Southeastern Vascular Study Group

October 3rd, 2019
10:00 AM – 3:00 PM EST
University of Alabama at Birmingham
PLEASE SIGN THE ATTENDANCE SHEET
Agenda

10:00-10:15am: Welcome and SEVSG Update – Adam Beck, MD and Yazan Duwayri, MD
10:15-10:45am: National VQI and Pathways Development Update – Carrie Bosela, SVS PSO
10:45 -11:00am: Arterial Quality Council Update - Adam Beck, MD
11:00-11:05am: Venous Quality Council Update- Olamide Alabi, MD
11:05am-12:00pm: Data Manager Presentation

LUNCH

12:30-12:45pm: ERAS Update from UAB - TBD
12:45-1:00pm: Evaluation of Obesity on Lower Extremity Bypass Readmissions- Emily Spangler, MD
1:00-1:15pm: Volume Outcomes and AAA: An International Perspective with VQI Data- Salvatore Scali, MD
1:15-1:30pm: Predictors of CSF Drain Use- Victoria Aucoin, MD

BREAK

1:45-2:00pm: Lower Extremity Arterial Interventions (Quality and Cost Value Assessment)- Olamide Alabi, MD
2:00-2:15pm: Review of Recent VQI Publications- Jaime Benarroch, MD
2:15-2:45pm: Regional Report Findings – Yazan Duwayri, MD
2:45-3:00pm: Closing Remarks: SEVSG Future Directions & Action Items - Yazan Duwayri, MD
Welcome and Introductions

AdventHealth Celebration
AdventHealth Orlando
Albany Vascular Specialist Center
BayCare Health System-Morton Plant Hospital
Bayfront Health Seven Rivers
Brookwood Baptist Medical Center
Central Florida Regional Hospital
Christus Highland Medical Center
Coastal Vascular & Interventional, PLLC
Coastal Vein and Vascular Specialists
Cobb Hospital
Delray Medical Center
Emory St. Joseph's Hospital
Florida Hospital Memorial Medical Center
Florida Hospital Zephyrhills
Floyd Medical Center
Grady Memorial Hospital (GA)
Gulf Coast Medical Center
Health Park Medical Center
Holmes Regional Medical Center
Huntsville Hospital Health System
Kenneestone Hospital
Lakeland Regional Medical Center
Lyerly Baptist Neurosurgery
Martin Medical Center
Mayo Clinic Florida
Medical Center Navicent Healthcare
Memorial Health University Medical Center
Memorial Hospital Pembroke
Memorial Hospital West
Memorial Regional Hospital
Miami Vein Center

Mobile Infirmary Association
Mount Sinai Medical Center (Miami)
North Florida Regional Medical Center
North Okaloosa Medical Center
Northeast Georgia Medical Center, Inc.
Northside Hospital Atlanta
Northside Hospital Cherokee
Northside Hospital Forsyth
Ocala Regional Medical Center
Orlando Health - Dr. P. Phillips Hospital
Orlando Health - Health Central Hospital
Orlando Health - Orlando Regional Medical Center
Orlando Health - South Seminole Hospital
Piedmont Athens Regional Medical Center
Piedmont Hospital
Redmond Regional Medical Center
Sarasota Memorial Hospital
Southern Regional Medical Center
St. Anthony's Hospital
Surgical Specialists of Central Florida
Tampa General Hospital
Tenet Florida Physician Services, LLC
The Emory Clinic
The Vein and Vascular Institute of Tampa Bay
Tradition Medical Center
University Of Alabama Medical Center
University of Florida, Gainesville
Vascular & General Surgical Specialists of SWFL
Vascular Associates Of South Alabama, LLC
Vascular Surgery Associates
New to SEVSG:

Saint Luke’s Memorial Hospital, in Puerto Rico
## Potential Sites

<table>
<thead>
<tr>
<th>Account</th>
<th>City/State</th>
<th>Stage</th>
<th>Physician Lead</th>
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<tbody>
<tr>
<td>Baptist Hospital of Miami</td>
<td>Miami, FL</td>
<td>Awaiting Signatures</td>
<td>Dr. Steven Kang</td>
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<tr>
<td>Baptist Health South Miami</td>
<td>Miami, FL</td>
<td>Awaiting Signatures</td>
<td>Dr. Ignacio Rua MD</td>
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<td>Dr. Myron St Louis</td>
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<td>Capital Regional &amp; Lake City</td>
<td>Tallahassee</td>
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<td>Dr. Jeffrey Kirk</td>
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<td>Augusta University Medical Center</td>
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<td>Mrinal Shukla, M.D., RPVI</td>
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<td>Halifax Health Medical Center</td>
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<td>Proposal</td>
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<td>Dr. Cary J. &quot;Jake&quot; Lambert</td>
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<td>Dalton, GA</td>
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<td>Dr. Hector Dourron</td>
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<td>Phoebe Putney</td>
<td>Albany, GA</td>
<td>Qualified</td>
<td>Dr. Daniel Martin</td>
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<tr>
<td>John D. Archbold Memorial Hospital;</td>
<td>Thomasville, GA</td>
<td>Qualified</td>
<td>Dr. Bert Richardson</td>
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</table>
National VQI Update:
Carrie Bosela, SVS PSO
Number of Participating Centers

Location of VQI Participating Centers

602 VQI Centers
601 centers in North America
1 center in Singapore
### Total Procedures Captured (as of 9/1/2019)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedures</th>
</tr>
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<tr>
<td>Peripheral Vascular Intervention</td>
<td>200,124</td>
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<tr>
<td>Carotid Endarterectomy</td>
<td>126,825</td>
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<tr>
<td>Infra-Inguinal Bypass</td>
<td>55,222</td>
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<td>Endovascular AAA Repair</td>
<td>51,218</td>
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<td>Hemodialysis Access</td>
<td>50,379</td>
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<td>Carotid Artery Stent</td>
<td>33,621</td>
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<td>Varicose Vein</td>
<td>32,823</td>
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<tr>
<td>Supra-Inguinal Bypass</td>
<td>18,361</td>
</tr>
<tr>
<td>Thoracic and Complex EVAR</td>
<td>15,646</td>
</tr>
<tr>
<td>Lower Extremity Amputations</td>
<td>15,379</td>
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<tr>
<td>IVC Filter</td>
<td>12,938</td>
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<tr>
<td>Open AAA Repair</td>
<td>12,715</td>
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</table>

**Total**: 625,251

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**VQI Total Procedure Volume**

- **Total Procedure Volume tab** reflects net procedures added to the registry for the month.
SVS PSO Staffing Update:

- Kristopher Huffman has been hired as the new Director of Analytics
  - Kristopher comes to us from ACS NSQIP
  - Kristopher started on September 3rd
  - Dan Neal will continue on as a part-time employee of the PSO

- Caroline Morgan, BSN has been hired as the new Clinical Operations Associate
  - Caroline will:
    - assist with data audits, responding to clinical questions and updating and maintaining the registries
    - be the lead interface with regional data managers
    - attend regional and national meetings
  - Caroline comes from NCDR, where she was in charge of their ICD, Afib Ablation and PVI registries
  - Caroline started on September 30th
SVS PSO Staffing Update:

- SVS PSO will be hiring an Associate Medical Director
  - A RFA will be issued by the end of August and the position will be filled by March 2020
  - Position will report to the PSO’s Medical Director, Dr. Jens Eldrup-Jorgensen
  - The initial focus will be to assist the SVS PSO Medical Director and SVS PSO staff, with guidance and oversight its clinical operations.
  - There will be a specific emphasis placed on attaining a deep understanding of the construct of the variables in each SVS VQI registry and then assisting with the development and maintenance of the registries and associated reporting and analytics.
VQI@VAM Highlights:

- **Expanded Concurrent Abstraction Sessions**
  - Consider adding Data Managers as presenters
  - Add more structured Q&A
  - Need more detailed Op Notes

- **Continued Growth of Poster/Networking Session**
  - People commented on not only the increased number of posters, but the diversity and quality of topics
  - More time allotted for QI presentations
  - Will hold QI presentations to given timeframes, going forward

- **New Topics/Presentations Received High Praise**
  - Opioid Crisis/ERAS Expert Panel
  - Limb Amputation/Preservation
  - Registry Operations Support
Attendance 161

60/40 split – Data Manager/Physician

3.24/4.00 Meeting Evaluation Rating

Who attended?

Feedback? How do we improve?
| Implementation of an Enhanced Recovery Program (ERP) for Lower Extremity Bypass | Novak, Z and Laygo-Prickett, M | University of Alabama |
Quality Improvement Activities
Quality Improvement Webinars:

- **2019 Quarterly Webinars**
  - February 2019
    - “Starting a QI project”
  - May 2019
    - “Code Rupture: Establishing A Protocol for the Patient With a Ruptured Aneurysm”
  - September 2019
    - Educational – Methodology, QI tools
    - Case studies from participants
  - November 2019
    - Wrapping up a QI project, 2020 Participation Award Information
Recap of 2018 QI Projects

Puting Data into Action
See what your colleagues are doing with QI

- Twenty five posters were presented at the 2019 VQI@VAM
- Eight charters were featured in the poster presentations
- Three charters became podium presenters
- Ten poster presenters were podium presenters
- Four posters were based on the national VQI initiatives: D/C Medications and EVAR Imaging LTFU
# Quality Improvement Details: Charter Information

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<tr>
<th>Activity</th>
<th>Documentation</th>
<th>Score</th>
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<tbody>
<tr>
<td>1. QI Project Initiation</td>
<td>Attestation to include:</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>• QI Project Title</td>
<td>Can be submitted at anytime</td>
</tr>
<tr>
<td></td>
<td>• Problem Statement</td>
<td></td>
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<tr>
<td></td>
<td>• Project Leader</td>
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<tr>
<td></td>
<td>• Clinical Sponsor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Expected start date</td>
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<td></td>
<td>Form can be accessed at <a href="https://www.vqi.org/vqi-resource-library/quality-improvement/">https://www.vqi.org/vqi-resource-library/quality-improvement/</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Project charters should be emailed to <a href="mailto:QI@SVSPO.ORG">QI@SVSPO.ORG</a> or <a href="mailto:c.jackson@svspsou.org">c.jackson@svspsou.org</a></td>
<td></td>
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</table>
Charters

- Charter participants become part of focused group calls
  - Interactive discussion sharing barriers and successes
  - Sharing of charters
  - Networking
  - Checking in – where are you in the process
  - Celebrating success

One on one calls, if requested
Newsletters

- The VQI News
  - Distributed every other month
  - Provides updates on regulatory issues, technical updates, and crossover news from the SVS and SVN

- VQI Quality Improvement Newsletter
  - Distributed every other month
  - Focusing on QI processes, tools, and definitions
Quality Improvement Details for 2019 Participation Awards:

- 6-point maximum credit for QI even though additional points can be acquired
- Each VQI center submits one QI project per center for the Participation Award
- Reminder: Eligibility requirement - Participation in VQI for at least 12 months
- Final scoring completed: January 31, 2020
- Star Ratings communicated in March 2020
Participation Awards: 2019

Scoring

- LTFU (40%)
- Regional Meeting attendance (30%)
- QI Project (20%)
- Registry subscriptions (10%)

Participation Committee is in the process of reviewing criteria for 2020 awards
Participation Awards:

3 Star recipients received certificates at the Spring Regional and National Meeting

- View pictures on your region’s website at www.vqi.org
3 Star Award Recipients

University of Florida, Gainesville
The Emory Clinic
National QI project details

- For general inquiries about the Participation Awards, please contact Cheryl Jackson at CJACKSON@SVSPSO.ORG or Jim Wadzinski at JWADZINSKI@SVSPSO.ORG.

- Submit Project Charters and supporting documentation for presentations and posters to QI@SVSPSO.ORG or cjackson@svspso.org.

- Visit the VQI Members Only Website for webinars and presentations on VQI Quality Improvement Projects. www.vqi.org
2019 Reports:

- **Quarter 1:**
  - Spring Regional Reports,
  - QI Update: EVAR LTFU Imaging Update/Risk Calculator
  - Performance Awards

- **Quarter 2:**
  - QI Initiative Updates – DC meds and EVAR LTFU imaging
  - Center and System Dashboards

- **Quarter 3:**
  - Fall Regional Reports
  - QI Initiative Updates – DC meds and EVAR LTFU imaging
  - Center and System Dashboards

- **Quarter 4:**
  - QI Initiative Updates – DC meds and EVAR LTFU imaging
Registry Updates:

- **Hemodialysis Access:** In development and will be released in Q3 2019
- **Vascular Medicine Registry:** Specifications finalized, to be released in Q4 2019
- **Varicose Vein:** Specifications finalized, to be released in Q4 2019
- **Venous Stent Registry:** Specifications finalized, to be released in Q4 2019
Research Advisory Council
Adam Beck, MD
Change in RAC Policies!

- Policy on RAC Requests Related to Industry Studies
- Policy on Device Identification for approved RAC Requests
- Conflict of Interest Policies Revised based on these new Policies
- All posted on the VQI Web Site
Proposal Submissions

October 2019

Call for Proposals: August 13, 2019
Due Date: September 16, 2019
Meeting: October 7, 2019
Notification Sent: October 8, 2019
RAC Update - Reminder

- No Restriction of data release based on similar projects; collaboration is encouraged
- Only 1 refresh of data within 24 months of initial approval
- Industry related projects need to collaborate with the steering committee/s (i.e. TCAR)
  - Review policy and industry charters on the web
- Device Identification Policy: review on the web before submitting proposal
Check Approved Project List

https://www.vqi.org/data-analysis/rac-approved-project-search/

To submit a proposal to be considered for the National RAC, please follow the link below:

http://abstracts123.com/svs1/meetinglogin
Arterial Quality Council: Adam Beck, MD
Opioid Workgroup is formed and charged with putting forth recommendations on how the VQI can be used to track, monitor and benchmark opioid utilization.

Continued refinement to Global Unique Device Identification Database (GUDID) integration in PVI, with planned expansion to other registries.

Initiating Future Registry Updates
- Harmonizing Demographics and Meds across all registries
- Updating Infra/Supra Registries
- Updating OAAA

Provided Education and Clarification on recording “Other Devices” and IDEs
Venous Quality Council: Olamide Alabi, MD
Council and Committee Transition
- Dr. Almeida is in his last year as Chair of VQC
- Succession needed for VV Registry committee chair

Formation of a separate RAC for Venous

Continued Interest from United Healthcare on collaborating on Appropriateness for Ablations. Could eliminate the need for pre-authorizations.
Governing Council:
Yazan Duwayri, MD
Vote on new Executive Committee Member
   – Dr. Yazan Duwayri, Emory University

Presentation on Potential New Cost Project –
Expanding upon the EVAR Cost Pilot Project

Need for New RAC Policies
   – Revised Data Use Agreements
   – Non-VQI members cannot have access to VQI BDS
   – How to handle center id in Regional Data Sets
Regional Reports:

Yazan Duwayri, MD

Notes:
1) In all reports, regional data are not shown for regions with <3 centers participating in the applicable registry.
2) In “by Center” bar charts, unless noted, data are not shown for centers with <10 cases.
3) In all graphics, “*” indicates a p-value<.05.
4) This report includes all data that had been entered into the VQI as of June 30, 2018.
Dashboard

The table below summarizes your center’s results as presented in each of the subsequent reports and provides regional and national benchmarks for comparison. In the “Your Center” column, percentages represent the rate of cases with the noted outcome. Numbers in parentheses are the number of cases with the outcome/the total number of cases meeting the exclusion criteria (see the full report for details). In the “Region” and “VQI” columns, the numbers represent the 25th, 50th (median) and 75th percentiles for centers in your region and across all centers in the VQI.

Your center’s results are highlighted in green if your center is at or above the top 25th percentile nationally, in yellow if your center is among the middle 50% of centers, and in red if at or below the bottom 25th percentile.
| Registry                        | Outcome                                           | Your Center % (n/N) | Your Region [25p|50p|75p] | VQI Overall [25p|50p|75p] |
|--------------------------------|---------------------------------------------------|---------------------|-----------------------------|-----------------------------|
| All                            | Total Procedure Volume                            | [32 | 107 | 221]            | [31 | 111 | 273]            |
| Multiple (July 2016-June 2017) | Long-Term Follow-Up                               | [47% | 64% | 81%]            | [38% | 70% | 86%]            |
| Multiple                        | Discharge Medications                             | [75% | 80% | 91%]            | [76% | 84% | 92%]            |
| AVACCESS                        | Primary AVF vs. Graft                              | [66% | 80% | 88%]            | [78% | 86% | 94%]            |
| CAS                            | In-Hospital Stroke/Death                          | [0% | 0% | 0%]             | [0% | 0% | 0%]             |
| CEA                            | In-Hospital Stroke/Death                          | [2% | 0% | 0%]             | [0% | 0% | 0%]             |
| CEA (July 2016-June 2017)      | LOS>1 Day                                        | [26% | 17% | 11%]            | [31% | 19% | 12%]            |
| EVAR                           | LOS>2 Days                                       | [16% | 10% | 0%]              | [18% | 10% | 0%]              |
| EVAR (July 2016-June 2017)     | Sac Diameter Reported at LTFU                    | [1% | 34% | 75%]             | [33% | 62% | 76%]             |
| INFRA                          | Major Complications                               | [5% | 0% | 0%]             | [6% | 0% | 0%]             |
| IVCF (January-December 2018)   | Filter Retrieval                                  | [5% | 14% | 22%]            | [0% | 8% | 39%]            |
| LEAMP                          | Postop Complications                              | [14% | 8% | 0%]              | [15% | 11% | 3%]              |
| OAAA                           | In-Hospital Mortality                             | [0% | 0% | 0%]             | [0% | 0% | 0%]             |
| PVI                            | ABI/Toe Pressure Reported                         | [48% | 68% | 86%]            | [68% | 83% | 93%]            |
| SUPRA                          | Postop Complications                              | NA (<3 centers)     | [0% | 0% | 0%]             |
| TEVAR (July 2016-June 2017)    | Sac Diameter Reported at LTFU                    | [45% | 75% | 90%]            | [20% | 50% | 71%]            |
| EVAR                           | Sac Size Guideline                                | [67% | 75% | 80%]            | [63% | 74% | 83%]            |
Total Procedure Volume

Procedures performed between June 1, 2018 and May 31, 2019

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

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Your Center (N)</th>
<th>Your Region (N)</th>
<th>VQI Overall (N)</th>
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<tr>
<td>AVACCESS</td>
<td>549</td>
<td>6748</td>
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<td>CAS</td>
<td>813</td>
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<td>1677</td>
<td>17482</td>
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<tr>
<td>EVAR</td>
<td>480</td>
<td>6674</td>
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<td>INFRA</td>
<td>537</td>
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<td>TEVAR</td>
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<td>Varicose Veins</td>
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<td>7372</td>
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<tr>
<td>Overall (June 2018-May 2019)</td>
<td>7424</td>
<td>95486</td>
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<tr>
<td>Overall (June 2017-May 2018)</td>
<td>8070</td>
<td>101908</td>
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## Total Procedure Volume, All Years

Includes all procedures with surgery date through May 31, 2019.

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<th>Your Center (N)</th>
<th>Your Region (N)</th>
<th>VQI Overall (N)</th>
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<tr>
<td>AVACCESS</td>
<td>4498</td>
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<td>CAS</td>
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<td>9447</td>
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<td>EVAR</td>
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<td>Varicose Veins</td>
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<td>Overall</td>
<td>41922</td>
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Physician Specialties Across Your Region (as of June 30, 2019, N=360 Physicians)
Percentage of Procedures with Follow-Up within 9-21 Months

Procedures performed between July 1, 2016 and June 30, 2017

Data for this report include all cases with surgery date between July 1, 2016 and June 30, 2017, that had been entered into the VQI as of June 30, 2019. The table below shows the number of procedures in the VQI, and the percentage of those procedures with long-term follow-up.

<table>
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<tr>
<th>Procedure</th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
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<tbody>
<tr>
<td>AVACCESS</td>
<td>723 (72%)</td>
<td>7666 (59%)</td>
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<tr>
<td>CAS</td>
<td>262 (61%)</td>
<td>4398 (62%)</td>
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<tr>
<td>CEA</td>
<td>1440 (65%)</td>
<td>17403 (69%)</td>
<td></td>
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<tr>
<td>EVAR</td>
<td>408 (67%)</td>
<td>6616 (71%)</td>
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<tr>
<td>INFRA</td>
<td>689 (64%)</td>
<td>7327 (70%)</td>
<td></td>
</tr>
<tr>
<td>IVCF</td>
<td>232 (51%)</td>
<td>2240 (62%)</td>
<td></td>
</tr>
<tr>
<td>LEAMP</td>
<td>253 (47%)</td>
<td>2394 (62%)</td>
<td></td>
</tr>
<tr>
<td>OAAA</td>
<td>NA (&lt;3 centers)</td>
<td>1250 (68%)</td>
<td></td>
</tr>
<tr>
<td>PVI</td>
<td>1358 (56%)</td>
<td>26918 (70%)</td>
<td></td>
</tr>
<tr>
<td>SUPRA</td>
<td>203 (62%)</td>
<td>2285 (69%)</td>
<td></td>
</tr>
<tr>
<td>TEVAR</td>
<td>189 (60%)</td>
<td>2230 (62%)</td>
<td></td>
</tr>
<tr>
<td>Overall (July 2016-June 2017)</td>
<td>5819 (62%)</td>
<td>80727 (68%)</td>
<td></td>
</tr>
<tr>
<td>Overall (July 2015-June 2016)</td>
<td>6064 (65%)</td>
<td>73396 (73%)</td>
<td></td>
</tr>
</tbody>
</table>
Percentage With Long-Term Follow-Up by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Long-Term Follow-Up by Center in Your Region (July 2016-June 2017)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

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

Long-Term Follow-Up by Region Across VQI (July 2016-June 2017)

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

Others* indicates centers that do not belong to a regional group. *** indicates region’s rate differs significantly from the VQI rate.
Discharge Medications

Procedures performed between June 1, 2018 and May 31, 2019

Excludes patients who died in hospital and patients who were not treated for medical reason. “Antiplatelet” is defined as ASA or P2Y12 inhibitor.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of procedures in the VQI, and the percentage of patients receiving 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>Your Region Overall</td>
<td>5979</td>
<td>79%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>VQI Overall</td>
<td>75598</td>
<td>83%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Percentage Receiving Discharge Antiplatelet+Statin by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Discharge Antiplatelet+Statin Rate by Center in Your Region (June 2018-May 2019)

Centers (centers with <10 cases not shown)

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

Discharge Antiplatelet+Statin Rate by Region Across VQI (June 2018-May 2019)

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

"**" indicates region’s rate differs significantly from the VQI rate.
Hemodialysis Access: Percentage of Primary AVF vs. Graft

Procedures performed between June 1, 2018 and May 31, 2019
Excludes patients with previous access procedure in the same arm.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of access procedures meeting the inclusion criteria in the VQI, and the percentage of those cases that were AVF vs. graft.

<table>
<thead>
<tr>
<th></th>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of access procedures meeting inclusion criteria</td>
<td>413</td>
<td>5351</td>
<td></td>
</tr>
<tr>
<td>Percentage with primary AVF</td>
<td>71%</td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>
Rate of Primary AVF Access by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of Primary AVF Access in Your Region (June 2018-May 2019)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

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

Rate of Primary AVF Access by Region Across VQI (June 2018-May 2019)

- Carolinas*
- Southeast*
- Michigan*
- Mid-Atlantic*
- Mid-America
- VQI
- Rocky Mtns.
- Virginiass
- G. Lakes
- New York*
- Midwest*
- New England*
- MidSouth*

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

"***" indicates region’s rate differs significantly from the VQI rate.
Carotid Artery Stent: Stroke or Death in Hospital

Procedures performed between June 1, 2018 and May 31, 2019

Asymptomatic admissions, excluding prior ipsilateral CAS, CAS for intracranial treatment and dissection, trauma and “other” lesion types. Asymptomatic patients are those who had no ipsilateral or contralateral TIA or stroke within 120 days prior to surgery.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of CAS procedures meeting the inclusion criteria in the VQI, 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 CAS procedures meeting inclusion criteria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>1.4%</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>484</td>
<td>3869</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>1.4%</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data*</td>
<td>1.5%</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.
Rate of In-Hospital Stroke or Death After CAS by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of In-Hospital Stroke or Death After CAS in Your Region (June 2018-May 2019)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

*** indicates center’s observed rate differs significantly from its expected rate.

Rate of In-Hospital Stroke or Death After CAS by Region Across VQI (June 2018-May 2019)

- Observed
- Expected

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

*** indicates region’s observed rate differs significantly from its expected rate.
Carotid Endarterectomy: Stroke or Death in Hospital

Procedures performed between June 1, 2018 and May 31, 2019

Asymptomatic admissions, excluding prior ipsilateral CEA and concomitant CABG, endovascular or other arterial procedure. Asymptomatic patients are those who had no ipsilateral or contralateral TIA or stroke within 120 days prior to surgery.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of CEA procedures meeting the inclusion criteria in the VQI, 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>1118</td>
<td>10534</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among procedures meeting inclusion criteria</td>
<td>1.2%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>1030</td>
<td>10001</td>
<td></td>
</tr>
<tr>
<td>Observed rate of stroke or death among cases with complete data</td>
<td>1.1%</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of stroke or death among cases with complete data*</td>
<td>0.9%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.51</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.
Rate of In-Hospital Stroke or Death After CEA by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of In-Hospital Stroke or Death After CEA in Your Region (June 2018-May 2019)

Centers (centers with <10 cases not shown)

*** indicates center’s observed rate differs significantly from its expected rate.

Rate of In-Hospital Stroke or Death After CEA by Region Across VQI (June 2018-May 2019)

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

*** indicates region’s observed rate differs significantly from its expected rate.
Carotid Endarterectomy: Percentage of Patients with LOS>1 Day

Procedures performed between June 1, 2018 and May 31, 2019

Asymptomatic admissions, excluding prior ipsilateral CEA, concomitant CABG, proximal endovascular or other arterial operation, in-hospital death with LOS<=1 day, procedures done on weekends or not done on admission day. LOS is based on the midnight rule used for hospital billing. Asymptomatic patients are those who had no ipsilateral or contralateral TIA or stroke within 120 days prior to surgery.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of CEA procedures meeting inclusion criteria in the VQI, and the observed and expected rates of those cases with LOS>1 Day.

<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>967</td>
<td>9826</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among procedures meeting inclusion criteria</td>
<td>21%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>895</td>
<td>9411</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;1 day among cases with complete data</td>
<td>22%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of LOS&gt;1 day among cases with complete data*</td>
<td>22%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.6</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.
Rate of CEA Patients With LOS >1 Day by Year

Regional data are not shown for the region with ≤3 centers with at least 10 cases.
Rate of CEA Patients With LOS>1 Day in Your Region (June 2018-May 2019)

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

Centers (centers with <10 cases not shown)

** indicates center's observed rate differs significantly from its expected rate.

Rate of CEA Patients With LOS>1 Day by Region Across VQI (June 2018-May 2019)

- Observed
- Expected

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

*** indicates region's observed rate differs significantly from its expected rate.
Endovascular AAA Repair: Percentage of Patients with LOS>2 Days

Procedures performed between June 1, 2018 and May 31, 2019

Excludes ruptured aneurysms and in-hospital deaths with LOS≤2 days, patients with prior aortic surgery, patients transferred from another hospital, procedures not done on day of admission and weekend procedures. LOS is based on the midnight rule used for hospital billing.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of EVAR procedures meeting the inclusion criteria and the observed and expected rates of those cases with LOS>2 Days.

<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>359</td>
<td>5182</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;2 days among procedures meeting inclusion criteria</td>
<td>10%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>333</td>
<td>4820</td>
<td></td>
</tr>
<tr>
<td>Observed rate of LOS&gt;2 days among cases with complete data</td>
<td>10%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of LOS&gt;2 days among cases with complete data*</td>
<td>12%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>P-value for comparison of observed and expected rates</td>
<td>0.3</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.
Rate of EVAR Patients With LOS>2 Days by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of EVAR Patients With LOS>2 Days in Your Region (June 2018-May 2019)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

** indicates center’s observed rate differs significantly from its expected rate.

Rate of EVAR Patients With LOS>2 Days by Region Across VQI (June 2018-May 2019)

- Observed
- Expected

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

** indicates region’s observed rate differs significantly from its expected rate.
EVAR: Rate of Sac Diameter Reporting at Long-Term Follow-Up

Procedures performed between July 1, 2016 and June 30, 2017
Excludes patients who died within 21 months of surgery.

Data for this report include all cases with surgery date between July 1, 2016 and June 30, 2017, that had been entered into the VQI as of June 30, 2019. The table below shows the number of EVAR procedures in the VQI, and the percentage of those cases in which the patient had a follow-up visit between 9 and 21 months post-surgery at which a sac diameter was recorded.

<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</td>
<td>383</td>
<td>6150</td>
<td></td>
</tr>
<tr>
<td>Percentage with sac diameter recorded at follow-up</td>
<td>52%</td>
<td>57%</td>
<td></td>
</tr>
</tbody>
</table>
Rate of LTFU Sac Diameter Reporting by Year

Your Center — Your Region — VQI Overall

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of LTFU Sac Diameter Reporting in Your Region (July 2016-June 2017)

Other centers in your region  Your center

Centers (centers with <10 cases not shown)

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

Rate of LTFU Sac Diameter Reporting by Region Across VQI (July 2016-June 2017)

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

**"" indicates region’s rate differs significantly from the VQI rate.
Infrainguinal Bypass: Rate of Major Complications

Procedures performed between June 1, 2018 and May 31, 2019

Includes only patients with indication of rest pain or tissue loss. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation or graft occlusion.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of INFRA cases with indication of rest pain or tissue loss in the VQI, and the percentage of those cases that resulted in in-hospital death, ipsilateral amputation or graft occlusion.

<table>
<thead>
<tr>
<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>288</td>
<td>3930</td>
</tr>
<tr>
<td>Percentage with major complications after INFRA</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
Rate of Major Complications After INFRA by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
**Rate of Major Complications After INFRA in Your Region (June 2018-May 2019)**

Centers (centers with <10 cases not shown)

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

**Rate of Major Complications After INFRA by Region Across VQI (June 2018-May 2019)**

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

"*" indicates region’s rate differs significantly from the VQI rate.
IVCF: Percentage of Temporary Filters With Retrieval or Attempt at Retrieval

Procedures performed between January 1 and December 31, 2018
Excludes patients with permanent filters and patients who have died since discharge.

Data for this report include all cases with surgery date between January 1 and December 31, 2018, that had been entered into the VQI as of June 30, 2019. The table below shows the number of IVCF procedures meeting the inclusion criteria in the VQI, and the percentage of those cases in which the filter was retrieved, or an attempt was made to retrieve it, at any time post-procedure.

<table>
<thead>
<tr>
<th>Your Center</th>
<th>Your Region</th>
<th>VQI Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of procedures meeting inclusion criteria</td>
<td>109</td>
<td>1428</td>
</tr>
<tr>
<td>Percentage with filter retrieval, or attempt at retrieval</td>
<td>12%</td>
<td>32%</td>
</tr>
<tr>
<td>Percentage not retrieved because not clinically indicated</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Percentage not retrieved because patient declined</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Rate of IVCF Retrieval by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of IVCF Retrieval in Your Region (January-December 2018)

Centers (centers with <10 cases not shown)

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

Rate of IVCF Retrieval by Region Across VQI (January-December 2018)

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

*** indicates region’s rate differs significantly from the VQI rate.
Lower-Extremity Amputation: Rate of Postop Complications

Procedures performed between June 1, 2018 and May 31, 2019

Complications are defined as myocardial infarction, dysrhythmia, congestive heart failure, surgical site infection, renal and/or respiratory complication.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of LEAMP cases in the VQI, and the percentage of those cases that resulted in 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 amputation procedures</td>
<td>360</td>
<td></td>
<td>3029</td>
</tr>
<tr>
<td>Percentage with complications after LEAMP</td>
<td>11%</td>
<td></td>
<td>11%</td>
</tr>
</tbody>
</table>
Rate of Complications After LEAMP by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of Complications After LEAMP in Your Region (June 2018-May 2019)

Centers (centers with <10 cases not shown)

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

Rate of Complications After LEAMP by Region Across VQI (June 2018-May 2019)

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

*** indicates region’s rate differs significantly from the VQI rate.
Non-Ruptured Open AAA: In-Hospital Mortality

Procedures performed between June 1, 2018 and May 31, 2019
Excludes ruptured aneurysms.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of OAAA procedures meeting the inclusion criteria in the VQI, 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>60</td>
<td>1009</td>
<td></td>
</tr>
<tr>
<td>Observed rate of in-hospital death among procedures meeting inclusion criteria</td>
<td>3.3%</td>
<td>4.2%</td>
<td></td>
</tr>
<tr>
<td>Number of procedures with complete data*</td>
<td>48</td>
<td>914</td>
<td></td>
</tr>
<tr>
<td>Observed rate of in-hospital death among cases with complete data</td>
<td>4.2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Expected rate of in-hospital 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>1</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Observed rate of in-hospital death among procedures with infrarenal proximal clamp</td>
<td>6.1%</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>Observed rate of in-hospital death among procedures with suprarenal proximal clamp</td>
<td>0%</td>
<td>5.7%</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.
Rate of In-Hospital Death After OAAA by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of In-Hospital Death After OAAA by Region Across VQI (June 2018-May 2019)

- **G. Lakes***
- **VQI**
- **New England**

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

"***" indicates region’s observed rate differs significantly from its expected rate.
PVI: Percentage of Claudicants with ABI/Toe Pressure Reported Before Procedure

Procedures performed between June 1, 2018 and May 31, 2019

“ABI or toe pressure reported” indicates at least one measure was recorded for the side of the operation, or on both sides for bilateral and aortic procedures.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of PVI procedures with indication of claudication in the VQI, and the percentage of those cases in which ABI or toe pressure was recorded.

<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 with indication of claudication</td>
<td>782</td>
<td>12890</td>
<td></td>
</tr>
<tr>
<td>Percentage with ABI/toe pressure recorded before procedure</td>
<td>57%</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Percentage who were current smokers</td>
<td>33%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>
Rate of ABI/Toe Pressure Assessment Before PVI by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of ABI/Toe Pressure Assessment Before PVI in Your Region (June 2018-May 2019)

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

Centers (centers with <10 cases not shown)

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

Rate of ABI/Toe Pressure Assessment Before PVI by Region Across VQI (June 2018-May 2019)

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

"*" indicates region's rate differs significantly from the VQI rate.
Suprainguinal Bypass: Rate of Major Complications

Procedures performed between June 1, 2018 and May 31, 2019

Includes only patients with indication of rest pain or tissue loss. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation or graft occlusion.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of SUPRA cases in the VQI, and the percentage of those cases that resulted in 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 SUPRA procedures</td>
<td></td>
<td>NA (&lt;3 centers)</td>
<td>803</td>
</tr>
<tr>
<td>Percentage with major complications after SUPRA</td>
<td></td>
<td></td>
<td>5%</td>
</tr>
</tbody>
</table>
Rate of Major Complications After SUPRA by Region Across VQI (June 2018-May 2019)

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

"***" indicates region's rate differs significantly from the VQI rate.
TEVAR: Rate of Sac Diameter Reporting at Long-Term Follow-Up

Procedures performed between July 1, 2016 and June 30, 2017

Includes only patients with Pathology=aneurysm or aneurysm from dissection. Excludes patients who died within 21 months of surgery.

Data for this report include all cases with surgery date between July 1, 2016 and June 30, 2017, that had been entered into the VQI as of June 30, 2019. The table below shows the number of TEVAR procedures in the VQI, and the percentage of those cases in which the patient had a follow-up visit between 9 and 21 months post-surgery at which a sac diameter was recorded.

<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</td>
<td></td>
<td>102</td>
<td>1234</td>
</tr>
<tr>
<td>Percentage with sac diameter recorded at follow-up</td>
<td></td>
<td>44%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Rate of LTFU Sac Diameter Reporting by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of LTFU Sac Dimaeter Reporting in Your Region (July 2016-June 2017)

Other centers in your region  Your center

Centers (centers with <10 cases not shown)

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

Rate of LTFU Sac Diameter Reporting by Region Across VQI (July 2016-June 2017)

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

"*" indicates region’s rate differs significantly from the VQI rate.
EVAR: Percentage of Elective Patients with AAA Diameter Within SVS Guideline (≥5.5cm for Men; ≥5 cm for Women)

Procedures performed between June 1, 2018 and May 31, 2019

Excludes non-elective procedures. If the patient has any iliac aneurysm, the guideline is considered to have been met regardless of AAA diameter.

Data for this report include all cases with surgery date between June 1, 2018 and May 31, 2019, that had been entered into the VQI as of June 30, 2019. The table below shows the number of elective EVAR procedures in the VQI, and the percentage of those cases meeting the SVS sac size 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 elective EVAR procedures</td>
<td></td>
<td>411</td>
<td>5567</td>
</tr>
<tr>
<td>Percentage meeting SVS sac size guideline</td>
<td></td>
<td>71%</td>
<td>72%</td>
</tr>
</tbody>
</table>
Rate of EVAR Cases Meeting Sac Size Guideline by Year

Regional data are not shown for the region with <3 centers with at least 10 cases.
Rate of EVAR Cases Meeting Sac Size Guideline in Your Region (June 2018-May 2019)

- Other centers in your region
- Your center

Centers (centers with <10 cases not shown)

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

Rate of EVAR Cases Meeting Sac Size Guideline by Region Across VQI (June 2018-May 2019)

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

"*" indicates region’s rate differs significantly from the VQI rate.
Technology Updates
Technology Released in Q2 2019

- Implement GUDID integration for PVI balloons and atherectomy (on PVI comprehensive form)
  - Released on 5/22/2019
• Add Medicare Beneficiary Identifier (MBI) as an optional patient identifier
  — Released on 6/5/2019
Technology Released in Q2 2019

• Across-registry change on Patient Details page
  — Released on 6/5/2019
  — Allow Follow-up links to display for all procedures even when an exclusion rule is met
  • Exclusion rules include:
    ➢ Carotid Artery Stent registry: If all arteries treated are Technical Failure then the procedure is excluded.
    ➢ Endo AAA Repair: If converted to Open, then a follow-up EVAR form is not required.
    ➢ PVI registry: If all arteries treated are Technical Failure or Unable to Treat then the procedure is excluded.
    ➢ Thoracic and Complex EVAR: If the 'Aortic Device Implanted = No' then treat the procedure as Technical Failure, or if converted to Open do not require a follow-up on the TEVAR form.
    ➢ Universal: If death is recorded on an index procedure, no follow-up is required for that procedure. This procedure will be excluded.
Technology Released in Q3 2019

- PVI Revision - update PVI Closure Device Type Right/Left
  - Released on **6/26/2019**

<table>
<thead>
<tr>
<th>Procedure Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access</strong></td>
</tr>
<tr>
<td>Number Access Sites</td>
</tr>
<tr>
<td>Site</td>
</tr>
<tr>
<td>Side</td>
</tr>
<tr>
<td>Access Guidance</td>
</tr>
<tr>
<td>Largest Sheath Size</td>
</tr>
<tr>
<td>Closure Device Type</td>
</tr>
<tr>
<td>Closure Device Successful</td>
</tr>
<tr>
<td><strong>Procedure</strong></td>
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<tr>
<td>Fluoro Time</td>
</tr>
<tr>
<td>DAP</td>
</tr>
<tr>
<td>Contrast Volume</td>
</tr>
<tr>
<td>C02</td>
</tr>
<tr>
<td>Anticoagulant</td>
</tr>
<tr>
<td>CIN Prophylaxis</td>
</tr>
<tr>
<td><strong>Treatment Details</strong></td>
</tr>
<tr>
<td>Number of Arteries Treated</td>
</tr>
<tr>
<td>Artery 1</td>
</tr>
<tr>
<td>Indication</td>
</tr>
<tr>
<td>Artery Treated</td>
</tr>
</tbody>
</table>
• Across-registry revision - retire Healthcare Insurance Claims Number (HICN) variable
  – Released on **7/24/2019**
  – HICN field was retired on:
    • Carotid Endarterectomy
    • Hemodialysis Access
    • IVC Filter
    • Infra-inguinal Bypass
    • Supra-inguinal Bypass
    • Lower Extremity Amputation
    • Open AAA Repair
    • TEVAR
Other Development Projects

Other Development Projects to be released in 2019

- Hemodialysis Access registry revision
- TEVAR registry revision for Cook Dissection PAS project
- New Venous Stent registry
- Varicose Vein registry major revision
- New Vascular Medicine registry
- INFRA & SUPRA revisions - groin incision variables
Registry 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 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

Re-Opening in 2019

- Project will include newly approved Cook device
- TEVAR centers will be invited to participate

For more information, please contact: tevarproject@m2s.com or Elizabeth Schwendler at (603) 565-2757
PVI Post-market Surveillance Projects

Medtronic IN.PACT® Admiral® DCB ISR Project

The Bard® LifeStent® Popliteal Artery Stent Project
• A Prospective Registry Surveillance of the clinical use of the Bard® LifeStent® Vascular Stent Systems.
• Objective: To conduct long term post-market surveillance of the safety and effectiveness of the Bard® LifeStent® Vascular Stent Systems for the treatment of symptomatic de novo or restenotic lesions in the popliteal artery.
• Patients will have 12 month and a 24 month follow up visits.
• Total reimbursement of $1,400 per patient for a patient followed annually for 2 years
• 2 additional fields added:
  – Check box to indicate that patient is eligible to enroll project based on the inclusion and exclusion criteria.
  – Post-procedure – site will be asked if the patient has had a stroke.
  – Angios performed at re-intervention and sent to M2S.
Enrollment

- 64 of the 74 required patients enrolled
  - Retrospective enrollment allowed- All eligible cases from 10/1/2016 (protocol FDA approval date)

- 29 of 30 sites enrolled (nearly complete)
  - This project is conducted within the SVS PSO and only non-identifiable data (removal of patient, center and physician information) will be provided to Bard 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.
The Medtronic IN.PACT® Admiral® DCB ISR Project Post-market registry surveillance of the clinical use of the Medtronic IN.PACT® Admiral® Paclitaxel-Coated PTA Balloon.

Objective: To assess the long-term safety and performance of the IN.PACT® Admiral® DCB in a U.S. population for the treatment of ISR lesions in the superficial femoral and popliteal arteries.

Patients will be followed at 12, 24 and 36 months

Total reimbursement of $1,950 per patient for a patient followed annually for 3 years

1 additional field added:
  - Check box to indicate that patient is eligible to enroll project based on the inclusion and exclusion criteria.
Enrollment

- 263 of the 300 required patients enrolled
  - Retrospective enrollment allowed- All eligible cases from December 6, 2016 (protocol FDA approval date)

- 49 of 50 sites enrolled (nearly complete)
  - This project is conducted within the SVS PSO and only non-identifiable data (removal of patient, center and physician information) will be provided to Medtronic 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.
For More Information Contact:

**Medtronic IN.PACT® Admiral® DCB ISR Project**
Elizabeth Schwendler or Anita Duxbury
MedtronicAdmiralDCB@m2s.com

**The Bard® LifeStent® Popliteal Artery Stent Project**
Charlotte Stirewalt or Elizabeth Schwendler
BardLifeStent@m2s.com
PATHWAYS Support
2018 Claims Validation

• The support team will be notifying sites selected to participate in the 2018 claims validation process in Q3.

Upcoming Analytics Webinars

• BASIC ANALYTICS - Wednesday, September 4, 2019 at 2 p.m. EST
• ADVANCED ANALYTICS - Wednesday, October 2, 2019 at 2 p.m. EST
• If you wish to register, and have not received a registration link, please contact pathwayssupport@m2s.com.
• Both webinars will be recorded and posted to the Resources in PATHWAYS along with the associated Q&A.

Support

• The support team will be introducing brief training recordings focused on specific PATHWAYS functions.
Meeting Evaluation:

- What did you like about this meeting?
- What can we do better?
- Next meeting location: ???