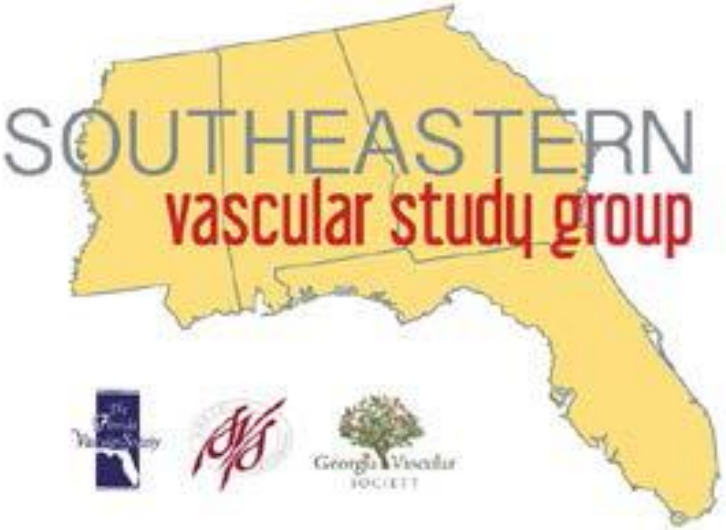
Vascular Quality Initiative®



Spring Meeting
April 28, 2017

Hosted by
Coastal Vascular & Interventional PLLC Pensacola Beach, Florida

SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

Agenda:

Morning Session:

- Welcome and SEVSG/VQI Update- Yazan Duwayri, MD, Emory University, Medical Director SEVSG
- Welcome and Introduction from Host Site – Shonak Patel, MD, Coastal Vascular & Interventional PLLC
- National VQI Update- Jim Wadzinski, PSO General Manager
- Pathways Development Update – Meridith Mitchell, Director, Business Development M2S
- Regional Report findings- Yazan Duwayri, MD
- Governing Council Update- Yazan Duwayri, MD
- Arterial Quality Council & Research Advisory Council updates – Adam Beck, MD
- National Quality Improvement Efforts – LTFU and Statin Therapy; LTFU and EVAR - Adam Beck, MD

Afternoon Session:

- VQI Literature Review- Jaime Benarroch, MD & Emily Spangler, MD
- Outcomes Reporting after AAA Repair - Kristina Giles, MD
- High HgbA1C and Outcomes after Lower Extremity Revascularization - Shipra Arya, MD
- Enhanced Recovery after Surgery: From Colorectal to Vascular Surgery – Dan Chu, MD
- Quality Payment Program Update– Yazan Duwayri, MD
- Abstraction of select PVI and CAS cases & difficult data definition discussion- Cynthia Ritter, MS, BSN
- SEVSG Future Directions and Closing Remarks: Yazan Duwayri, MD

Vascular Quality Initiative®

Welcome and Introductions

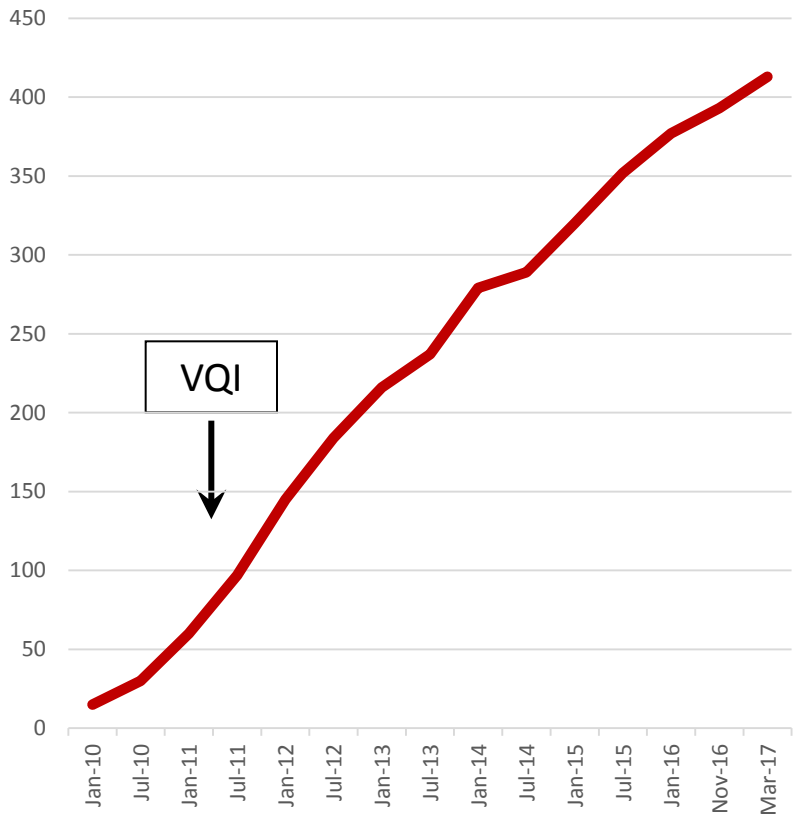
Piedmont Athens Regional Medical
Albany Vascular Specialist Center
Anderson Regional Medical Center
Baptist Hospital of Miami
Coastal Vascular & Interventional- PLLC
Florida Hospital
Floyd Medical Center
Grady Memorial Hospital (GA)
John F Lucas III- MD
Mayo Clinic Florida
Memorial Health University Medical
Memorial Hospital Pembroke
Memorial Hospital West
Memorial Regional Hospital
Miami Vein Center
North Florida Regional Medical Center- Inc.
Northside Hospital Atlanta
Northside Hospital Cherokee
Northside Hospital Forsyth
Orlando Health - Dr. P. Phillips Hospital
Orlando Health - Orlando Regional
Orlando Health - South Seminole
Palm Beach Gardens Medical Center
Piedmont Hospital
Redmond Regional Medical Center
Rush Foundation Hospital
Sarasota Memorial Hospital
South Miami Hospital
St. Anthony's Hospital
Surgical Specialists of Central Florida
Tampa Cardiovascular Associates
Tampa General Hospital
The Emory Clinic
The Vein and Vascular Institute of Tampa Bay
Tift Regional Medical Center
University Of Alabama Medical Center
University of Florida- Gainesville
Vascular Surgery Associates
Wellstar Cobb Hospital
Wellstar Kennestone Hospital

SVS Society for Vascular Surgery
m2s
Society for Vascular Medicine

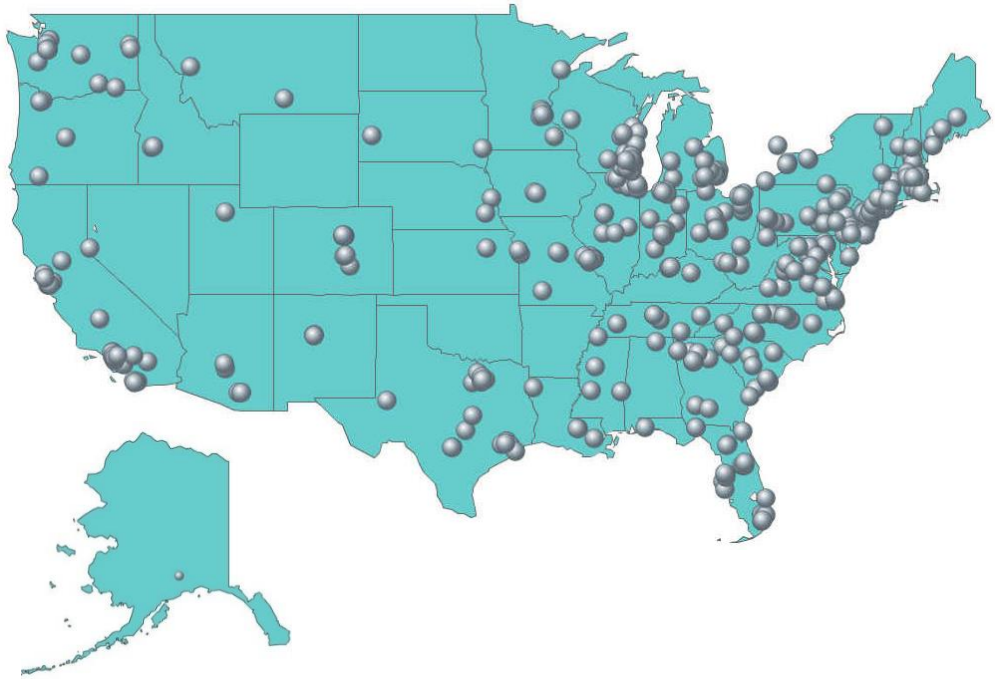
National VQI Update:
Jim Wadzinski, SVS PSO

Vascular Quality Initiative®

Participating Centers



VQI Participating Centers



413 Centers, 46 States + Ontario

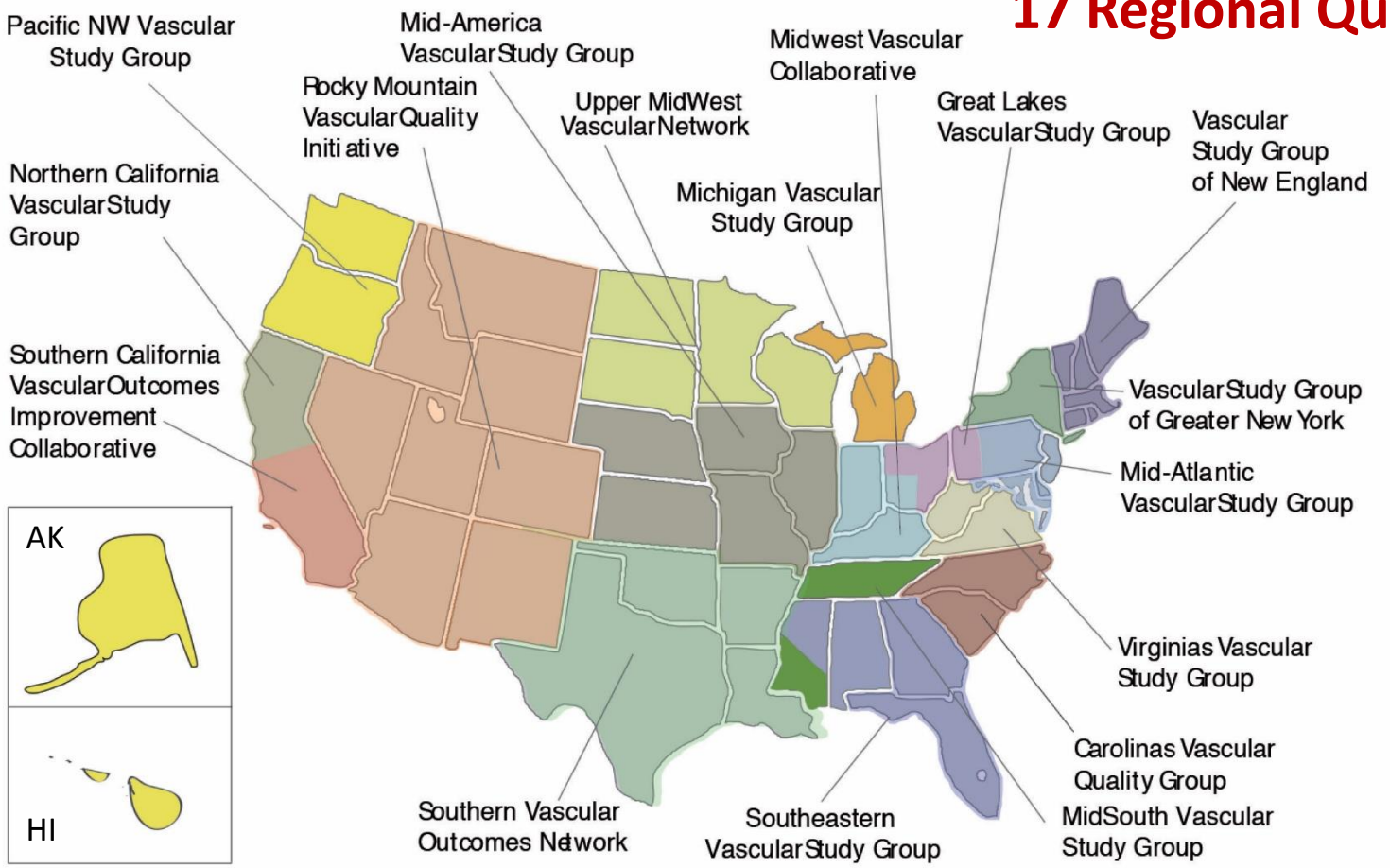
SVS Society for Vascular Surgery

m2s

Society for Vascular Medicine

Vascular Quality Initiative®

17 Regional Quality Groups

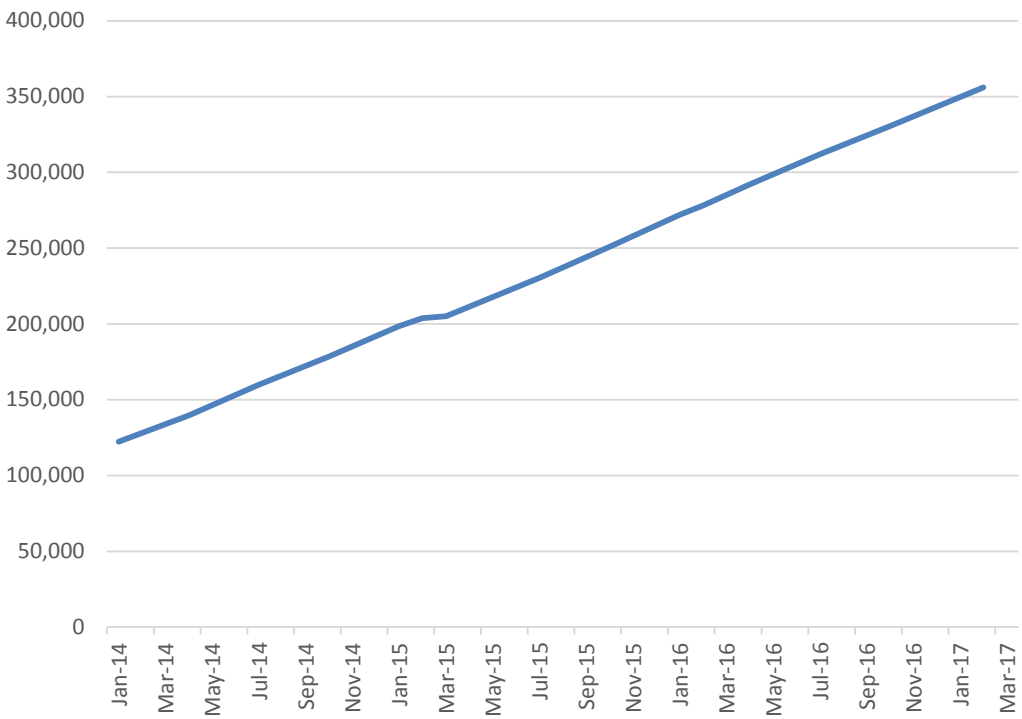


SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

Vascular Quality Initiative®

Total Procedures Captured (as of 3/1/2017)	355,937
Peripheral Vascular Intervention	112,095
Carotid Endarterectomy	79,320
Infra-Inguinal Bypass	35,570
Endovascular AAA Repair	31,921
Hemodialysis Access	29,759
Carotid Artery Stent	12,216
Supra-Inguinal Bypass	12,070
Varicose Vein	9,696
Open AAA Repair	9,249
Thoracic and Complex EVAR	8,208
Lower Extremity Amputations	6,932
IVC Filter	6,901

VQI Total Procedure Volume



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

SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

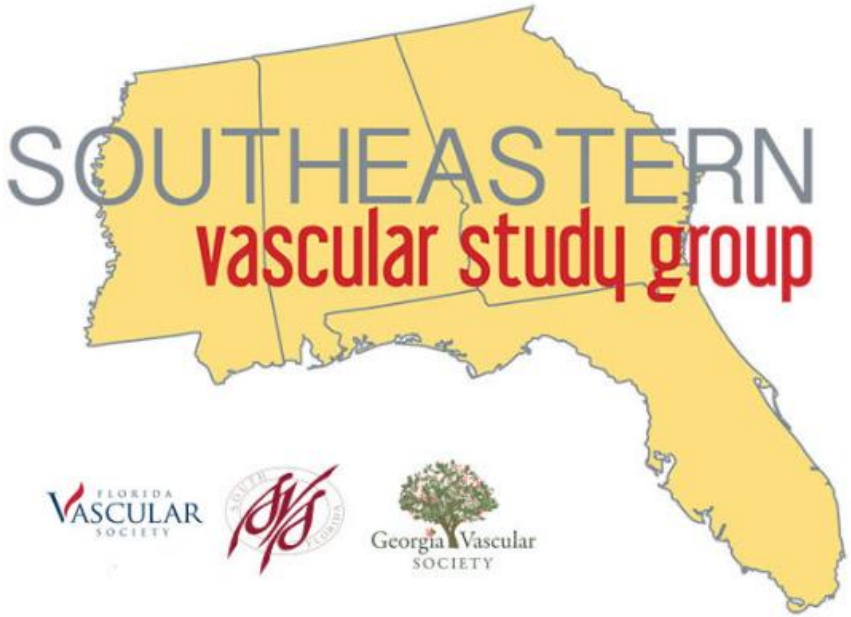
Vascular Quality Initiative®

SEVSG Website:

Southeastern Vascular Study Group Menu

- Home
- About Us
- VQI Risk Models
- Contact Us
- Data Elements
- Data Reports
- Events
- SEVSG Presentations
- Bylaws
- Participating Hospitals and Surgeons
- Data Management
- Vascular Quality Initiative Data Entry Portal

Southeastern Vascular Study Group



Southeastern Vascular Study Group
Emory University
Division of Vascular Surgery and Endovascular Therapy
1365 Clifton Road, NE
Atlanta, GA 30322
Phone: 404-727-1994
Fax: 404-727-3396

Southeastern Vascular Study Group News

SEVSG Meetings 2017

SAVE THE DATE

Date: April 28, 2017

Time: 10:00am - 3:00pm

Location: Hilton Pensacola Beach, Pensacola Beach, Florida

Registration Link

Please see the links below for the Fall Meeting minutes and presentations:

2016 Fall Meeting Minutes

2016 Fall Meeting Presentation

Society for Vascular Surgery · MCS · Society for Vascular Medicine

Member Only Website

- Purpose: To help and encourage members to share quality improvement and best practice information more easily between and within Regional Quality Groups.
- The site will include a new *topical discussion forum f*or VQI members that is password protected.
- Lead Regional Data Managers are currently pilot testing the site and we expect it to be operational 2nd quarter 2017.

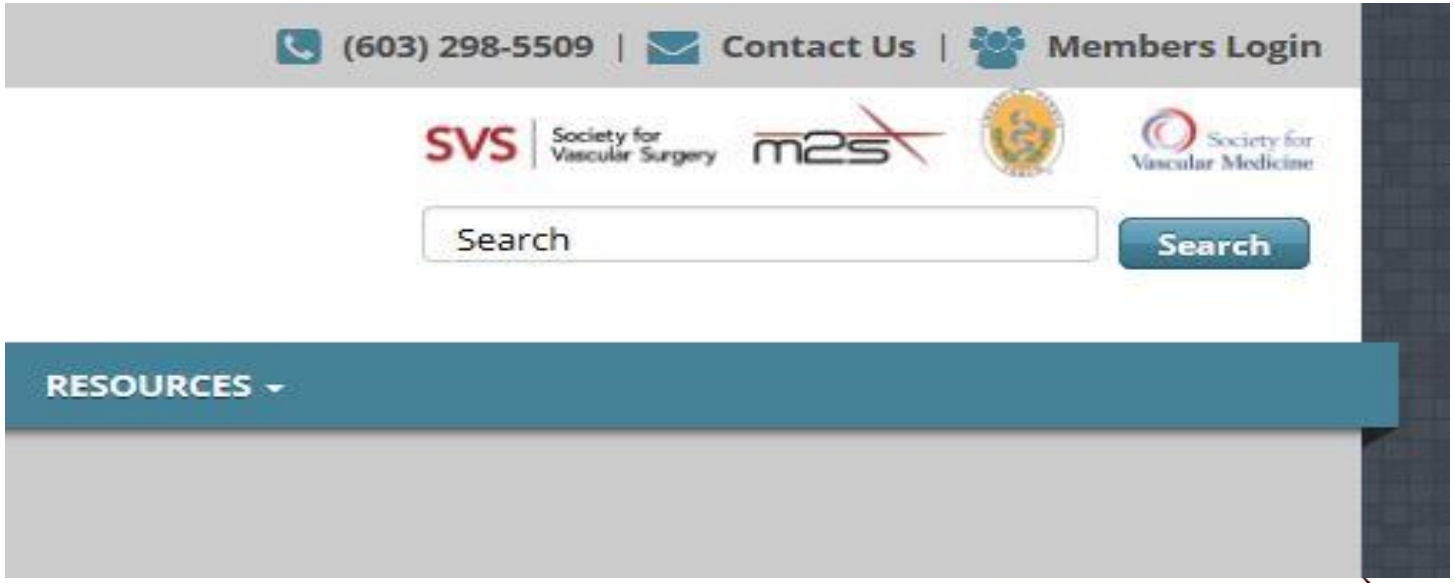
Vascular Quality Initiative®

Summary Description

The Members Only area is a set of web pages which are password protected and designed for use by VQI Regional Data Managers, Data Managers/Hospital Managers, Physicians and other VQI members. These pages should introduce you to the new pages and functionality. The Members Only area consists of a **National Shared Area, a Regional Shared Area and Members' Forums.**

Accessing the Members Only Area

From the VQI Home page top right, you will see a new option: "Members Login". Click here to access the Login Screen.



SVS Society for Vascular Surgery m2s Society for Vascular Medicine

Vascular Quality Initiative®

MEMBERS' FORUMS

The Members' Forums are areas for discussion and initially these Forums have been set up for each of the 12 Registries, Long Term Follow Up and a General Forum for general questions.

We also have the ability to create "sub-forums" for areas, depending on the needs of the users and the complexity. Creating Forums and Sub-Forums can only be done by Admin, but Topics can be added by all users.

HOME | ABOUT THE VQI | COMPONENTS | JOIN THE VQI | MEMBER SERVICES | RESOURCES

Home / Forums

Members Only Data Managers Forum – Rules

Current access will be given only to the regional data manager leads to test the use and benefits of the forum before rolling out to a larger audience. The primary purpose of the Forum is to share best practices for issues like Long Term Follow Up, process measure like Length of Stay, data collection challenges, and reports in the analytics engine.

The Forum is not to be used for clinical or data definition questions. All clinical questions need to be sent to Pathwayssupport@m2s.com to ensure an updated FAQ and ensure consistency in the interpretation of the VQI variables.

Tools can be shared by having Nancy Heatley upload them to your regional website and then pasting a link in the Forum for others to retrieve. Sensitive documents should not be shared at this time until we have the Members Only website further developed.

Forums

Home › Forums

Search

Forum	Topics	Posts	Freshness
CAS Registry	0	0	No Topics
CEA Registry	0	0	No Topics
Endovascular AAA Registry	0	0	No Topics
Hemodialysis Access Registry	0	0	No Topics
Infra-Inguinal Bypass Registry	0	0	No Topics
IVC Registry	0	0	No Topics
LEA Registry	0	0	No Topics
Long Term Follow Up	0	0	No Topics
Open AAA Registry	0	0	No Topics

Log In

You are currently logged into the members area.

Log out

Members Forums

- VQI General Discussion Forum
- PVI Registry
- Varicose Vein Registry
- TEVAR Registry
- Open AAA Registry
- LEA Registry
- IVC Registry
- Supra-Inguinal Bypass Registry
- Infra-Inguinal Bypass Registry
- Hemodialysis Access Registry
- Endovascular AAA Registry

SVS Society for Vascular Surgery | m2s | Society for Vascular Medicine

VQI@VAM 2017 Is Coming to San Diego

- Date: Tuesday, May 30, 2017 (half day) through Wednesday, May 31st (full day)
- Place: San Diego Convention Center, San Diego, CA
- Housing and Registration is open (Check the SVS website)

Vascular Quality Initiative®

VQI@VAM 2017 Is Coming to San Diego

- Tuesday Afternoon will be concurrent sessions on the

12:00noon – 12:30pm	**CONFERENCE OPENING (Water/soft drinks provided, no lunch provided but food available at venue)**	
The Afternoon Registry Sessions will focus on Complex Data Definitions, Inclusion/Exclusion Criteria and FAQs. Specific room locations will be advised.		
12:40pm – 1:30pm Concurrent Sessions		
Peripheral Vascular Intervention	Endovascular Aneurysm Repair (EVAR)	Lower Extremity Amputation
1:40pm – 2:30pm Concurrent Sessions		
Thoracic and Complex EVAR	Carotid Endarterectomy	Hemodialysis Access
2:40pm – 3:30pm Concurrent Sessions		
Peripheral Vascular Intervention (Repeated)	Open AAA Repair	Infra-inguinal and Supra-inguinal Bypass
3:40pm – 4:30pm Concurrent Sessions		
EVAR Registry (Repeated)	Carotid Artery Stent	Varicose Vein and Inferior Vena Cava Filter

SVS Society for Vascular Surgery · m2s · American Heart Forum · Society for Vascular Medicine

VQI@VAM 2017 Is Coming to San Diego

- Poster Session and Networking Reception from 5:00 – 6:30
  - We will have close to 20 posters
  - We will have attendees to the reception vote on the best poster.

4:30pm – 5:00pm	**Break Prior to Reception and Poster Viewing**
5:00pm – 6:30pm	**Cocktail Reception for Networking and Poster Viewing**

VQI@VAM 2017 Is Coming to San Diego

- Wednesday Sessions will Include the Following Topics:

8:00am – 9:00am	Registry Overviews and Q&A: Focus on Reporting and Analysis
9:00am – 10:00am	Quality Improvement Case Studies – Data and Reporting
10:00 – 10:15	**BREAK**
10:15am – 11:00am	The VQI Team – How Physicians and Data Managers Partner to Enhance Data Collection, Reporting and Analysis
11:00am – 11:45am	Data Automation- Smart Forms, Structured Op Notes and Improved Workflow
11:45am – 12:00noon	**BREAK**
12:00noon – 1:00pm	VQI Update and National Quality Initiatives (Working Lunch)
1:00pm – 1:45pm	Quality Improvement Case Studies – Outcomes
1:45pm – 2:15pm	The Role of VQI in Office Based Labs (OBLs)
2:15pm – 2:30pm	**BREAK**
2:30pm – 3:15pm	Corporate Structures to Support QI and Positioning the VQI to the C-Suite
3:15pm – 4:00pm	Enhanced Recovery After Surgery (ERAS): Adopting the Protocol in Vascular
4:00pm – 4:45pm	Current Research Projects from Approved RAC Requests
4:45pm – 5:00pm	**CONFERENCE CLOSING**

Vascular Quality Initiative®

Newsletter

Volume 9

In the April 2017 issue, we highlight the following topics:

VQI@VAM 2017: Agenda and More

The SVS PSO has developed a comprehensive agenda of presentations and events, member requested sessions, and programming that covers the breadth of VQI Registries and networking opportunities.

SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

Two New National QI Projects

The SVS PSO is launching two national initiatives together with implementation tools aimed squarely at using data to improve patient care.

- ✓ **Prescribing anti-platelets and statins to appropriate patients to improve their long-term vascular health**
- ✓ **Increasing follow-up imaging rates at one year for endovascular aneurysm repair patients – April 25th Webinar: Sal & Adam**

The goal for both of these initiatives is 100% compliance. To support increased compliance, the PSO, working with the Arterial Quality Council and the Quality Improvement Workgroup, is developing implementation tools for members, issuing comparative reports and data on improvements over time.

Vascular Quality Initiative®

Vascular Specialist Article

FEBRUARY 2017

VASCULAR SPECIALIST

NEWS FROM SVS

SVS | VQI
VASCULAR QUALITY INITIATIVE

SVS PSO Launches 2 National Initiatives

The SVS Patient Safety Organization (SVS PSO) is launching two national initiatives aimed at improving patient care with a data-driven approach.

They are:

- Reminding vascular surgeons to prescribe anti-platelet agents and statins to vascular patients to improve long-term outcomes, led by Dr. Randall R. DeMartino, co-chair of the Vascular Medicine Registry.
- Promoting follow-up imaging at one year for endovascular aneurysm repair (EVAR) patients, led by Dr. Salvatore Scali, EVAR registry chair.

For both initiatives, the SVS PSO is creating toolkits and educational webinars for members, promoting best practices and offering comparative benchmarks. "We issue reports and registry data that show that certain practices can improve patients' outcomes," said Dr. Jens Eldrup-Jorgensen, SVS PSO medical director. "We also provide bi-annual data releases to help hospitals assess their performance over time and in comparison to other facilities nationally and within their region."

Discharge medications

For example, the Vascular Quality Initiative (VQI) released data last year on the impact of prescribing statins after discharge and how it improved patient outcomes. Patients on statins and antiplatelet agents had an impressive improvement in five-year survival rates compared to patients on neither medication, or on only one. Members found the data so compelling that the SVS PSO is expanding the initiative at the local and national levels.

Two components are essential for improvement: proper discharge planning and follow-up information and patient education/compliance.

"There are a number of ways that high-performing hospitals facilitate the process," said Dr. Adam Beck, chair of the Arterial Quality Committee. "Some have instituted new standing orders and reminders in their electronic medical records, or have nurse navigators work one-on-one with patients to make sure they have the appropriate prescriptions." It is critical that patients understand the importance of taking their medications before they leave the hospital and then maintain contact with their vascular surgeon, he said.

EVAR Long-term Follow-up Imaging

The second initiative emphasizes the importance of long-term follow-up care – with imaging as a crucial component – for EVAR patients.

"We feel surgeons should follow up close to 100 percent of their patients at one year after EVAR with imaging," said Dr. Eldrup-Jorgensen. "Currently those figures aren't as high as they should be."

The imaging – MRI, CT or ultrasound – at one year is vitally important to document the adequacy of the AAA repair, he said. Noninvasive imaging is critical to assessing the success of the aneurysm repair and determining the presence of an endoleak that might require re-intervention.

Both national quality initiatives require continuous effort and rely upon data to monitor the effectiveness of these efforts, said Dr. Beck. "We issue hospital and physician reports every six months; providers have to be conscious of checking their data to be sure quality improvements stay in place," he said. Information now being collected underscores the importance of developing and maintaining long-term relationships with patients – a practice SVS members not only embrace but also prize.

"It's exciting to know that VQI members are using this registry data to improve care," said Dr. Eldrup-Jorgensen. "The mission of VQI is to improve the care of the vascular patient and we are pleased that we can provide data that allows providers to improve their care and up their game."

For more information, contact Nadine Caputo, quality director, at ncaputo@svspso.org. ■

VQI QI Resources

- **New on-line QI resources are available within on the VQI Members Only Website and VQI M2S PATHWAYS in the Resources Section:**
- *Leading Change* webinar slides and audio transcripts on change management by Dr. Ted James
- Slides from all of the VQI@VAM 2016 presentations
- Videos from 2016 VQI@VAM on the Members Only Website
- Digital QI Project Guide – a 'soup to nuts' guide for QI project implementation.

QI Project Charter – Template

Project Overview	
Problem Statement:	
Goal:	
Scope:	
Deliverable(s):	
Resources Required:	

Key Metrics	Milestones	
Outcome Metrics:	**Milestone / Description:**	**Date (mm/yy):**
Process Metrics:		

Team Members	
Exec Sponsor:	**Clinical Sponsor**:
Sponsor:	**Process Owner**:
Project Leader:	**Team Members**:

QI Project Charter

Project Overview

Problem Statement: Discharge Medication Example from Hospital A

Only **61**% of eligible vascular procedure patients at Hospital X are discharged on antiplatelets and statins. Increasing the prescribing rate of antiplatelet and statin therapy for vascular procedure patients at discharge increases graft patency and increases survival at one year and five years post procedure.

Problem Statement

What is wrong with our current process? Why do we care? Create a statement that is specific, measurable and relevant. Include data or use placeholders until you get the data.

Goal: Example

- Twenty-five percent increase in prescribing rates at six months postproject implementation. Verify that 76% of eligible vascular procedure patients are discharged on an antiplatelet and statin medication at six months after project implementation (June, 2015).
- Another 25% increase at one year post implementation. Verify that 95% of eligible vascular procedure patients are discharged on an antiplatelet and statin medication at one year after project implementation (January, 2016).

Goal: What do we want to achieve and when do we want to achieve it?

QI Project Charter

Scope: **Example**

- Educate vascular procedure providers on the importance of prescribing antiplatelets and statins to their vascular procedure patients and coordination with their primary care physicians
- Revise vascular discharge order sets
- Utilize the expertise of pharmacists and care coordinators
- The project will be tested for a 12-month period.

Scope: What areas will we improve and over what time period will we do the improvement? What are the limitations (e.g., limited to certain units or for a certain time period.

Deliverable(s):

- Discharge order medication templates
- Sample PCP letter templates

Deliverable(s)

What new processes will we deliver in order to help reach our goals?

Resources Required: **Example**

- IT
- Care Coordinators
- Pharmacists

Resources Required

What people, materials, and/or finances will be needed to conduct the project? Who must be kept informed?

QI Project Charter

Key Metrics	Milestones	
Outcome Metrics: Example Increased one and five year survival rates for vascular procedure patients that were discharged on antiplatelet and statin medications.	**Milestone / Description Example** •Confirm baseline information using VQI data •Notify and educate all vascular procedure providers on the new initiative. •Contact IT for guidance in adding templates •Meet with care coordinators to identify programs to aid patients in obtaining medications, if needed. •Revise 100% of provider discharge order sets to reflect AP and statin medication options.	**Date (mm/yy):**
Outcome Metrics "How will you know the project is successful?" e.g., LOS, surgical site infections		
Process Metrics: Example •Verify that 76% of eligible vascular procedure patients were discharged on an antiplatelet and statin medication at six months after project implementation using VQI and/or EMR data. •Verify that 95% of eligible PVI patients were discharged on an antiplatelet and statin medication at one year after project implementation using VQI registry data and reports using VQI and/or EMR data.	**Milestone / Description:** Complete 'QI Project Overview' Confirm baseline outcome metric Identify root cause / hypothesis Identify potential improvement(s) Implement improvement(s) Evaluate progress & confirm action plan	
Process Metrics: "How will you ensure the interventions you implement are being completed?" e.g., % pts on progressive care unit, % discharged patients on statins and anti-platelets Rx		

Educational Webinars 2017

Topics for the educational webinars in the first half of 2017 include:

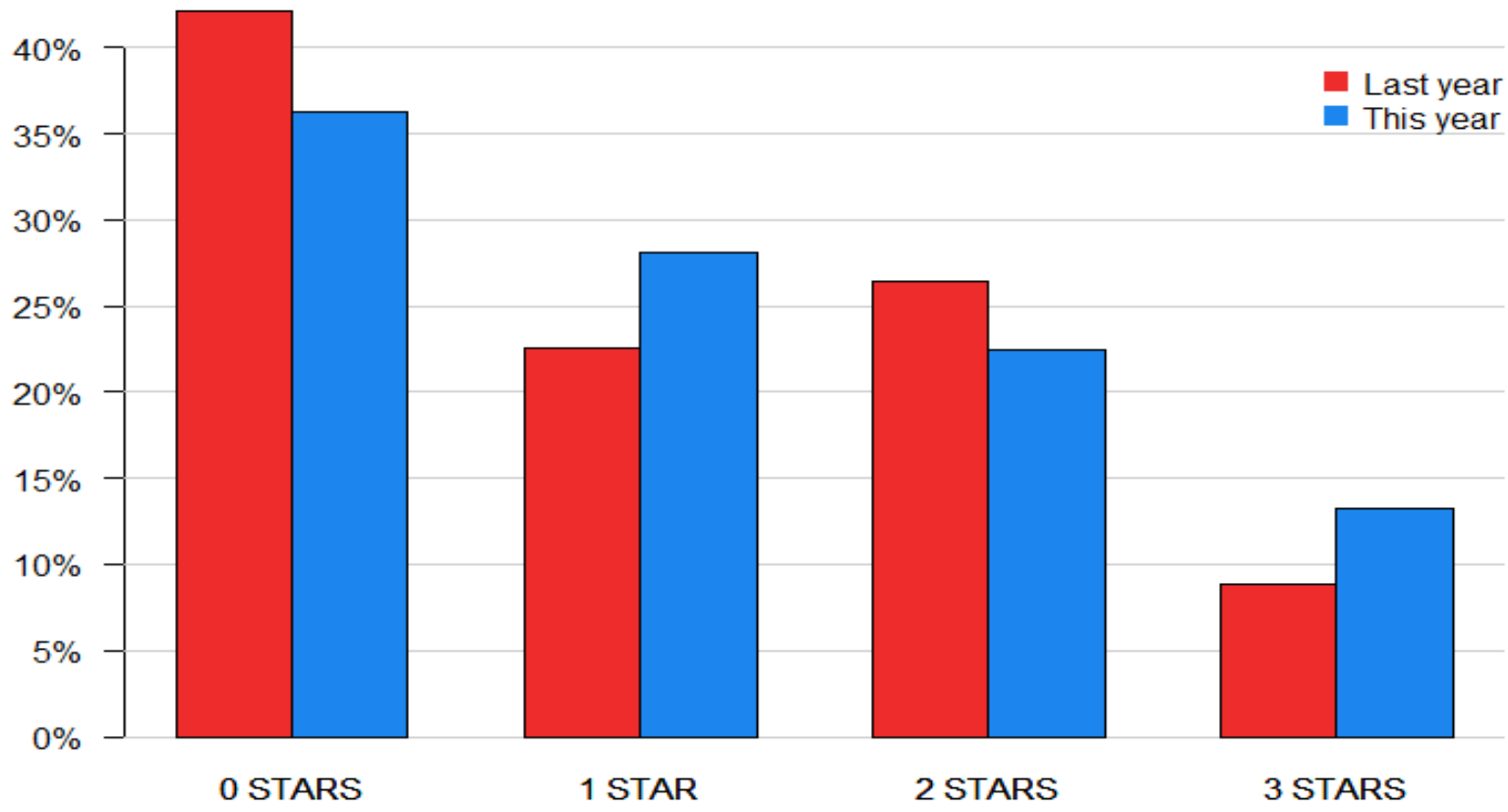
February: National QI Projects: Discharge Medications: Reaching and Sustaining our Goal of 100% by Randy R. De Martino, MD, MS and Cheryl R. Jackson, DNP, MS, RN, CPHQ

March: PVI Clone and CAS Registry (TCAR)

April 25: National QI Projects: Quality Improvement Process and Tools for EVAR LTFU Imaging

May: PVI – forum with users and developers

2016 Participation Award Results



Participation Award potential changes:

- Participation in National, Regional or Local QI project using VQI data
- Credit for attendance at the Annual meeting (data managers only)
- Penalty of not being able to get data for research if your attendance at the regional meetings is low over a certain number of years
- Should you get a star award at all if you are on probation for <50% LTFU
- Additional participation point if your site gives a presentation at a regional meeting

VQI Datasets for Research

- Data discrepancies identified
- Due to multiple revisions and coding
- **No significant errors in key outcome variables** (SO FAR – audit not done yet)
- Conclusion – Large complex data sets need periodic, regular review
- Multiple new quality assurance measures instituted

Moving forward

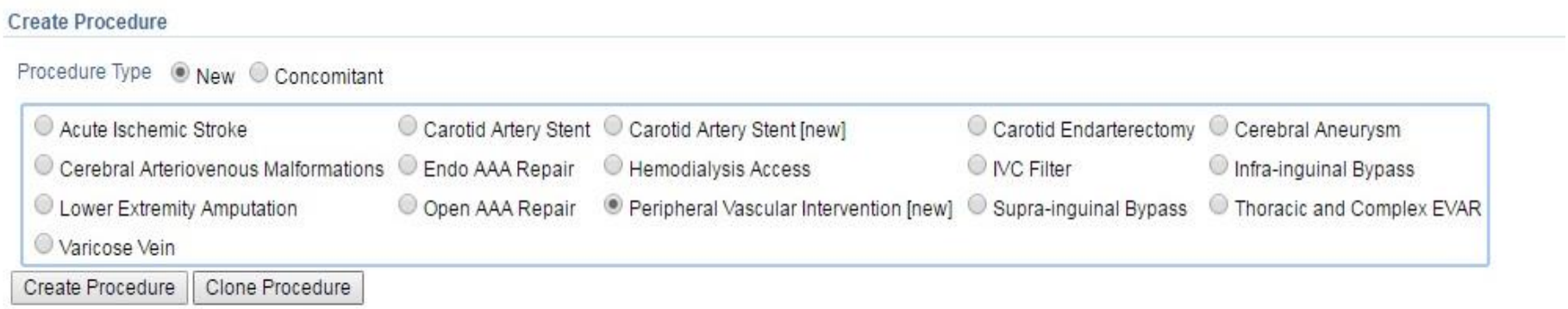
New Quality Assurance Measures

- **New Data Quality Control Testing**
- **New Sign off for Development Specifications and before release of new Code**
- **New Software for Quality Assurance**
- **New Code to ensure Consistency of BDS across Registries**
- **New Data Warehouse**

Pathways Development Update

PVI Clone Data

- Release in Q1 of this year.
- Functionality will allow users to generate a new PVI procedure based on an existing PVI procedure.



PVI Clone Data

- Certain data elements from the Demographics and History section are included and all have are time sensitive to the date of procedure.
- This should provide a large time savings to users who are entering repeat PVI procedures for a single patient.

Clone from:

* Procedure 02/09/2017 - Moloney2, Bob - Incomplete, Submitted

Clone to:

* Procedure Date 02/10/2017 * Primary Physician Freeman, Walter

Report

Page	Region	Field Name	Long Field Name	Field Value	✓
Demographics	Pre-Adm Status:	Living Status	Living Status	Home	✓
Demographics	Pre-Adm Status:	Functional Status	Functional Status	Full	✓
Demographics	Co-morbidities:	CVD	CVD	None	✓
Demographics	Co-morbidities:	CAD	CAD Symptoms	None	✓
Demographics	Co-morbidities:	CHF	Prior CHF	None	✓
Demographics	Co-morbidities:	Dysrhythmia	Dysrhythmia	No	✓
Demographics	Co-morbidities:	COPD	COPD	Not Treated	✓
Demographics	Co-morbidities:	Diabetes	Diabetes	None	✓
Demographics	Co-morbidities:	Dialysis	Dialysis	No	✓
Demographics	Co-morbidities:	Hypertension	Hypertension	No	✓
Demographics	Co-morbidities:	Smoking	Smoking	Never	✓
Demographics	Testing:	Stress Test	Stress Test	Normal	✓
Demographics	Testing:	Creatinine	Creatinine	12	✓
Demographics	Testing:	Creatinine (umol/L)	Creatinine	1060.8	✓
Demographics	Pre-Procedure Medications	Pre ACE-Inhibitor/ARB	Pre-op ACE-Inhibitor/ARB	No	✓
Demographics	Pre-Procedure Medications	Pre ASA	Pre-op ASA	Yes	✓
Demographics	Pre-Procedure Medications	Pre Chronic Anticoagulant	Pre-op Chronic Anticoagulant	Vitamin K Antagonist	✓
Demographics	Pre-Procedure Medications	Pre Antiplatelet Drugs	Pre-op P2Y12 Antagonist	None	✓

PVI Post-Procedure Tab Revision

- Redesign of the Post-Procedure tab of the PVI registry.
- Goal of improving data collection and complication rate accuracy.
- Streamlined the user experience and reduces the chance of information being missed.
- Discharge Status is now being collected for every PVI procedure.

Vascular Quality Initiative®

PVI Post-Procedure Tab Revision

Demographics | History | Procedure | Post-Procedure

Post-Procedure Information

Procedure Complications: Select
Discharge Status: Select

Complications

Cardiac: Select
Myocardial Infarction: Select
Pulmonary: Select
Renal: Select
Access Site Cx: Select
Serious Contrast Reaction: Select
Other: Select

Artery Complications/Treatments

Thrombosis: Select
Embolization: Select
Target Lesion Dissection: Select
Dissection Remote: Select
Perforation: Select

Access Site Complications/Treatments

Site 1

Hematoma: Select
Stenosis/Occlusion: Select
Infection: Select
Pseudoaneurysm: Select
AV Fistula: Select

Post-Procedure Medications

Any Change in Medications: Select
Post ASA: Select
Post Antiplatelet Drugs: Select
Post Statin: Select
Post Chronic Anticoagulant: Select
Post ACE-Inhibitor/ARB: Select
Post Cilostazol: Select

Comments

TEVAR Dissection Postmarket Surveillance

- Sponsors: Medtronic and W.L. Gore
- Sites have received $854,100 as of 1/31/2017 as compensation for their time.
- FDA has received 4 summary reports (non-identifiable data)
- Steering Committee is drafting a abstract highlighting 30 day outcomes

Cohort	Enrolling new sites	Number of Sites	Number of Patients	Follow Up	Reimbursement
5 Year	No	50	400 (389 patients enrolled)	At 30 days and annually for 5 years	**Per Subject: $4,000** - $1300 Initial Treatment - $400 Each follow up visits - - $700 Final 5 year follow up $700 Add' l intervention
1 Year	**Yes**	Up to 50	200 (143 patients enrolled)	Annually for 1 year	$400 for each procedure with a completed 1 year follow up

Lombard Aorfix Postmarket Surveillance

- Sponsor: Lombard Medical
- EVAR Registry
- Sites have received $79,200.00 as of 1/31/2017 as compensation for their time.
- Lombard has received 4 data reports (non-identifiable data)

Enrolling	Number of Sites	Number of Patients	Follow Up	Reimbursement
Yes	50	234 (40 patients enrolled)	At 30 days and annually for 5 years	**Per Subject: $4,000** - $1300 Initial Treatment - $400 Each follow up visits - - $700 Final 5 year follow up $700 Add' l intervention

Medtronic IN.PACT DCB ISR Postmarket Surveillance

- Sponsor: Medtronic
- PVI Registry
- The Medtronic IN.PACT® Admiral® DCB ISR Project is a prospective, non-randomized, multi-center, single arm post market registry surveillance of the clinical use of the Medtronic IN.PACT® Admiral® Paclitaxel-Coated PTA Balloon
- The primary objective of this project is 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**.

Enrolling	Number of Sites	Number of Patients	Follow Up	Reimbursement
Yes	50	300 (2 patients enrolled)	At 12, 24 and 36 Months	**Per Subject: $1,950** - $350 Initial Treatment - $500 1 and 2 year FU visits - $600 Final 3 year FU visit

Bard® LifeStent® Popliteal Artery Stent Project

- Sponsor: Bard Peripheral Vascular, Inc.
- PVI Registry
- Objective: to conduct long term post-market surveillance of the safety (including fractures assessed at revision) and effectiveness of the Bard® LifeStent® Vascular Stent Systems for the treatment of symptomatic de novo or restenotic lesions in the popliteal artery.

Enrolling	Number of Sites	Number of Patients	Follow Up	Reimbursement
Yes	Up to 30 (5 currently enrolled)	74	12 months and 24 months	**Per Subject: $1400** - $400 Initial Treatment - $500 Each follow up visits - $400 Additional TLR or TVR intervention

CREST 2 Registry Project

- CAS Registry with Supplemental 1-page form
- Enrolling
- 64 Physicians are participating through VQI
- Objectives
  - Promote rapid initiation and completion of enrollment in the CREST-2 trial
  - Ensure that CAS is performed by adequately experienced operators within CREST-2 and C2R
  - Closely monitor clinical outcomes of C2R patients
  - Prevent inappropriate use of CAS outside of C2R
- C2R Investigators have received 10 reports
  - Patient-level data is non-identifiable per HIPAA
  - Physician and center names are transferred IAW project data sharing agreement

Trans-Carotid Artery Revascularization Project

- Collaboration with CMS to provide reimbursement for TCAR in medical high risk symptomatic or asymptomatic patients if entered into VQI CAS Registry + 1 Yr follow-up
- Data will be compared with outcome of CEA procedures in VQI during the same time interval
- Goal is to generate real-world data for future decisions about coverage of TCAR as distinct from trans-femoral CAS
- Enter TCAR case using FDA approved stent/flow-reversal into Registry, submit Medicare claim using NCT 02850588

Trans-Carotid Artery Revascularization Project

VQI Information:

http://www.vascularqualityinitiative.org/vqi-resource-library/tcar-surveillance-project/

Clinical Trials Information:

https://clinicaltrials.gov/ct2/show/NCT02850588?term=TCAR&rank=1

CMS:

- https://www.cms.gov/Medicare/Medicare-General-Information/MedicareApprovedFacilitie/Carotid-Artery-Stenting-CAS-Investigational-Studies.html

TCAR vs. CREST2

- For physicians that are doing TCAR and are not in CREST2:
  - Use the new CAS form, include the NCT# on the claim

- For physicians that are doing TCAR and ARE in CREST2 or Just CREST2:
  - Use the original CAS form (not the new CAS form), and follow the CREST2 instructions. This ensures that the case is provided to the CREST2 team and the physician gets paid

VQI Enhancements On The Way

IVC Filter Retrieval Reporting

- All patients implanted with retrievable filters will populate report
  - If follow-up recorded indicates filter has been retrieved this patient will be excluded from report
- Interactive functionality
  - User defines duration to retrieval
  - Customize interval based on specific IVC filter used
  - Highlights patients past due for retrieval
  - Report delivered via email at defined frequency

Vascular Quality Initiative®

Go | Reports: 1. Dr. House Filter Retrieval Overdue | Rows: 15 | Actions | Reset Report

- Saved Report = "Dr. House Filter Retrieval Overdue"
- Days Since Procedure >= 30
- Primary Physician = 'Gregory House'
- Primary Physician
- Filter Retrieval Overdue

Primary Physician : Gregory House

Surgery Date	Last Name	First Name	Date of Birth	MRN	Planned Duration	Days Since Procedure	Insertion Site	Landing Site	Manufacturer	Device Type
05-OCT-16	Hannaford	Amy	01-JAN-50	01011950	Temporary	37	Right femoral	Iliac, right	Boston Scientific	Other (retrievable)
12-AUG-16	Clarkson	Micheal	01-JAN-50	0	Temporary	91	Right jugular	Infra-renal	ALN	ALN Optional (retrievable)
01-OCT-16	Gusling	Sheldon	01-JAN-50	Oracle00001	Temporary	41	Right jugular	Supra-renal	Bard	G2 (retrievable)
02-SEP-16	Stoner	Fred	01-JAN-52	02020	Temporary	70	Right leg vein	Supra-renal	B Braun	Tempofilter (retrievable)
12-DEC-15	Cooper	Jasmine	01-JAN-50	SQAIVCFU1	Temporary	335	Left femoral	Supra-renal	Cook	Celect (retrievable)

SVS Society for Vascular Surgery | m2s | Society for Vascular Medicine

Email Deliverability

Have you experienced problems receiving our email newsletters or PATHWAYS updates? Contact us at vqi@m2s.com if you are not receiving emails from the VQI or PATHWAYS.

Types of emails we are currently sending:

- VQI Pulse eNewsletter
- PATHWAYS product updates
- VQI Registry news
- Webinar events
- and much more!

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 Jan. 1, 2017.

New HTML format!!

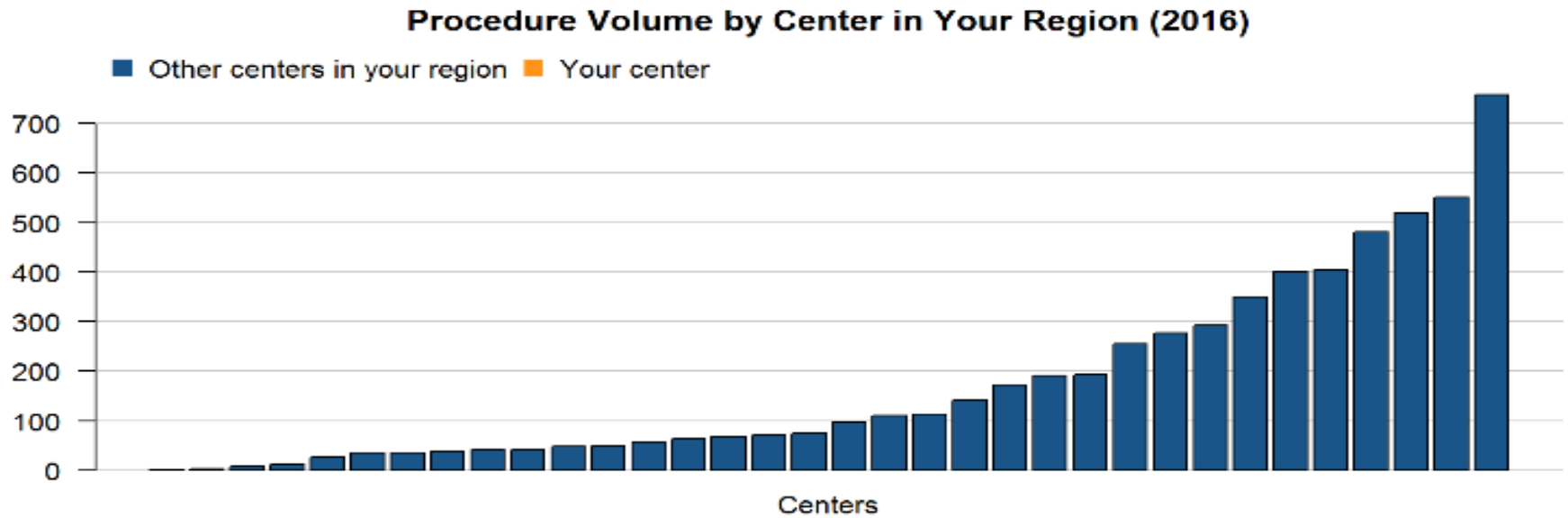
Vascular Quality Initiative®

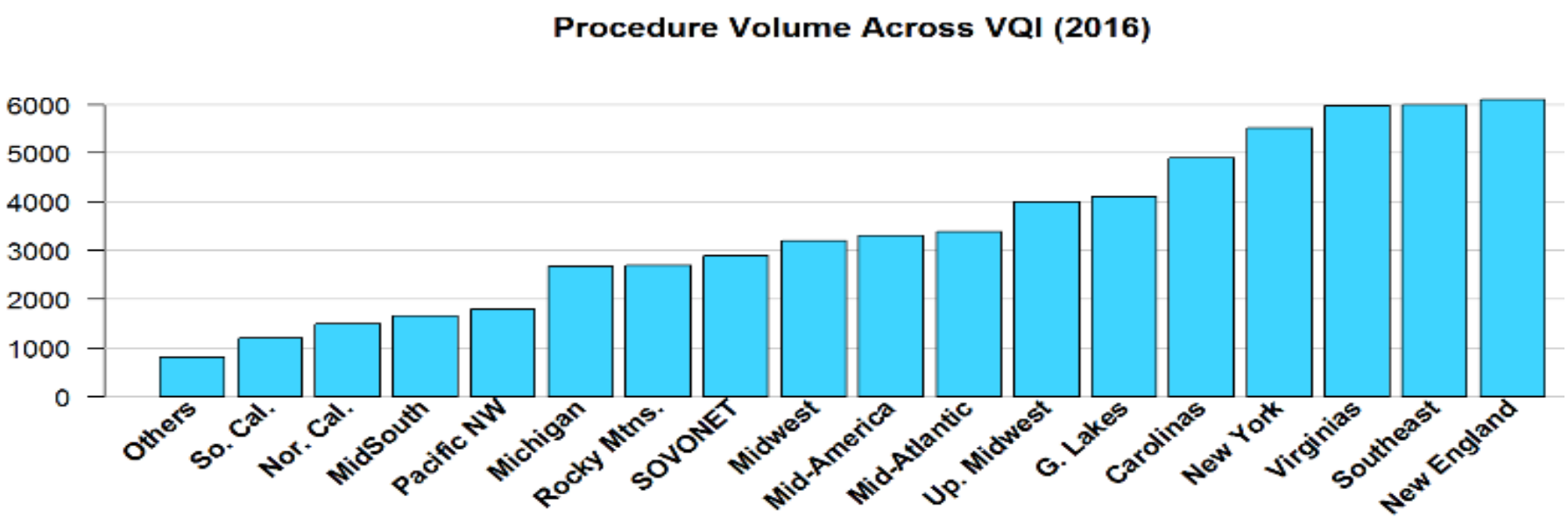
Total Procedure Volume, All Years (2003-Dec 2016)

	Your Region (N)	VQI (N)
CAS	813	13052
CEA	5282	74975
EVAR	1828	29702
HEMO	4736	27339
INFRA	2274	33122
OAAA	466	8664
PVI	5127	96345
SUPRA	863	11104
TEVAR	817	7100
IVCF	770	6476
Varicose Veins	1073	8236
LEAMP	647	6339
Overall	24696	322454

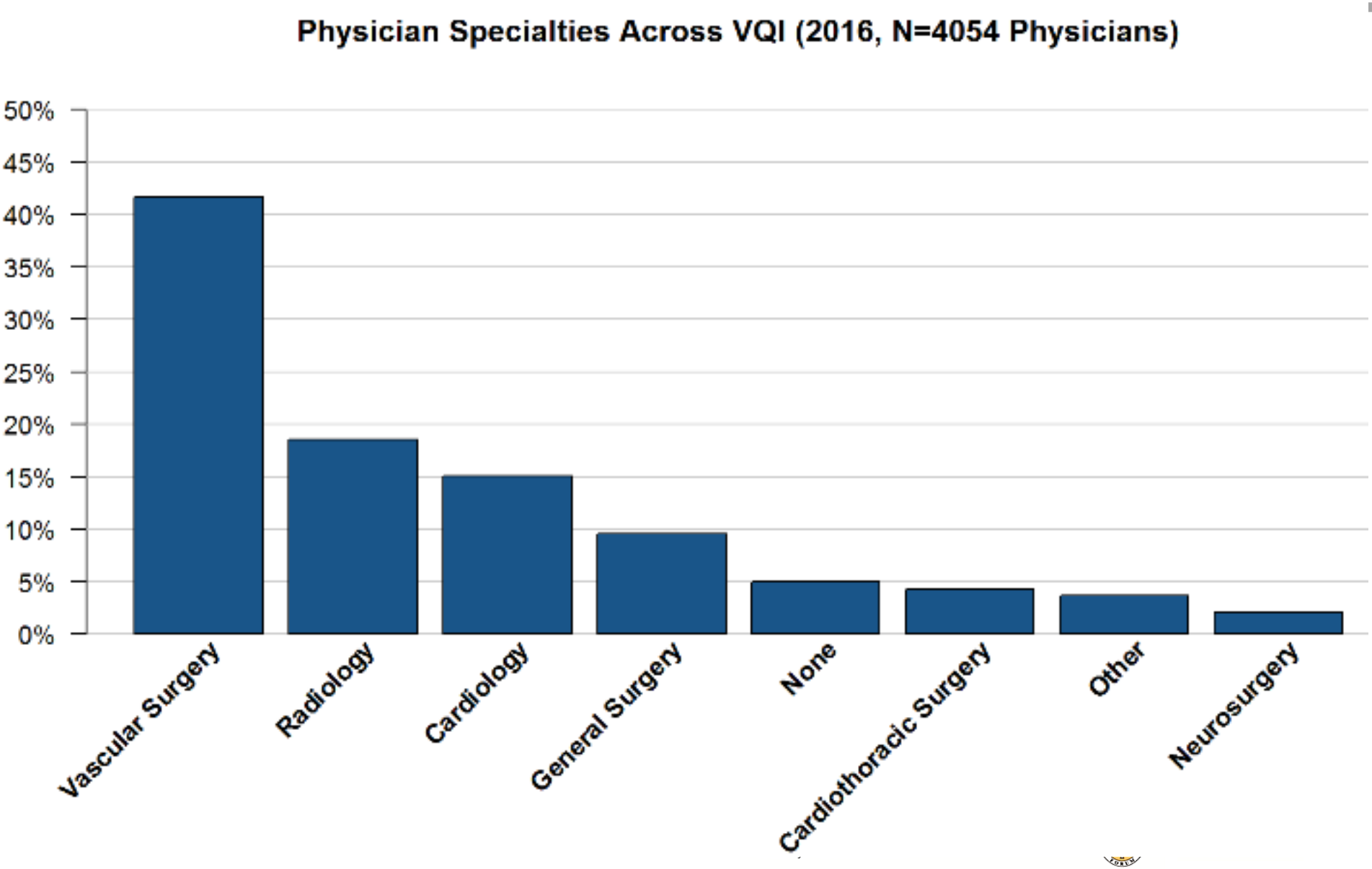
Society for Vascular Medicine

Vascular Quality Initiative®

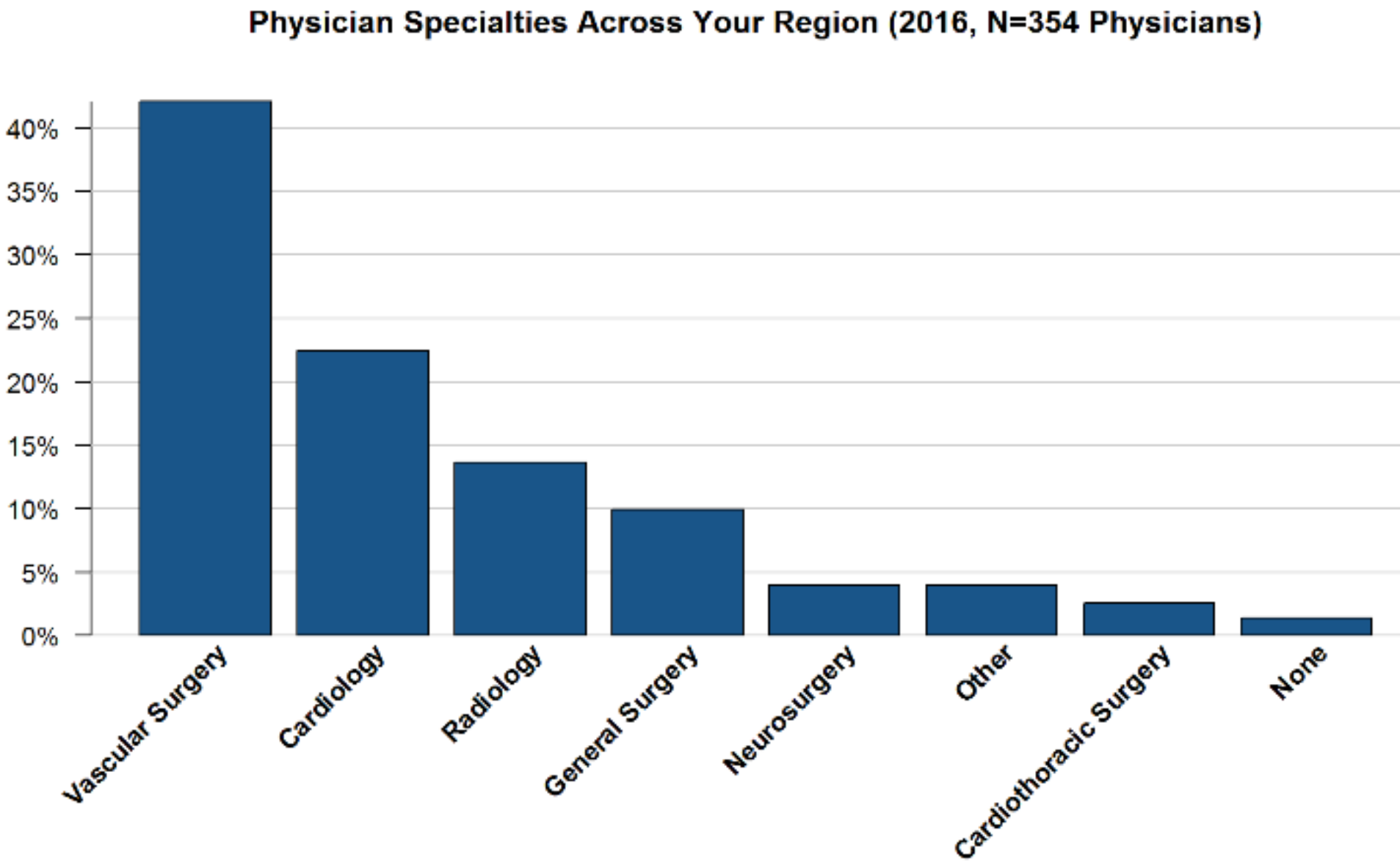




Vascular Quality Initiative®



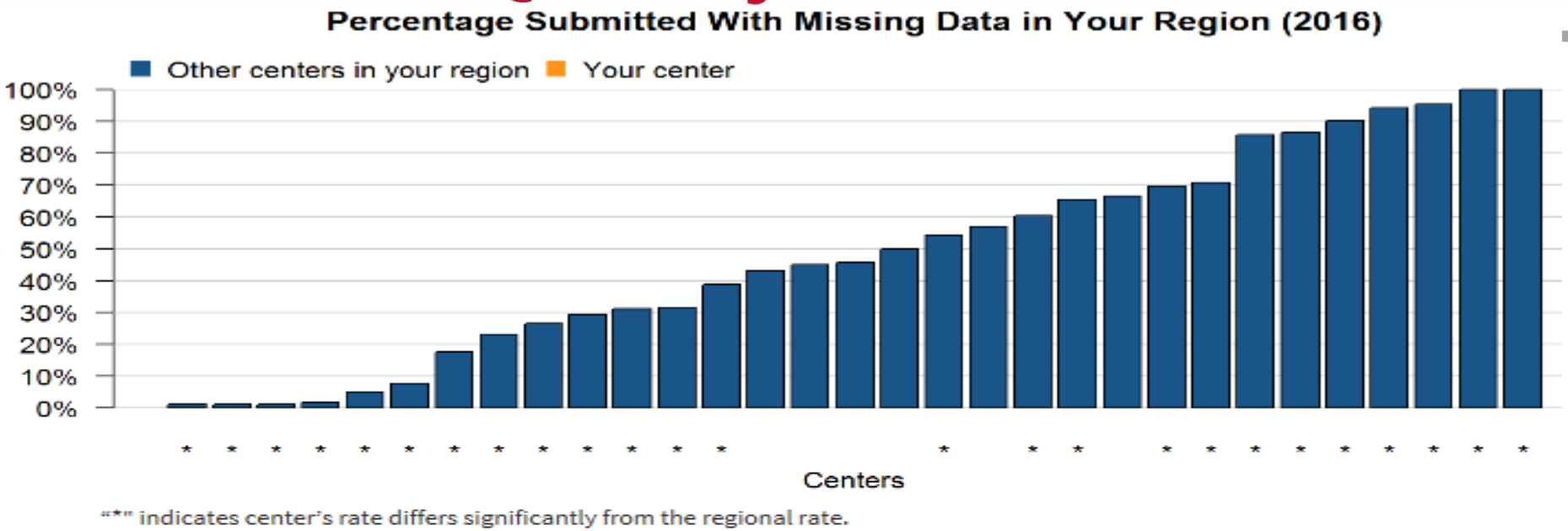
Vascular Quality Initiative®

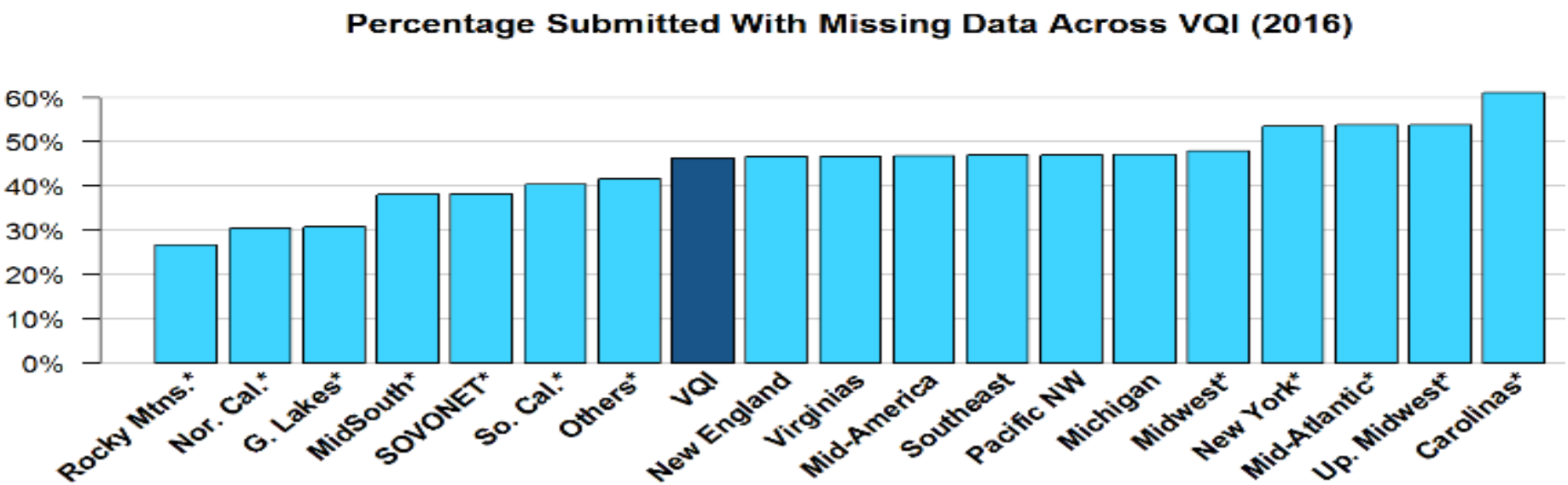


Percentage of Procedures Submitted With Missing Data (2016)

	Your Region	VQI
CAS	162 (62%)	2952 (50%)
CEA	1195 (26%)	13546 (29%)
EVAR	360 (75%)	5291 (60%)
HEMO	980 (39%)	5690 (36%)
INFRA	514 (86%)	5575 (81%)
OAAA	54 (22%)	1064 (31%)
PVI	1305 (66%)	15602 (52%)
SUPRA	183 (72%)	1852 (79%)
TEVAR	124 (14%)	1613 (28%)
IVCF	224 (47%)	1631 (17%)
Varicose Veins	691 (6%)	5197 (28%)
LEAMP	195 (73%)	1718 (72%)
2016 overall	5987 (47%)	61731 (46%)
2015 overall	7067 (52%)	75813 (49%)

Vascular Quality Initiative®

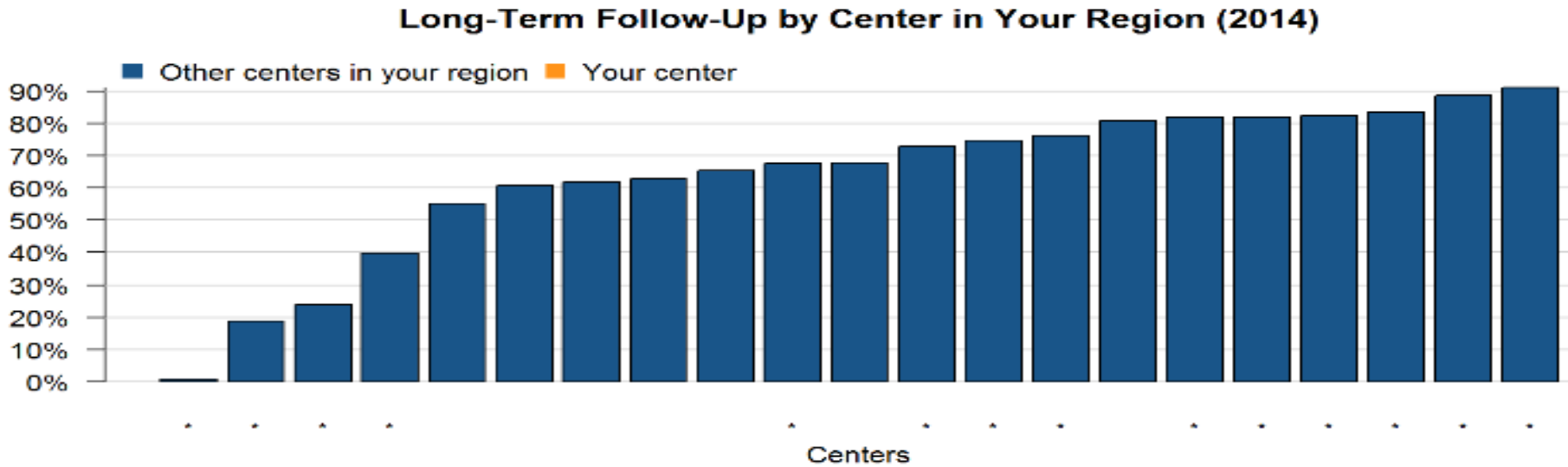




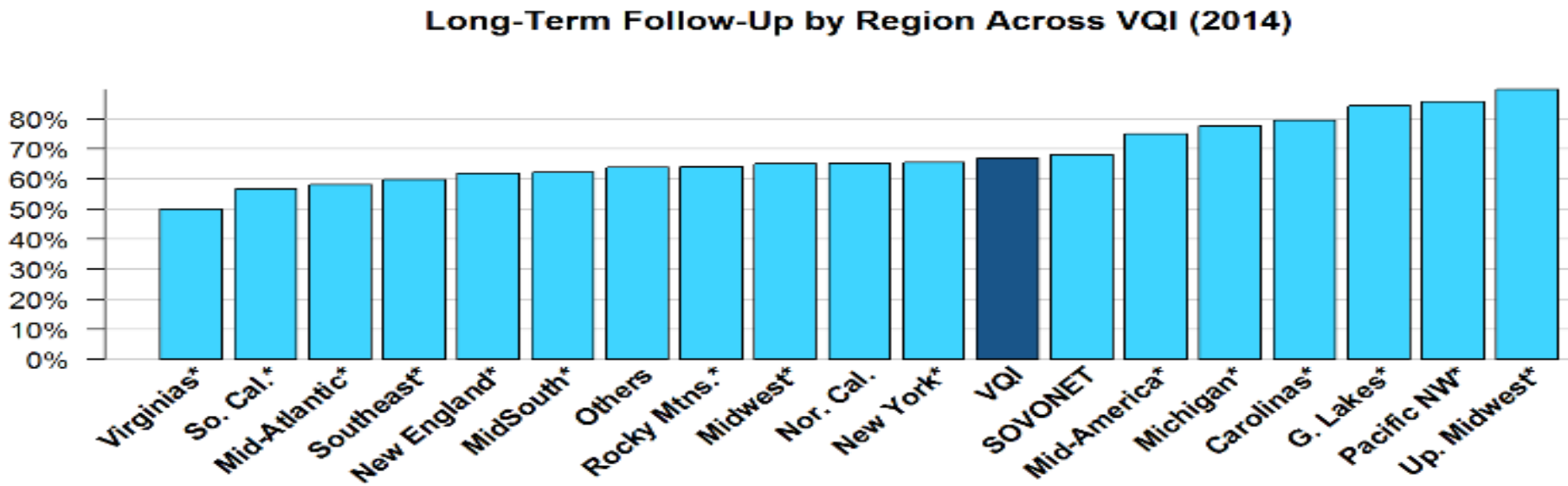
LTFU as of January 1, 2017

	Your Region	VQI
CAS	173 (53%)	2350 (66%)
CEA	1177 (54%)	14507 (67%)
EVAR	388 (54%)	5659 (70%)
HEMO	1034 (74%)	6425 (61%)
INFRA	398 (55%)	5834 (70%)
OAAA	93 (60%)	1413 (73%)
PVI	1190 (56%)	20645 (67%)
SUPRA	121 (64%)	2111 (72%)
TEVAR	195 (62%)	1495 (65%)
IVCF	148 (61%)	1693 (58%)
LEAMP	191 (60%)	1743 (67%)
2014 overall	5108 (60%)	63875 (67%)
2013 overall	2707 (76%)	45266 (70%)

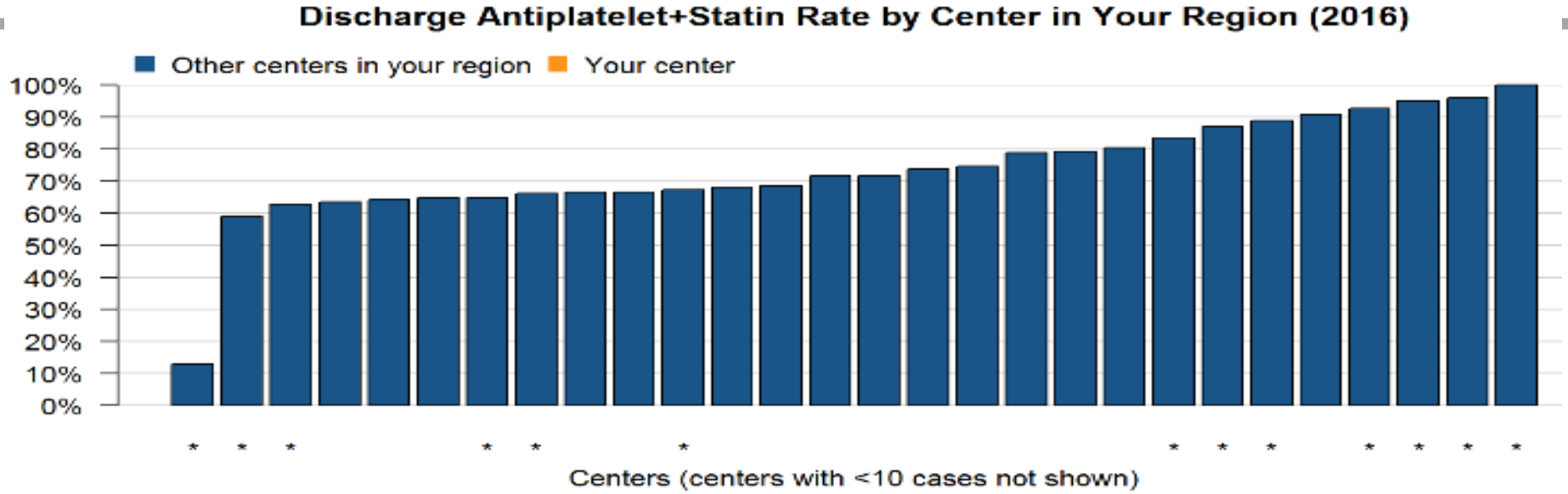
Vascular Quality Initiative®



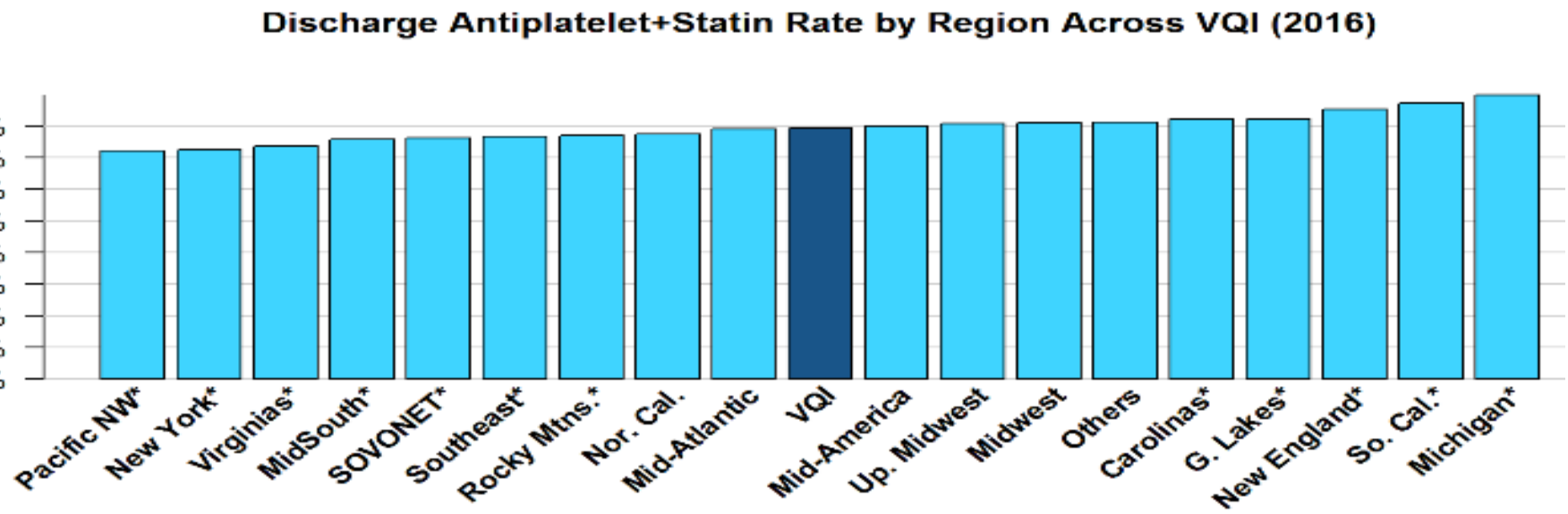
"*" indicates center's rate differs significantly from the regional rate.



Vascular Quality Initiative®



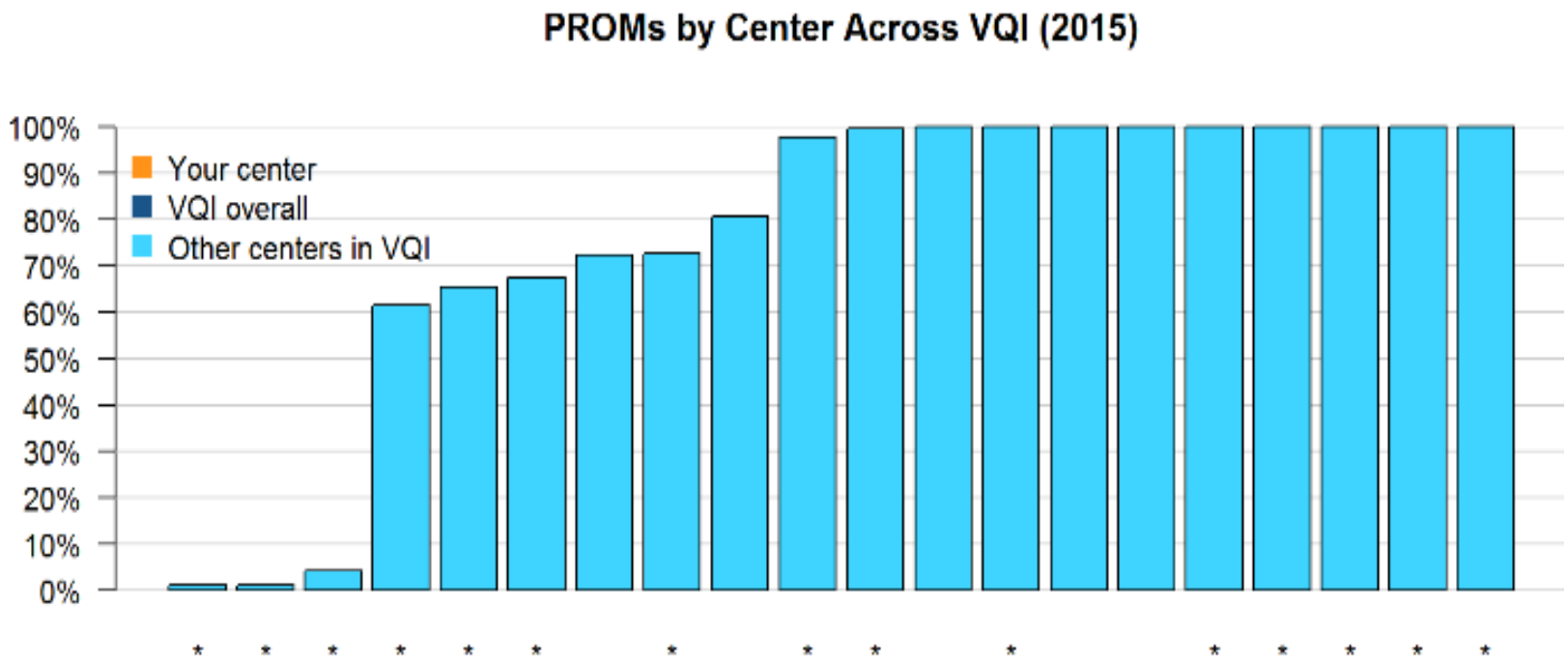
"*" indicates center's rate differs significantly from the regional rate.



Vascular Quality Initiative®

Varicose Veins: Percentage of Procedures with Complete Patient-Reported Outcome Measures Recorded at Follow Up

procedures; includes only patients with any follow-up visit recorded. All regional data omitted because most regions have <3 centers. Patient-reported outcome measures (PROMs) include heaviness, achiness, swelling, throbbing, itching, appearance and impact on work in side of operation.



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

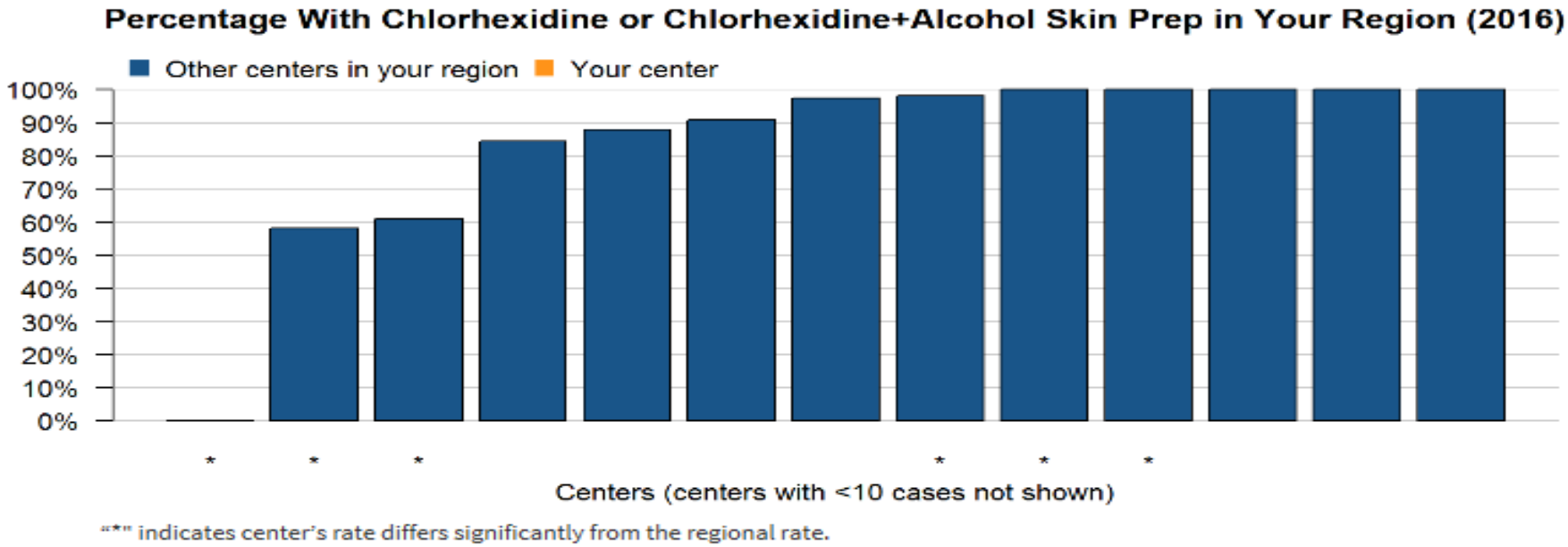
Society for
ar Medicine

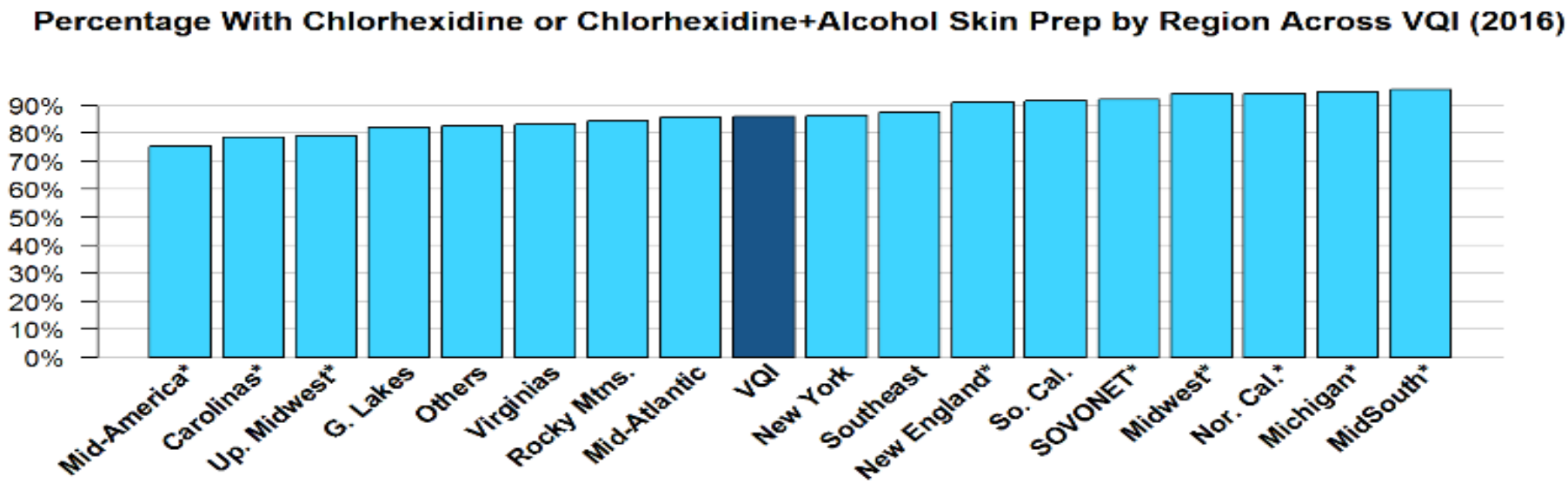
Infrainguinal Bypass: Percentage of Procedures with Chlorhexidine or Chlorhexidine+Alcohol Skin Prep (2016)

The table below shows the number of INFRA procedures in the VQI as of Jan. 1, 2017, the percentage of those cases in which chlorhexidine or chlorhexidine+alcohol skin prep was used, and the rate of in-hospital surgical-site infection.

	Your Region	VQI Overall
Number of procedures	512	5537
Rate of chlorhexidine or chlorhexidine+alcohol skin prep	87%	86%
Rate of in-hospital surgical-site infection	2%	2%

Vascular Quality Initiative®



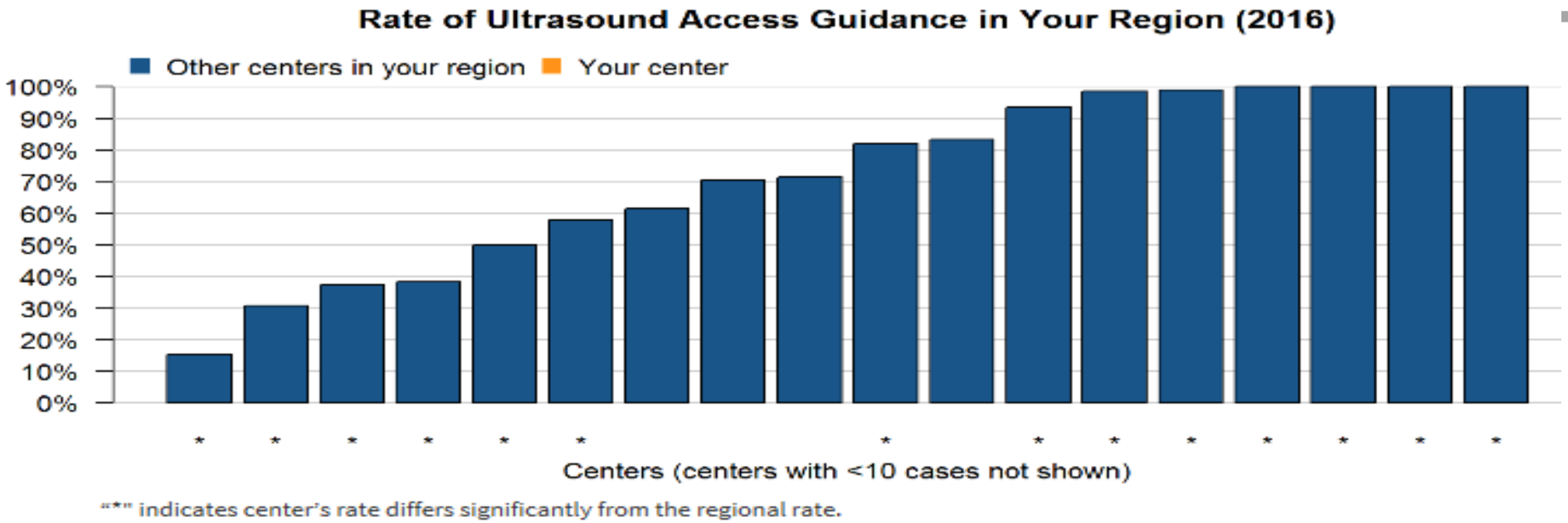


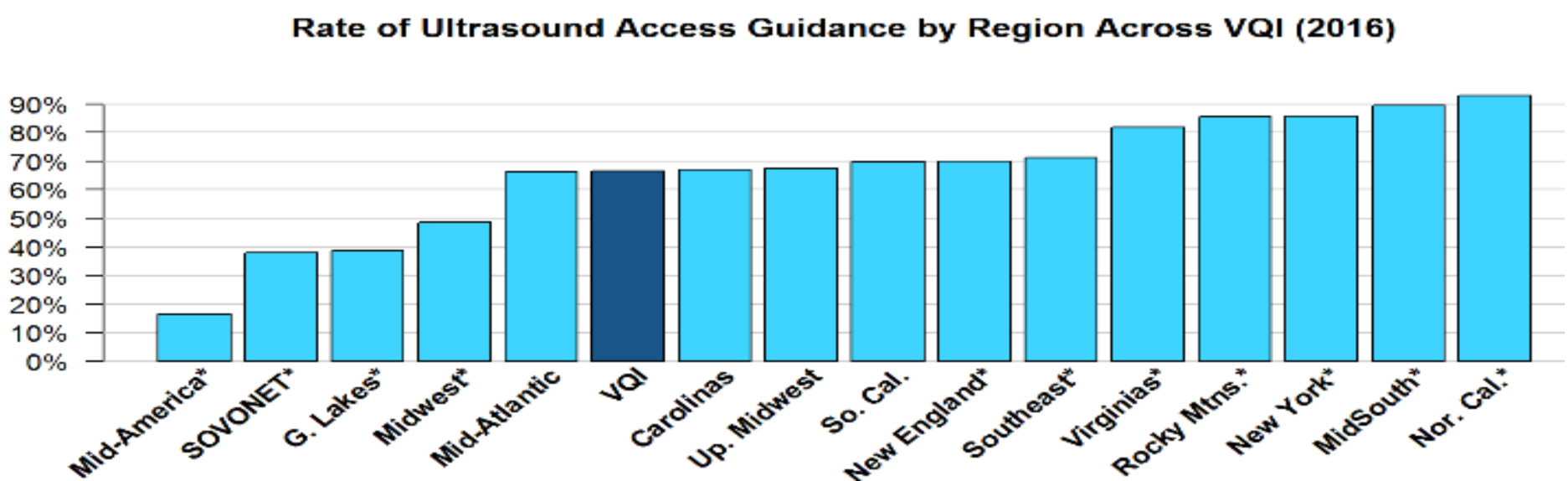
PVI: Percentage of Percutaneous Femoral Procedures Using Ultrasound Guidance (2016) Excludes cut-down access guidance

The table below shows the number of percutaneous femoral PVI procedures in the VQI as of Jan. 1, 2017, the percentage of those cases in which ultrasound access guidance was used, and the rate of hematoma.

	Your Region	VQI Overall
Number of percutaneous femoral procedures	1211	14093
Rate of ultrasound access guidance	71%	67%
Rate of any hematoma (minor, moderate or major)	3%	3.3%
Rate of mdoerate or major hematoma	0.9%	0.8%

Vascular Quality Initiative®





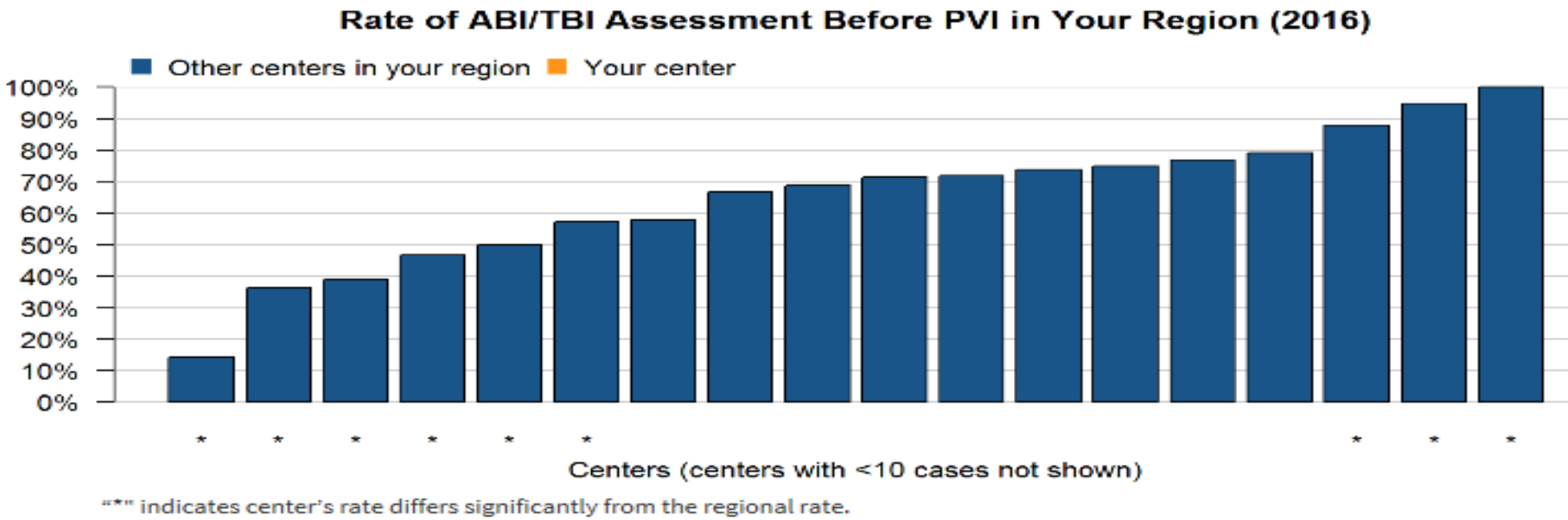
PVI: Percentage of Patients With ABI or TBI Reported Before Procedure (2016)

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

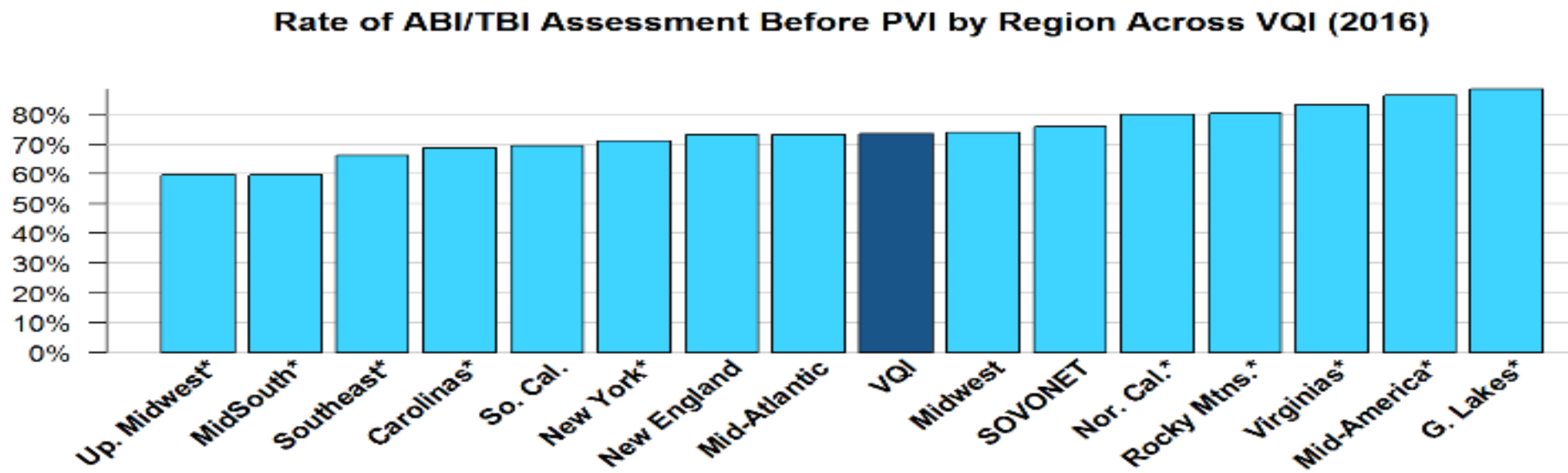
The table below shows the number of PVI procedures in the VQI as of Jan. 1, 2017, and the percentage of those cases in which ABI or TBI was recorded.

	Your Region	VQI Overall
Number of PVI procedures	1301	15568
Percentage with ABI/TBI recorded before procedure	66%	73%
Percentage of claudicants with ABI/TBI recorded	74%	79%
Percentage of patients with critical limb ischemia with ABI/TBI recorded	61%	70%

Vascular Quality Initiative®



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



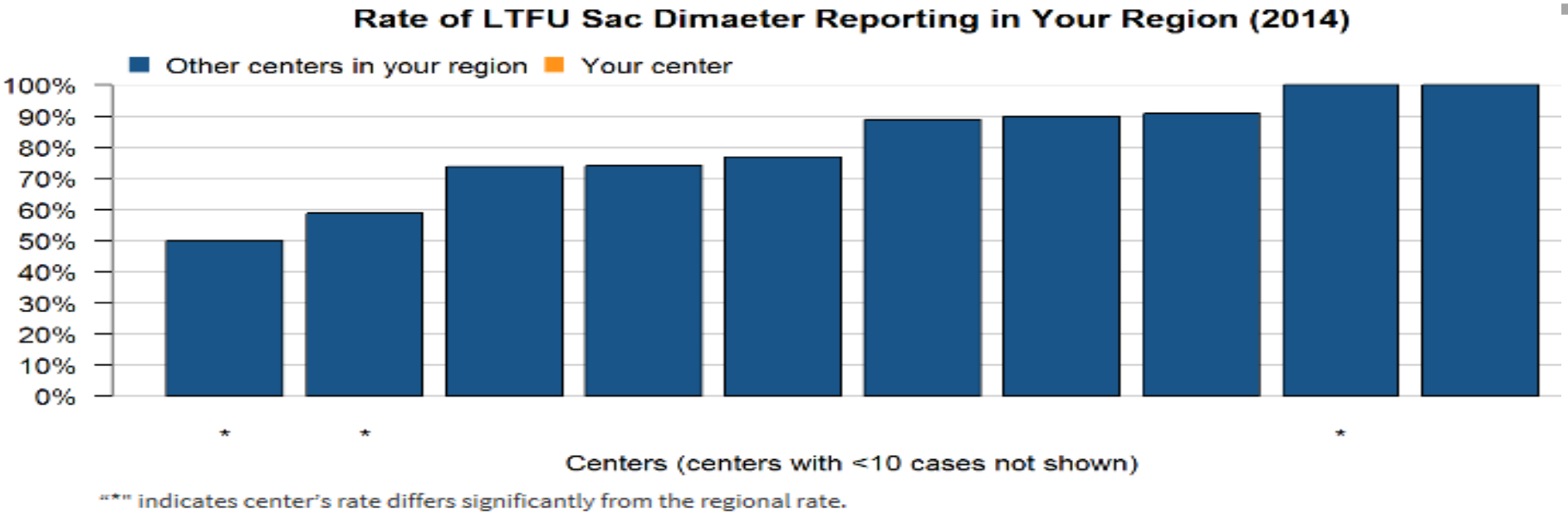
EVAR: Rate of Sac Diameter Reporting at Long-Term Follow-Up (2014)

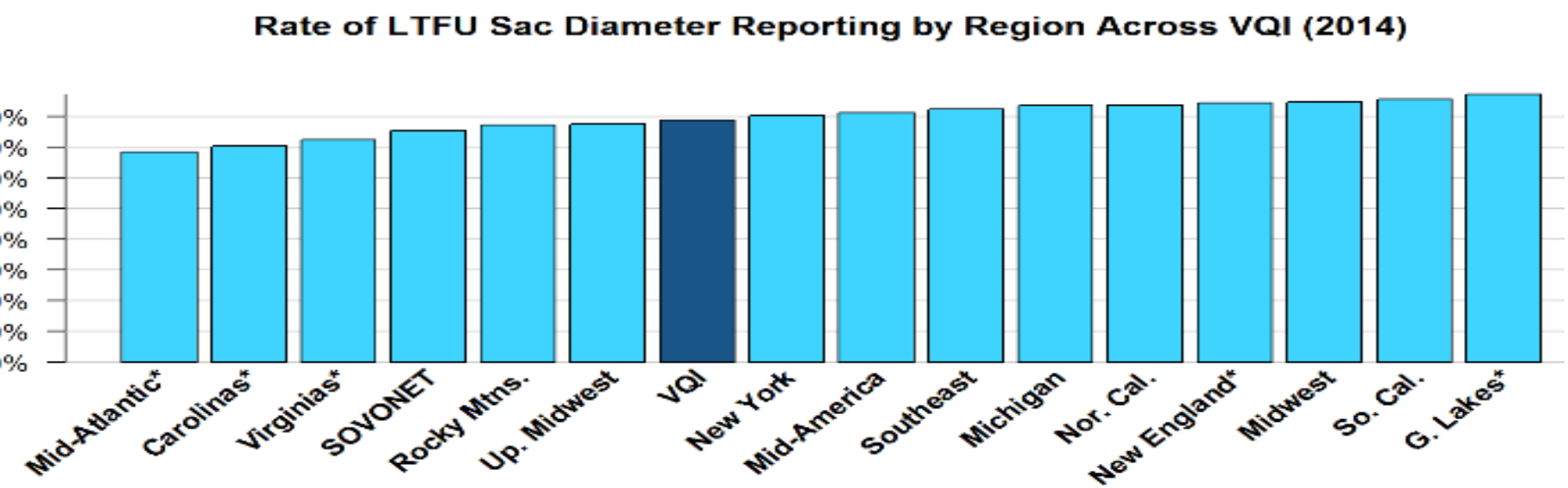
Excludes patients without at least 9 months of LTFU

The table below shows the number of EVAR procedures with long-term follow-up that were in the VQI as of Jan. 1, 2017, and the percentage of those cases in which sac diameter was recorded at LTFU.

	Your Region	VQI Overall
Number of EVAR procedures with at least 9 months of follow-up	209	3937
Percentage with sac diameter recorded at follow-up	82%	79%

Vascular Quality Initiative®



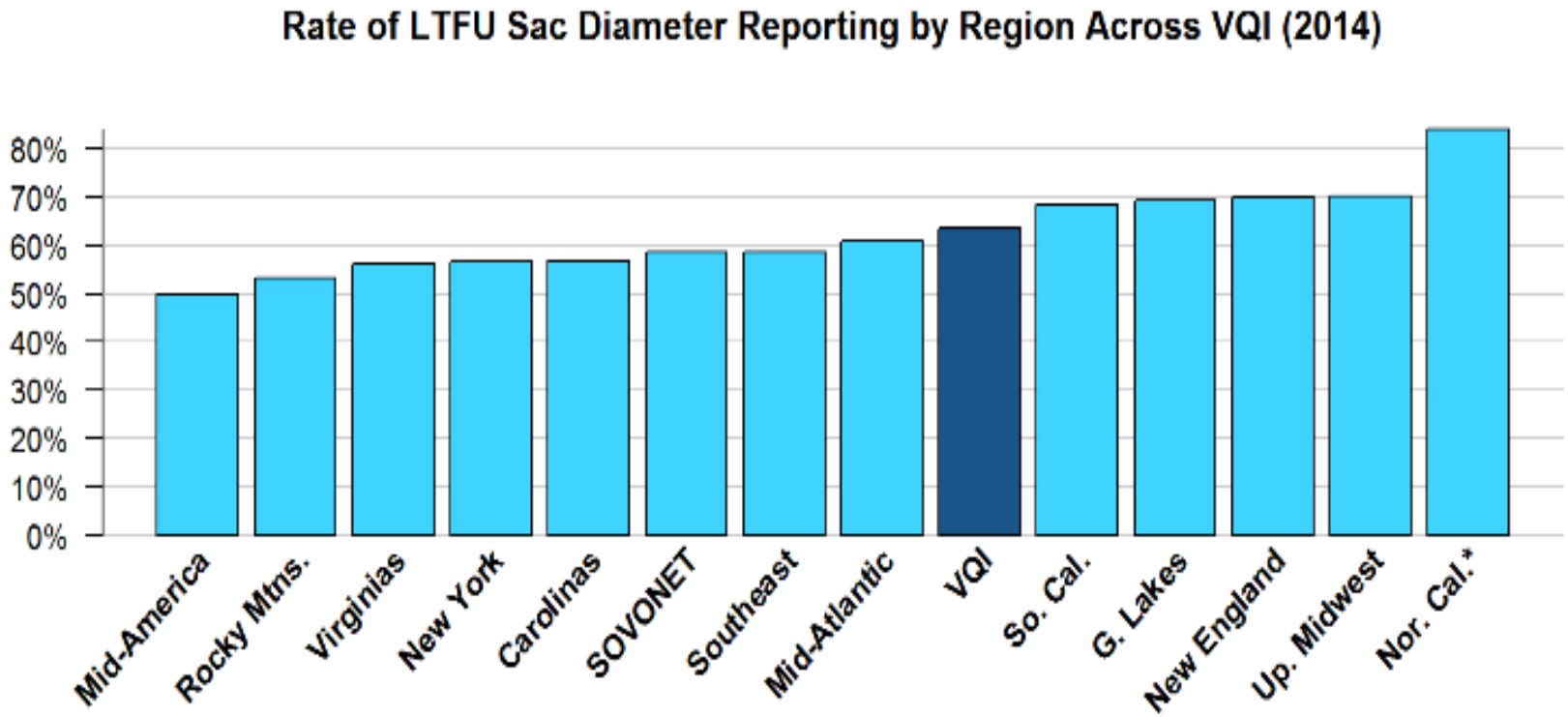


Vascular Quality Initiative®

TEVAR: Rate of Sac Diameter Reporting at Long-Term Follow Up

2014, excluding patients without at least 9 month follow up

(your region did not have at least 3 centers with 10 procedures)



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

Vascular Quality Initiative®

Carotid Endarterectomy: Percentage of Patients with LOS>1 Day

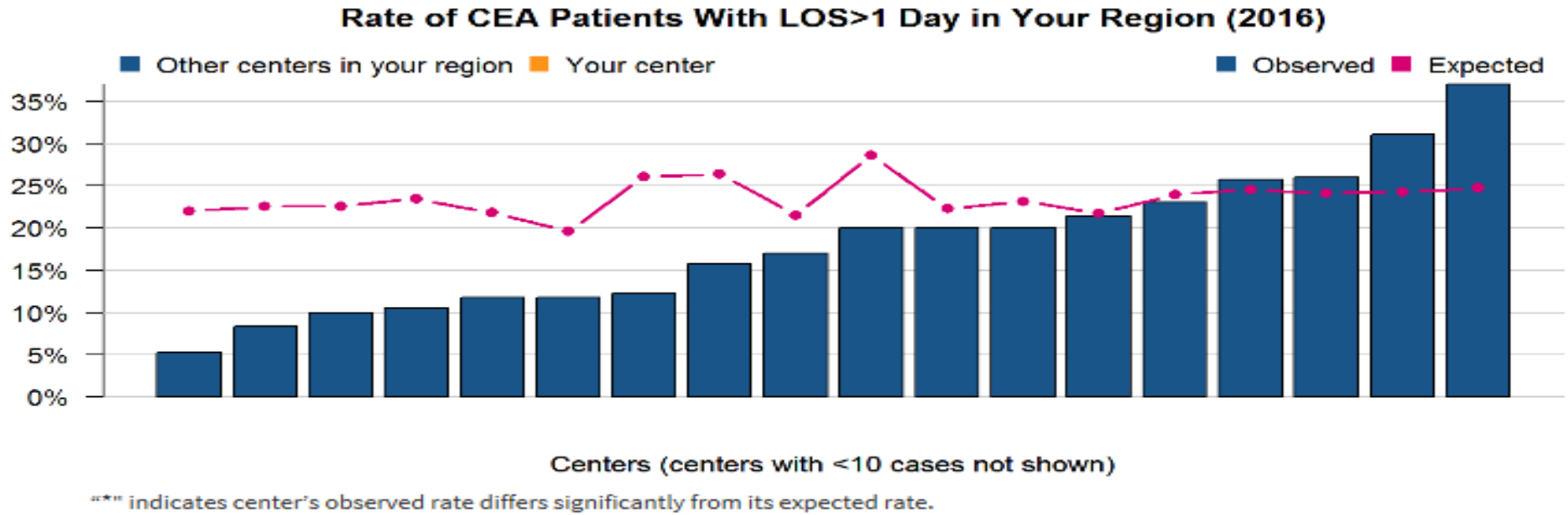
(2016)

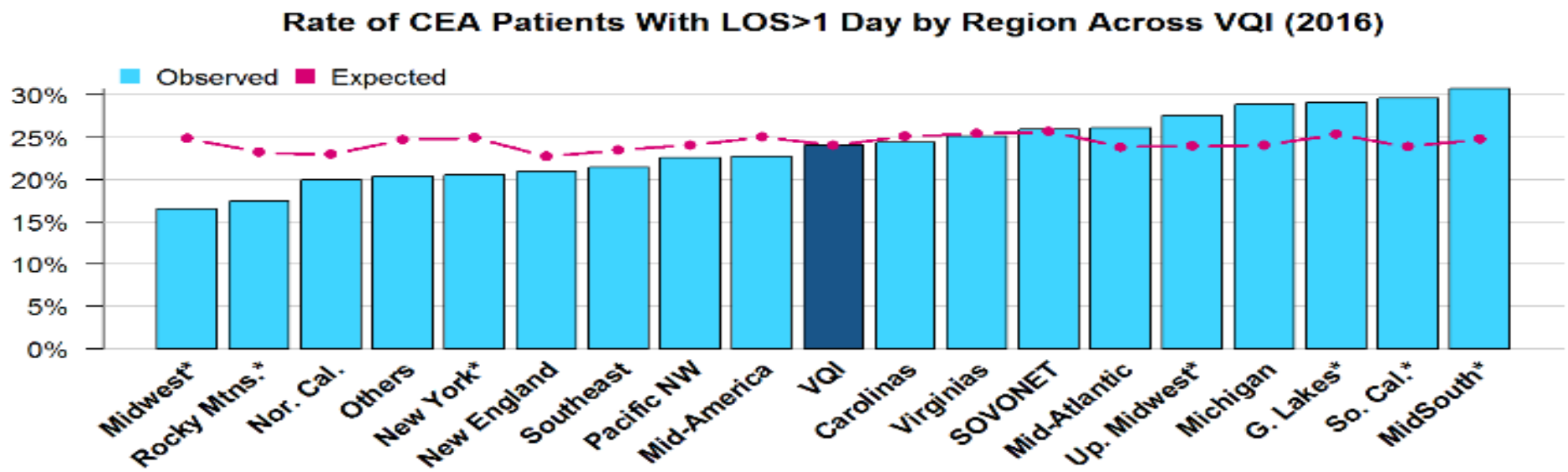
Elective procedures, excluding prior ipsilateral CEA, concomitant CABG, proximal endovascular or other arterial operation, in-hospital death with LOS<=1 day, procedures done on weekends or not done on admission day.

The table below shows the number of CEA procedures meeting inclusion criteria that were in the VQI as of Jan. 1, 2017, and the observed and expected rates of those cases with LOS>1 Day.

	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria	765	10108
Observed rate of LOS>1 day among procedures meeting inclusion criteria	22%	24%
Number of procedures with complete data*	704	9606
Observed rate of LOS>1 among cases with complete data	21%	24%
Expected rate of LOS>1 among cases with complete data*	24%	NA
P-value for comparison of observed and expected rates	0.2	NA

Vascular Quality Initiative®





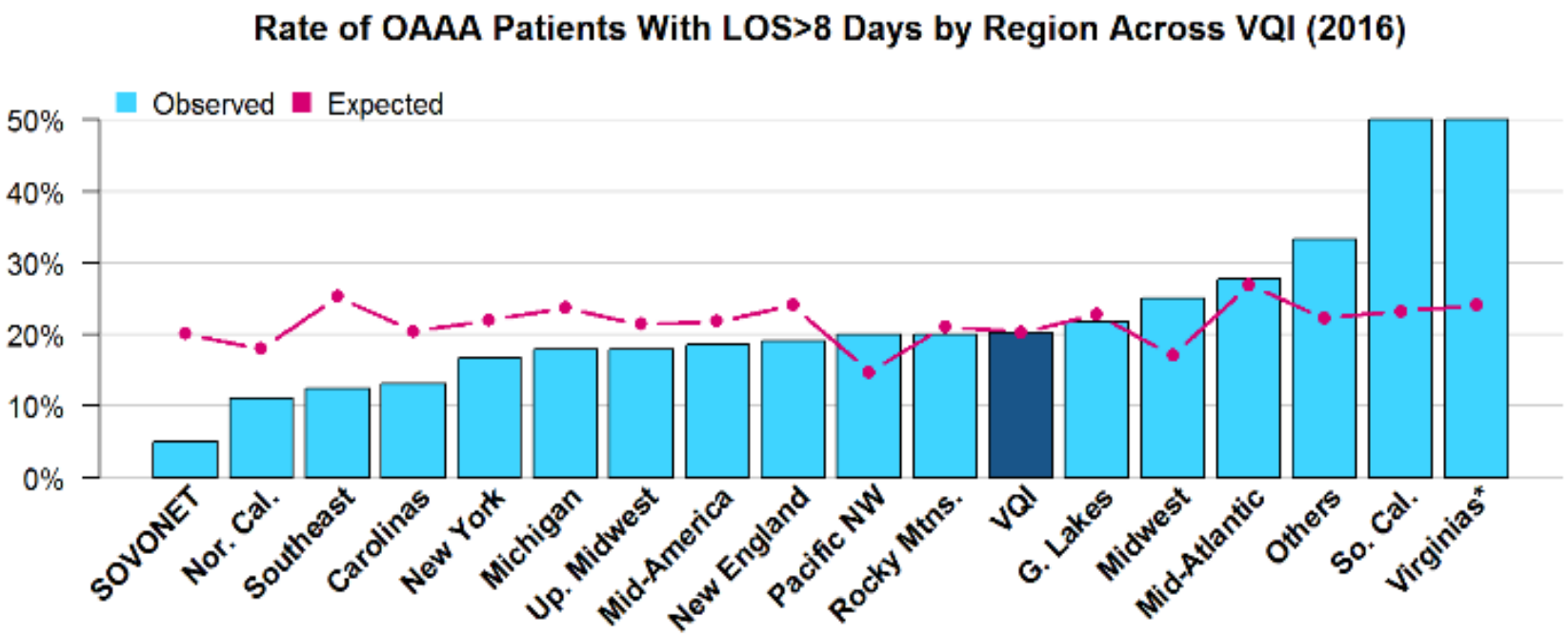
Vascular Quality Initiative®

OAAA Repair: Percentage of Patients with LOS>8 Days (2016)

Excludes ruptured aneurysms and in-hospital deaths with LOS<=8 days, procedures not done on day of admission and weekend procedures

The table below shows the number of OAAA procedures meeting the inclusion criteria that were in the VQI as of Jan. 1, 2017, and the observed and expected rates of those cases with LOS>8 Days.

(your region did not have at least 3 centers with 10 procedures)



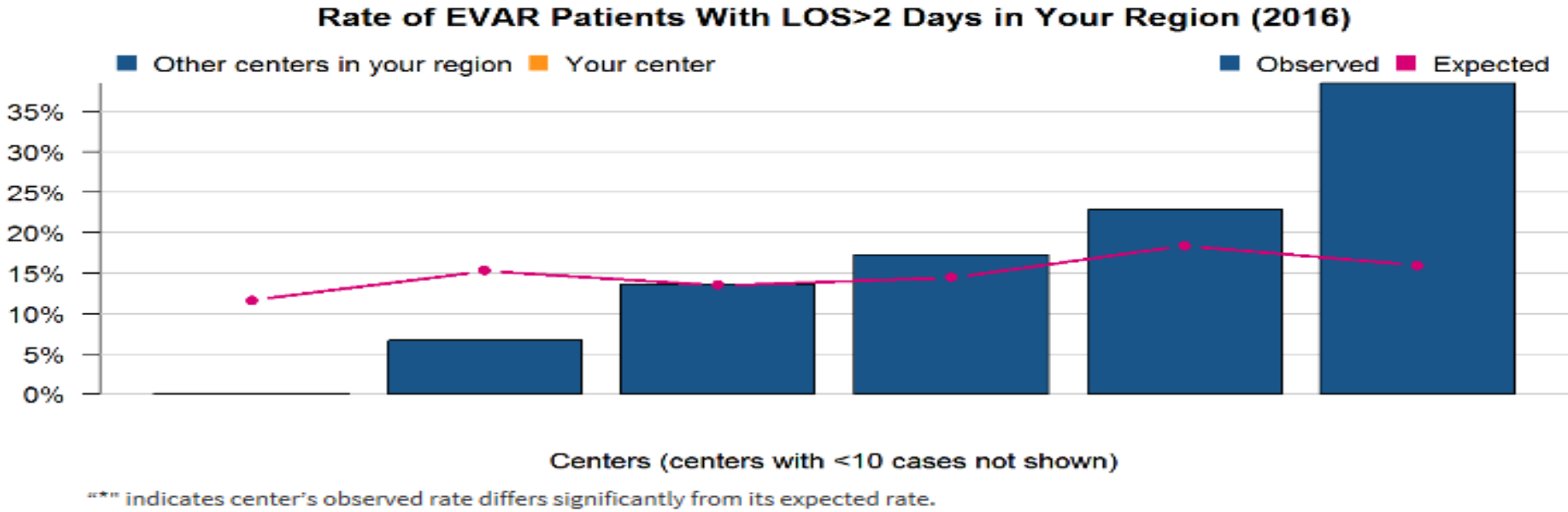
Endovascular AAA Repair: Percentage of Patients with LOS>2 Days (2016)

Excludes ruptured aneurysms and in-hospital deaths with LOS<=2 days, patients with prior aortic surgery, procedures not done on day of admission and weekend procedures

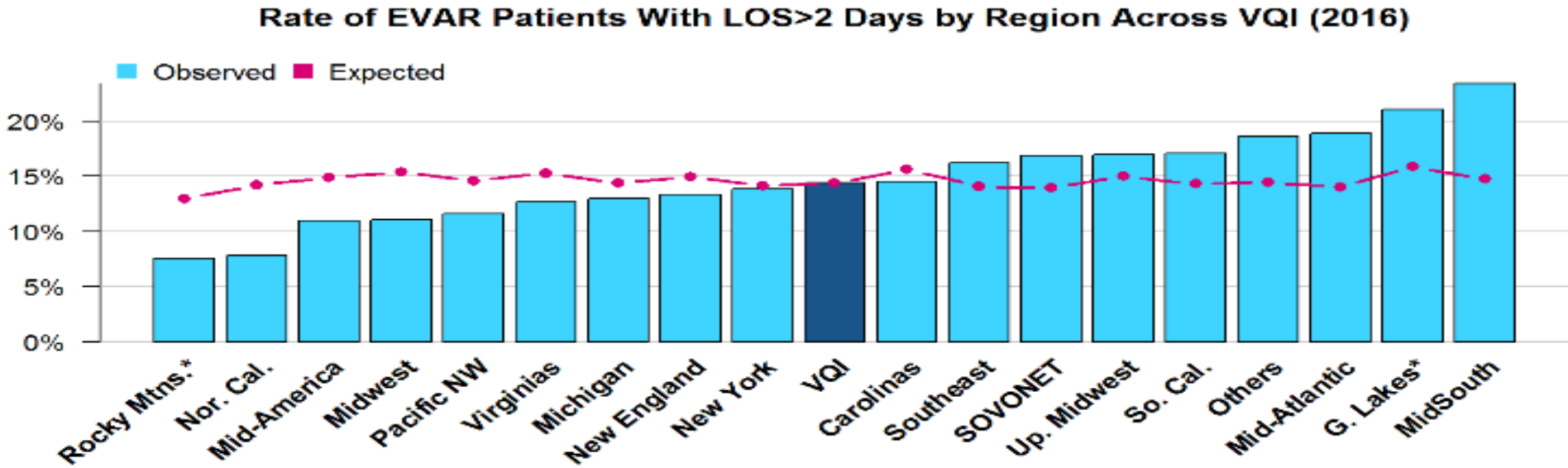
The table below shows the number of EVAR procedures meeting the inclusion criteria that were in the VQI as of Jan. 1, 2017, and the observed and expected rates of those cases with LOS>2 Days.

	Your Region	VQI Overall
Number of EVAR procedures meeting inclusion criteria	260	4194
Observed rate of LOS>2 days among procedures meeting inclusion criteria	17%	14%
Number of procedures with complete data*	216	3905
Observed rate of LOS>2 among cases with complete data	16%	14%
Expected rate of LOS>2 among cases with complete data*	14%	NA
P-value for comparison of observed and expected rates	0.38	NA

Vascular Quality Initiative®



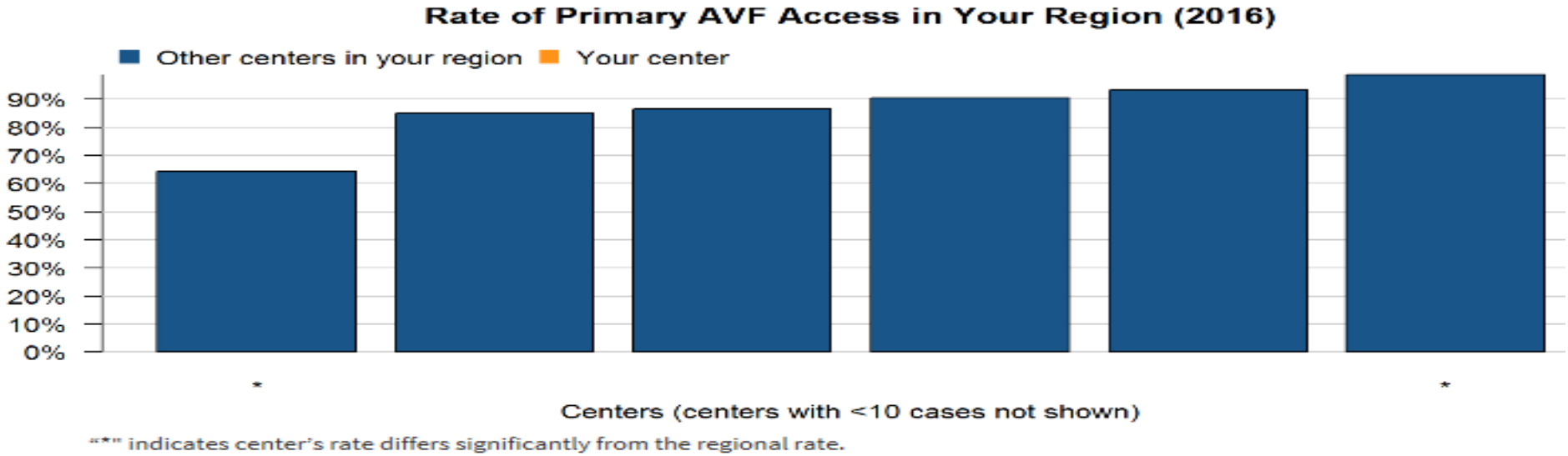
"*" indicates center's observed rate differs significantly from its expected rate.

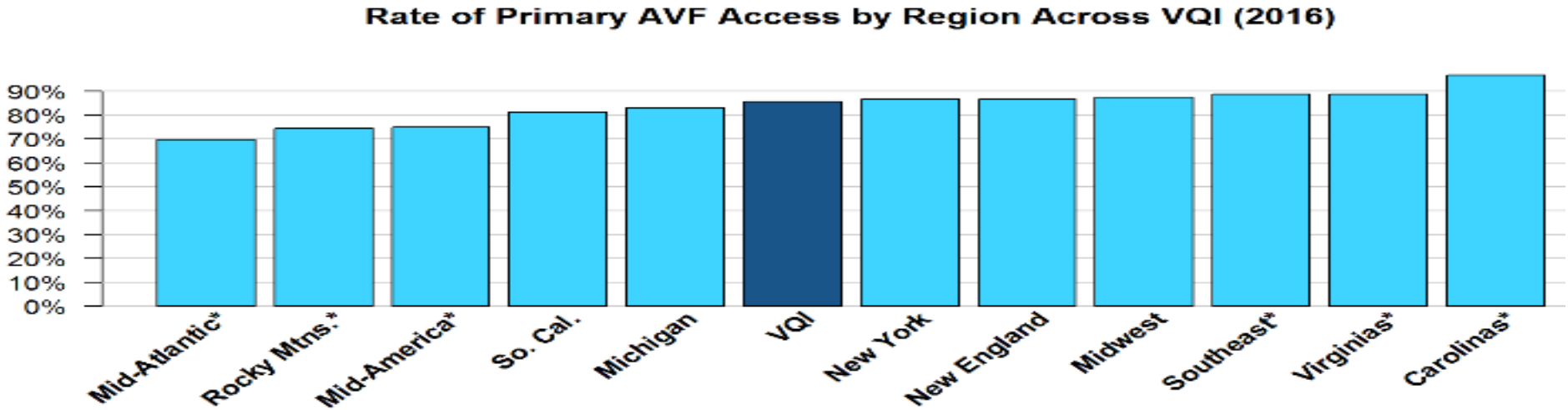


Vascular Quality Initiative®

Hemodialysis Access: Percentage of Primary AVF vs. Graft(2016)

Excludes patients with previous access procedure in the same arm





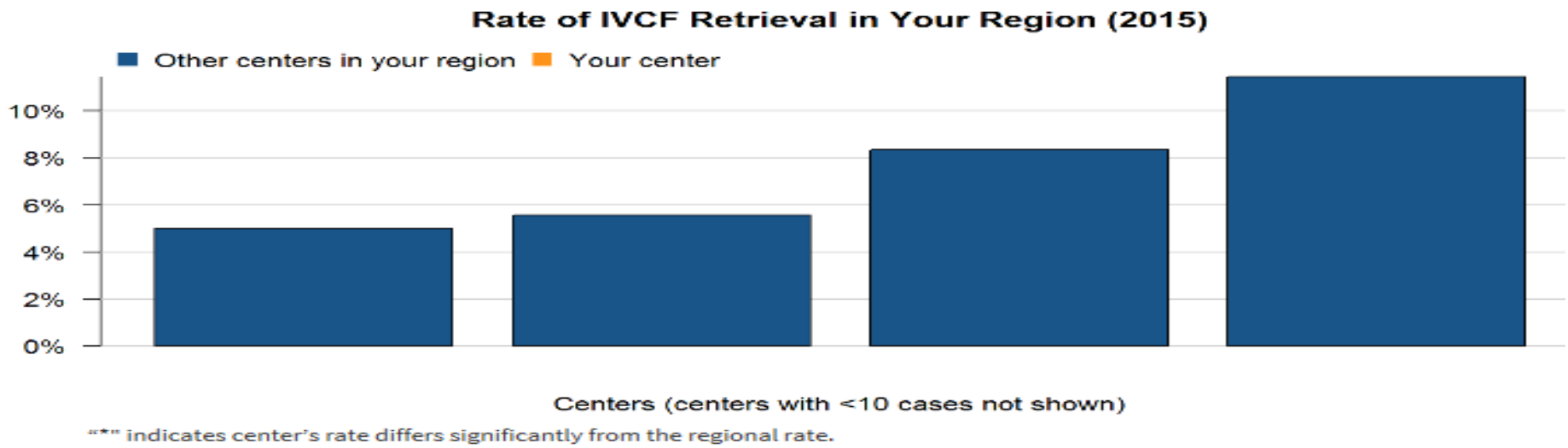
IVCF: Percentage of Temporary Filters With Retrieval or Attempt at Retrieval (2015)

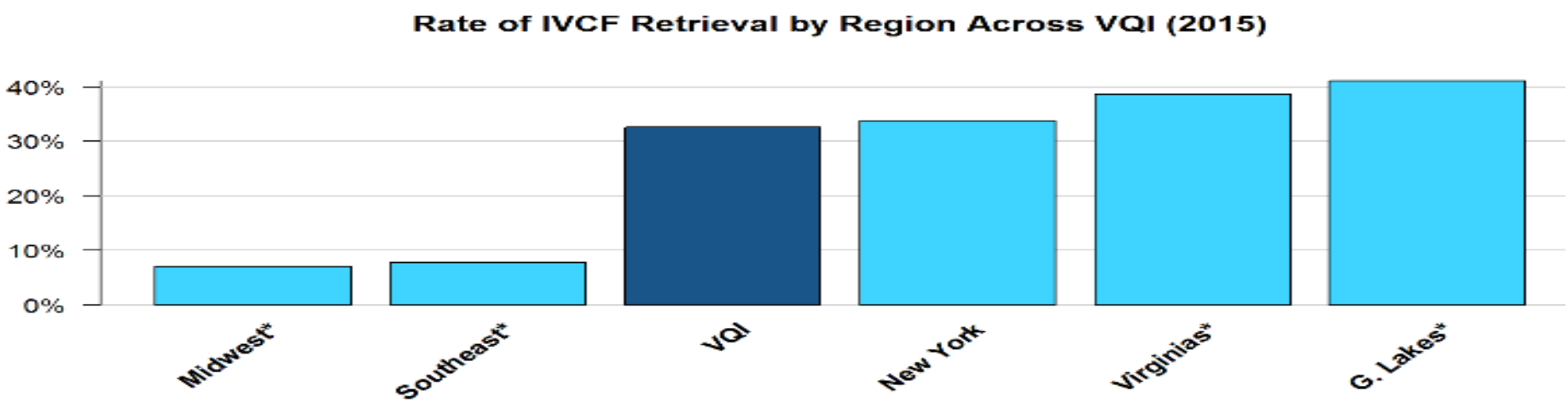
Excludes patients with permanent filters and patients who have died since discharge
The table below shows the number of IVCF procedures meeting the inclusion criteria that were in the VQI as of Jan. 1, 2017, and the percentage of those cases in which the filter was retrieved, or an attempt was made to retrieve it, at any time post-procedure

	Your Region	VQI Overall
Number of access procedures meeting inclusion criteria	242	1562
Percentage with filter retrieval, or attempt at retrieval	8%	33%

Vascular Quality Initiative®

IVCF: Percentage of Temporary Filters With Retrieval or Attempt at Retrieval (2015)



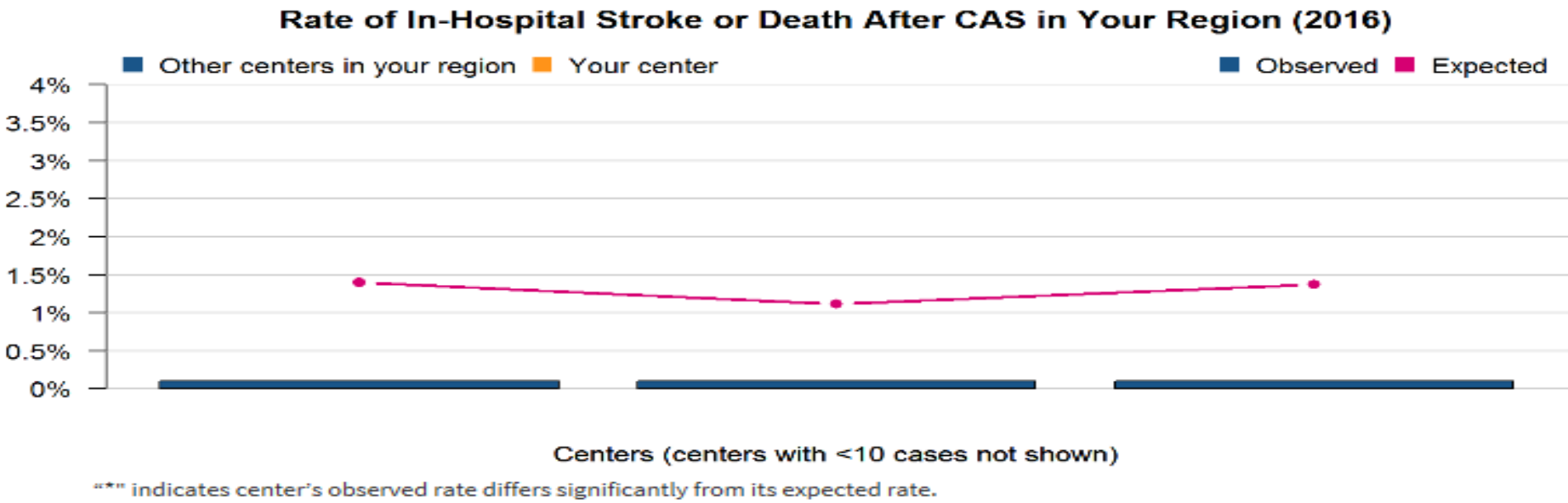


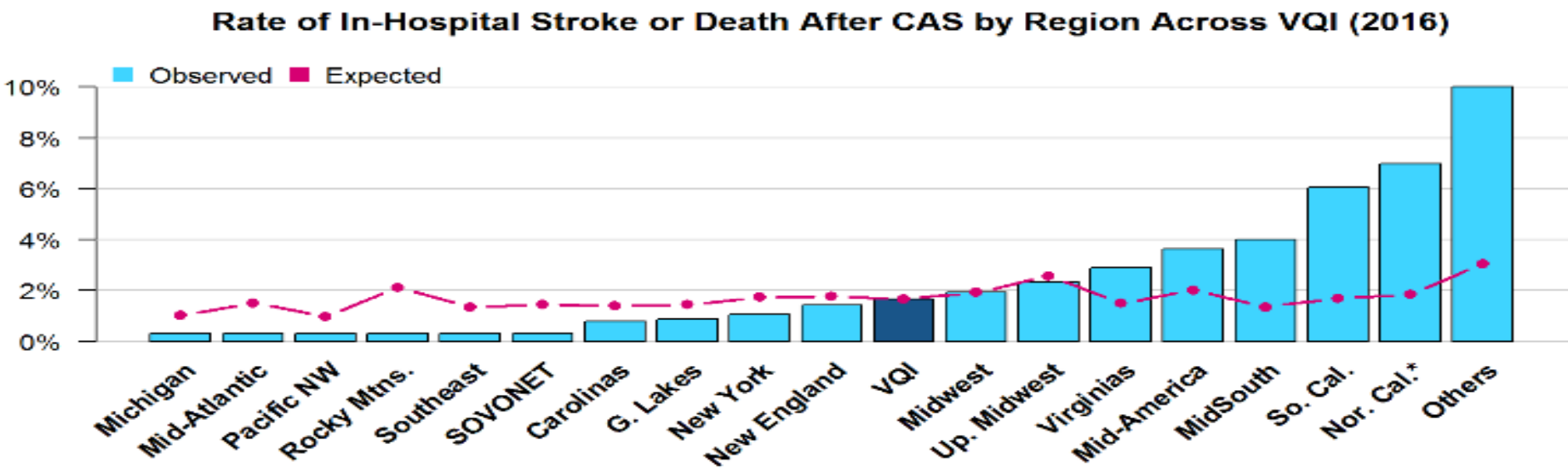
Artery Stent: Stroke or Death in Hospital (2016)

ocedures, excluding prior ipsilateral CAS, and dissection,
d "other" lesion types
elow shows the number of CAS procedures meeting the
iteria that were in the VQI as of Jan. 1, 2017, and the
nd expected rates of in-hospital stroke or death for those cases.

	Your Region	VQI Overall
Number of CAS procedures meeting inclusion criteria	90	1708
Observed rate of stroke or death among procedures meeting inclusion criteria	0%	1.6%
Number of procedures with complete data*	87	1610
Observed rate of stroke or death among cases with complete data	0%	1.7%
Expected rate of stroke or death among cases with complete data*	1.3%	NA
P-value for comparison of observed and expected rates	0.63	NA

Vascular Quality Initiative®





Vascular Quality Initiative®

Carotid Endarterectomy: Stroke or Death in Hospital (2016)

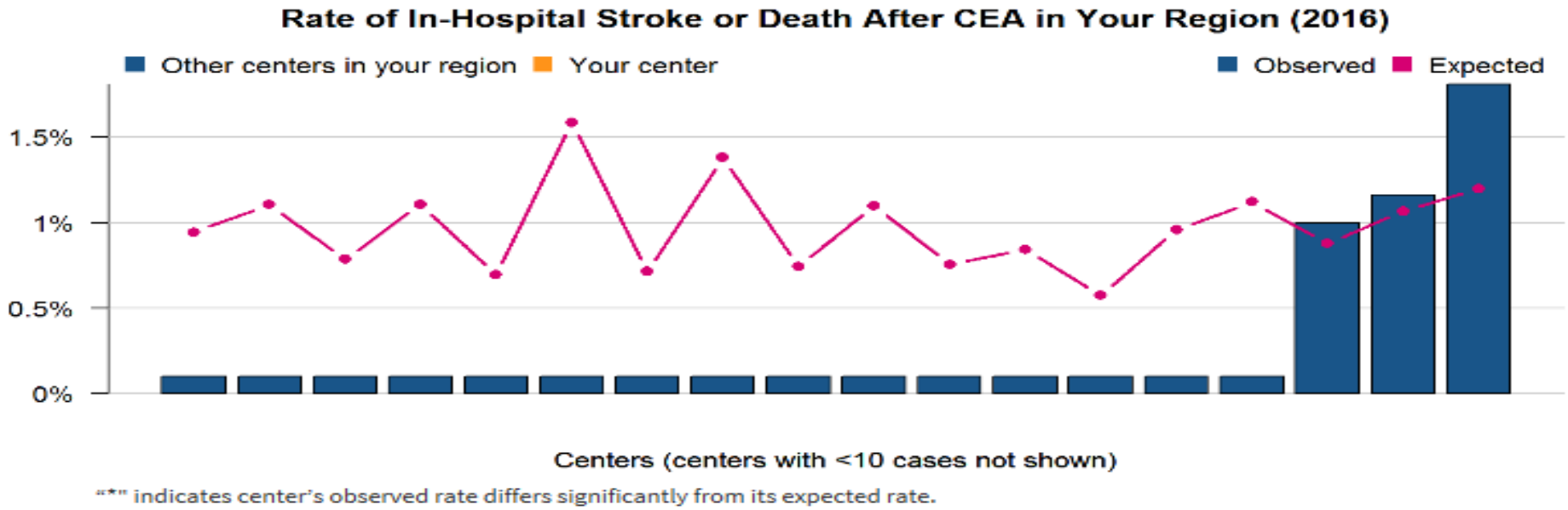
Elective procedures, excluding prior ipsilateral CEA and concomitant CABG, endovascular or other arterial procedure

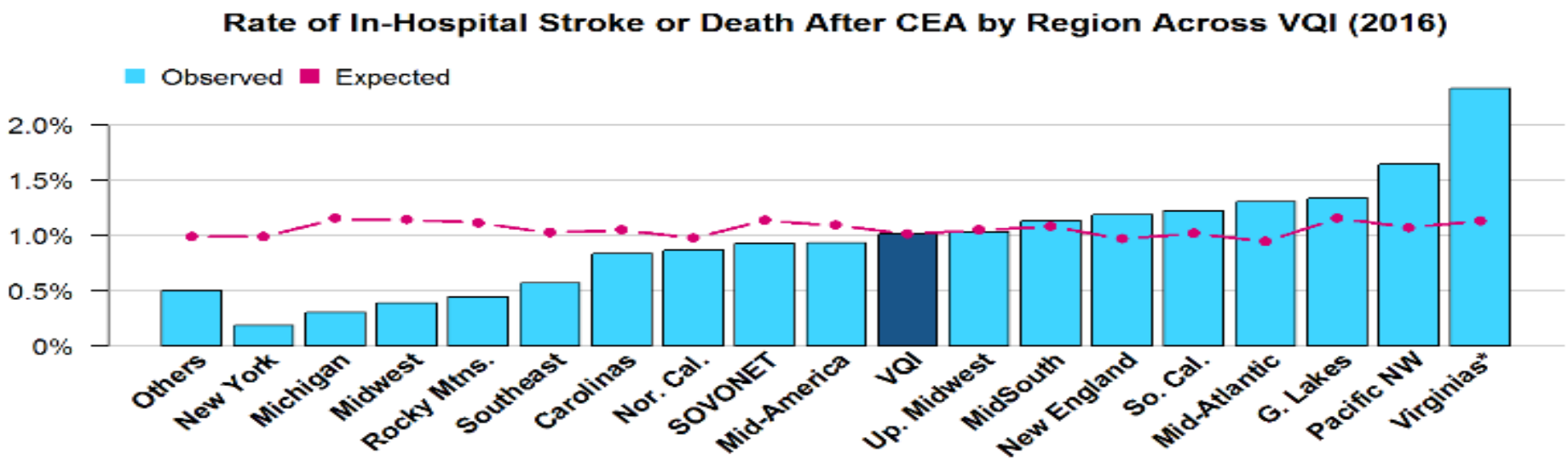
The table below shows the number of CEA procedures meeting the inclusion criteria that were in the VQI as of Jan. 1, 2017, and the observed and expected rates of in-hospital stroke or death for those cases

	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria	947	11302
Observed rate of stroke or death among procedures meeting inclusion criteria	0.5%	1%
Number of procedures with complete data*	882	10751
Observed rate of stroke or death among cases with complete data	0.6%	1%
Expected rate of stroke or death among cases with complete data*	1%	NA
P-value for comparison of observed and expected rates	0.24	NA

SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

Vascular Quality Initiative®



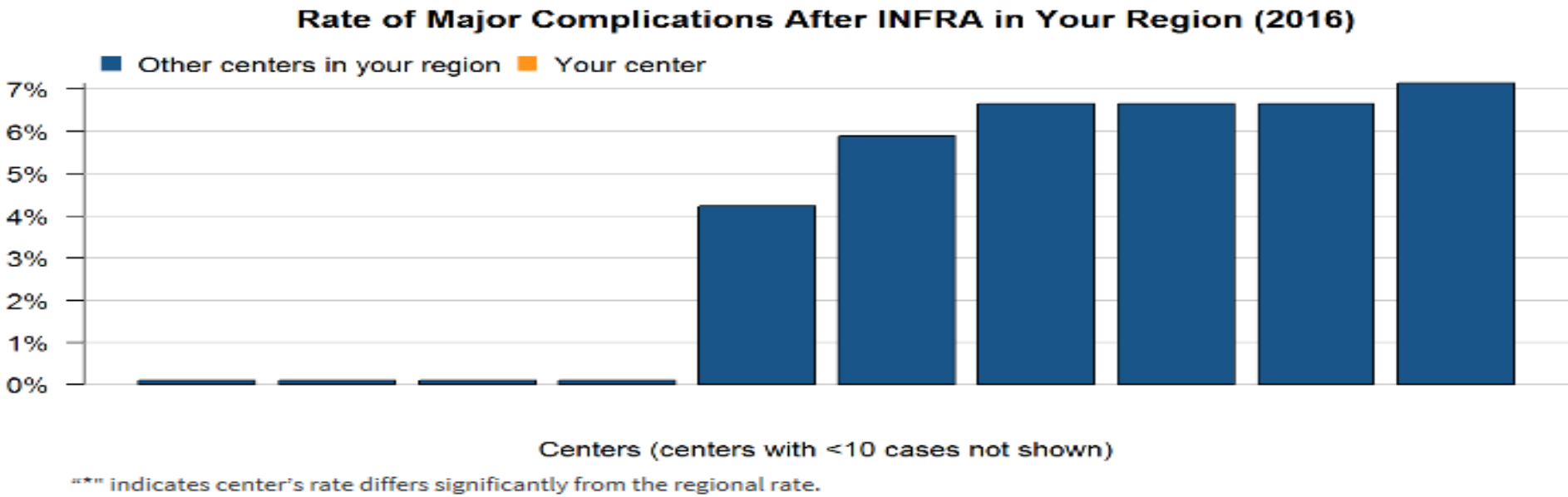


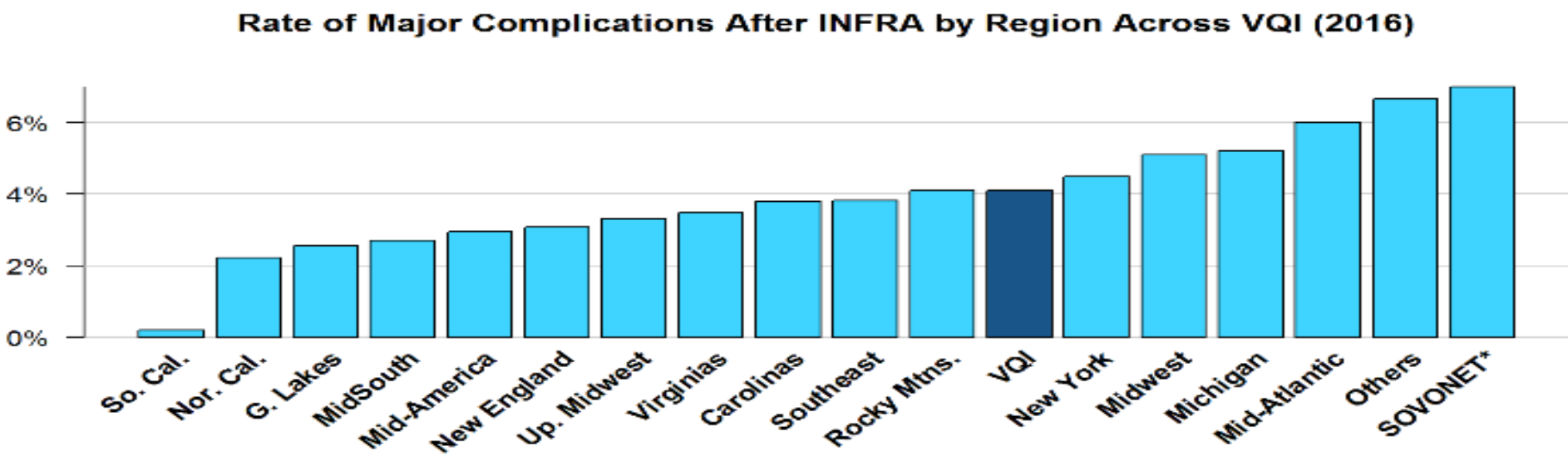
Infrainguinal Bypass: Rate of Major Complications (2016)

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.
The table below shows the number of INFRA cases with indication of rest pain or tissue loss that were in the VQI as of Jan. 1, 2017, and the percentage of those cases that resulted in in-hospital death, ipsilateral amputation or graft occlusion.

	Your Region	VQI Overall
Number of access procedures meeting inclusion criteria	288	3242
Percentage with major complications after INFRA	3.8%	4.1%

Vascular Quality Initiative®



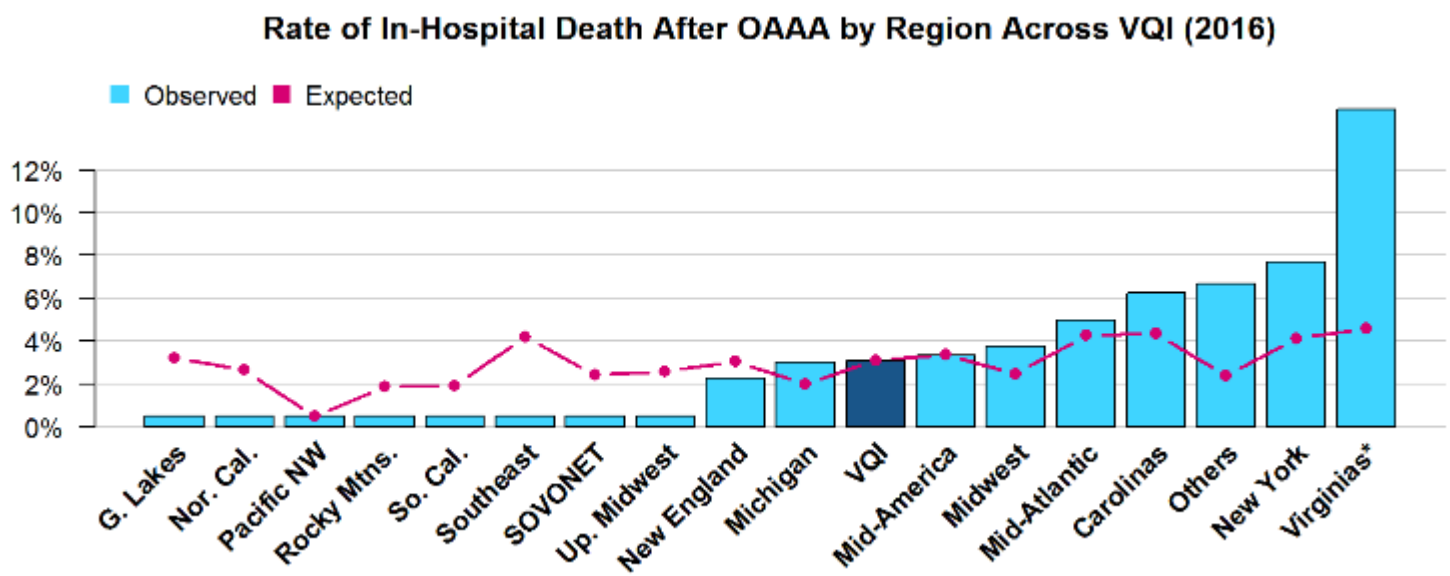


Vascular Quality Initiative®

Open Non-ruptured AAA: In hospital Mortality (2016)

Elective procedures, excluding patients with prior aortic surgery, concomitant renal, infrainguinal or other abdominal procedures, and procedures performed on the weekend.

(your region did not have at least 3 hospitals with 10 procedures)



SVS Society for Vascular Surgery · m2s · Society for Vascular Medicine

Governing Council Update:
Yazan Duwayri, MD

GC meeting at VEITH

- Strategic Planning Summary
  - National Quality Projects
  - Defining the Value of VQI to SVS Members
  - Data Integrity
  - Focus on MIPS
  - Work with SVS and the Clinical Practice Committee on Appropriateness

- M2S Update
  - CAS Revisions
  - Work with Medstreaming on Data Integration
  - Work with the PSO on MIPS/MACRA

GC meeting at VEITH

- Device Identification Sub-Committee
  - New policy for the release of BDS files with Device Identifiers
  - Would need an attestation that research was free of conflicts
  - Research would need to be reviewed before Identifiers would be granted
  - Need to work on Communications with Industry, prior to Publication

- Potential New Projects
  - EVAR Cost Study with MedAssets/Visient
  - Venous Stenting Registry
  - US News and World Report

Arterial Quality Council Update:
Adam Beck, MD

VQI Committee Activities – Arterial Quality Committee

The Arterial Quality Committee (AQC) discussed term limits and succession planning for VQI Registry Chairs and Vice Chairs and recommended:

- Three year terms renewable every year for one year
- The Vice Chair should be prepared to accept the Chair position when the Chair steps down
- The Chair can rejoin the committee after stepping down
- The AQC Chair has the right to ask a Chair or Vice Chair to step down if the Registry Chair or Vice Chair is unable to fully participate

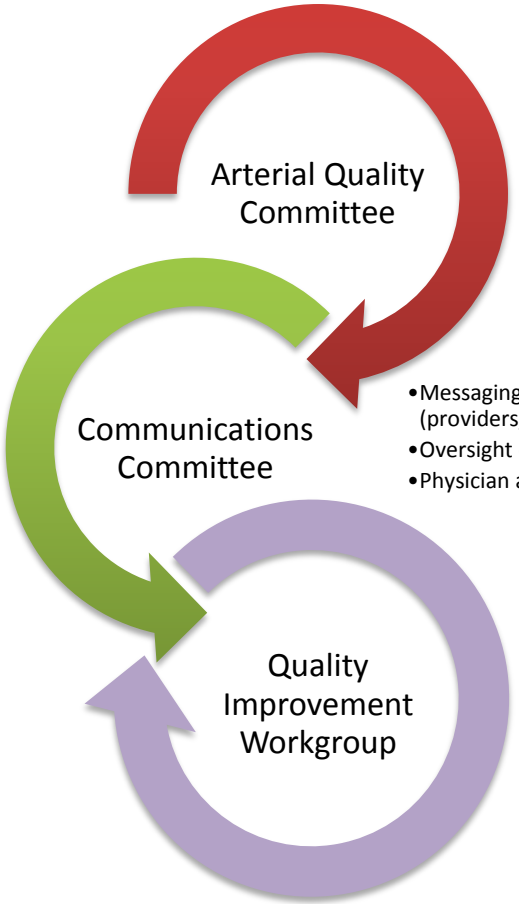
Registry Chairs were requested to examine existing research projects to help identify two to three quality improvement projects that may lead to best practice recommendations for procedures included in each Registry.

Implementation of National QI Projects:

- **Three VQI committees** working on the National QI project rollout of improving discharge medication and EVAR LTFU imaging rates.
- Provide physician specific reports and COPI reports for discussion at regional meetings
- Identify high performing centers
- Seek industry funding for EVAR LTFU imaging once a plan of work has been completed.
- **Publication** of National QI projects in Feb 22nd issue of *Vascular Specialist*

PSO National QI Project Committee Process

SVS PSO
- Identify high performing centers
- **Provide input to/from regional meetings**
- Develop educational resources
- Develop COPI and Physician Reports
- Align with MIPS/MACRA
- Track successes



- Goals, measures, definitions, benchmarks
- Analysis of results
- QI bundles (recommended clinical practices)
- Outcomes of interest to payers, administrators
- Recommended practices

- Messaging to key stakeholders (providers, patients, administrators)
- Oversight of articles, press releases
- Physician and hospital engagement

- QI implementation tools
- 'How-To' presentations
- Expert guidance for user groups

Implementation of National QI Projects:

Later Steps

- Planned VQI publication describing outcomes of patients with and without EVAR follow-up and imaging
- Registry changes: Automatic push reports that provide centers with information on patients needing follow-up imaging
- Incorporate QI project participation as part of the Participation Awards. Inform VQI members that adding QI project participation as part of the Awards program is being considered.
- Medicare integration/query to determine if imaging is being done elsewhere, but not entered in the VQI registry.

COPI and Physician Reports

- In addition to the spring and fall regional reports, this year we have published three COPI reports:
  - 30-day stroke and 1-year mortality after CEA
  - 30-day stroke or 1-year mortality after CAS
  - COPI report on hematoma after PVI
- We have also published three surgeon-level reports:
  - Percentage of high-risk patients receiving CEA
  - Percentage of patients receiving follow-up imaging after EVAR
  - Surgeon-level report on percentage of high-risk patients receiving CAS
- 2017 Plan to repeat previous reports:
  - First one is CEA LOS

Research Advisory Council Update: Adam Beck, MD

National Research Process

http://www.vascularqualityinitiative.org/vqi-resource-library/quality-research/

Approved Project List – as of 12/13/2016

- To submit a proposal to be considered for the National RAC, please follow the link below and select "PSO National RAC – MONTH Proposal Submission.

http://abstracts123.com/svs1/meetinglogin

National Research Process

Proposal Submissions

April 2017

Call for Proposals: February 14, 2017
Due Date: Midnight March 27, 2017
Meeting: April 10, 2017
Notification Sent: April 11, 2017

June 2017 – Dates Subject to Change

Call for Proposals: April 11, 2017
Due Date: May 29, 2017
Meeting: June 12, 2017
Notifications Sent: June 13, 2017

Regional Research Projects:

- Any new ideas?