-site).**
Quality Improvement Update

• QI Toolkits
  – LTFU to be developed
  – DM to be developed
• Monthly Newsletter
• Quarterly QI Webinars
• Quarterly Focus Charter Calls
• Quarterly Regional Lead Data Manager Calls
• 1:1 Meetings
• https://www.vqi.org/quality-improvement/
Charter Update

Charter Types

- Center Charter: 70%
- Regional Charter: 28%
- Hashtag Charter: 2%

Legend:
- Center Charter
- Regional Charter
- Hashtag Charter
Charter Update

Regions with Charters n=86

- CAROLINAS VASCULAR QUALITY GROUP: 8
- GREAT LAKES VASCULAR STUDY GROUP: 1
- MICHIGAN VASCULAR STUDY GROUP: 1
- MID-AMERICA VASCULAR STUDY GROUP: 0
- MID-SOUTH VASCULAR STUDY GROUP: 0
- MIDWEST VASCULAR STUDY GROUP: 21
- NORTHERN CA VASCULAR STUDY GROUP: 1
- PACIFIC NORTHWEST VASCULAR STUDY GROUP: 0
- ROCKY MOUNTAIN VASCULAR STUDY GROUP: 1
- SOUTHERN CA VASCULAR QUALITY OUTCOMES: 3
- SOUTHERN CA VASCULAR OUTCOMES: 2
- SOUTHERN VASCULAR OUTCOMES GROUP: 33
- UPPER MIDWEST VASCULAR NETWORK: 0
- VIRGINIA VASCULAR STUDY GROUP: 1
- VSGNY: 0
- VSGNE: 2
Mid-Atlantic Charters

• St. Luke’s Health System
  Catherine Weston
  AKI
  LTFU Scorecard

• Mainline Health
  Vanessa Cambria Mengel
  Documentation – Smart Phrases
  Documentation of DC Drugs

• University of Pennsylvania
  Dr. Wang
  Statin Use
Charter Update

Charter Topics

Registries Used for Charters
Arterial Quality Council:
Grace Wang, MD
Fall 2022 AQC Update

• Every other month AQC meetings
  – Last meeting 9/12/2022
  – Next meeting 11/7/2022

• Approval for harmonization of Chronic Anticoagulation across arterial registries

• Review of the Infra/Supra major revisions

• Risk Calculator Update and integration

• Discussions for potential new National Quality Initiative – Smoking Cessation
Venous Quality Council:
Tanya Flohr, MD
Fall 2022 VQC Update

• Quarterly VQC Meetings
  – Next meeting 11/17/2022 at VEITH, hybrid meeting
  – Reviving of Venous Registry Committees

• AVF meeting
  February 23rd - 26th, 2023

• Venous Registry Committee will begin meeting more regularly to develop one year and long-term goals for each of the registries

Ideas for Venous Registry Specific Metrics:
  – Anticoagulation after venous stents?
  – C2 disease for varicose veins?
  – IVC temporary filter retrieval?
  – IDEAS???
Arterial Research Advisory Council:
Caitlyn Hicks, MD
Arterial RAC Resources


Data Analysis Updates

- National RAC Submissions Link
- Latest RAC Approved Project List

NEW SVS PSO Instructional Videos for Requesting VQI Data

- Requesting VQI Data - Part 1
Arterial RAC Schedule

August 2022
Call for Proposals – June 20, 2022
Submission Deadline – July 22, 2022
Meetings – August 8, 2022

October 2022
Call for Proposals – August 15, 2022
Submission Deadline – September 22, 2022
Meetings – October 10, 2022

December 2022
Call for Proposals – October 17, 2022
Submission Deadline – November 23, 2022
Meetings – December, 12, 2022

Venous Research Advisory Council
 Submitting a Venous RAC Proposal

Presentation: How to Submit a Venous RAC Proposal (By Dr. Jaime Benarroch-Gampel)
National Venous RAC


Data Analysis

- National Arterial RAC Schedule
- National Venous RAC Schedule
- Research Advisory Councils

National Venous RAC Schedule

Submissions are made separately to the National Arterial RAC and the National Venous RAC – see the schedule below and the link to Abstracts123: [http://abstracts123.com/svs1/](http://abstracts123.com/svs1/)

(If you do not have a login for Abstracts123, you can create one through the same link)

Bi-Monthly Schedule for National Venous RAC Proposal Submissions
Governing Council:
Faisal Aziz, MD
Fall 2022 GC Update

• Last meeting June 17, 2022
• Publicizing Registry Participation by Site Discussion
• Update on expansion of TCAR
  • Expanded coverage for Transcarotid Artery Revascularization (TCAR) to include standard surgical risk patients within the VQI TCAR Surveillance Project.
• Update on the addition of Cedaron as a VQI reseller
  • Software solution that automates data collection and validation at the point of care
• Continued discussion on PSO Risk Calculator
  • Will reside on the PSO Website w/ possible app for easier accessibility
Updates for Fall 2022 VQI Regional Meeting
Technology
Released in Q1 2022

- **HDA Revision**
  - **Demographic Tab**
    - GFR dependency modified
    - Hard stops removed from Hemoglobin and Creatinine fields to create commonalities across all registries
  - **History Tab**
    - Lower Extremity Tunneled Catheter and Other Access dependencies modified
    - Previous Left Type of Other CVD “Port-a-cath”, Current Right Other CVD “Port-a-cath” and Current Left Other CVD “Port-a-cath” modified to a generic name
  - Implement collection of balloon device data and atherectomy data via GUDID
Released in Q1 2022

• Support Tab Enhancements
  • Added menu/navigation on left side for documents, release notes and training schedule
  • Added 30-Day Data Dictionary to dictionary capabilities
Released in Q1 2022

- Customizable Data Download
  - Additional dates added to Date filter (Discharge Date, Created Date, Admit Date, Updated Date)
  - Added Data Download Label as default for column name
  - Added Record Status filter (both complete and incomplete, complete only, incomplete only)
  - Added Field Selection so users can choose only the desired fields
A new 'Follow-up Outcomes Report' for the PVI registry, developed by the SVS PSO, is now available in the PATHWAYS Reporting tab. The report will provide key follow up metrics for VQI sites with center data as well as regional and all VQI benchmarking and includes drill down capabilities to better understand center data at the procedure level.
Released in Q2 2022

- Imaging Fields added to EVAR/TEVAR
  - Captures additional image guidance technologies used to reduce radiation from std fluoroscopy
Air Kerma and DAP Fields added to EVAR/TEVAR

Collection of Dose Area Product and Air Kerma to assess radiation risk from diagnostic x-ray and interventional procedures

Released in Q2 2022
• Modified TEVAR LTF Patency Branch Fields
  • Collect FWP branches’ patency fields in standard TEVAR Follow-up records to assess the status of the branch after treatment
PATHWAYS Support
PATHWAYS Support

Claims Validation

The annual claims validation process is intended to ensure that all eligible cases have been captured in the registry and is a requirement of participation in the VQI. This process is a key component of VQI’s efforts to make certain registry data reflects real world evidence.

The 2021 Claims Validation process was launched in July 2022.

- Centers are notified via email with a request to provide the contact information for the individual responsible for completing the audit.
- The deadline to finish is November 4, 2022.
- PATHWAYS Support is here to help you. Please reach out if your center was selected to participate in the audit and you need assistance.
PATHWAYS Support

What’s coming up?

Explore the PATHWAYS Support tab

Training Schedule
List of upcoming training opportunities and registration links for new staff and experienced abstractors.

New Report Training opportunities
Please look for a new Report Training opportunity to be available in Q4. We want to make sure you are using all the tools available to you!
PATHWAYS Support - Tips & Tricks

Help us help you...

- To avoid confusion and expedite resolution, please include detailed information in emails to the PATHWAYS Support team, including:
  - The registry name and specifics of the field in question (if applicable)
  - Center name and phone number, in case we need to contact you
    (For those of you in multiple centers, it is helpful for us to know which center you are working with.)
- Remember to submit your cases often. Don’t get caught trying to scramble to get multiple cases entered immediately prior to a reporting deadline!
- Periodically review the User and Permissions Report (PATHWAYS/Data Management/Tools) to confirm user access and contact details.
PATHWAYS Support

Coming Soon

The Support Team continues to work on enhanced tools and training opportunities for new and existing PATHWAYS users to learn more about PATHWAYS functionality.

Be sure to read PATHWAYS notifications announcing important updates via email by asking your IT department to white list “fivoshealth.com”
Registry Projects
SVS Post-Market Surveillance Projects

• These projects are conducted within the SVS PSO and only non-identifiable data (removal of patient, center and physician information) will be provided to Medtronic/BARD/Cook/Gore or the FDA. Only standard of care practice is being evaluated. For such PSO activities, patient informed consent and Institutional Review Board review are not required.

• Sites must follow their institutional guidelines.
TEVAR Dissection Surveillance Project

- The SVS PSO is excited to announce the continuation of the TEVAR Dissection Surveillance Project to evaluate the Cook Zenith Dissection Endovascular System. FDA approval was granted for this device after safety and effectiveness were demonstrated in pre-market studies of complicated dissection with the proviso that the efficacy of TEVAR treatment of descending aortic dissection would be more fully analyzed through post-market surveillance, as was done through VQI for the W. L. Gore and Medtronic devices after their approval.
- Patients will have 30 day, and annual visits for 5 years.
- Total reimbursement of $4,000 per patient for a patient followed annually for 5 years
TEVAR Dissection Surveillance Project

- 88 of the 180 required patients enrolled (48 potential cases in process)
- Retrospective enrollment allowed- All eligible cases from December 31, 2018 (protocol FDA approval date)
- 34 30-Day visits completed, 18 1-year follow-up visits completed and 1 2-year follow-up visit completed
- All 40 sites enrolled (4 in contracting and 36 trained)
- This project is conducted within the SVS PSO and only non-identifiable data (removal of patient, center and physician information) will be provided to Cook or the FDA. Only standard of care practice is being evaluated. For such PSO activities, patient informed consent and Institutional Review Board review are not required.
TEVAR Dissection Surveillance Project

- Initiated in October 2014, the TEVAR Dissection Surveillance Project Arm evaluates the W.L. Gore and Medtronic devices for treatment of Type B thoracic dissections.
- Meeting FDA requirement
  - 194 chronic and 200 acute patients with device technical success
- Currently in 5-year follow-up phase
Polling Question 2
Date?

Location?
Meeting Attendance Credit

REMEMBER TO PSO:

• **P**UT your FULL NAME in Zoom to get credit for attendance and CME/CE credit (no exceptions will be made)

• **S**END an email to lijohnson@svspso.org with names of group members that are sharing 1 device

• **O**FFICIALLY apply for CME/CE credit by clicking this link: https://dmu.co1.qualtrics.com/jfe/form/SV_1FBujFZKbYwrEh0

You only have **7 days** to complete forms for CME/CE Credit.

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