

Southeastern Vascular Study Group

April 14, 2023
1 PM – 3:30 PM (ET)
Remote

Meeting Attendance Credit

Before we get started...

Please sign in using your Full Name (First and Last).

In-Person Attendees – Scan the QR code shown and sign in

Remote Attendees – See below instructions (#1-#3)

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



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

****SPECIAL NOTE: ALL ATTENDEES must have an ACTIVE PATHWAYS user account to get attendance credit!!!**

Agenda-SEVSG-April 14, 2023

Time	Topic	CE Credit
1:00 pm	Welcome Regional Data Review –Young Erben, MD, SEVSG Medical Director Learning Objectives: <ul style="list-style-type: none">• Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process).• Interpret and compare each centers' VQI results to regional and national benchmarked data.• Learn, through group discussion the VQI regional results to improve the quality of vascular health care by monitoring measurable performance indicators, SVS PSO evidence-based research, and outcomes.• Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care.	Yes
2:00 pm	Regional QI Proposal – Young Erben, MD, SEVSG Medical Director Learning Objectives: <ul style="list-style-type: none">• Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process).• Interpret and compare each centers' VQI results to regional and national benchmarked data.• Learn, through group discussion the VQI regional results to improve the quality of vascular health care by monitoring measurable performance indicators, SVS PSO evidence-based research, and outcomes.• Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care.	Yes
2:30 pm	Break	No

Agenda (con't)

Time	Topic	CE Credit
2:35 pm	National VQI Update – Betsy Wymer, DNP, RN, RN-BC, PSO Quality Director Learning Objectives: <ul style="list-style-type: none">• Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process).• Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care.	Yes
3:05 pm	AQC Update –Emily Spangler, MD	No
3:10 pm	VQC Update –Olamide Alabi, MD	No
3:15 pm	RAC Update –Susan Shafii, MD	No
3:20 pm	Governing Council Update –Young Erben, MD	No
3:25 pm	Case Presentations	No
3:30 pm	Open Discussion/Next Meeting/Meeting Evaluation	No

Agenda-SEVSG-April 14, 2023

SEVSG Regional Meeting Spring 2023

Theme: Let's Get Trainees Involved

1300 **Welcome and Introductions**

1305 **Regional Data Review**

Dr. Young Erben, Regional Medical Director

Case Presentations During and After Regional Data Review:

Brian Gilmore, MD Vascular Surgery Fellow
University of Florida - Gainesville

The Contemporary Impact of the Temporal Trends for AAA Care in the United States

Adam Banks, MD Vascular Surgery Integrated Resident
University of Alabama – Birmingham

Readmissions after cEVAR/TEVAR in VQI/VISION

Michael Fassler, MD General Surgery Resident
University of Florida - Gainesville

Frequency of Inappropriate Endovenous Ablation Therapy within the VQI Varicose Vein

Sara Lee, MD Candidate 2024, Mayo Clinic Alix School of Medicine, Florida Campus

State of Gender-Based Microaggressions Among Surgeons and Development of Simulation Workshops for Addressing Microaggressions for Surgical Trainees and Students

Agenda-SEVSG-April 14, 2023

1425 Regional QI Proposal

Dr. Young Erben, Regional Medical Director

1430 National VQI Updates

Dr. Betsy Wymer, SVS PSO Director of Quality

1500 Committee Updates

ACQ Update – Dr. Emily Spangler

VQC Update – Dr. Olamide Alabi

RAC Update – Dr. Susan Shafii

VQC RAC Update – Dr. Olamide Alabi

GC Update – Dr. Young Erben/Dr. Betsy Wymer

1515 Open Discussion/Next Meeting/Meeting Evaluation

1530 Closing Remarks

No Disclosures

Welcome and Introductions

New =7 Existing = 127

AdventHealth Celebration
AdventHealth Daytona Beach
AdventHealth Ocala
AdventHealth Orlando
AdventHealth Tampa
AdventHealth Waterman
Albany Vascular Specialist Center
Ascension Sacred Heart Hospital Bay
Augusta University Medical Center, Inc.
Baptist Hospital of Miami
Bartow Regional Medical Center
Bayfront Health Seven Rivers
Bethesda Hospital East
Bethesda Hospital West
Birmingham St. Vincent's East Hospital
Blake Medical Center
Boca Raton Regional Hospital
Brookwood Baptist Medical Center
Broward Health Medical Center
Broward Health North Medical Center
Cape Canaveral Hospital
Cape Coral Hospital
Capital Regional Medical Center
Cardiothoracic and Vascular Surgical Associates
Cleveland Clinic Florida - Weston Hospital
Cleveland Clinic Martin North Hospital
Cleveland Clinic Tradition Hospital
Coastal Vascular & Interventional, PLLC
Coastal Vein and Vascular Specialists
Cobb Hospital
Coral Gables Hospital
Corporación Centro Cardiovascular de Puerto Rico y del Caribe
DCH Regional Medical Center
Decatur Morgan Hospital

Delray Medical Center
Doctors Hospital of Augusta
Doctors Hospital of Sarasota
East Alabama Medical Center
Emory St. Joseph's Hospital
Emory University Hospital
Fawcett Memorial Hospital
Flagler Hospital
Florida Hospital Zephyrhills
Floyd Medical Center
Grady Memorial Hospital (GA)
Gulf Coast Medical Center
Gulf Coast Regional Medical Center
Halifax Hospital Medical Center
HCA Florida Aventura Hospital
HCA Florida Brandon Hospital
HCA Florida Lawnwood Hospital
HCA Florida South Tampa Hospital
Health Park Medical Center
Holmes Regional Medical Center
Holy Cross Hospital
Jackson Memorial Hospital
Kennestone Hospital
Lakeland Regional Medical Center
Largo Medical Center
Lyerly Baptist Neurosurgery
Manatee Memorial Hospital
Marshall Medical North
Marshall Medical South
Mayo Clinic Florida
Mease Countryside Hospital
Medical Center Navicent Healthcare
Medical Center of Trinity
Memorial Health University Medical Center
Memorial Hospital Jacksonville

Memorial Hospital Pembroke
Memorial Hospital West
Memorial Regional Hospital
Miami Vein Center
Mobile Infirmary
Morton Plant Hospital
Morton Plant North Bay Hospital
Mount Sinai Medical Center
Naples Community Hospital
North Alabama Medical
North Florida Regional Medical Center
North Fulton Hospital, Inc.
North Okaloosa Medical Center
Northeast Georgia Medical Center, Inc.
Northside Hospital Atlanta
Northside Hospital Cherokee
Northside Hospital Forsyth
Northside Hospital Gwinnett
Ocala Regional Medical Center
Orlando Health, Inc. Dr. P. Phillips Hospital
Orlando Health, Inc. Health Central Hospital
Orlando Health, Inc. Orlando Regional Medical Center
Orlando Health, Inc. South Lake Hospital
Orlando Health, Inc. South Seminole Hospital
Palm Beach Gardens Medical Center
Phoebe Putney Memorial Hospital
Piedmont Athens Regional Medical Center
Piedmont Hospital
Princeton Baptist Medical Center
Providence Hospital (AL)
Redmond Regional Medical Center
Rockledge Regional Medical Center
Sacred Heart Emerald Coast
Sacred Heart Pensacola

Saint Joseph's Hospital
Saint Luke's Memorial Hospital
Sarasota Memorial Hospital
Sarasota Memorial Hospital - Venice Campus
Shelby Baptist Medical Center
South Bay Hospital
South Florida Baptist
South Georgia Medical Center
South Miami Hospital
Southeast Georgia Health System, Inc. - Brunswick Campus
Springhill Medical Center
St. Anthony's Hospital-FL
St. Dominic's Memorial Hospital and Medical Associates
St. Joseph's Hospital North
St. Joseph's Hospital South
St. Joseph's Hospital-FL
St. Vincent's Birmingham
St. Vincent's Medical Center - Clay County
St. Vincent's Medical Center- Riverside
St. Vincent's Medical Center- Southside
Surgical Specialists of Central Florida
Tallahassee Memorial HealthCare, Inc
Tampa General Hospital
Tenet Florida Physicians Services
The Vein and Vascular Institute of Tampa Bay
Tift Regional Medical Center
University Of Alabama Medical Center
University of Florida, Gainesville
University of Miami Hospital and Clinics
Valley Vascular Consultants, P.C.
Winter Haven Hospital

Thank you!
Data Abstractors
Data Managers
Clinicians
PSO Staff
SEVSG Leaders

Region Volume Appendix

Spring 2023

About the Appendix

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

Region Volume Index

Report	Included Cases	Centers with Included Cases	Centers with at least 10 Included Cases	Complete Cases	Centers with Complete Cases	Centers with at least 10 Complete Cases
Procedure Volume	13134	109	87			
Procedure Volume, All Years	84937	121	101			
Long-Term Follow-up	10471	76	68			
Discharge Medications	10945	107	85			
Preop Smoking	8528	107	83			
Smoking Cessation	1538	63	37			
TFEM CAS ASYMP: Stroke/Death	264	40	9	235	40	8
TFEM CAS SYMP: Stroke/Death	201	38	6	188	37	6
TCAR ASYMP: Stroke/Death	1281	83	40	1161	78	39
TCAR SYMP: Stroke/Death	504	73	17	469	71	16
CEA ASYMP: Stroke/Death	1167	49	35	1074	49	35
CEA ASYMP: Postop LOS>1 Day	1164	49	35	1071	49	35
CEA SYMP: Stroke/Death	507	46	19	490	46	19
CEA SYMP: Postop LOS>1 Day	506	46	19	489	46	19
EVAR: Postop LOS>2 Days	543	28	22	515	28	21
EVAR: Sac Diameter Reporting	509	28	20			
EVAR: SVS AAA Diameter Guideline	484	28	20			
TEVAR: Sac Diameter Reporting	124	10	3			
OAAA: In-Hospital Mortality	345	18	7	317	18	7
OAAA: SVS Cell-Saver Guideline	346	19	7			
OAAA: SVS Iliac Inflow Guideline	383	18	7			
PVI CLAUD: ABI/Toe Pressure	1376	41	29			
INFRA CLTI: Major Complications	410	18	14			
SUPRA CLTI: Major Complications	122	16	5			
LEAMP: Postop Complications	116	5	2			
HDA: Primary AVF vs. Graft	438	8	6			
HDA: Ultrasound Vein Mapping	535	9				
HDA: Postop Complications	535	9				
IVCF: Filter Retrieval Reporting	60	5				



The VQI Regional Quality Report is produced semiannually to provide centers and regions targeted, comparative results and benchmarks for a variety of procedures, process measures and postoperative outcomes.

The following updates have been implemented to enhance and improve the Spring 2023 VQI Regional Quality Report:

- **Preop Smoking Report Added** - A preop smoking report is now provided. This report displays center-level, regional, and VQI overall rates of current smoking at time of procedure.
- **Smoking Cessation Report Added** - A smoking cessation report is now provided. This report displays center-level, regional, and VQI overall rates of smoking cessation at follow up.

SEVSG Spring 2023 Regional Report

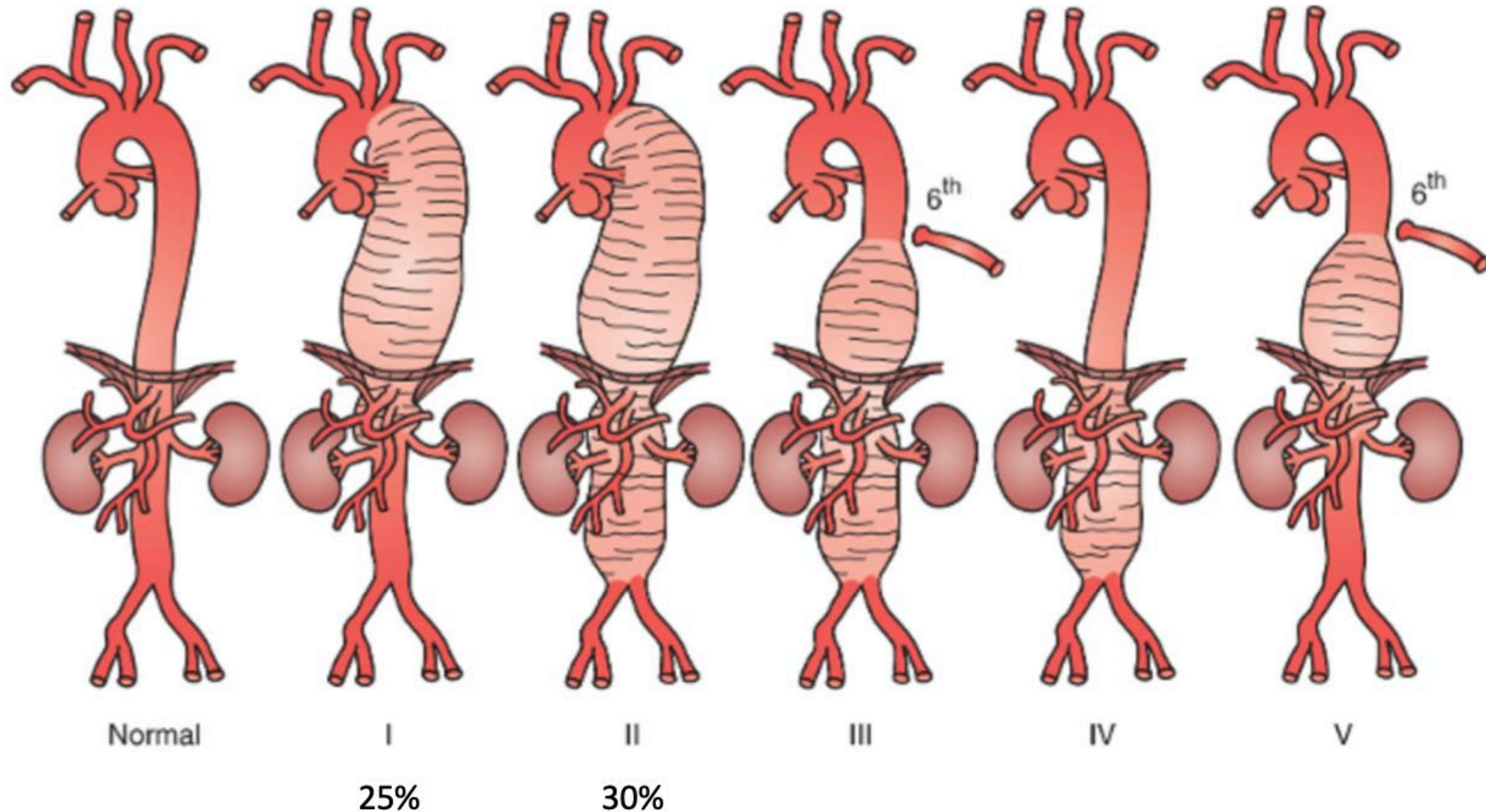
Readmissions Following Endovascular Thoracoabdominal Aortic Repairs in the Vascular Implant Surveillance and Interventional Outcomes Network (VISION)

Banks, CA¹, Spangler, EL¹, Novak, Z¹, Zheng, X², Mao, J²,
Scali, S³, Sutzko, DC¹, McFarland, GE¹, Beck, AW¹

University of Alabama at Birmingham Division of Vascular Surgery and
Endovascular Therapy¹; Weill Cornell Medical College²; University of
Florida Division of Vascular Surgery and Endovascular Therapy³

Introduction: Thoracoabdominal Aortic Aneurysms

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Introduction Continued

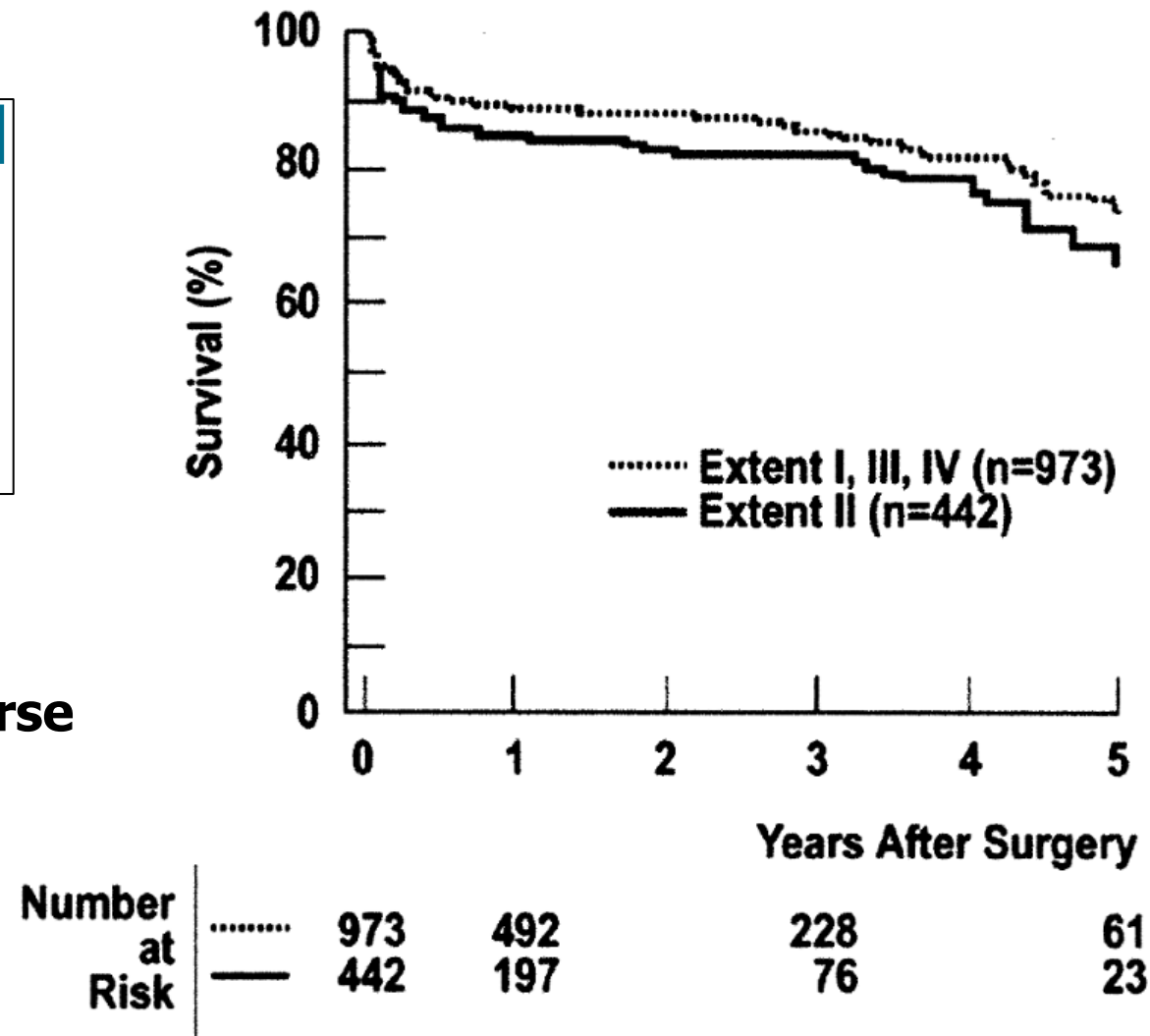
J. MAXWELL CHAMBERLAIN MEMORIAL PAPER

Morbidity and Mortality After Extent II Thoracoabdominal Aortic Aneurysm Repair

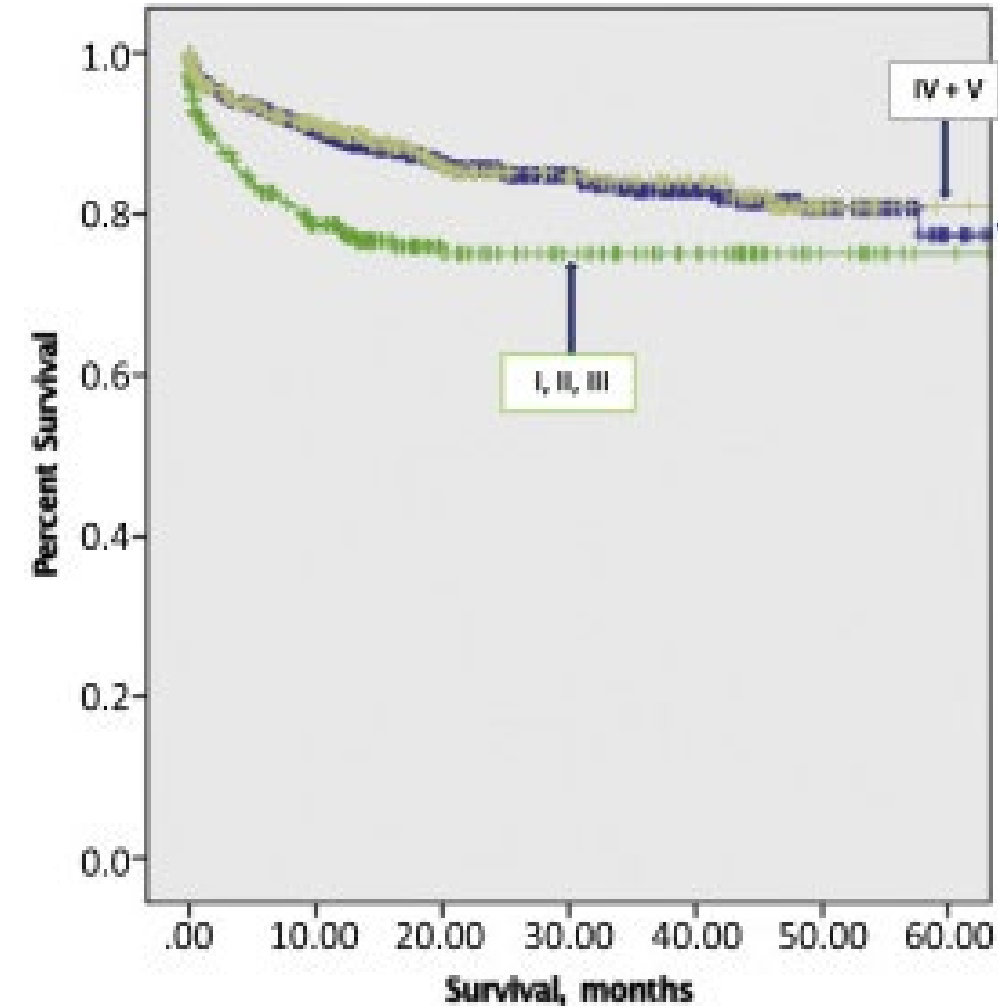
Joseph S. Coselli, MD, Scott A. LeMaire, MD, Lori D. Conklin, MD, Cüneyt Köksoy, MD, and Zachary C. Schmittling, MD

The Michael E. DeBakey Department of Surgery, Division of Cardiothoracic Surgery, Baylor College of Medicine, and The Methodist DeBakey Heart Center, Houston, Texas

- In open thoracoabdominal aneurysm repair, extent of aortic disease is associated with worse overall survival, higher rates of spinal cord ischemia, and renal failure



Introduction Continued



From the Southern Association for Vascular Surgery

Association between thoracoabdominal aneurysm extent and mortality after complex endovascular repair

Ryan T. Heslin, BS,^a Danielle C. Sutzko, MD, MS,^b John Axley, MD,^b Zdenek Novak, MD, PhD,^b Victoria J. Aucoin, MD,^b Mark A. Patterson, MD,^b Benjamin J. Pearce, MD,^b Marc A. Passman, MD,^b Salvatore T. Scali, MD,^c Graeme E. McFarland, MD,^b and Adam W. Beck, MD,^b Mobile and Birmingham, Ala; and Gainesville, Fla

Extent of Aortic Coverage and Incidence of Spinal Cord Ischemia After Thoracic Endovascular Aneurysm Repair

Robert J. Feezor, MD, Tomas D. Martin, MD, Philip J. Hess Jr, MD, Michael J. Daniels, ScD, Thomas M. Beaver, MD, Charles T. Klodell, MD, and W. Anthony Lee, MD

Divisions of Vascular Surgery and Endovascular Therapy, and Thoracic and Cardiovascular Surgery, Department of Surgery, and Division of Biostatistics, Department of Epidemiology and Biostatistics, University of Florida, Gainesville, Florida

- **Increasing extent of aortic coverage in complex endovascular thoracoabdominal aneurysms (TAAA) repair is associated with increased short and long-term mortality as well as increased rates of spinal cord ischemia in previous studies**

Purpose

- Investigate both *overall* and *by extent of coverage* in elective endovascular TAAA repair:
 - **Readmission rates**
 - **Reasons for readmission**
 - **Identify preoperative and pre-discharge variables associated with readmission within 90-days of index procedure**

- **Cohort:**

- Index, elective, non-traumatic endovascular TAAA cases
- 2010-2018
- From VISION (VQI cases with Medicare claims data)

- **Data available:**

- VQI demographics, perioperative events, billable events from Medicare, mortality

Methods

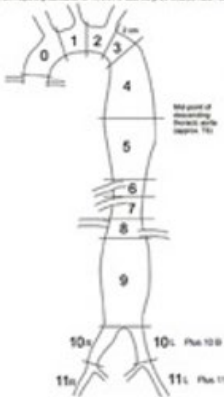
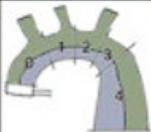


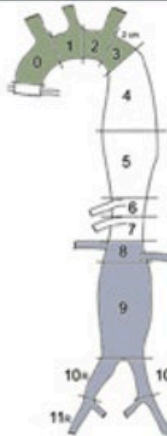
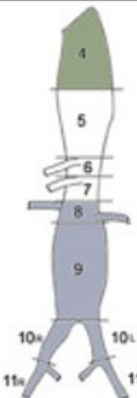
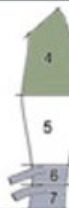
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Exposures:

- Crawford extent of device coverage clustered into **0A or 0B, 1-3, and 4-5**

Outcomes of interest:

- Readmission events** within **90 days** postoperatively
- ICD codes** associated as principal diagnosis with first readmission

Crawford Extent	0A	0B	I	II	III	IV	V
Proximal Landing Zone	0 – 4	0 – 5	0 – 3	0 – 3	4	5	4
Distal Landing Zone	0 – 4	5	6 – 7	8 – 11	8 – 11	6 – 11	6 – 7
Aortic Zones <small>Adapted from Reporting standards for TEVAR, J Vasc Med 2010;13(4):402-408</small>							

Methods

- Surgical Quality Database
- Pre and postoperative variables
- Length to follow-up 9-21 months
- Physicians enter data
- Linked to social security death index

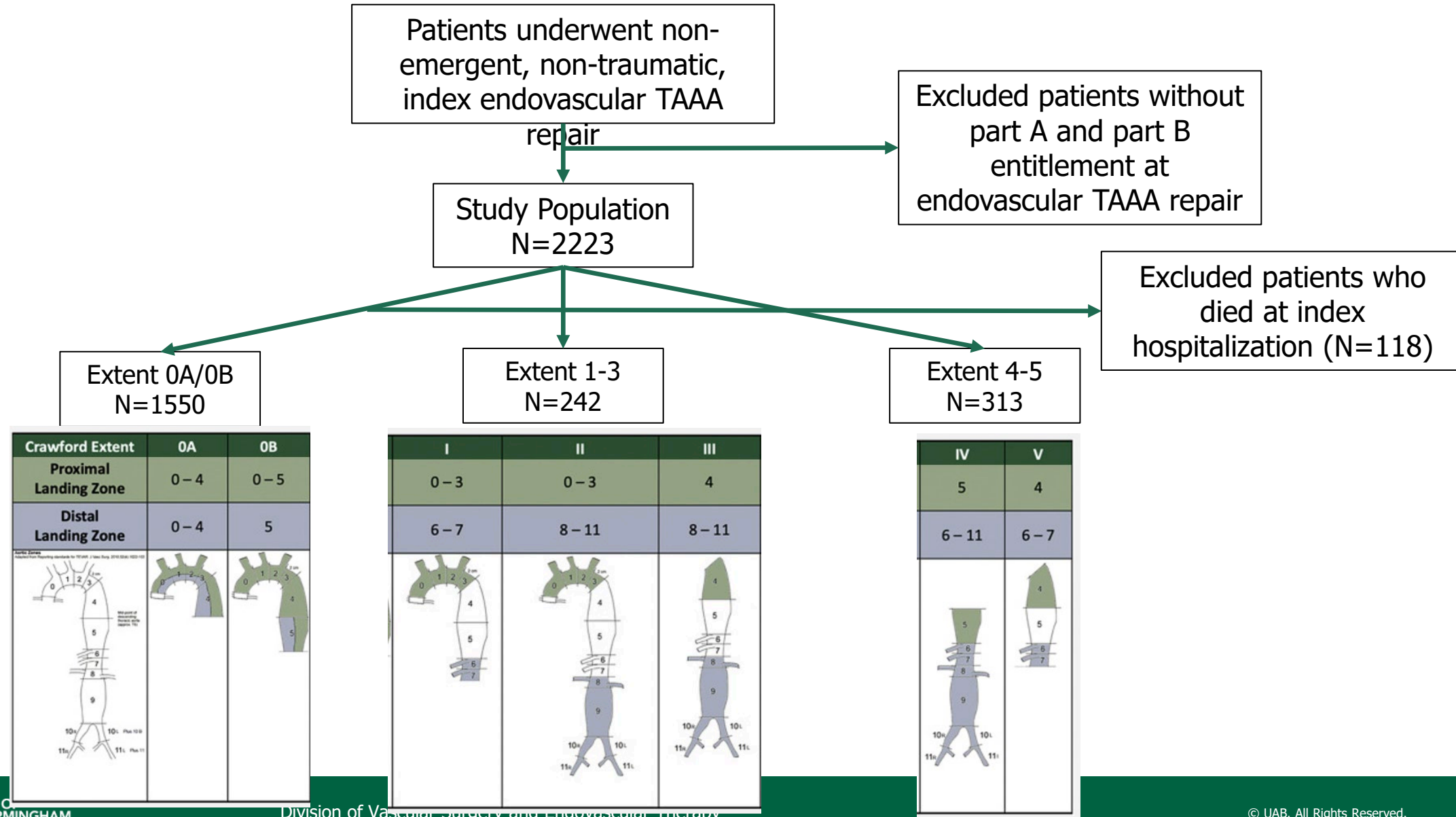
- CPT Codes, billable events
- Connected to readmission as principal diagnosis
- 2010-2018 data for our study

Vascular Quality
Initiative
(VQI)

Medicare Claims

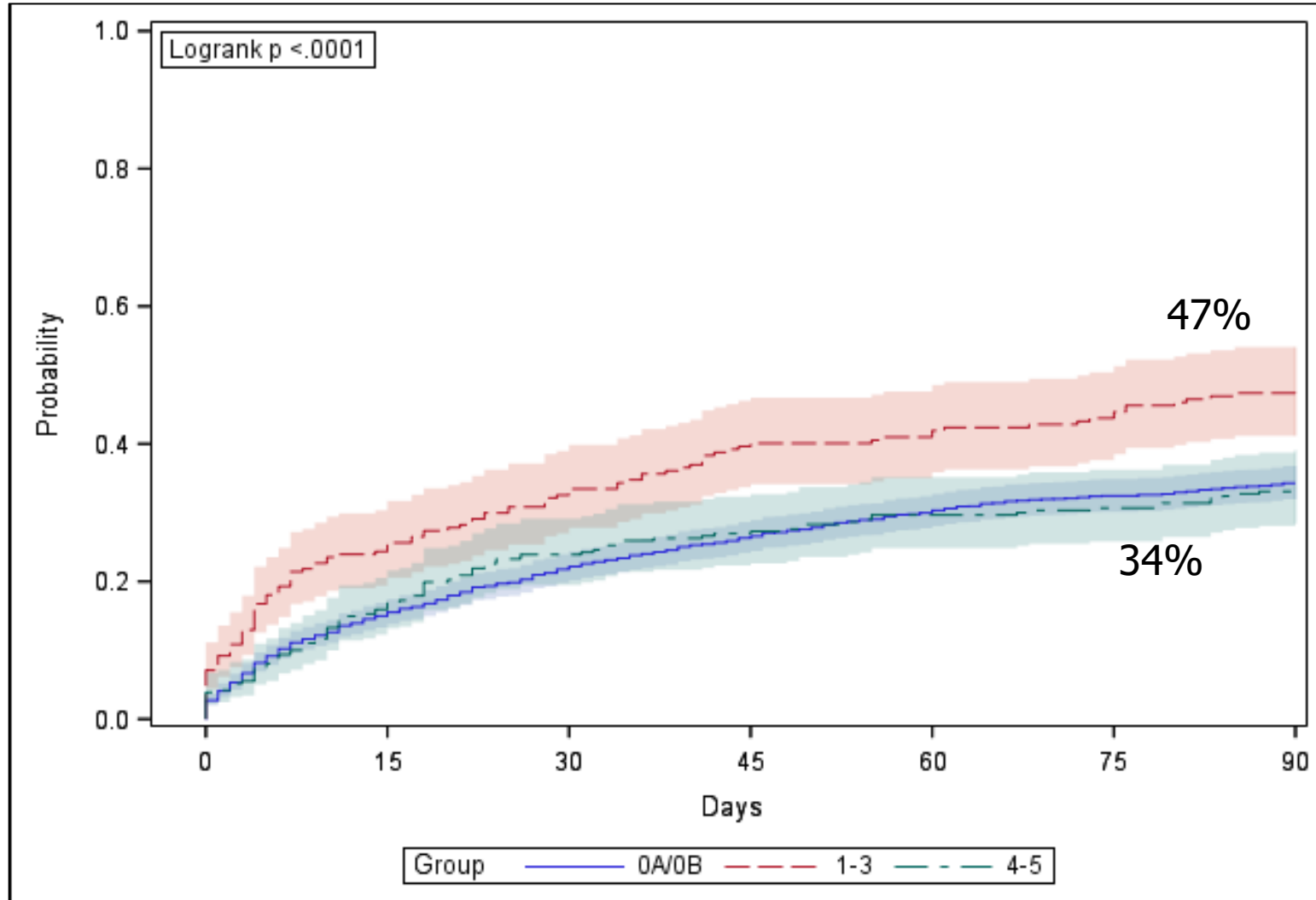
**Vascular Implant Surveillance and
Interventional Outcomes Network
(VISION)**

Methods



Results: Incidence Curve of Readmission

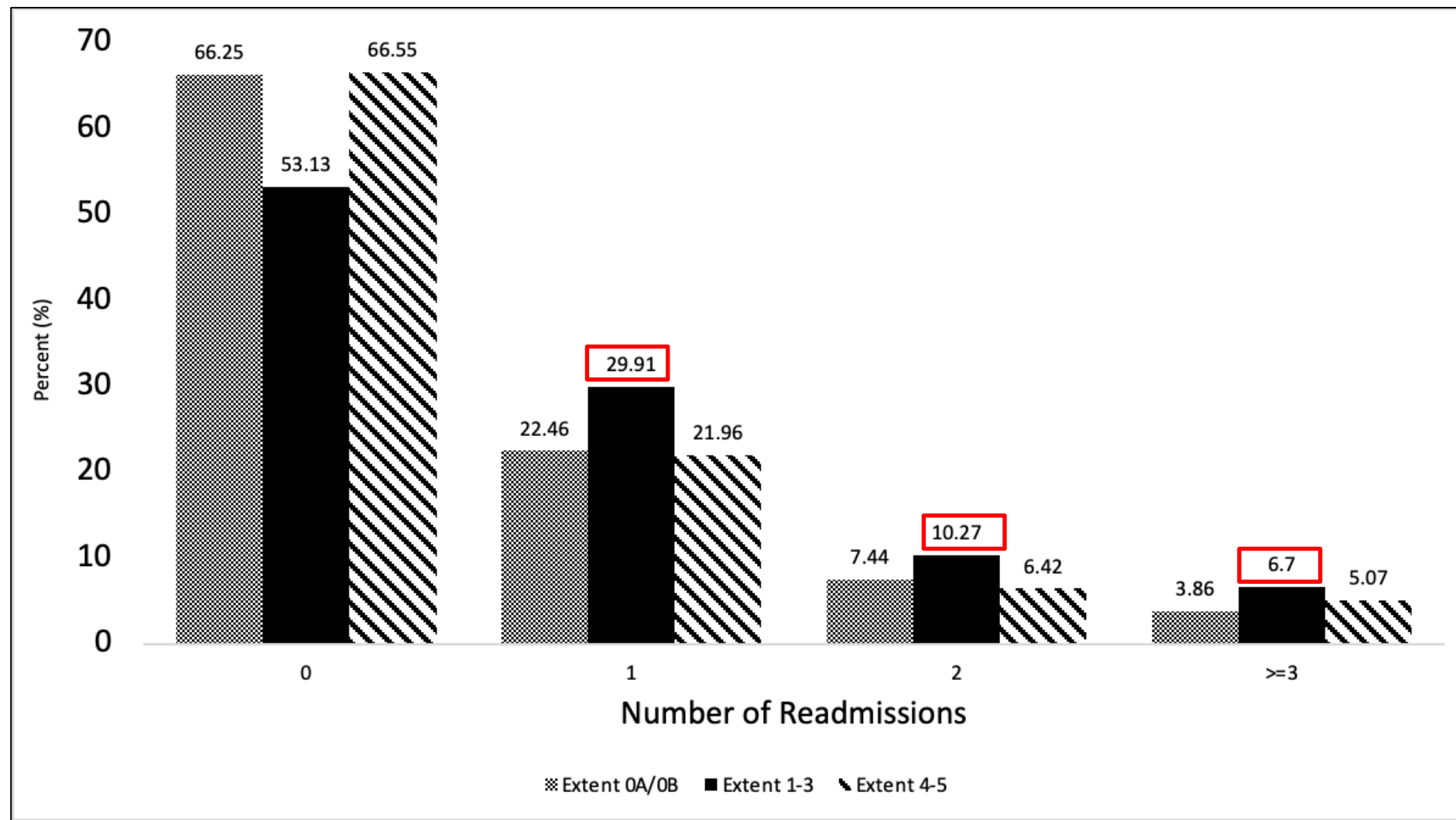
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- By 90-days up to **47%** of patients with **extent 1-3 TAAA** were readmitted
- Significantly different from **34%** of patients with 0A/0B and **33%** of patients with extent 4-5



Results: Number of Readmissions By Extent Coverage at 90-days



Results:

- Patients with a re-admission within 90 days for any reason had a **7.89-fold increased risk of mortality (HR 7.89; 95%CI, 5.21-11.94)** compared to those not readmitted.
- Readmission rate among both CE 0A/0B and 4-5 repairs was **0.54 re-admissions/90 person-days** and **0.78 re-admissions/90 person-days** after CE1-3 repairs.
- After adjusting for preoperative factors, **CE 1-3 repairs experienced increased risk of readmission** within 90 days postoperatively (**aHR 1.28, 95%CI 1.01-1.62**) compared to CE 0A/B.
- Adjusted readmission risk for CE 4-5 repairs did not differ significantly (aHR 0.91, 95%CI 0.72-1.16) from CE 0A/0B.

Results: Reason for Readmission

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Category	Total N	Extent 0A/0B	Extent 1-3	Extent 4-5	Odds Ratio
Cardiac	119(16.4)	94(18.3)	<11	>=11	2.29(0.83,6.32)
Aneurysm/dissection related	108(14.9)	71(13.8)	19(17.3)	18(17.8)	Reference
Gastrointestinal	90(12.4)	64(12.5)	13(11.8)	13(12.9)	3.03(0.99,9.29)
Neurological	88(12.2)	70(13.7)	<11	<11	0.90(0.36,2.27)
Infectious	86(11.9)	59(11.5)	12(10.9)	15(14.9)	1.03(0.40,2.64)

- Although not significant, primary reasons for readmission included **cardiac, gastrointestinal, and aneurysm/dissection** related were most common[ref: Aneurysm/dissection as readmission reason]

Results: Factors Predicting Readmission

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Preoperative

- Planned extent of aortic coverage
 - HR 1.5 (1.20, 1.87)
- Diagnosis of **COPD**
 - HR 1.21 (1.03, 1.43)
- **Dialysis**
 - HR 1.94 (1.38, 2.71)
- **Smoker (current vs never)**
 - HR 1.2 (1.00,1.59)
- **Ambulatory/Functional status**
 - **HR 1.31 (1.12, 1.53)**
- Prior Carotid endarterectomy
 - HR 1.50 (1.06, 2.12)

Intra-Op/Pre-Discharge

- Long-term ICU stay
 - HR 1.31 (1.04,1.65)
- **Visceral Ischemia**
 - **HR 1.94 (1.23,3.05)**
- Cerebrovascular Disease
 - HR 1.75 (1.23,3.05)
- **Spinal Cord Ischemia**
 - 1.40 (1.14, 1.72)

Modifiable Factors Associated with Readmission

Pulmonary Status

- COPD
- Smoking status

Functional Status

- Limited ambulatory state associated with increased 90-day readmissions

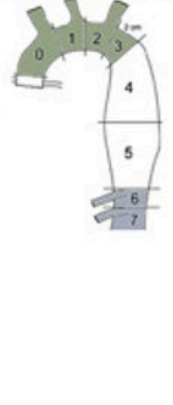
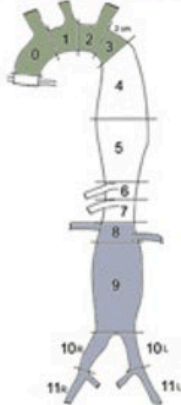
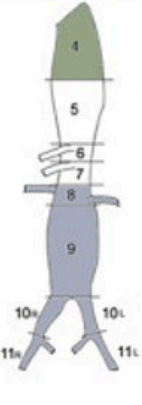
Spinal Cord Ischemia during hospitalization

- Presence of spinal cord ischemia prevention protocol

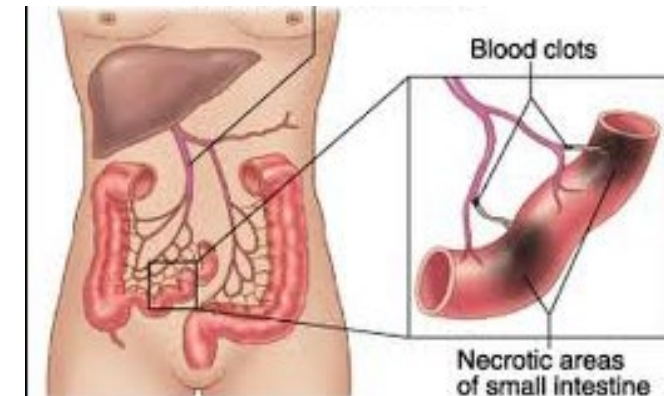
Conclusions

- Increasing extent of endovascular TAAA repair (CE 1-3) is associated with higher 90-day readmission rates.
- The most common principal diagnoses associated with 90-day readmission were cardiac, aneurysm/dissection-related, and gastrointestinal



I	II	III
0-3	0-3	4
6-7	8-11	8-11
		

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Conclusions

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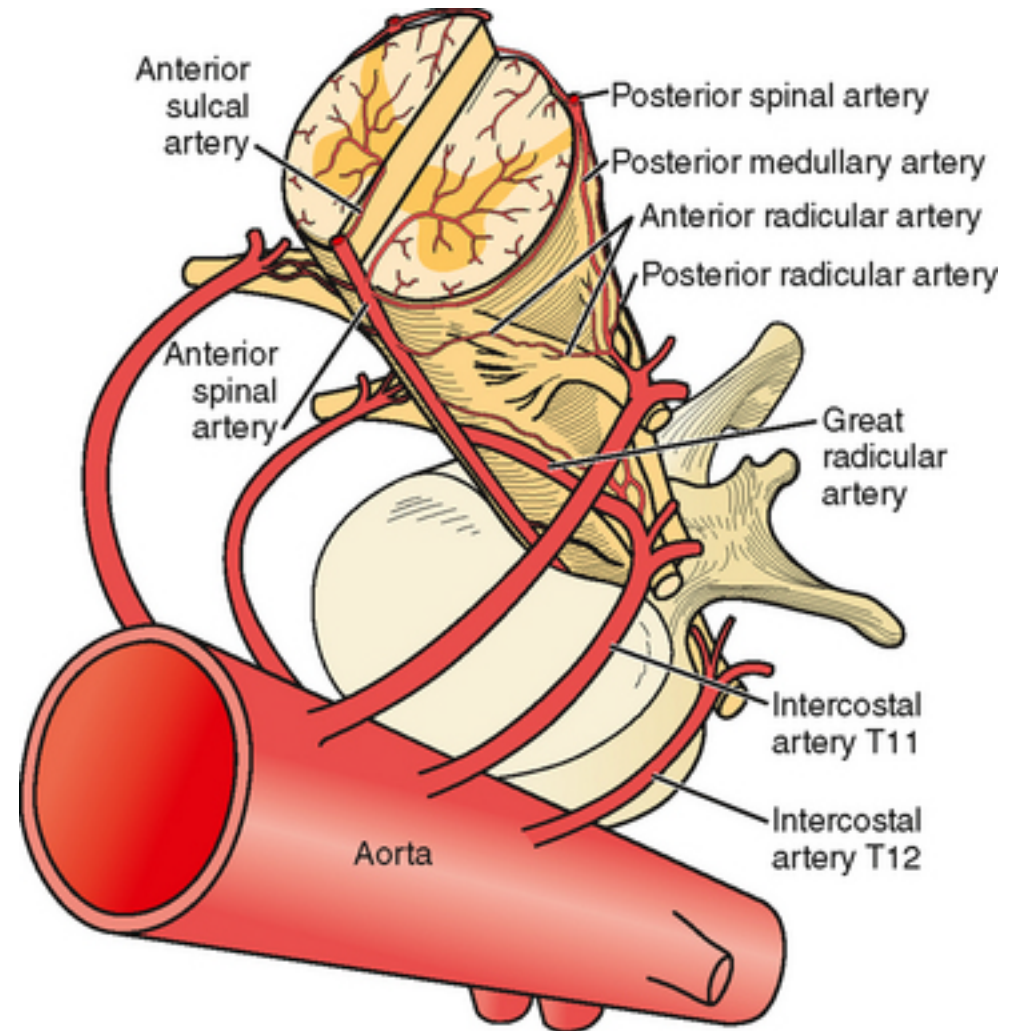
- **Patients with COPD or severe pulmonary disease known preoperatively or with pulmonary complication while in the hospital have increased incidence of readmission.**
- **Functional status decline during hospitalization and preoperative poor functional status is associated with increased readmission.**



Conclusions

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- **Spinal Cord Ischemia is associated with increased risk for readmission after index endovascular TAAA repair**



Future Implications:

- **Overall provides new data regarding modifiable preoperative and postoperative risk factors allowing the ability to further counsel patients on risk of repair based on planned extent of aortic coverage with endovascular repair**
- **Possibility of implementing physical and pulmonary prehabilitation programs for patients undergoing endovascular TAAA repair**
- **Implementation of standardized spinal cord ischemia protocols and preoperative risk stratification**

Contemporary Implications of the Temporal Trends in AAA Care in the United States

Brian Gilmore, MD¹, David Stone, MD², Dan Neal MS¹, Mario D'Oria, MD³

Zain Shahid, MD¹, Michol Cooper, MD, PhD¹, Scott Robinson MD, PhD¹, Benjamin Jacobs, MD¹, Thomas Huber, MD, PhD¹, Gilbert Upchurch Jr., MD¹, Martin Back, MD, MS¹, Salvatore Scali, MD¹

¹Division of Vascular Surgery and Endovascular Therapy, University of Florida, Gainesville, FL, USA

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³Department of Vascular Surgery, University Hospital of Trieste, Italy

*Southeastern Vascular Study Group 2023 Spring Meeting
April 14, 2023*



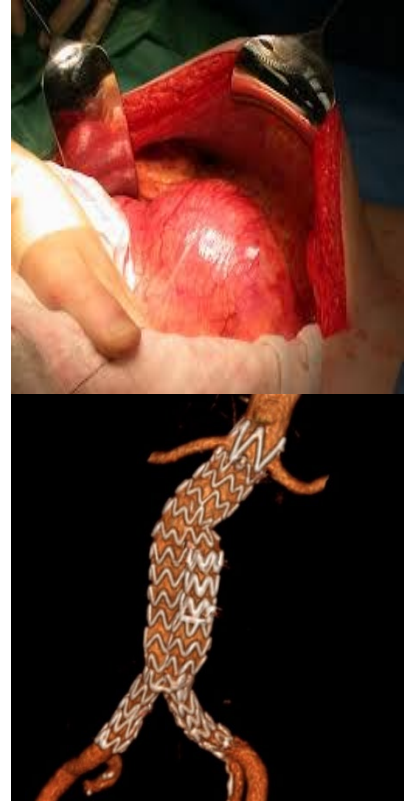
Disclosures

- No potential financial conflicts of interest.



Introduction

- EVAR adoption has dramatically changed treatment of both elective and non-elective AAA.
- Contemporary temporal influence of EVAR adoption on AAA patient selection, procedural details and outcomes using real-world evidence is poorly characterized.



Objective

Describe the longitudinal changes in patient selection, procedure details and short-term outcomes after EVAR & Open AAA (OAAA) repair using a large national quality registry.



Methods

- SVS VQI [including all regional registries]
- All AAA repairs: 2011-2021 (Intact & Rupture, EVAR & OAAA)
- **End-points** = in-hospital complications, mortality (30-day, 1–year)
- *Secondary end-points = center proportion of EVAR: OAR, elective ‘off-label’ or ‘complicated’ EVAR use, EBL/cross-clamp rate (for OAAA), SVS diameter guideline compliance (EVAR + OAAA)*



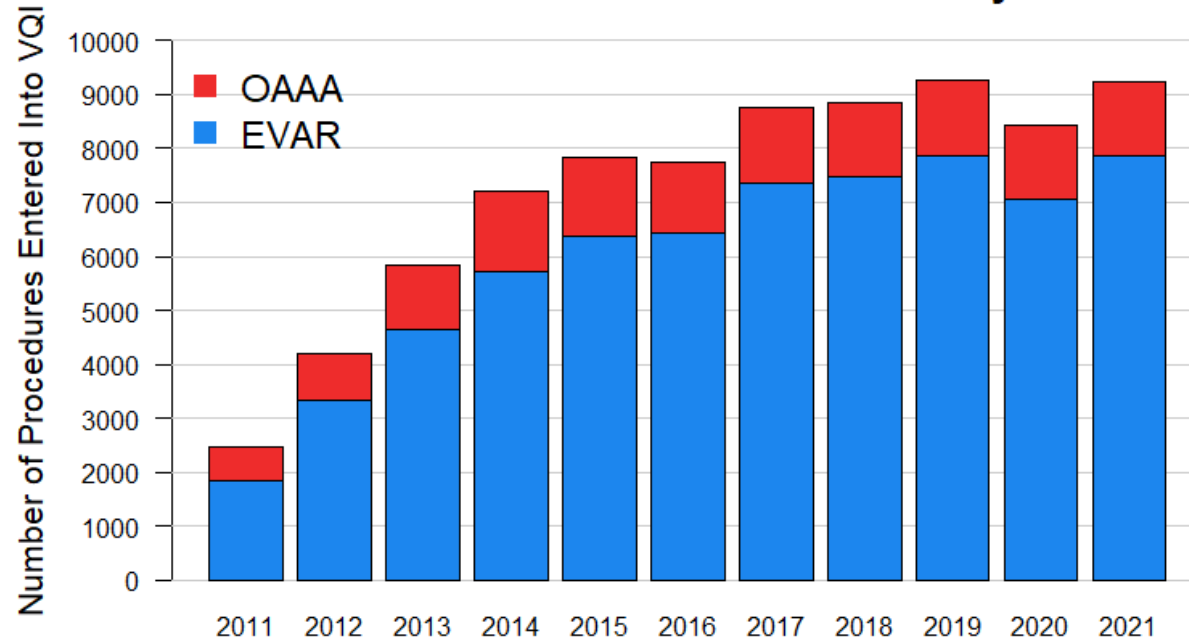
Definitions & Methods

- *Elective* = asymptomatic, intact AAA
 - *Non-elective* = symptomatic intact and/or ruptured AAA
 - '*Major in-hospital complications*' - stroke, death, MI, CHF, arrhythmia, respiratory failure, renal failure (new), leg ischemia, return to OR for bleeding, intestinal ischemia
 - '*Off-label*' and/or '*complex EVAR*' = outside IFU or use of intraop adjunct such as fem-fem bypass, Aptus, iliac conduit, iliac pta/stent, access vessel injury, open conversion, unintentional renal coverage
-
- Risk-adjustment: mixed-effect & Cox regression models;
all-cause mortality verified using SSDI



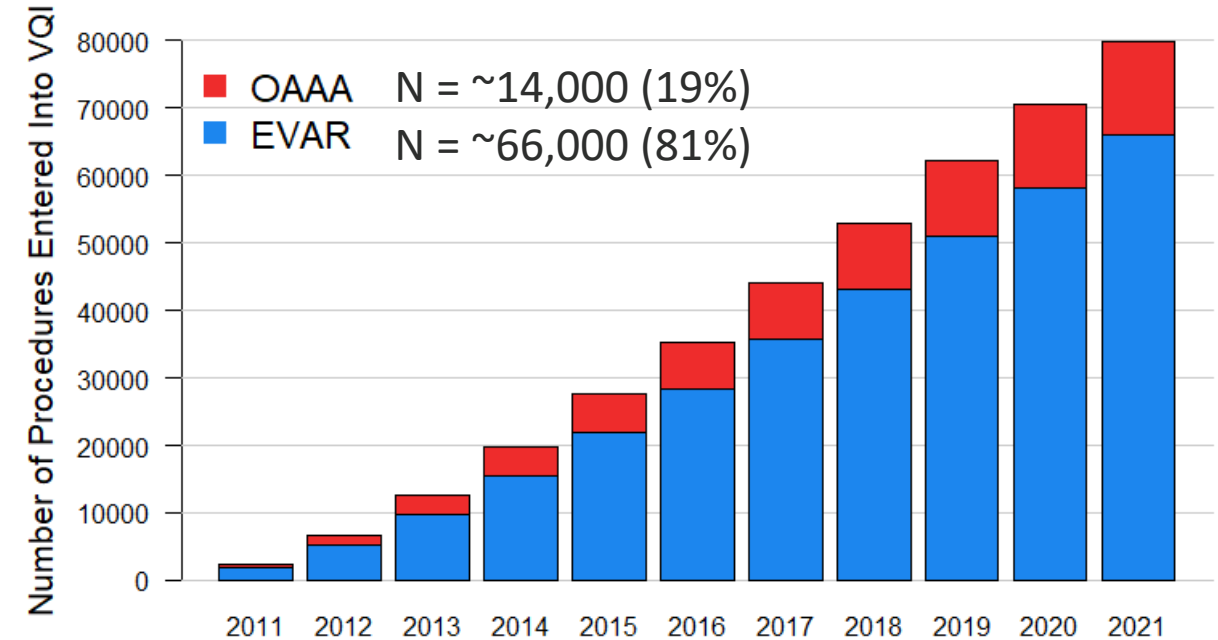
SVS VQI AAA Registry Growth Over Time

VQI EVAR and OAAA Procedures By Year



Year

Cumulative Number of VQI Procedures



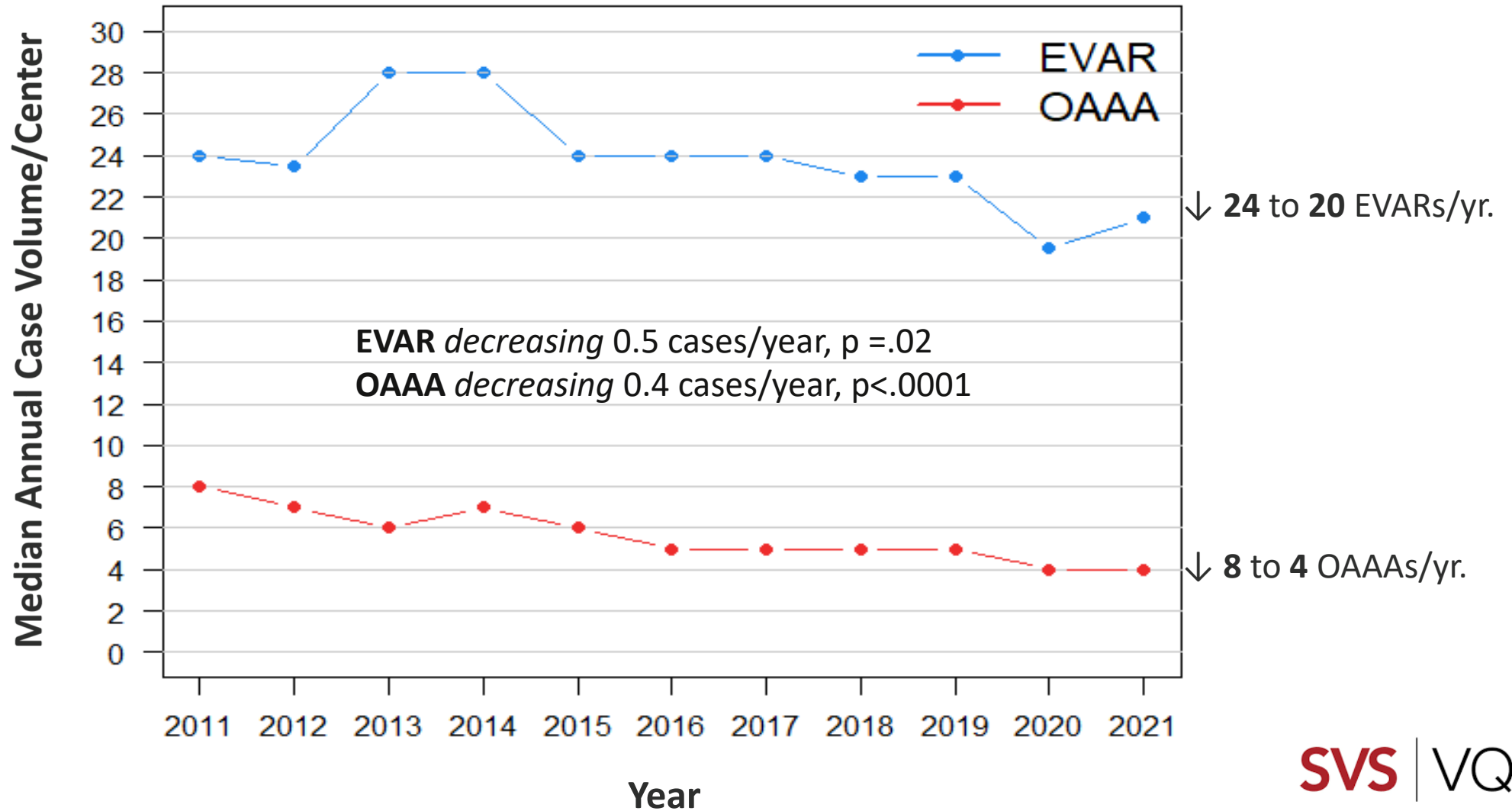
Year

- 370 centers contribute data to either registry
- 247 centers contribute to both EVAR and OAAA registries
- 49 centers contributed to both EVAR and OAAA registries for all 10 years



Median Annual Center Volumes Over Time

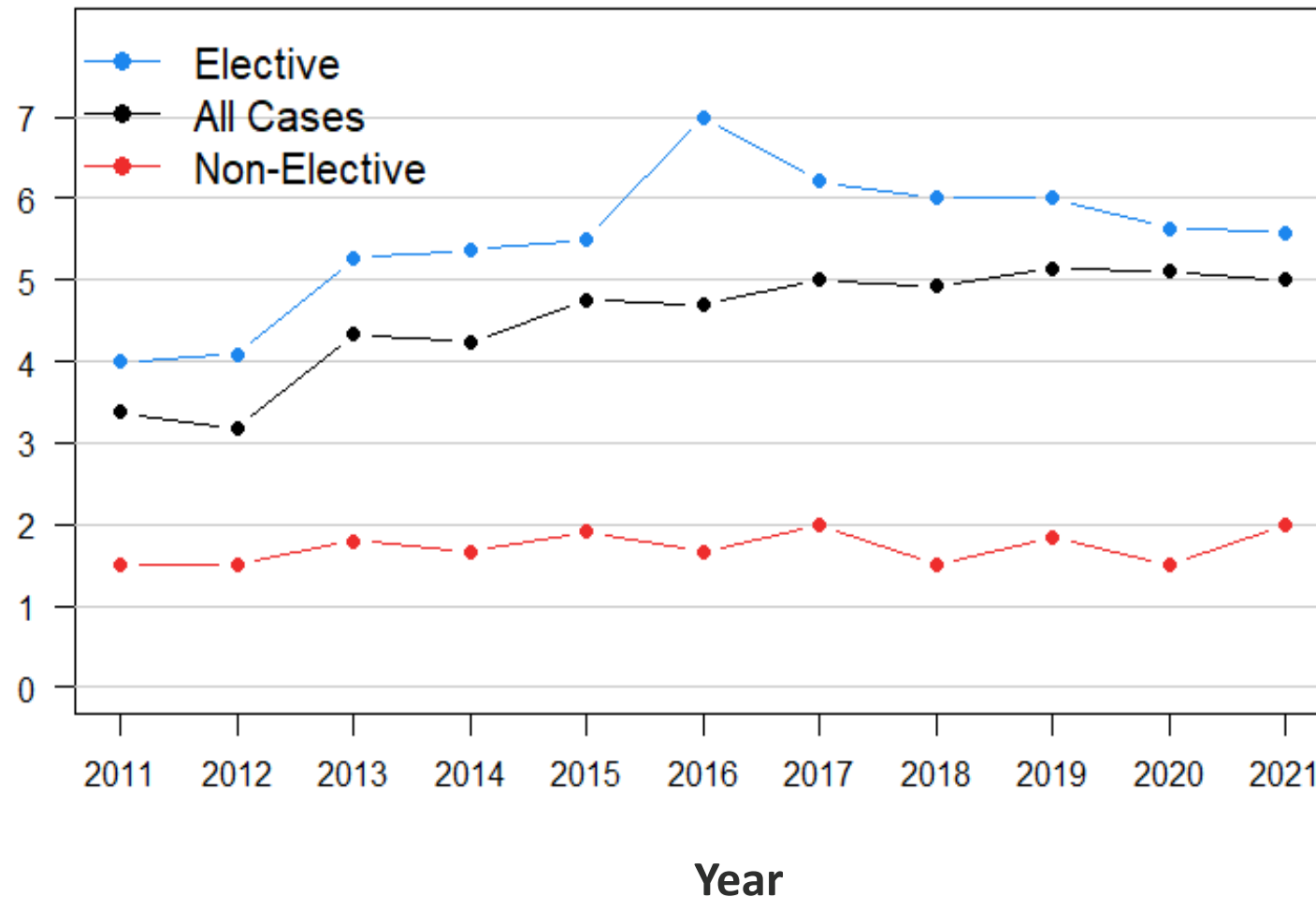
- All centers
- All Elective & non-elective presentations



Median EVAR to OAAA Repair Ratio Over Time

- N = 49 centers
- Trends similar when looking at all centers over time

Median # of EVARs per Each OAAA Repair



• All AAA EVAR: OAAA

↑ 0.2/yr., p = .0004

• Elective:

↑ 0.2/yr., p = .04

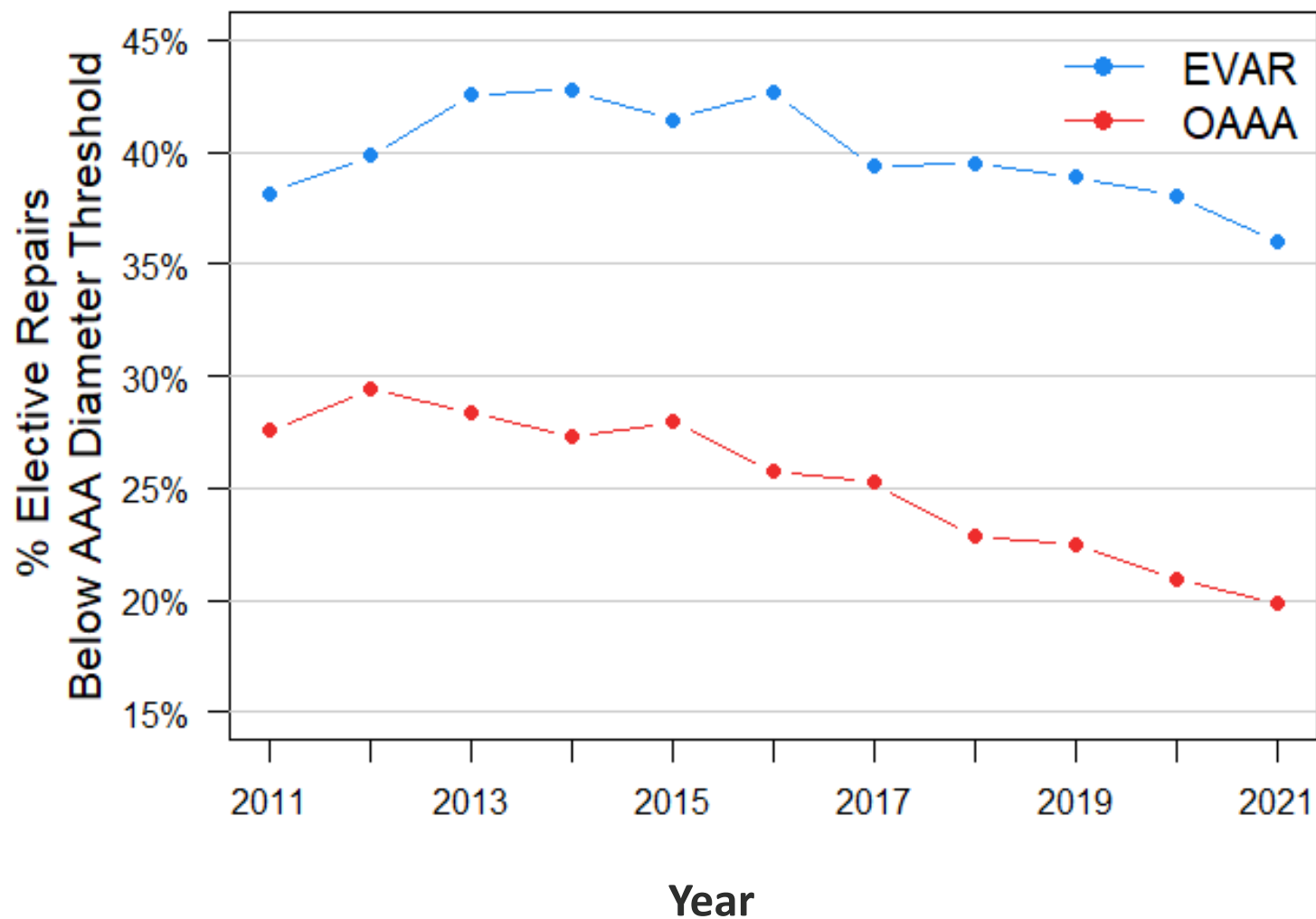
• Non-elective:

↑ 0.02/yr., p = .3



Elective Repairs Below SVS Diameter Threshold

- All centers
- “Below threshold”
 - Men < 5.5cm
 - Women < 5.0cm



EVAR

~37%↔43% (no change)

OAAA

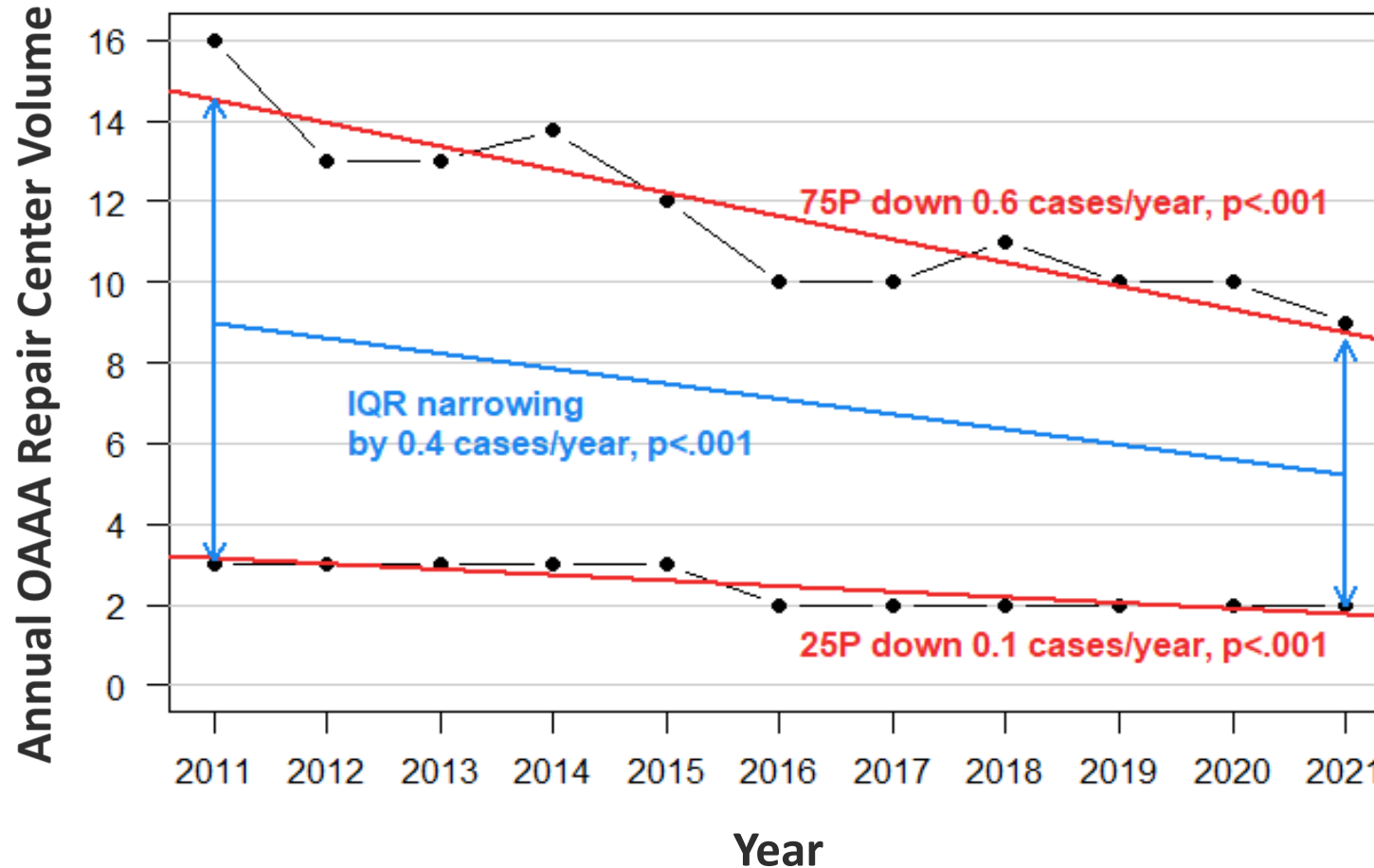
↓ from 27% to 20%, $p = .01$



OAAA Repairs at Low Volume Centers

- All centers

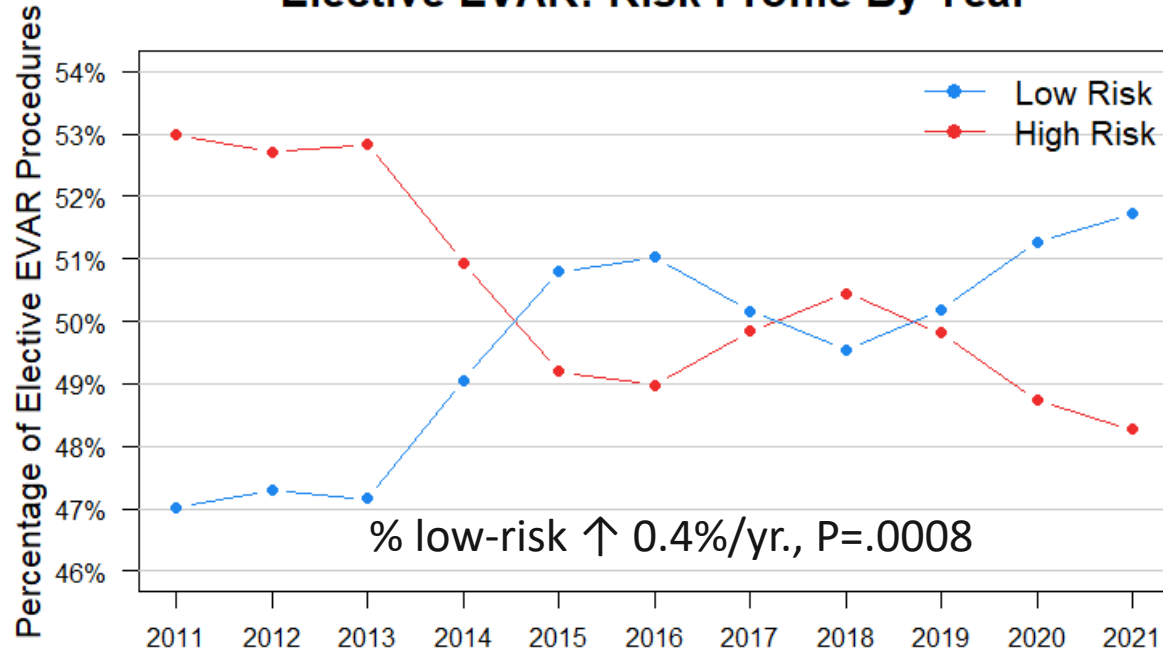
Examining 25th and 75th percentiles of OAAA repair volume distribution across centers for each year



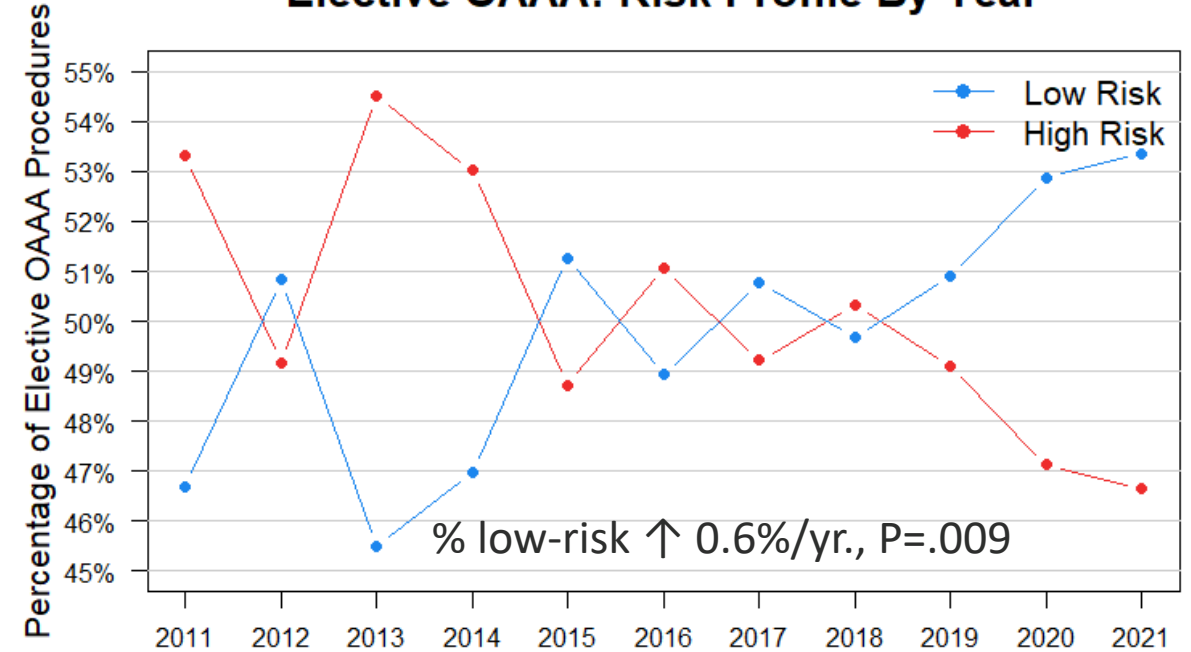
Elective AAA Patient Preop 1-yr Mortality Risk

- All centers
- 'Low Risk' < 5%, 'High Risk' ~10%-22% based on VQI 1-year Mortality Risk Calculator (QxMD)*

Elective EVAR: Risk Profile By Year



Elective OAAA: Risk Profile By Year

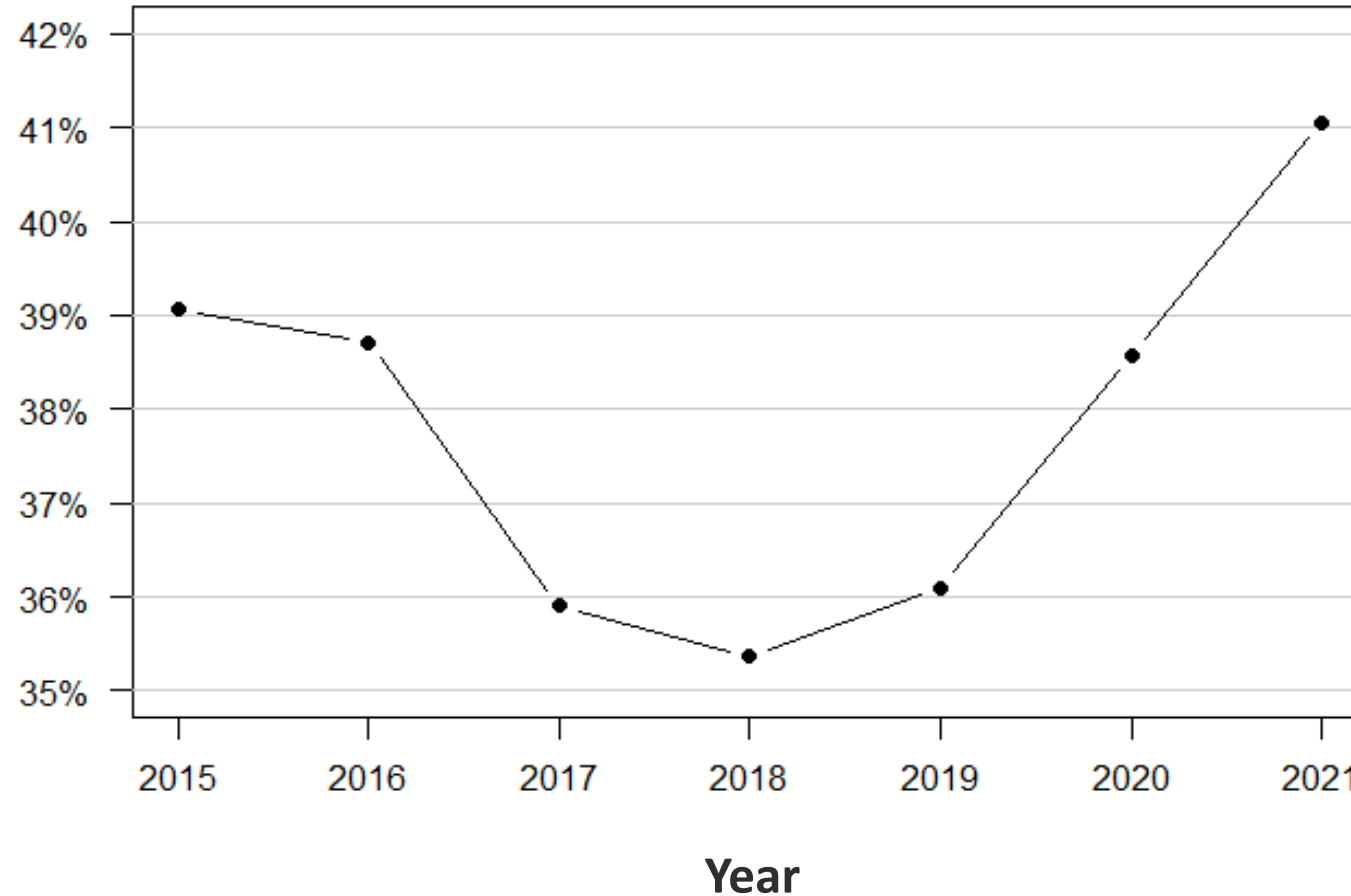


*Validation of a Preoperative Prediction Model for Mortality within 1 Year after EVAR of Intact AAA
Neal et al. J Vasc. Surg. 2019 Aug;70(2):449-461

Elective Infrarenal EVAR 'Off-Label' Use

- N = 260 centers
- *Anatomic data needed had variables added Dec 2014*
- 58% of cases with available data
- N = 28,275

Proportion of Elective Off-Label EVAR



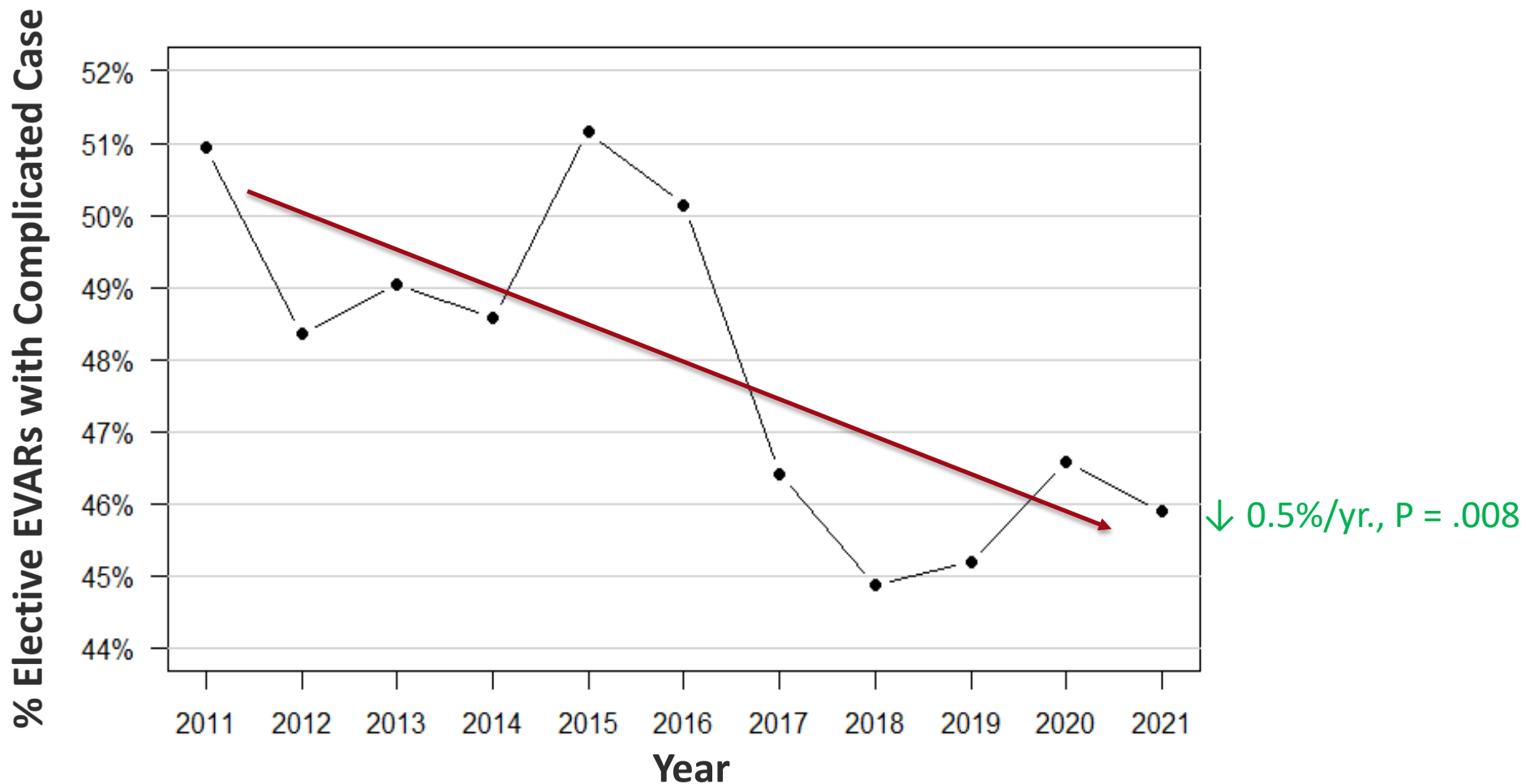
No clinically
significant change
39%↔41%



'Off-label' Use = included any procedure with neck angle >60 degrees, proximal LZ diameter >32mm, EIA diameter <6mm, and/or proximal LZ neck length < 10mm

Elective Infrarenal EVAR Intraop Complexity

- All centers

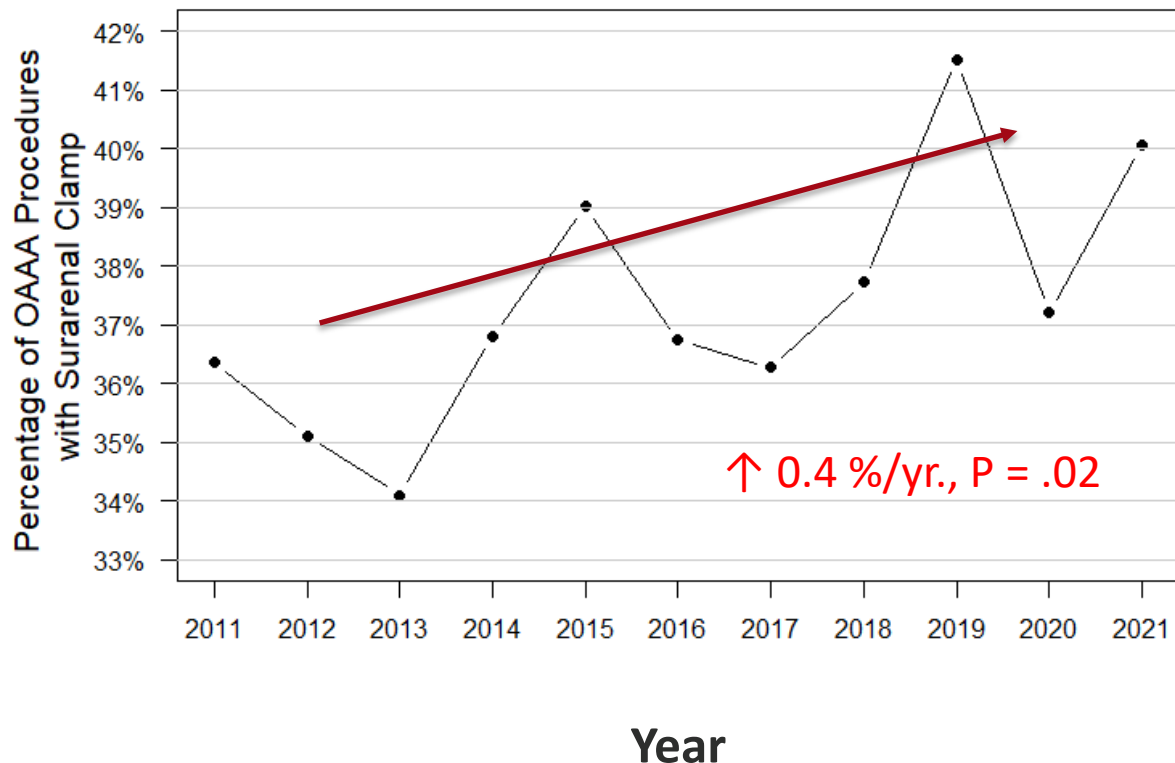


Complicated case = use of intraop adjunct such as fem-fem bypass, Aptus, iliac conduit, iliac pta/stent, access vessel injury, open conversion, unintentional renal coverage

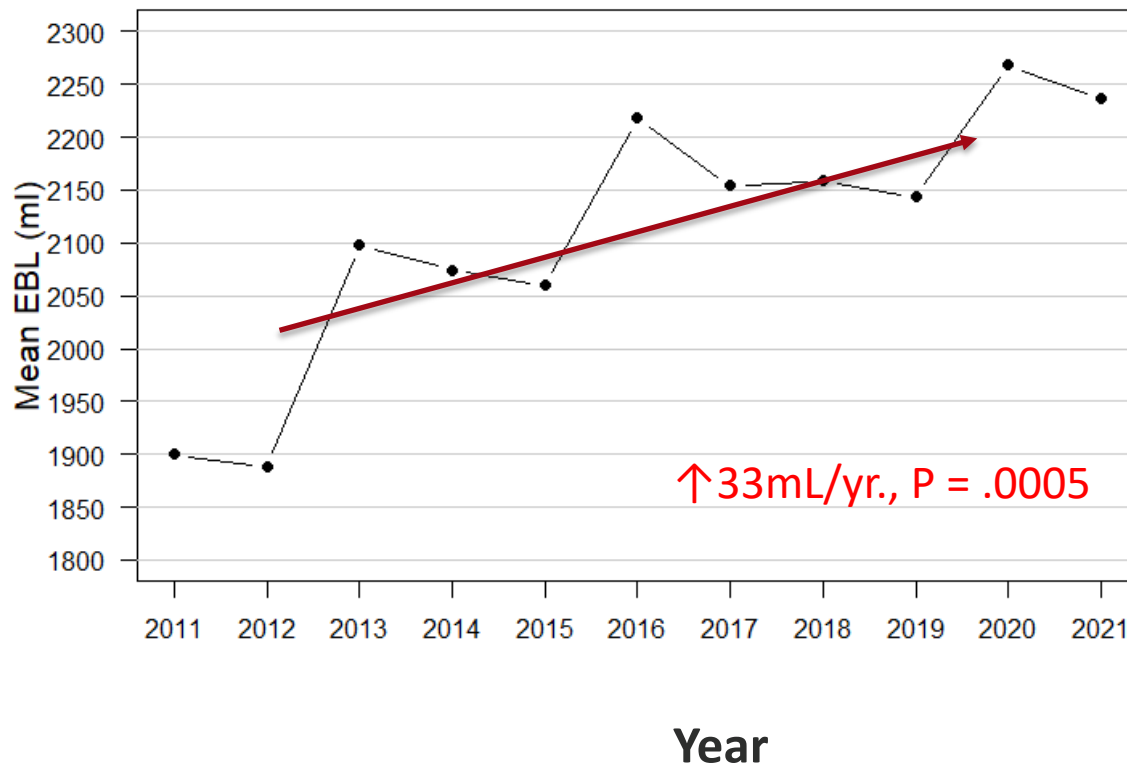


Elective Infrarenal OAAA Complexity

OAAA: Rate of Suprarenal Cross Clamp By Year

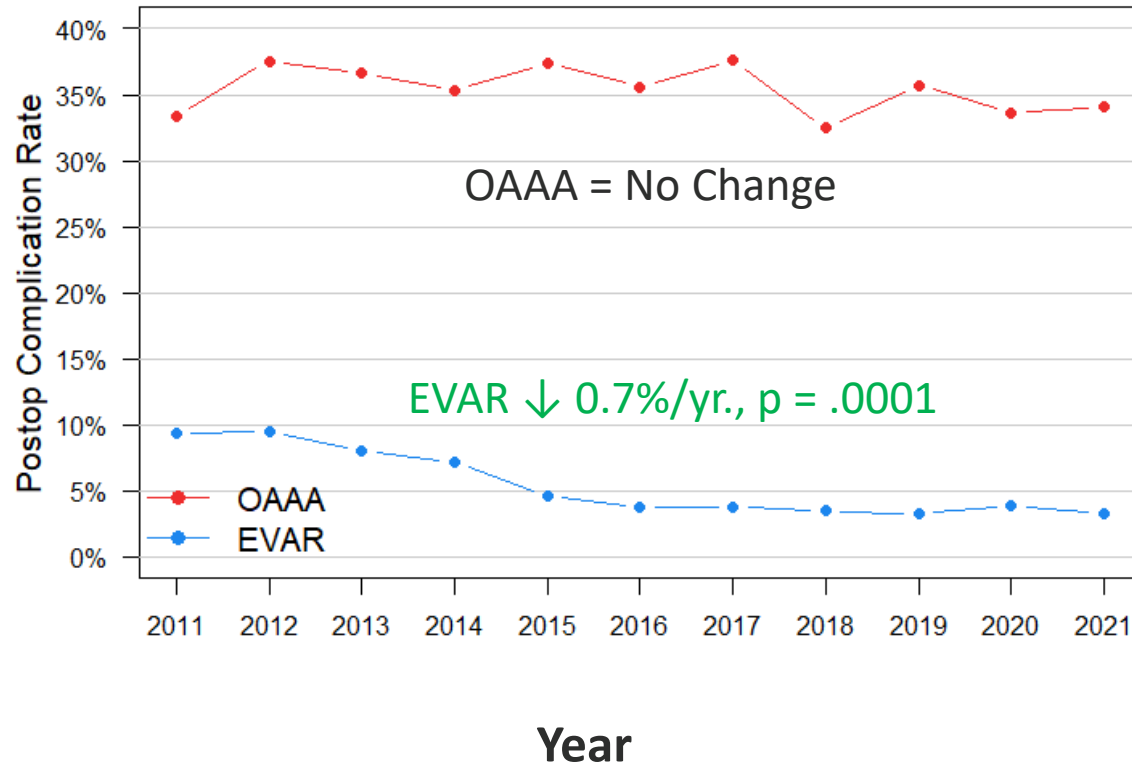


OAAA: Mean EBL By Year

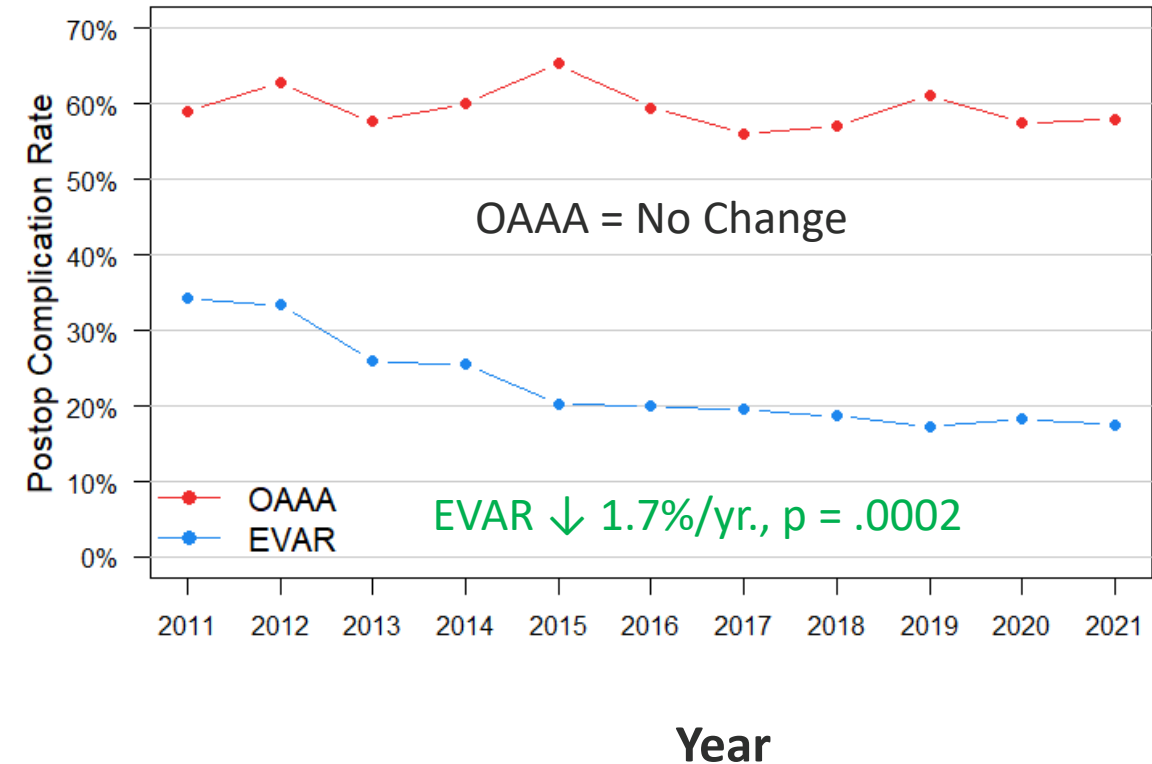


Any In-hospital Complication

**Elective Procedures:
Postop Complications By Year**



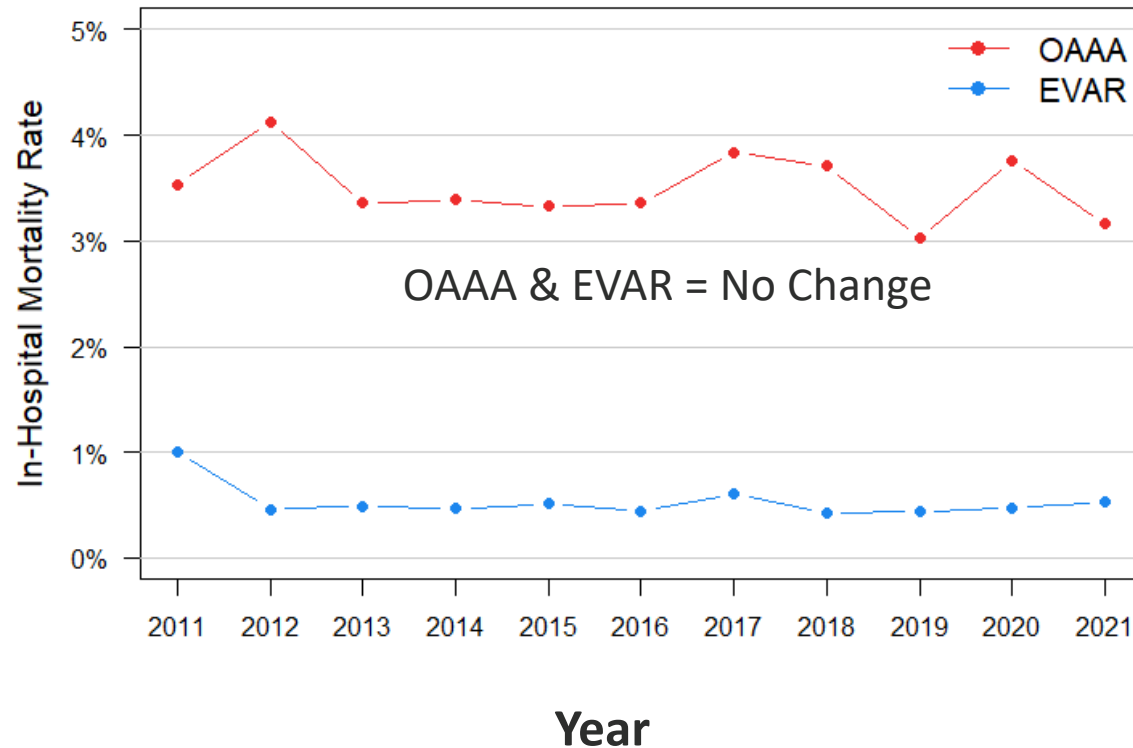
**Non-Elective Procedures:
Postop Complications By Year**



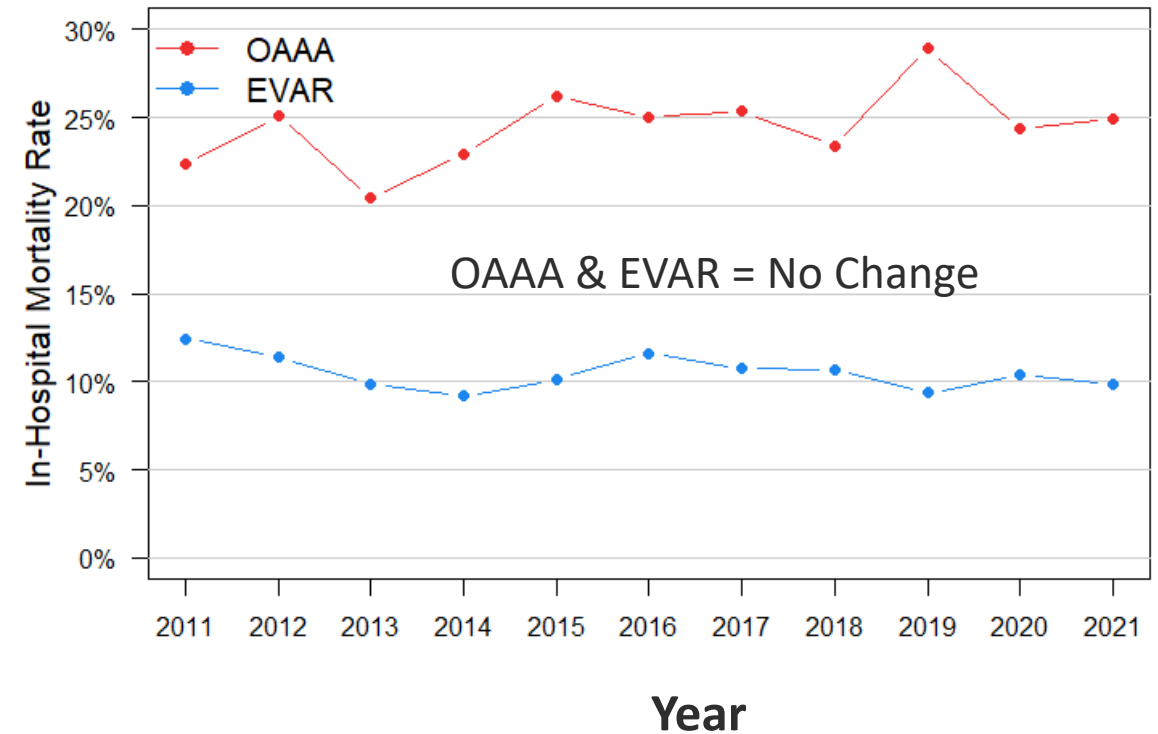
Complications include: stroke, death, MI, CHF, arrhythmia, respiratory failure, renal failure, leg ischemia, intestinal ischemia

In-hospital Mortality

**Elective Procedures:
In-Hospital Mortality By Year**

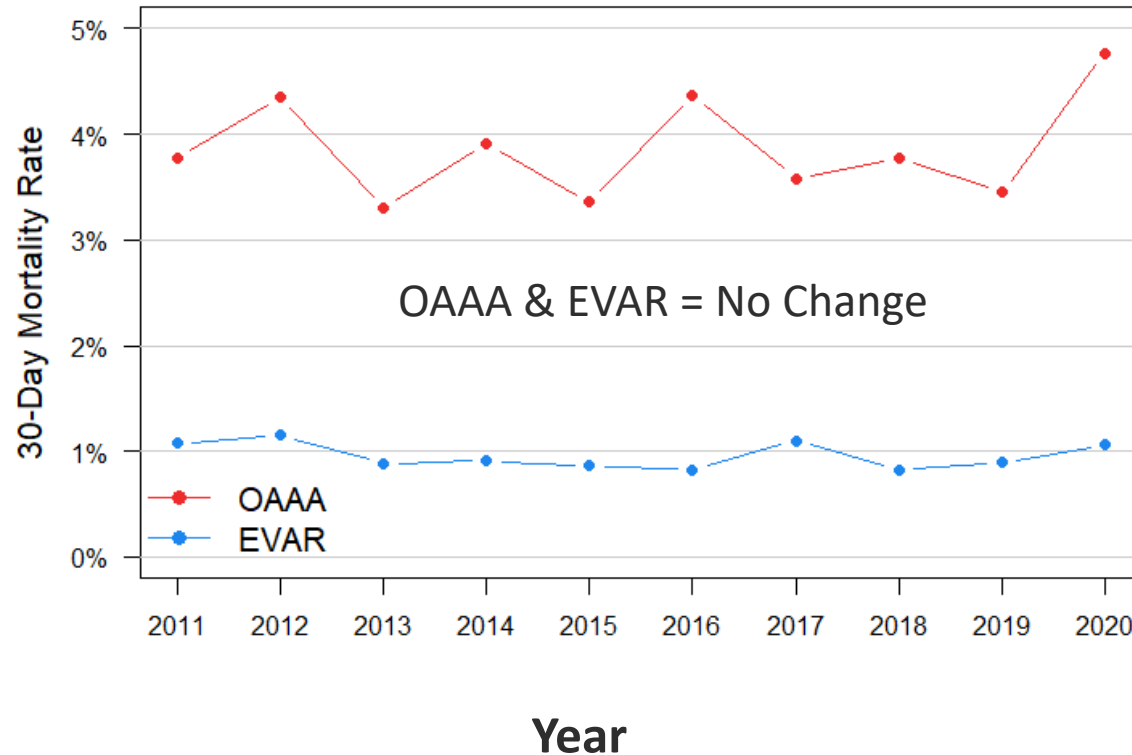


**Non-Elective Procedures:
In-Hospital Mortality By Year**

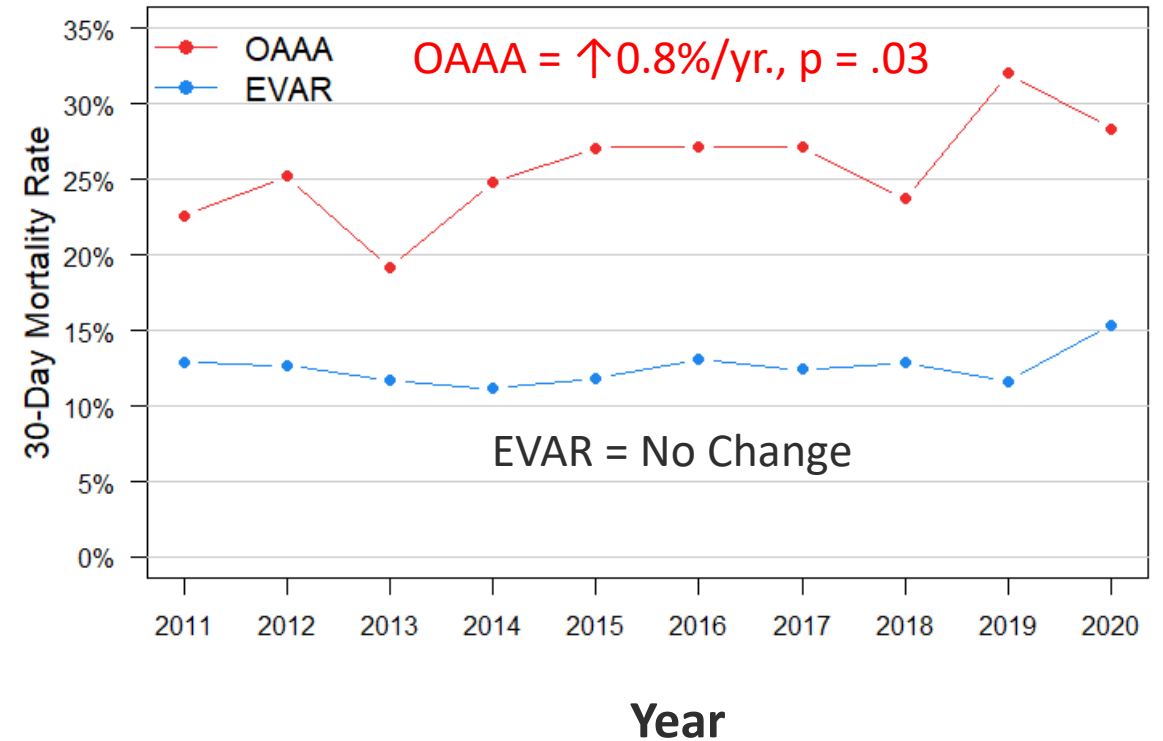


30-Day Mortality

Elective Procedures: 30-Day Mortality By Year

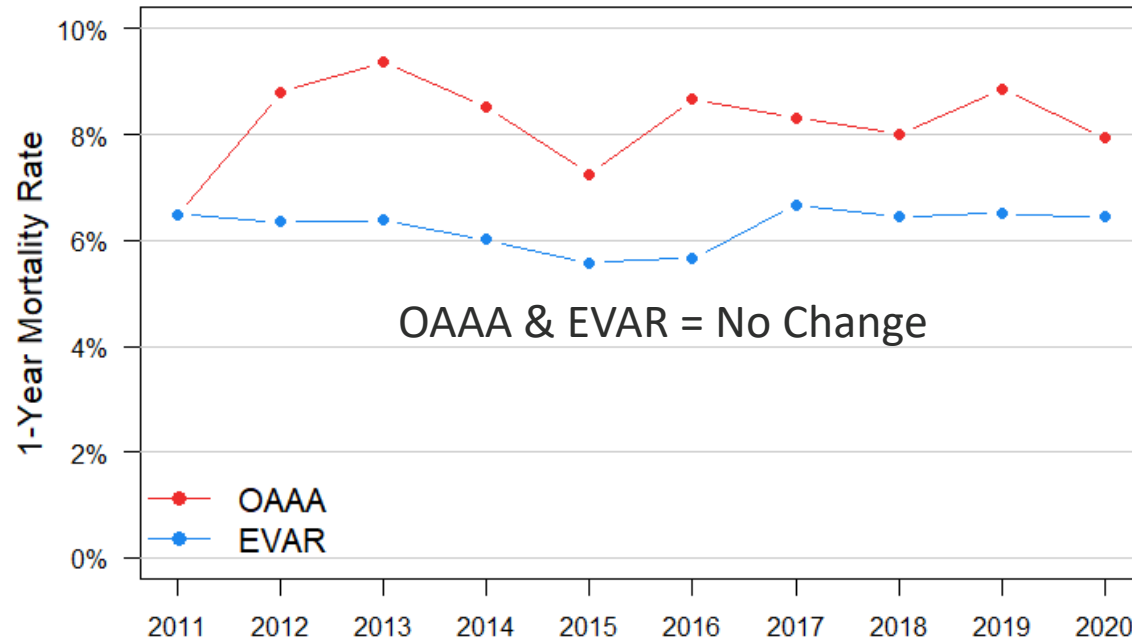


Non-Elective Procedures: 30-Day Mortality By Year



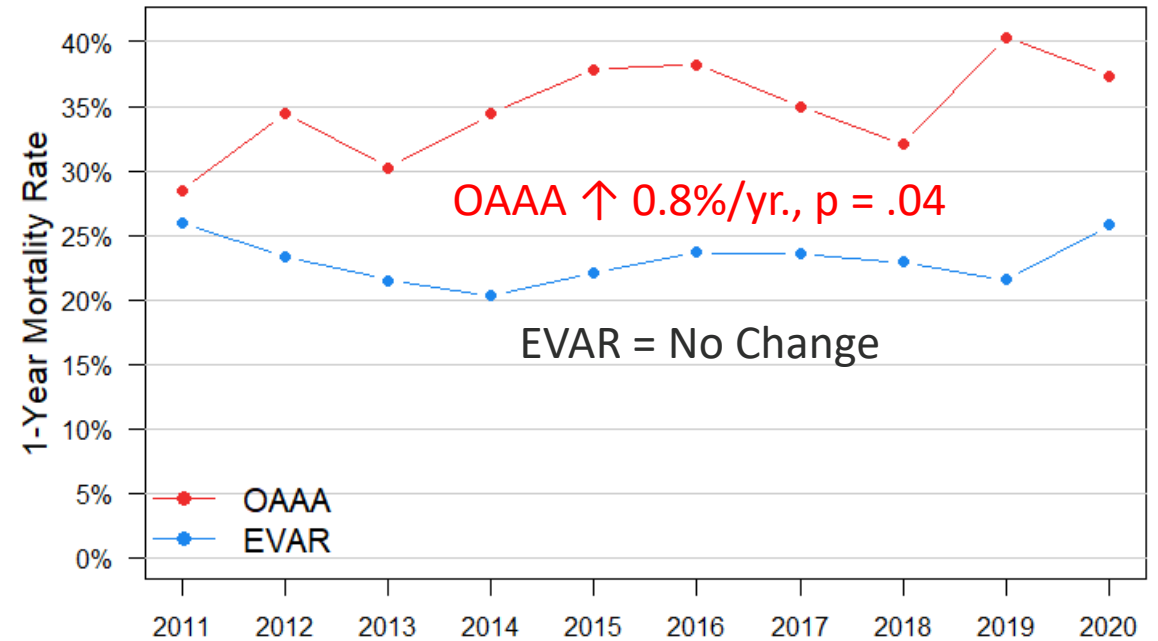
One Year Mortality

Elective Procedures: 1-Year Mortality By Year



Year

Non-Elective Procedures: 1-Year Mortality By Year

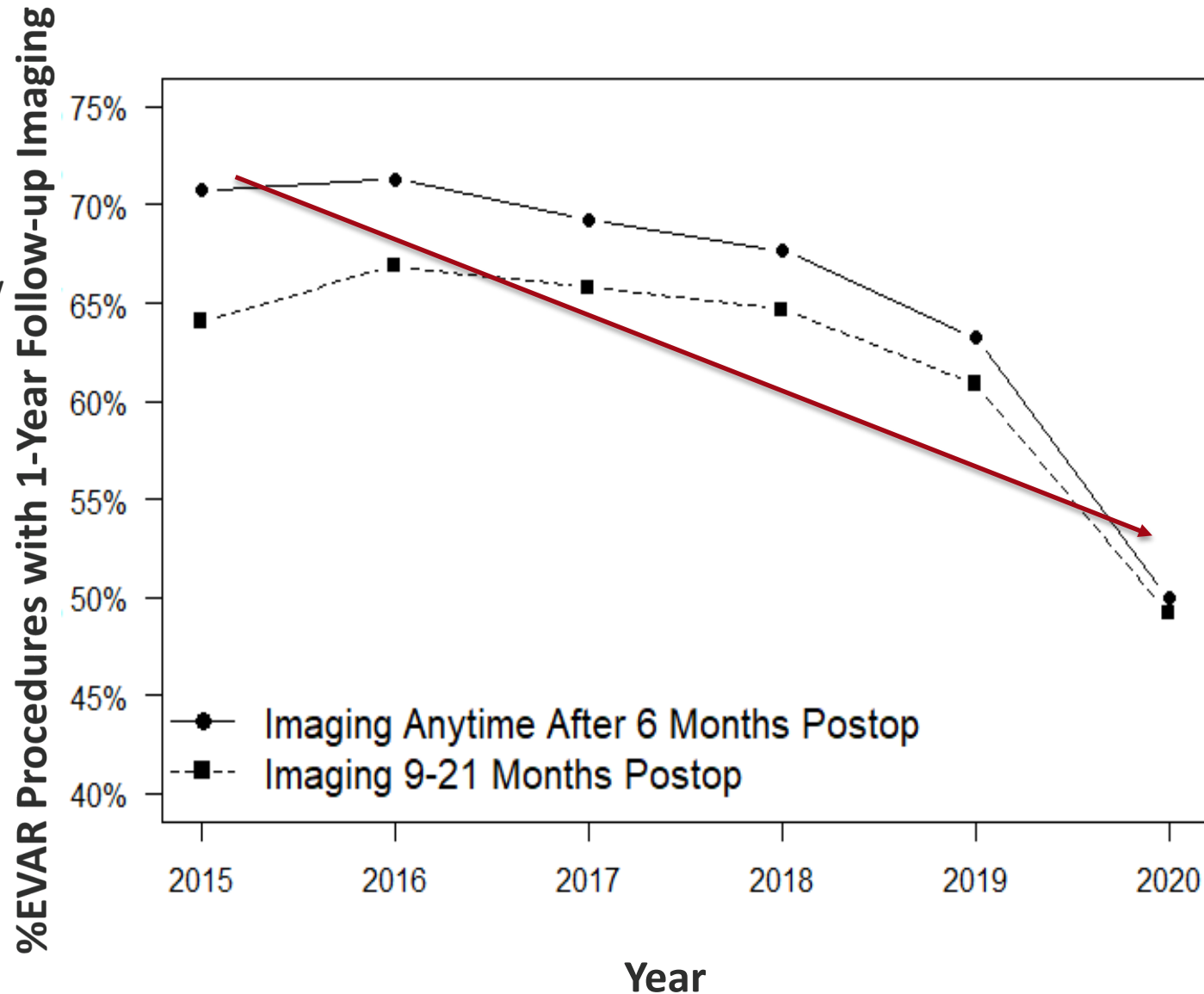


Year



EVAR Surveillance

- N = 260 centers
- 'Imaging' Y/N variable added Dec 2014
- N = 28,275
- If EVAR performed in 2019/2020, FU window occurred during COVID19 pandemic



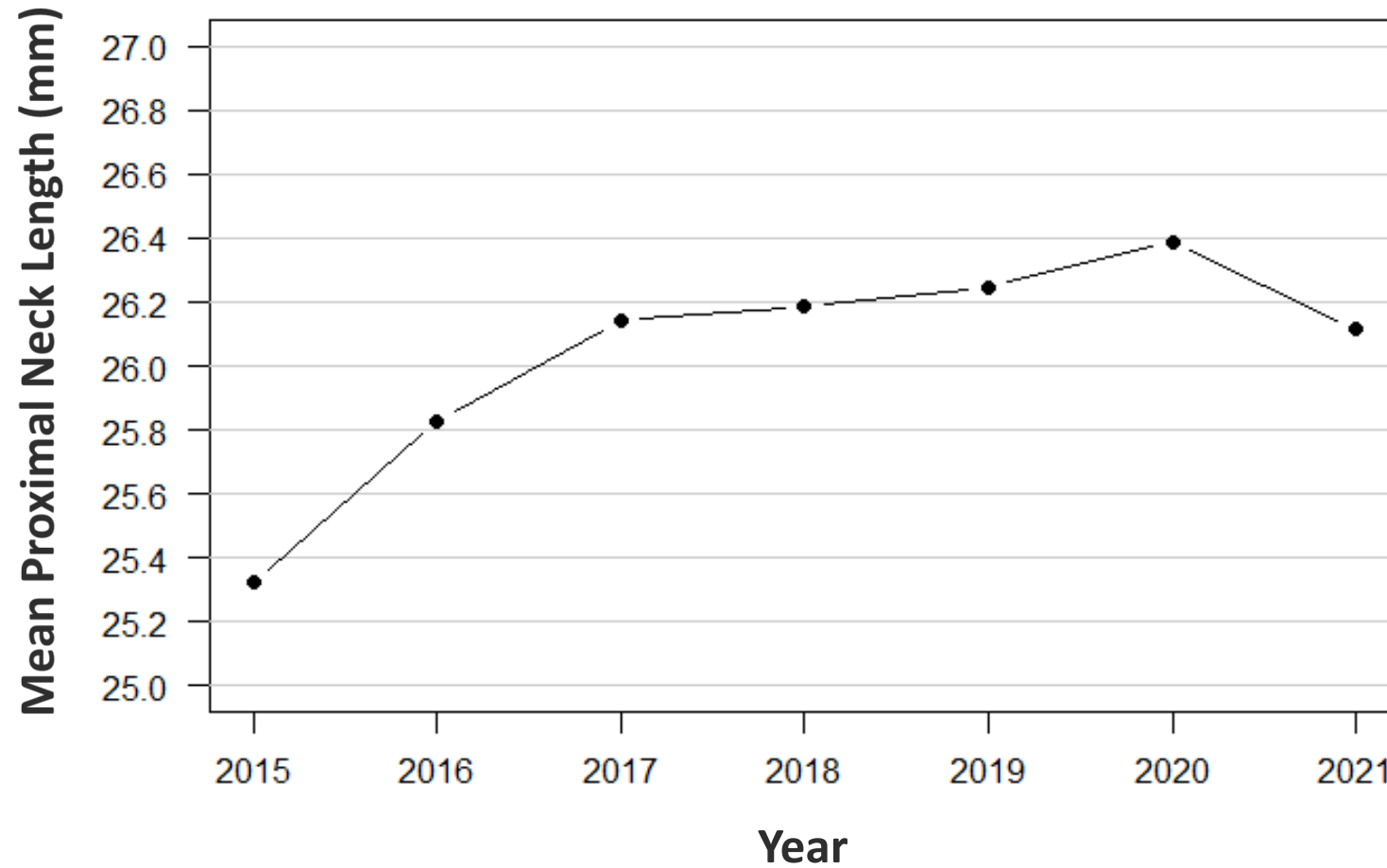
Conclusions

- EVAR continues to supplant OAAA for elective repair but plateau for non-elective repair- associated with a higher proportion of lower volume centers performing open repairs (\neq regionalization).
- Lower risk patients are undergoing elective EVAR and OAAA repair but ~40% of EVARs are for small AAA (vs. ~20% OAAA).
- Off-label EVAR use remains high (but stable) while OAAA complexity appears to be increasing over time.
- Overall complication and mortality outcomes for elective EVAR/OAAA repair remain stable but non-elective OAAA repair mortality is increasing.
- Impact of pandemic on practice patterns, surveillance, and reintervention needs further study.



Elective Infrarenal EVAR Proximal Neck Length

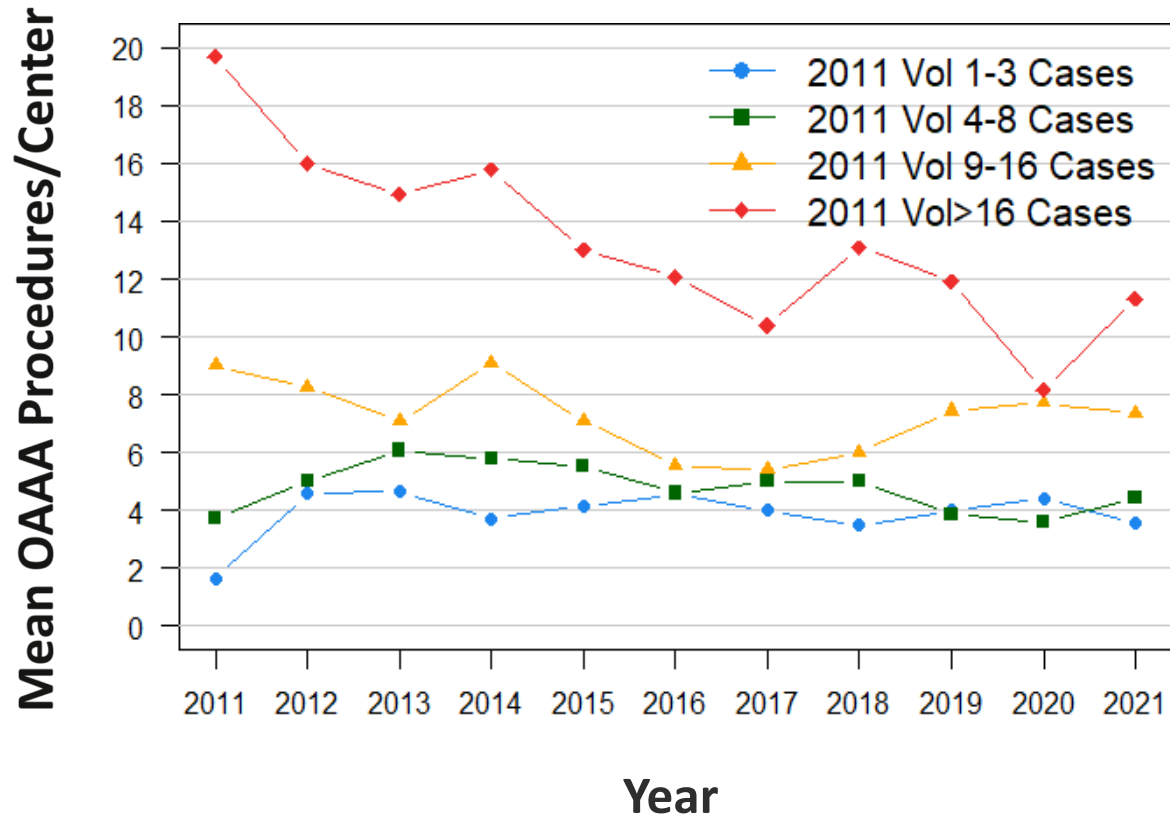
- N = 260 centers
- *Anatomic data needed had variables added Dec 2014*
- 58% of cases with available data
- N = 28,275



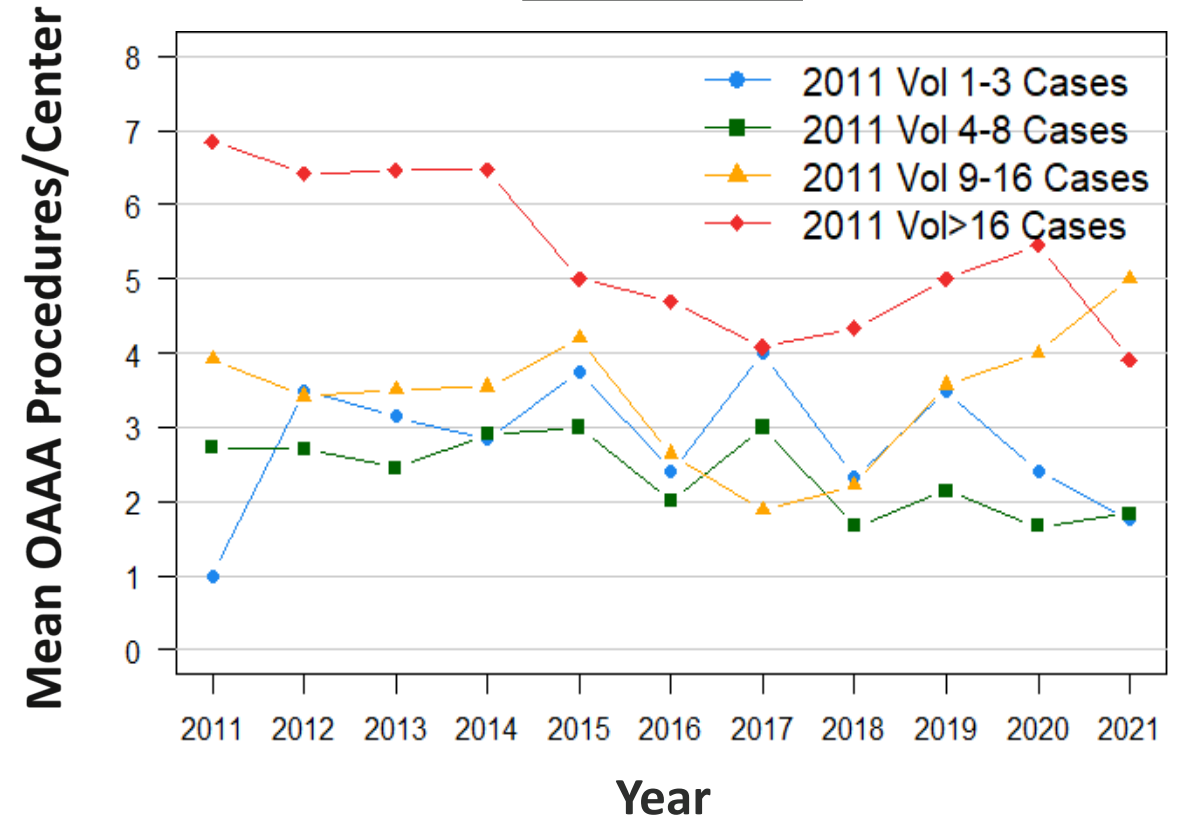
OAAA Repairs at High & Low Volume Centers

- All centers

Elective



Non-Elective



Frequency of Inappropriate Endovenous Ablation Therapy within the VQI Varicose Vein Registry

Michael Fassler, MD, Benjamin Jacobs, MD; Scott Robinson, MD; Dan Neal, MS;
Nick Osborne, MD; Salvatore Scali, MD

Department of Surgery, University of Florida College of Medicine

SEVSG Spring 2023 Remote Meeting
April 16, 2023





Background

- Venous disease affects roughly 1/3 of the general population
 - Significant impact on quality of life and cost to society
 - Substantial burden on both primary care providers and surgeons
- Endovenous ablation techniques have changed the management of venous treatment.
 - Outpatient techniques
 - Easily performed by surgeons and non-surgeons.

As the need for these procedures continues to increase, concern exists there has been a concomitant increase in the number of *inappropriate* endovenous ablation procedures performed.

2020 Appropriate Use Criteria for Chronic Lower Extremity Venous Disease



American
Venous Forum

SVS

Society for
Vascular Surgery

Multi-Society Document



AMERICAN VEIN &
LYMPHATIC SOCIETY



Society of
Interventional
Radiology

Great Saphenous Vein (GSV) ablation

CEAP 2-6*	Appropriate
Below-knee in CEAP 4-6*	Appropriate

Small Saphenous Vein (SSV) ablation

CEAP 2-6* when reflux directed to affected area	Appropriate
CEAP 4-6* when reflux to GSV or thigh veins	Appropriate

Anterior Accessory Saphenous Vein (AASV) ablation

CEAP 2, 4-6* when reflux directed to affected area	Appropriate
--	-------------

Ablation of any vein

CEAP 1-2 for asymptomatic disease and visible veins	Rarely Appropriate
NO reflux	Never Appropriate

Perforator vein treatment

CEAP 4-6*, with high outward flow and large diameter directed toward affected area	Appropriate
CEAP 1-2*, with high outward flow and large diameter directed toward affected area	Rarely Appropriate
CEAP 1-2 in asymptomatic patient	Never Appropriate

Iliac vein or inferior vena cava (IVC) stenting

CEAP 4-6,* for obstructive disease <i>without</i> superficial truncal reflux	Appropriate
CEAP 3 (edema),* for obstructive disease <i>with or without</i> superficial truncal reflux	May Be Appropriate
In asymptomatic patient for iliac vein compression (such as May-Thurner compression), found as incidental finding by imaging, with or without teleangiectasia (CEAP 1)	Never Appropriate

*in symptomatic patients



Journal of
Vascular Surgery
Venous and Lymphatic Disorders

Masuda et al. *J Vasc Surg Venous Lymphat Disord*, July 2020


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We hypothesized that there would be significant variation in practice patterns for the treatment of venous disease, including conformity with appropriate use guidelines.

Methods

Table I: Mapping of VQI Variables to Multi-Society Criteria for GSV Interventions

Rating	VQI Variables	Criterion #	Text of Criterion
Never appropriate	GSV ablation + No reflux or Not Done	2.0	Ablation for a vein with no reflux
Rarely Appropriate	GSV Ablation + C2 + asymptomatic + reflux	1.9	Therapeutic ablation for asymptomatic disease and visible veins (CEAP classes 1-2)
Rarely Appropriate	<u>GSV ablation calf</u> + <u>Reflux GSV calf</u> + C2 + Asymptomatic	Table V	
May be Appropriate	GSV ablation calf + C3 + Only symptom edema + reflux GSV calf	1.3	Ablation of the below-knee GSV in a symptomatic patient with edema due to venous disease (CEAP class 3), provided careful clinical judgment is exercised because of the potential for a wide range of coexisting nonvenous causes of edema.
May be Appropriate	GSV ablation calf + Reflux GSV calf + C2 or C3 + Symptoms	Table V	
Appropriate	GSV ablation thigh + C2-6 + Symptoms + reflux GSV calf + reflux GSV thigh	1.1	Ablation of the GSV in a symptomatic patient with varicose veins, edema due to venous disease, skin or subcutaneous changes, healed or active ulcers (CEAP classes 2-6), when the GSV demonstrates axial reflux with or without SFJ reflux.
Appropriate	GSV ablation calf + C4-C6 + reflux GSV calf	1.2	Ablation of the below-knee GSV in a symptomatic patient with skin or subcutaneous changes, healed or active ulcers (CEP 4-6), when there is segmental GSV reflux below the knee directed to the affected area.
Asymptomatic = 0 for heaviness, achiness, swelling, throbbing, itching, impact on work/activity			
Segmental = GSV thigh OR GSV calf			
Axial = GSV thigh AND GSV calf			

Methods

Table II: Mapping of VQI Variables to Multi-Society Criteria for AAGSV Interventions

Rating	VQI Variables	Criterion #	Text of Criterion
Appropriate	AAGSV ablation thigh + C2 or C4-6 + Symptoms + reflux AAGSV calf + reflux AAGSV thigh	1.6	Ablation of the AAGSV in a symptomatic patient with varicose veins, skin or subcutaneous changes, healed or active ulcers (CEAP classes 2, 4-6) when the AAGSV demonstrates axial reflux directed to the affected area.
May be Appropriate	AAGSV ablation thigh + C3 + only symptom edema + reflux AAGSV calf + reflux AAGSV thigh	1.7	Ablation of the AAGSV in a symptomatic patient with edema due to venous disease (CEAP class 3), provided careful clinical judgment is exercised because of the potential for a wide range of coexisting nonvenous causes of edema.
Rarely Appropriate	No AAGSV reflux + GSV reflux + CEAP 2-6	1.8	Ablation of the AAGSV with no reflux, but GSV with reflux (CEAP classes 2-6)
Never Appropriate	AAGSV ablation + No reflux or Not Done	2.0	Ablation for a vein with no reflux
Asymptomatic = 0 for heaviness, achiness, swelling, throbbing, itching, impact on work/activity			
Segmental = GSV thigh OR GSV calf			
Axial = GSV thigh AND GSV calf			



Methods

- Accessed VQI VV Registry Data from 2015-September 2022
- All analyses performed at the procedure level.
- Statistical analysis: t-tests (continuous variables) or Fisher's exact tests (categorical variables).

Results

- Total N=55,740 procedures on 34,721 patients
- Excluded:
 - 406 – Information on treatment location was missing
 - 83 – Patient age <18
 - 3 – side of treatment was missing
 - 629 – CEAP was missing
 - 471 – CEAP in treated leg <2
- Total N for analysis: 54,148 procedures on 33,752 patients

Results

- Mean age 55.3 (13.9)
- 67% Female
- 81.8% White
- Mean BMI 30 (7.2)
- Treatment Location:
 - Office 7240 (66.7%)
 - Ambulatory Center 1321 (12.2%)
 - Outpatient 2274 (20.9%)
 - Inpatient 20 (0.2%)
 - Insurance
 - Private 22798 (70.1%)
 - Medicare 6908 (21.2%)
 - Medicaid 1922 (5.9%)

CEAP "C" Classification	
C2	10857 (33.3)
C3	11817 (36.3)
C4	7414 (22.8)
C5	833 (2.6)
C6	1637 (5.0)

Results

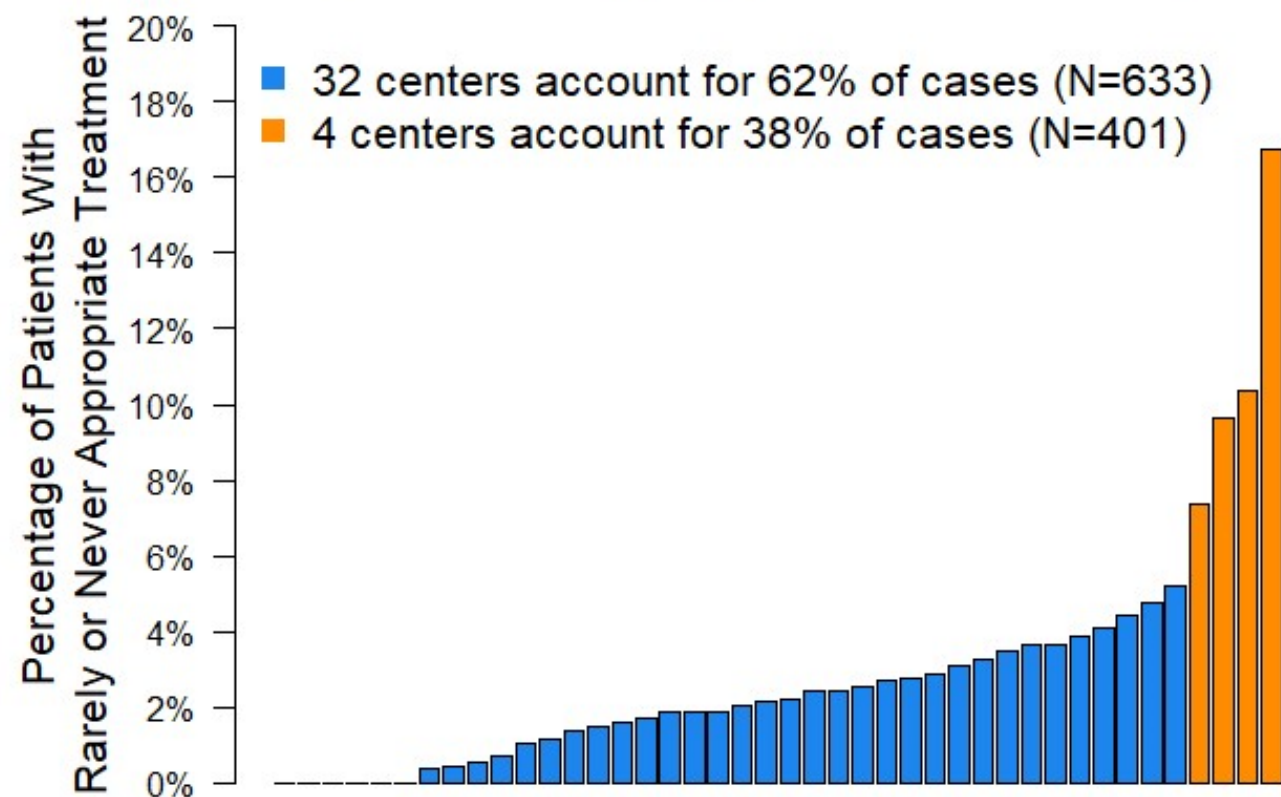
- Appropriate – 18727 Procedures
 - Most common – ablation of thigh GSV for C2-C6 disease 14151 (43.5%)
- May be Appropriate – 7320 procedures
- Rarely Appropriate – 632 procedures
 - GSV Ablation with reflux in asymptomatic C2 patient – 112 (0.3%)
 - AAGSV Ablation without reflux with GSV reflux – 488 (1.5%)
- Never Appropriate – 498 procedures
 - GSV Ablation with no reflux or imaging not done – 349 (1.1%)
 - AAGSV Ablation with no reflux or imaging not done – 149 (2.7%)

Results

- No correlation between insurance status and “Rarely Appropriate” or “Never Appropriate” procedures
- Office-based procedures
 - OR 2.7 ($p < 0.0001$) for Never Appropriate Procedure
 - OR 1.7 ($p < 0.003$) for Rarely Appropriate Procedure
- Number of veins treated associated with increased likelihood of inappropriate intervention ($p < 0.0001$)



Rarely or Never Appropriate Treatment by Center



Centers with 10 or More GSV Cases



Limitations

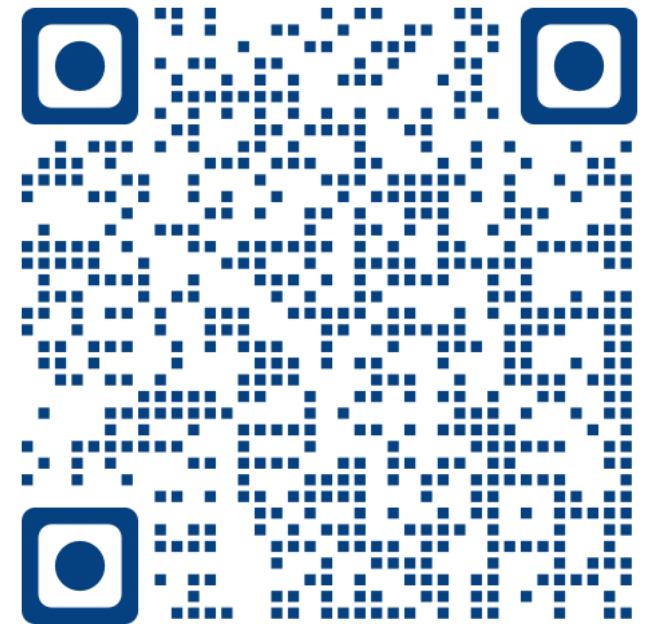
- Selection Bias
 - VQI providers represent subset of overall number of providers that offer treatment for venous disease
- Treatment Site not added until 2020 so 60% missing
- Number of veins treated has inherent bias because more veins are “at risk”



Discussion

- Generally, providers participating in VQI are doing very well
 - Low rate of inappropriate venous ablation procedures
- We should continue educational efforts regarding appropriate
- Our study demonstrates a novel use of VQI registry data to assess appropriateness in venous procedures.

Questions





State of Gender-Based Microaggressions Among Surgeons and Development of Simulation Workshops for Addressing Microaggressions for Surgical Trainees and Students

Yeonsoo S. Lee,¹ Shalyn Fullerton,¹ Rafay Malik,¹ Chelsea Dorsey, MD,² Deisy Mercado, MD, MSMS, CHSE,³ Amy Allen,³ Young Erben, MD⁴

1. Mayo Clinic Alix School of Medicine, Mayo Clinic Florida, Jacksonville, FL; 2. Section of Vascular Surgery and Endovascular Therapy, The University of Chicago Medicine and Biological Sciences; 3. Simulation Center, Mayo Clinic Florida, Jacksonville, FL; 4. Division of Vascular and Endovascular Surgery, Mayo Clinic Florida, Jacksonville, FL

BACKGROUND

- **Microaggressions** are exchanges or actions that send a demeaning and/or discriminatory message to members of a minoritized group. It is important to identify and address microaggressions, as they have been linked to **physician burnout** and add to depression, anxiety, and stress.
- Within surgery, an inherently hierarchical field, it can be difficult for learners to identify and respectfully address microaggressions—which could foster a safer and more positive work environment.

AIM

In this study, we evaluated the prevalence, quality, and impact of gender-based microaggressions on surgeons and trainees for future development of workshops to help trainees address microaggressions.

METHODS

- An 11-item instrument was developed based on the **Sexist and Microaggressions Experiences and Stress Scale (Sexist MESS)** and disseminated through email listservs and social media. Data collection occurred from November to December 2022.
- In an accompanying **pilot simulation workshop**, published tools addressing gender-based microaggressions were outlined in preparation for a discussion of recorded simulations of actors in actual scenarios with microaggressions previously experienced. Debrief discussions involved developing potential resolutions.

GRIT Framework

G

Gather your thoughts

- Pause to avoid reacting with anger.
- Assume positive intent.
- Decide whether it is an appropriate time and place to address the issue.

R

Restate

- Ask the person to repeat and possibly clarify the comment.
- Alternatively, rephrase the comment yourself to confirm what you heard.

I

Inquire

- Ask for clarification or for the intention of the comment.
- Focus on the comment and not the person making the comment.

T

Talk it out

- Use first person language to illustrate how the comment could be interpreted.
- Debrief with a trusted ally if needed after the interaction.

Adapted from Warner NS, Njathi-Ori CW, O'Brien EK. The GRIT (Gather, Restate, Inquire, Talk It Out) Framework for Addressing Microaggressions. JAMA Surg. 2020;155(2):178–179. doi:10.1001/jamasurg.2019.442

RESULTS

- Most respondents to the disseminated survey (N=147) were vascular surgeons (95/147; 64.6%) and identified as White (93/147; 63.3%), and as women (142/147; 96.6%). **Most identified as targets of gender-based microaggressions (128/147; 87.1%) and or silent witnesses (87/147; 59.2%).**
- Of the quality of microaggressions, the most common were when the target felt compelled to hide their emotions (described in the literature as “leaving gender at the door”) (32/147; 21.8%). The most stressful microaggressions were ones in which only male peers received recognition for work (55/147; 37.4%).

RESULTS, CONT'D

- Other types of and levels of stress regarding microaggressions are seen in **Tables 1 and 2**. Qualitative responses to the survey included comments remarking on the relevancy and prevalence of gender-based microaggressions, reasons for silence, and the personal and professional impacts (e.g. pay equity) of microaggressions and gender bias.

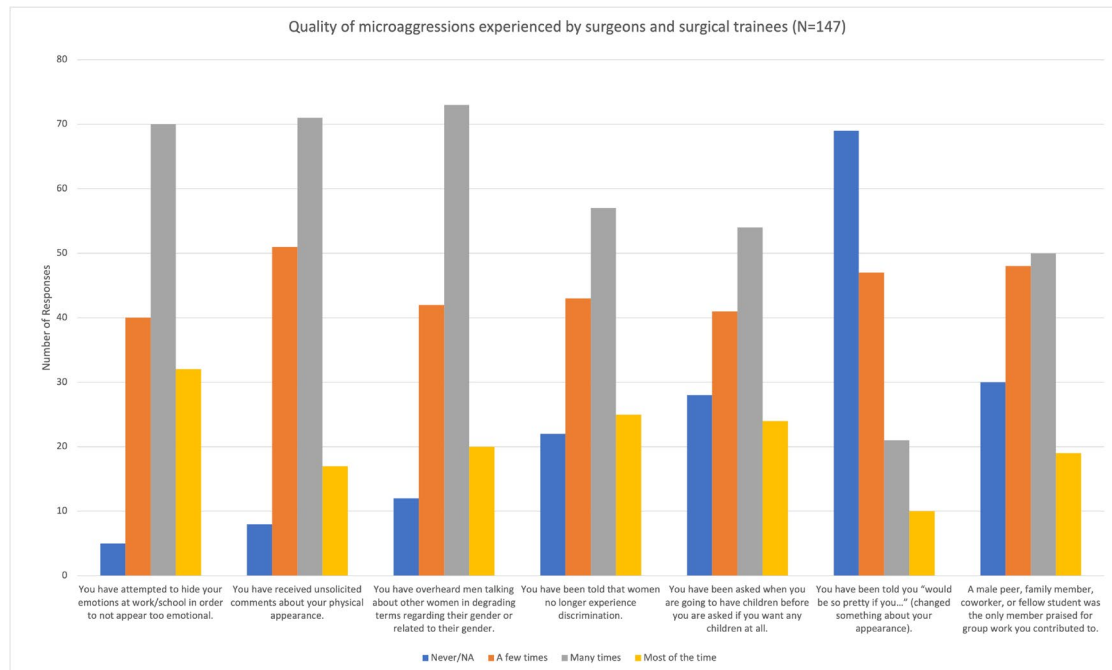


Table 1. Examples of microaggressions experienced by surgeons and surgical trainees reflecting identified common types of microaggressions in the literature

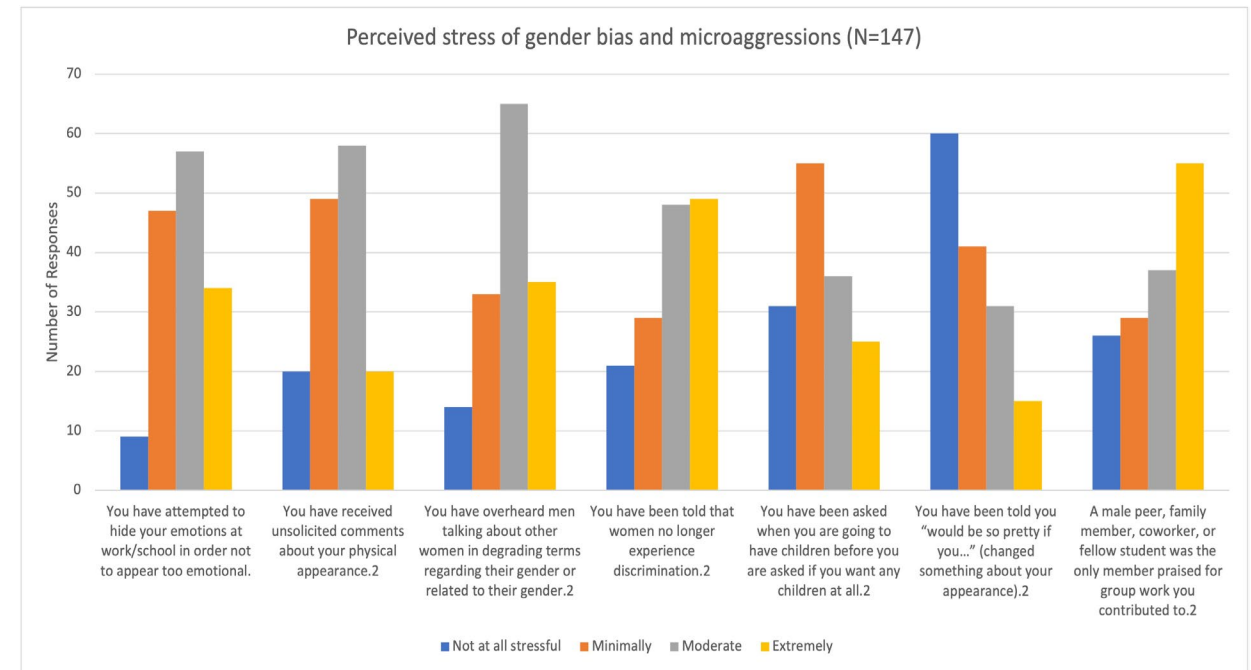


Table 2. Levels of stress associated with types of microaggressions experienced.

RESULTS, CONT'D

- When surveyed after the pilot workshop, 100% of participants would recommend this session to fellow colleagues.
- 100% completely agreed the content of the simulation was relevant to their future practice.
- Further, 100% agreed or completely agreed their ability to address microaggressions had improved.

CONCLUSION

- This study adds to the literature showing the **ubiquitous nature of microaggressions in surgery**.
- These results can be used to further develop targeted **workshops** aimed at helping trainees and practicing surgeons respond more effectively when experiencing or witnessing microaggressions.
- Future steps **include implementation of workshops that address intersectionality and providing virtual sessions to increase accessibility**.

ACKNOWLEDGEMENTS

Thank you to the **Mayo Clinic Simulation Center** for their support in developing and presenting the scenarios for these workshops.

Additional thanks to **Dr. Dana Herrigel** for her expertise and support from previously presented work, including her poster for the GEA Regional Conference, “Creating UPSTANDERS not bystanders: How to use simulation as a platform to recognize and respond to microaggressions.”

QUESTIONS & ANSWERS



Dr. Young Erben – Medical Director

Vacant – Associate Medical Director

Mary Wanzek – Lead Data Manager

Rhonda Iverson – Lead Data Manager

Quality Improvement Charters -2022

Center Name	Charter Topic	Lead	Surgeon Champion
Florida Hospital Zephyrhills	D/C Meds - Statin	Barbara VanCatterburch	Dr. Torres, Dr. Citrin
Piedmont Atlanta	LTFU	Cynthia Boatright	Dr. Charles Ross
Piedmont Atlanta	DC Meds	Cynthia Boatright	Dr. Charles Ross
UAB	LTFU	Courtney Busby	Dr. Adam Beck
The Emory Clinic	Clinical	Alexis Neill	Dr. Yazan Duwayri
Emory St. Joseph's	Clinical	Alexis Neill	Dr. Yazan Duwayri

Open Discussion following data review

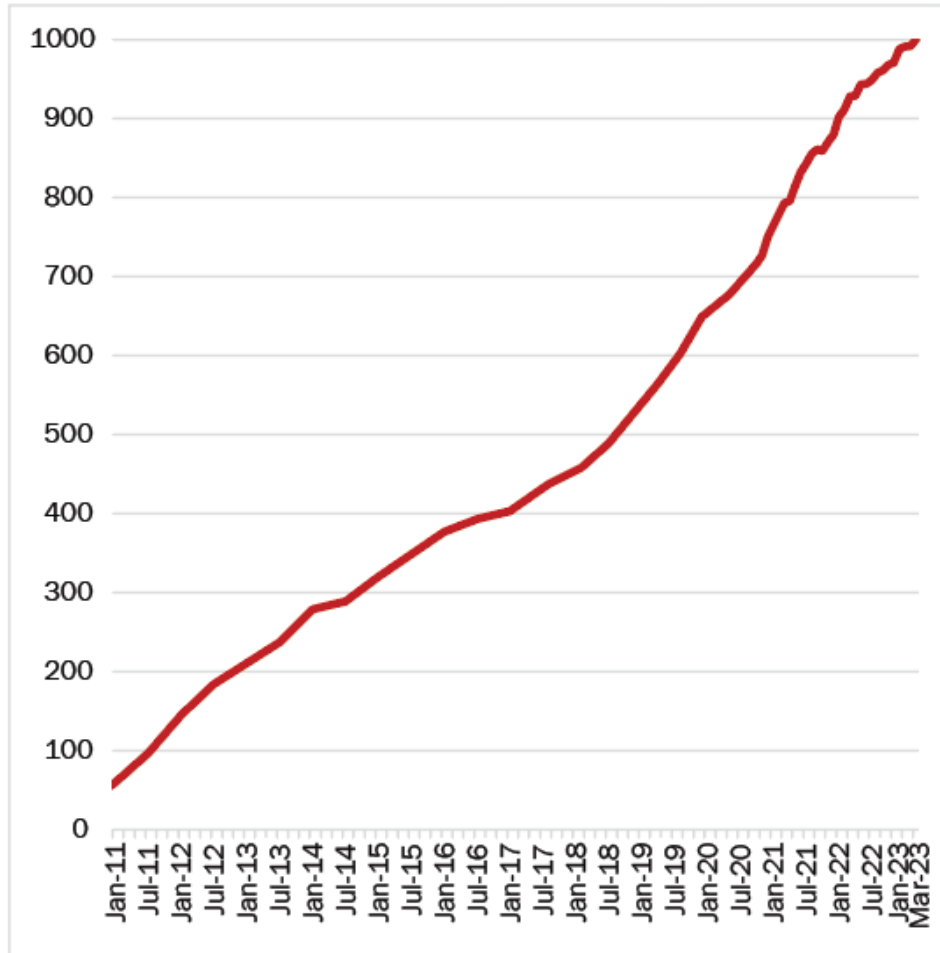
PVI Claud ABI/Toe Pressure

CEA ASYMP LOS>1 Day

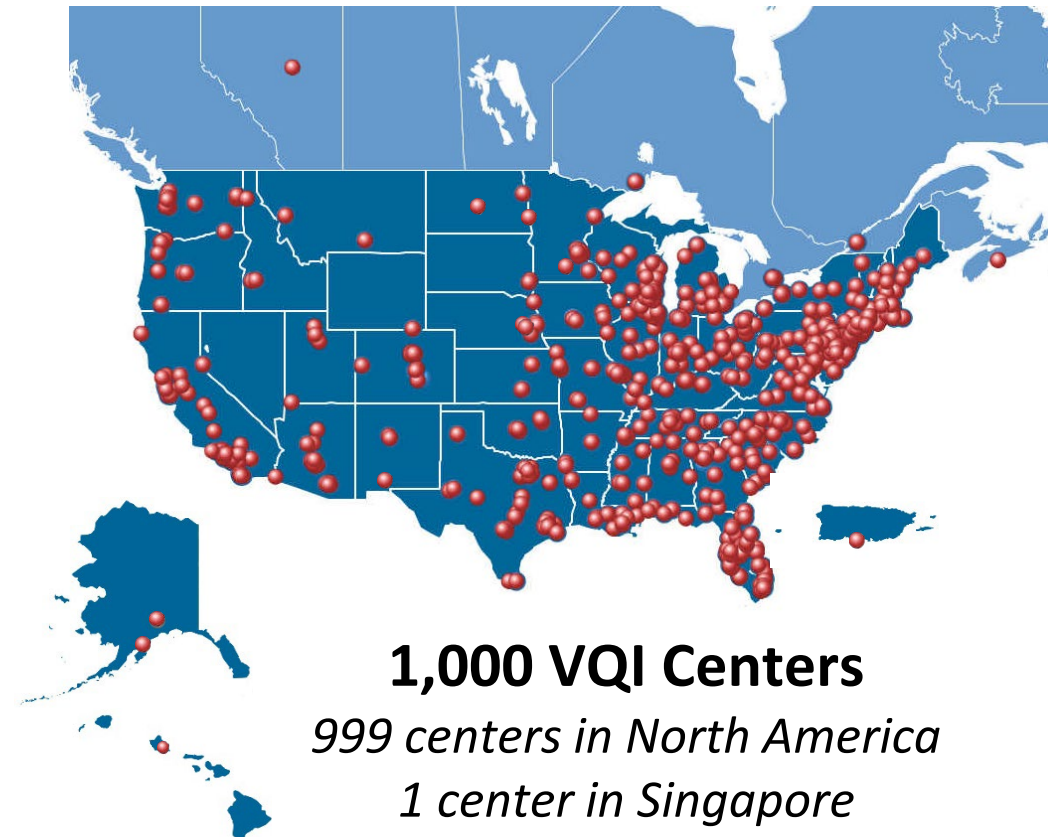
National VQI Update

Betsy Wymer, DNP, RN, CV-BC
SVS PSO Quality Director

Number of Participating Centers

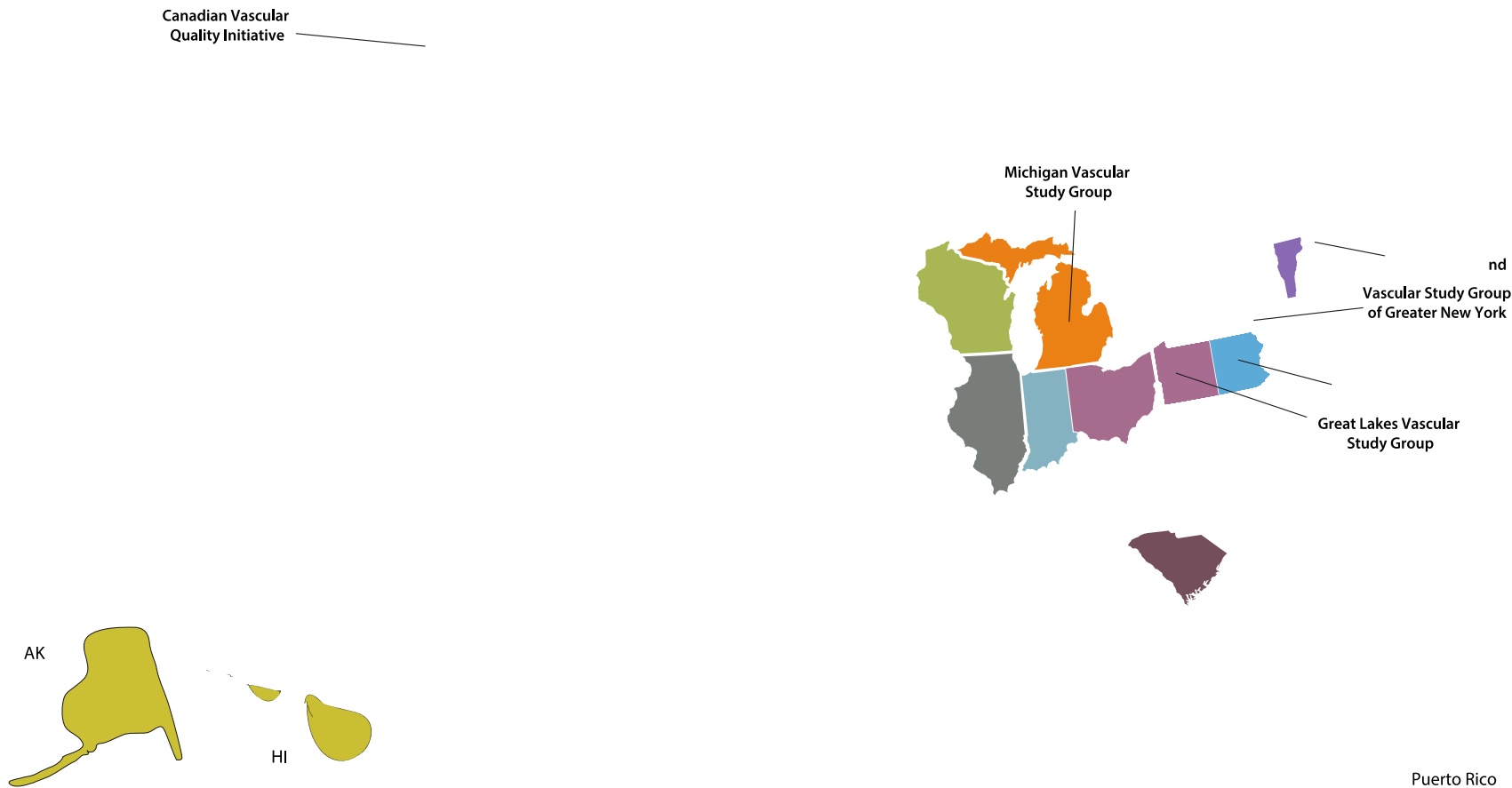


Location of VQI Participating Centers



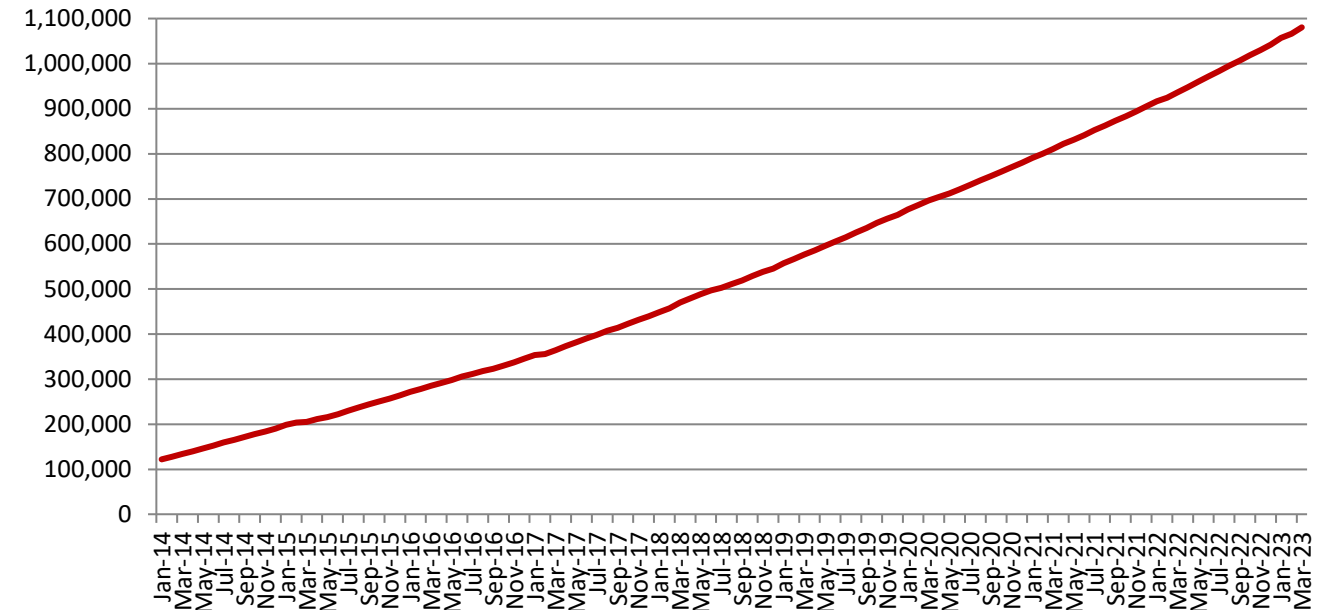
18 Regional Quality Groups

18 Regional Quality Groups



TOTAL PROCEDURES CAPTURED (as of 4/1/2023)		1,080,461
Peripheral Vascular Intervention		373,148
Carotid Endarterectomy		192,093
Infra-Inguinal Bypass		81,019
Endovascular AAA Repair		80,103
Hemodialysis Access		76,335
Carotid Artery Stent		96,355
Varicose Vein		61,164
Supra-Inguinal Bypass		25,887
Thoracic and Complex EVAR		28,692
Lower Extremity Amputations		28,322
IVC Filter		18,290
Open AAA Repair		17,727
Vascular Medicine Consult		1,162
Venous Stent		164

VQI Total Procedure Volume



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

Save the Date!

2023 VQI Annual Meeting
June 13-14, 2023

Gaylord National Resort & Convention Center
National Harbor, MD (outside **Washington, DC**)

2
0
2
3

https://www.compusystems.com/servlet/ar?evt_uid=805





SVS | Society for Vascular Surgery

National Harbor, MD • June 14-17

 <p>SVS Society for Vascular Surgery</p> <p>SVS Member Username/Password Help - Contact SVS Membership Department at 800-258-7188 or 312-334-2300. Non-Member and VQI Registrants are required to create an account.</p> <p>Registration categories are auto assigned based on current membership status. Pay lapsed dues online at www.vascular.org to obtain member registration rates.</p> <p>Start New SVS Registration</p>	 <p>SVN SOCIETY® VASCULAR NURSING EMPOWERING NURSES THROUGH EDUCATION & COLLABORATION</p> <p>Registration categories are auto assigned based on current membership status. Pay lapsed dues <u>online</u> to obtain membership rates. Please allow up to 72 hours for payment to be applied.</p> <p>Start New SVN Registration</p>
 <p>SVS VQI In collaboration with NCDR®</p> <p>VQI Annual Meeting Registration allows for admission to VQI ONLY.</p> <p>Start New VQI Registration</p>	 <p>RPVI</p> <p>RPVI Course Registration allows for admission to RPVI ONLY.</p> <p>Start New RPVI Registration</p>

A Brand New VQI.org!

SVS | **VQI**
In collaboration with NCDR®

ABOUT VQI REGISTRIES QUALITY IMPROVEMENT REGIONAL GROUPS PARTNERS & COLLABORATIONS DATA ANALYSIS & RESEARCH RESOURCES CONTACT / JOIN

Q

Improving the quality, safety, effectiveness and cost of vascular healthcare by collecting and exchanging information.

BEGIN YOUR SEARCH HERE.

Enter keyword or term to search... Q

ABOUT THE VQI →

VQI REGISTRIES →

REGIONAL GROUPS →

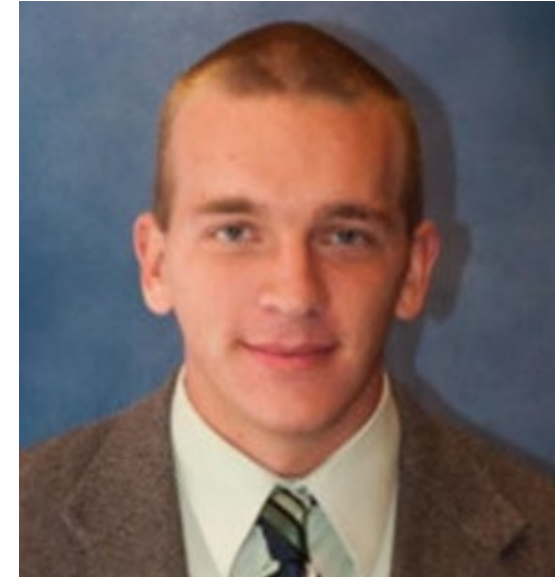
QUALITY IMPROVEMENT →

<https://staging.vqi.bytscosite/about/>

- The addition of 14 registry specific pages
- More robust search capabilities, so customers can easily get the information they need
- Clean presentation of content
- Consistent menu options for each of the 18 Regional Group Pages.
- Streamlined Members Only area

Jeff Yoder – Statistician

- Start Date December 2022
- M.S. degree in Statistical Science from Indiana University
- Teaching assistant at Indiana University.



Top Responsibilities:

Working with the PSO Analytics team on a variety of projects and initiatives.

- Infra/Supra Inguinal Bypass Revisions Live late March 30, 2023
- New National Quality Initiative Smoking Cessation to be announced at VQI@VAM
- Data Integrity Audit Program
- Risk Calculator
- Follow-up reports:
 - IVC Filter and Varicose Vein
- Coming soon:
 - Harmonization of CAD variables
 - Harmonization of Anticoagulation
 - Open AAA Registry Revision



- SVS PSO recognizes need to reduce number of registry variables while maintaining balance between QI & research/publishing
- Work underway to decrease data entry burden
- Registry committees have begun reviewing variables
 - Possible variable retirement
 - Marking variables as mandatory versus **NOT** mandatory for record completion
- Variables required for reporting measures, industry projects & guideline/AUC recommendations will be taken into consideration
- Progress being made with data integration between EMRs & VQI. Updates provided at the VQI Annual Meeting



- Data Integrity Audits will begin Spring 2023
- The Carotid Artery Stent Registry - first to go live
- Additional registries will be added on a regular basis
- Data results will not be punitive; will be utilized to update training and help texts
- Audits are being performed by a third-party vendor – Telligen
- Audited records will be blindly abstracted by Telligen; then compared to the completed case in Pathways for matches
- More information to come soon
- All inquiries should be sent to Melissa Latus at mlatus@svspso.org



- In partnership with the American College of Surgeons
- Inpatient launch late March, Outpatient launch June
- Standards derived by SVS members; program is used to measure compliance w/standards
- Six National Quality Strategies to align organizational functions to drive improvement based on the aims & priorities of the Agency for Healthcare Research and Quality (AHRQ):
 - Measurement & feedback w/ required registry participation
 - Certification, accreditation, & regulation w/required facility regulation
 - Consumer incentives & benefit designs with thorough discussion of treatment options and consent
 - Health information technology, working with outside software for continuation of care
 - Innovation & diffusion with research
 - Work force development w/ the capability of resident training

- TASC/GLASS
 - Dr. Elizabeth Genovese, M.D.
- Varicose Vein
 - Dr. Jennifer Ellis, M.D.

Visit VQI.org for a full listing of all Educational video offerings

<https://www.vqi.org/registry-education-members-only/>

REGISTRY EDUCATION WEBINARS

- VQI Educational Session – Vascular Medicine Consult (VMC)
- VQI Educational Session – Infra/Supra
- VQI Educational Session – PVI
- VQI Educational Session – EVAR
- VQI Educational Session – TEVAR/COMPLEX EVAR
- VQI Educational Session – CAS and CEA
- VQI Educational Session – Open AAA
- SVS VQI Infra/Supra Registry Revisions Webinar
- SVS VQI Educational Webinar – TASC/GLASS
- SVS VQI Education Webinar – TASC/GLASS Slides

**SPECIAL
OFFER**

Venous Stent Registry and Vascular Medicine Consult Registry Free Trial

For a limited time, SVS VQI is offering a **complimentary one-year trial subscription** to the VSR and VMC for an easily accessible first-hand experience of its value and ROI.

<https://mailchi.mp/5119b784e8d0/no-time-like-the-present>

To learn more about the Venous Stent Registry offer click here: [Venous Stent](#)

To learn more about the Vascular Medicine Consult Registry offer click here: [Vascular Medicine](#)

Or email vqi@fivoshealth.com to contact an account executive.

- **A Vascular Quality Initiative frailty assessment predicts post discharge mortality in patients undergoing arterial reconstruction** Kraiss LW, Al-Dulaimi R, Allen CM, Mell MW, Arya S, Presson AP, Brooke BS.
<https://pubmed.ncbi.nlm.nih.gov/35709866/>
- **Ankle-brachial index use in peripheral vascular interventions for claudication** Hawkins KE, Valentine RJ, Duke JM, Wang Q, Reed AB. <https://pubmed.ncbi.nlm.nih.gov/35276260/>
- **Assessing the quality of reporting of studies using Vascular Quality Initiative (VQI) data** Mirzaie AA, Delgado AM, DuPuis DT, Olowofela B, Berceli SA, Scali ST, Huber TS, Upchurch GR Jr, Shah SK.
<https://pubmed.ncbi.nlm.nih.gov/35760240/>
- **Incidence of Procedure-Related Complications in Patients Treated With Atherectomy in the Femoropopliteal and Tibial Vessels in the Vascular Quality Initiative** Sanon O, Carnevale M, Indes J, Gao Q, Lipsitz E, Koleilat I.
<https://pubmed.ncbi.nlm.nih.gov/35466788/>
- **Survival, reintervention and surveillance reports: long-term, center-level evaluation and feedback of vascular interventions** Fowler XP, Gladders B, Moore K, Mao J, Sedrakyan A, Goodney P.
<https://pubmed.ncbi.nlm.nih.gov/36248241/>

- **Perioperative outcomes of carotid endarterectomy and transfemoral and transcervical carotid artery stenting in radiation-induced carotid lesions** Batarseh P, Parides M, Carnevale M, Indes J, Lipsitz E, Koleilat I.
<https://pubmed.ncbi.nlm.nih.gov/34560219/>
- **Long-term implications of elective evar that is non-compliant with clinical practice guideline diameter thresholds** de Guerre LEVM, Dansey KD, Patel PB, Marcaccio CL, Stone DH, Scali ST, Schermerhorn ML.
<https://pubmed.ncbi.nlm.nih.gov/34508797/>
- **Effect of postoperative antithrombotic therapy on lower extremity outcomes after Infrapopliteal bypass for chronic limb-threatening ischemia** Marcaccio CL, Patel PB, Wang S, Rastogi V, Moreira CC, Siracuse JJ, Schermerhorn ML, Stangenberg L. <https://pubmed.ncbi.nlm.nih.gov/35074410/>
- **The association between device instructions for use adherence and outcomes after elective endovascular aortic abdominal aneurysm repair** De Guerre LEVM, O'Donnell TFX, Varkevisser RRB, Swerdlow NJ, Li C, Dansey K, van Herwaarden JA, Schermerhorn ML, Patel VI. <https://pubmed.ncbi.nlm.nih.gov/35276256/>
- **Association of preoperative vein mapping with hemodialysis access characteristics and outcomes in the Vascular Quality Initiative** Fedorova E, Zhang GQ, Shireman PK, Woo K, Hicks CW.
<https://pubmed.ncbi.nlm.nih.gov/34718099/>

Regional Meeting CME/CE Credit



Des Moines University is the continuing education provider for this activity.



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



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



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



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



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

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

REMEMBER TO PSO:

- **P**UT your FULL NAME in Zoom for remote attendees. Record of meeting attendance is required for CME/CE credit (no exceptions will be made)
- **S**END an email to ljohnson@svspso.org with names of group members that are sharing 1 device
- **O**FFICIALLY apply for CME/CE credit by clicking the URL or QR code provided here:
https://dmu.co1.qualtrics.com/jfe/form/SV_0031yjozTi1pebc





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

Quality Improvement Update Spring 2023



Quality Improvement – Participation Awards

The following is a list of the four domains for the 2023 Participation Awards criteria:

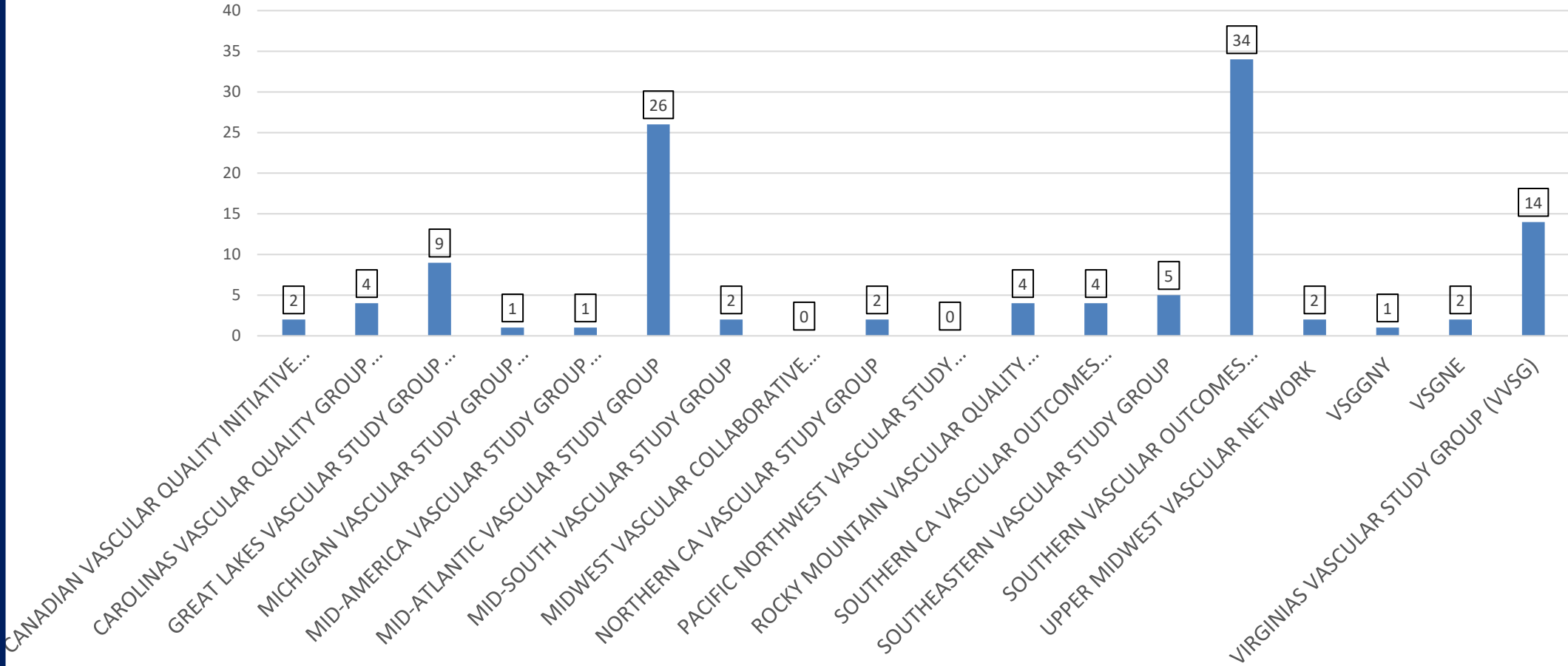
- **Domain 1 – LTFU – 40% weighted**
- **Domain 2 – Regional Meeting Attendance – 30% weighted**
- **Domain 3 – QI Project – 25% weighted** 
- **Domain 4 – Registry Subscriptions – 5% weighted** 

<https://www.vqi.org/quality-improvement/participation-awards/>



Quality Improvement - Charters

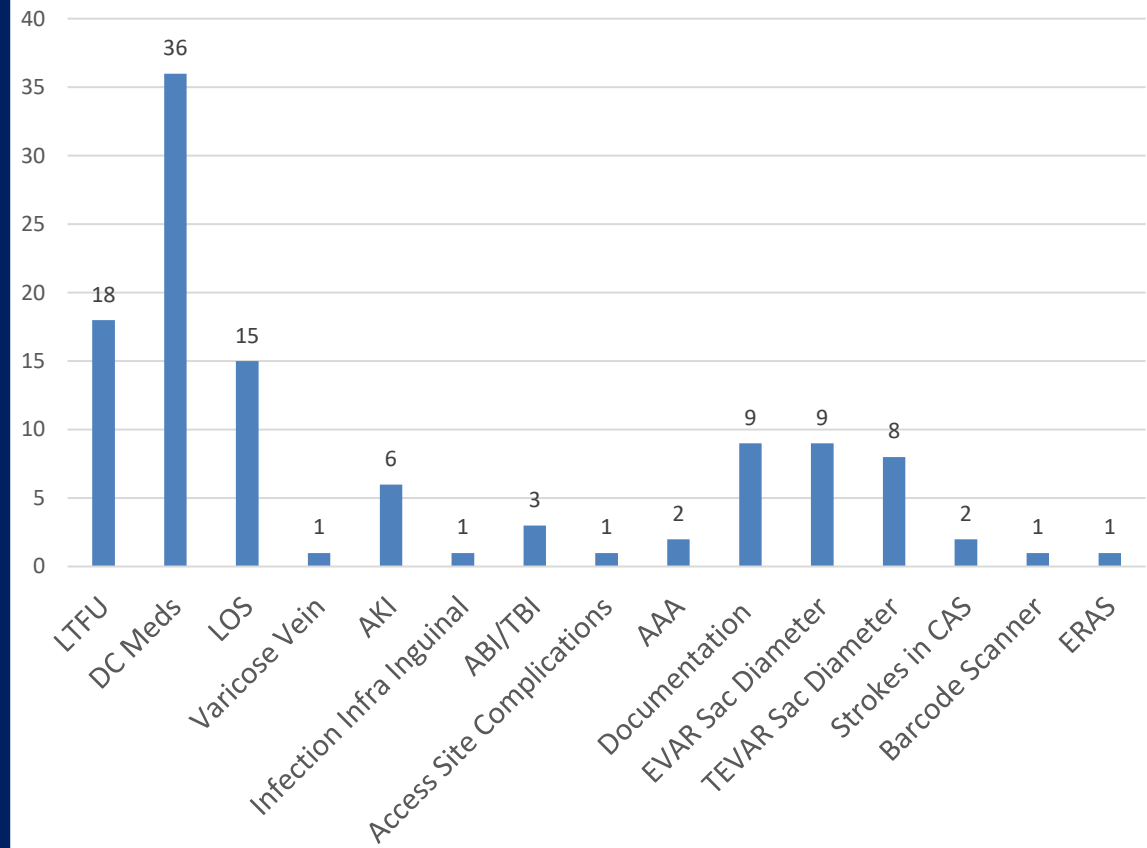
Regions with Charters n=113



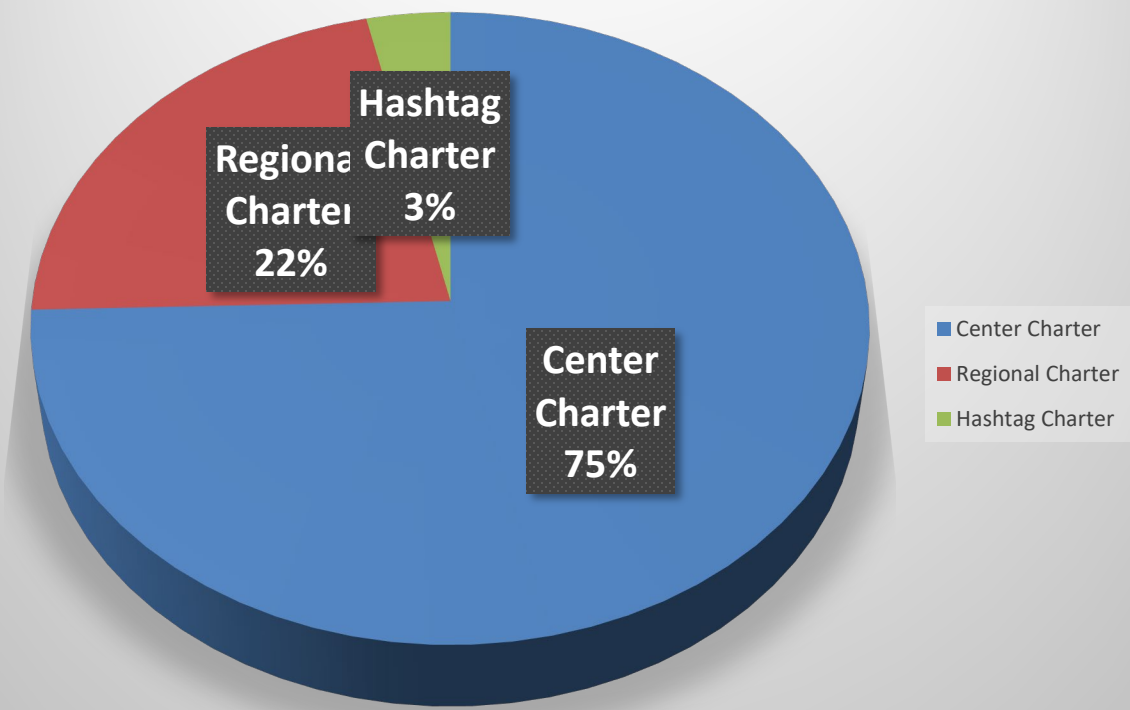


Quality Improvement – Charter Breakdown

Charter Topics



Charter Types



- Quarterly Webinars (Charter and QI)
 - www.vqi.org/quality-improvement-members-only/#upcoming-events
- Sample Charters
 - www.vqi.org/quality-improvement/quality-improvement-tools/#qi-charters
- Toolkits (VQI@VAM, Data Manager, LTFU)
 - www.vqi.org/quality-improvement/quality-improvement-tools/#qi-toolkits
- New improved VQI website
 - www.vqi.org
- 1:1 Calls
 - bwymmer@svspso.org



SVS Clinical Practice Guidelines



In collaboration with NCDR®

HOME / QUALITY IMPROVEMENT – MEMBERS ONLY



Society for
Vascular Surgery

[About](#) [News](#) [Advocacy](#) [Join](#) [SVS Foundation](#)

[MY ACCOUNT](#)

[GO](#)

[Vascular Specialists](#)  [Trainees & Students](#)  [Patients and Referring Physicians](#) 

[Home](#)

Clinical
Practice
Guidelines

Enabling healthcare providers to select the best care for a unique individual based on patient preferences.



Society for
Vascular Surgery



American
Venous Forum





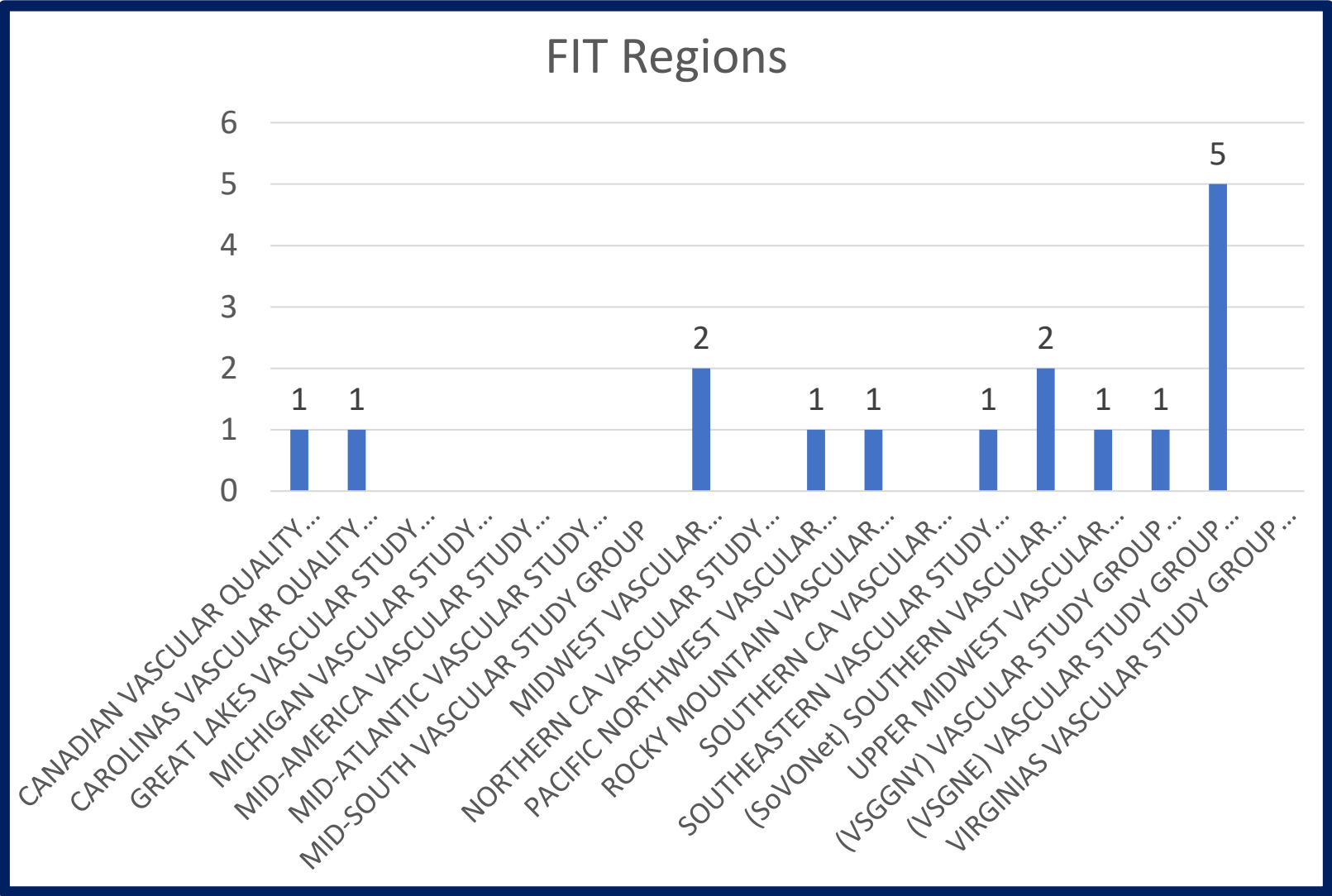
SVS PSO Quality FIT Program

- Existing FIT Trainees Jack Cronenwett Scholarship Application
 - Applications accepted January 9 – February 28
 - FIT Committee Review March – April
 - Scholarship winners announced at VQI@VAM 2023
- FIT Trainee 2023 Applications
 - Applications accepted January 9 - February 28
 - FIT Committee Review April – May
 - FIT Trainees with FIT Mentors announced at VQI@VAM 2023
- FIT Mentors
 - Accepted at any time
 - Contact bwymmer@svspso.org
- www.vqi.org/quality-improvement/quality-fellowship-in-training-fit-program/





SVS PSO Quality FIT Program



Arterial Quality Council:

Emily Spangler, MD



Arterial Quality Council Update

- Open AAA Major Revision
 - Will be renamed to accurately capture intent of the registry
 - Iliac to Left Subclavian
- Registry Committee updates
- Review Smoking Cessation and inclusion of vaping variables.
Grp decided not at this time
- Introduction of the Data Integrity Program

Venous Quality Council:

Olamide Alabi, MD



Venous Quality Council Update

- Last Meeting February 22, 2023
- Re-engagement of the venous registry committees
 - Focus on new center recruitment
 - Review of current reporting
 - Brainstorming & discussion for addition of new reporting measures for bi-annual reports, Quarterly Dashboards and follow-up reports

IVC Filter Follow Up Report

IVC Follow-up Outcomes Report

1m ago

Procedure Date

Planned Filter Duration

2019/01/01 – 2021/12/31

is any value

2019/01/01 – 2021/12/31



☐ Temporary

☐ Permanent

Prepared for Demo Medical Center on 02/01/2023

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

Follow-Up Rate

	My Center	My Region	All VQI
Cases with any follow-up	83.3% (5/6)	NA (<3 centers)	NA (<3 centers)
Cases with follow-up >= 9 & <= 21 ...	50% (2/4)	NA (<3 centers)	NA (<3 centers)
Cases with follow-up >= 9 & <= 21 ...	50% (2/4)	NA (<3 centers)	NA (<3 centers)

Varicose Vein Follow-up Report

Varicose Vein Follow-Up Outcomes Report

22m ago

Procedure Date

2020/01/01 – 2022/12/31

2020/01/01 – 2022/12/31

Leg Treated

is any value

☐ Right only

☐ Left only

☐ Bilateral

Treatment Type

is any value

☐ Thermal_RF

☐ Thermal_Laser

☐ Mechanochemical

☐ Chemical

☐ Embolic adhesive

☐ High ligation and stripping

☐ Stripping

☐ Stab phlebectomy

☐ Trivex phlebectomy

☐ Open ligation

☐ Endoscopic ligation

Vein Type

is any value

☐ Truncal

☐ Perforator

☐ Cluster

Treatment Region

any value

Thigh

Calf/Ankle

Both

This report is a patient safety work product. It is intended to be used for internal quality improvement and patient care within the SVS PSO, LLC, and is considered privileged and confidential.

Follow-Up Rate

	My Center	My Region	All VQI
Cases with early follow-up 0-3 months	33.33% (2/6)	NA	NA (<3 centers)
Cases with late follow-up >3 months	33.33% (2/6)	NA	NA (<3 centers)
Venous ulcers patients with late follow-up >= 3 months	0.00% (0/6)	NA	NA (<3 centers)

Fictitious Data

- Melissa Latus is your PSO primary point of contact on the status or refresh request. mlatus@svspso.org
- An **ACTIVE** pathways account & privileges to '*Share a File*' is required in order to receive your requested Blinded Data Set (BDS)
- Always included your RAC proposal number in any communications please.

Arterial Research Advisory Council:

Susan Shafii, MD



<https://www.vqi.org/svs-vqi-national-arterial-rac-schedule/>

- PSO Arterial RAC - April 2023 Proposal Submission
- Call for Proposals: February 28, 2023
- Submission Deadline: March 28, 2023
- Meeting: April 10, 2023
-
- PSO Arterial RAC - June 2023 Proposal Submission
- Call for Proposals: May 2, 2023
- Submission Deadline: May 30, 2023
- Meeting: June 12, 2023
-
- PSO Arterial RAC – August 2023 Proposal Submission
- Call for Proposals: July 4 ,2023
- Submission Deadline: August 1, 2023
- Meeting: August 14, 2023

194 Publications in 2022

- **Data Security:** All investigators/team members are responsible for security of datasets, which are only to be used for the project for which they were approved.
- **Dataset Access:** Investigators have free access to the datasets to which their center has subscribed, providing that their center has at least 50% Long Term Follow-Up for the registry data being requested. Please confirm that your center subscribes to the dataset(s) you wish to analyze before submitting your proposal.
- **Comparison of Specialties:** The SVS VQI is a multi-specialty registry, therefore the SVS PSO Executive Committee does not allow comparisons between specialties in submission topics.

Venous Research Advisory Council:

Susan Shafii, MD

Venous RAC Update:

Created a separate Venous RAC in July 2020

[The Vascular Quality Initiative - National Venous RAC Schedule \(vqi.org\)](https://vqi.org)

2020: 3 proposals

- The impact of vein size on closure rate in treatment of the saphenous vein for venous insufficiency: **Jaime Benarroch-Gampel, MD**
- Comparison of complication rates of IVC filters based on anticoagulant and indication: **Emily Spangler, MD**
- Effect of Access Site Choice on Angulation of IVC filter and Impact on retrieval rates: **Khalil Qato, MD**

2021: 3 proposals

- Incidence of venous thromboembolic events (VTE) after endovenous ablation in patients with venous stasis ulcers (C6 disease): **Jaime Benarroch-Gampel, MD**
- Impact of Treatment Length and Treatment Region on Clinical Outcomes after Varicose Vein Procedures: **Halbert Bai, MD**
- Safety and efficacy of Endovenous ablation in patients with a history of DVT: **Mikel Sadek, MD**

2022: Proposals

- Impact of IAC Vein Treatment Center Accreditation on practice habits, utilization index, and patient outcomes: ProMedica Toledo Hospital
- Patient, Provider, and Geographical Factors Influencing Appropriate Use of Endovenous Ablation Therapy
- Outcomes following endovenous ablation therapy for obese patients with CEAP C2 and C3 venous disease

National Venous RAC Schedule

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

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

Bi-Monthly Schedule for National Venous RAC Proposal Submissions

May 2023

Call for Proposals: March 28, 2023

Submission Deadline: April 25, 2023

Meeting: May 8, 2023

July 2023

<https://www.vqi.org/national-venous-rac-schedule/>

Call for Proposals: May 30, 2023

Submission Deadline: June 27, 2023

Meeting: July 10, 2023

Governing Council:

Young Erben, MD

Meeting November 18, 2022

- Quality Improvement Update
 - Smoking Cessation as a National Quality Initiative
 - 2022 ended with a record # of charters 113
- RAC Submission
 - 5 proposals per cycle from each institution
 - Once a center reaches 15 Arterial RAC proposals, faculty member will be expected to serve on RAC as an at large member
- Frailty variable development
- OBL Registry Refinement; enhanced value, reporting/reimbursement, ease data burden
- Discussion - Data burden within registry
 - Committee member engagement/expectations
 - Each Committee will have an associate chair
 - Enhance reporting measures
 - Review current variables; consider required fields; elimination of data variables



Updates for Spring 2023 VQI Regional Meetings



Technology Updates for VQI

Released in Q3 2022



- Carotid Artery Stent (CAS) Revision

- Air Kerma field was added Air Kerma ** mGy DAP ** Gy.cm²

** At least one of these fields must be completed for submission

- Select options for Lesion -> Stent -> Pre Dilate were updated

Pre-dilate Lesion

Select ▼

Select

No

Yes, drug coated balloons

Yes, lithotripsy

Yes, plain balloon

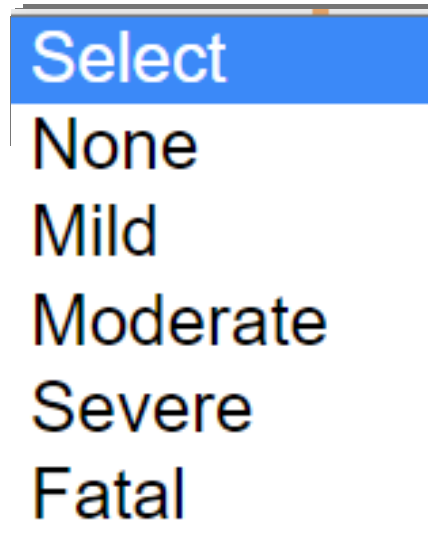


- Peripheral Vascular Intervention (PVI), Infra- and Suprainguinal Bypass, and Vascular Medicine Consult (VMC) Revision
 - Medication regions, in Demographics, Post- procedure and follow-up forms, were reordered and four new fields related to the dose of ASA and Rivaroxaban were added.

ASA	<div>Yes</div>	ASA Daily Dose	<div>Select</div>	mg		
Chronic Anticoagulant	<div>Rivaroxaban</div>	Rivaroxaban Dose	<div>10</div>	mg	Rivaroxaban Dose Frequency	
					<div>Other</div>	Please Specify
P2Y12 Antagonist	<div>Select</div>					
Statin	<div>Select</div>					
Beta Blocker	<div>Select</div>					
ACE-Inhibitor/ARB	<div>Select</div>					

- PVI, INFRA, SUPRA, VMC Revision
 - Any Bleeding Complication field was added to the follow-up forms.

Any Bleeding Complication



A dropdown menu with a blue header labeled "Select". The menu is open, showing five options: "None", "Mild", "Moderate", "Severe", and "Fatal".

Select
None
Mild
Moderate
Severe
Fatal

Device Assistant Enhancements

- Moved full or partial matched Catalog Numbers to appear at the top of the device results list
- Added ability to search for Catalog Number, Primary DI or Alternate Catalog Number with or without dashes
- Added the columns 'Description' and 'Alternate Catalog Number' to the device table

Released in Q3 2022



TEVAR Follow-up Outcomes Report

- A new 'Follow-up Outcomes Report' for the Thoracic and Complex EVAR registry, developed by the SVS PSO, is now available in the PATHWAYS Reporting tab. The report will provide key follow up metrics for VQI sites with center data as well as regional and all VQI benchmarking and includes drill down capabilities to better understand center data at the procedure level.

TEVAR Follow-up Outcomes Report

Procedure Date	Presentation	Pathology	Dissection Indication	Zone of Treatment (Proximal/Distal)
2018/01/01 – 2021/12/31	is any value	is any value	is any value	<div><div>3 4</div><div></div></div>

Released in Q3 2022



IVC Filter Follow-up Outcomes Report

- A new 'Follow-up Outcomes Report' for the IVC Filter registry, developed by the SVS PSO, is now available in the PATHWAYS Reporting tab. The report will provide key follow up metrics for VQI sites with center data as well as regional and all VQI benchmarking and includes drill down capabilities to better understand center data at the procedure level.

IVC Follow-up Outcomes Report

Procedure Date

2020/01/01 – 2022/12/31

Planned Filter Duration

is any value

Released in Q3 2022



HDA Follow-up Outcomes Report

- A new 'Follow-up Outcomes Report' for the Hemodialysis Access registry, developed by the SVS PSO, is now available in the PATHWAYS Reporting tab. The report will provide key follow up metrics for VQI sites with center data as well as regional and all VQI benchmarking and includes drill down capabilities to better understand center data at the procedure level.

HDA Follow-up Outcomes Report

Procedure Date

2020/01/01 – 2022/12/31

Procedure Type

is any value

Performance Site

is any value

AV Graft Conduit

is any value

Inflow Artery

is any value



VVR Follow-up Outcomes Report

- A new 'Follow-up Outcomes Report' for the Varicose Vein registry, developed by the SVS PSO, is now available in the PATHWAYS Reporting tab. The report will provide key follow up metrics for VQI sites with center data as well as regional and all VQI benchmarking and includes drill down capabilities to better understand center data at the procedure level.

Varicose Vein Follow-Up Outcomes Report

Procedure Date	Leg Treated	Treatment Type	Vein Type	Treatment Region
2017/01/01 – 2022/12/31	is any value	is any value	is any value	any value ▼



PATHWAYS Support

PATHWAYS Support

Need help?

Check out the PATHWAYS Support tab.

- **Documents**

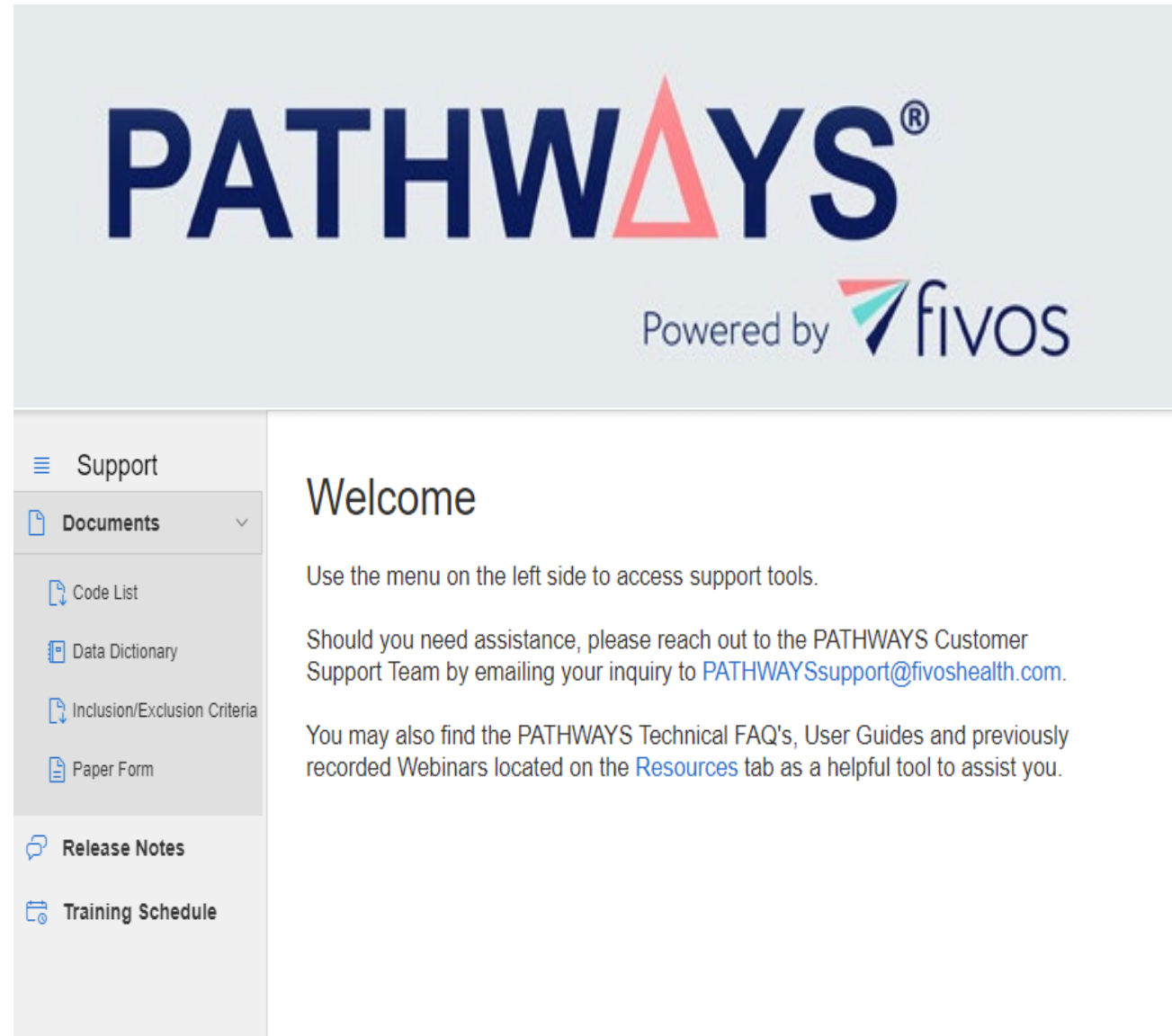
List of essential documents necessary for new staff and experienced abstractors to assist with data abstraction.

- **Release Notes**

Listing of release announcements highlighting changes & improvements to the registries.

- **Training Schedule**

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



PATHWAYS Support



Help us help you.

PATHWAYSsupport@fivoshealth.com

When sending an email inquiry to the PATHWAYS Support team...

- Please include:
 - Detailed information regarding your question including the name of the procedure registry and field(s) in question
 - Primprocid's to identify specific records
 - Your center name and contact information including a phone number in case we need to contact you
- Please **exclude**:
 - PHI from any email or attachments you upload
 - i.e., Patient name & DOB

This will help avoid confusion as we research your questions to ensure an accurate and timely response!

PATHWAYS Support

Are you new to the role of Hospital Manager at your center?

The **PATHWAYS Hospital Manager Guide**, located on the Resources tab, might help you better understand the responsibilities of your role in the VQI.



PATHWAYS® Hospital Manager Guide

We are excited to welcome you as a new Hospital Manager to PATHWAYS!

Your center has shown a commitment to quality improvement. The PATHWAYS platform provides a complete solution for collecting and managing registry data. Built-in reporting tools allow you to manage your registry data and compare your outcomes with other centers.

As a new Hospital Manager (HM) for your center, we would encourage you to reach out to existing staff to discuss your center's unique workflows and experience, and to gather information about the status of your registry data abstraction.

Responsibilities/Expectations of HM Role:

- Primary contact for the Registry at your center
- Receive & distribute communications regarding reports, meetings, announcements, etc.
- Understand the participation requirements of the registry & ensure adherence to these requirements (such as annual claims validation, registry inclusion criteria, and follow-up expectations)
- Create and manage user accounts and privileges
- PATHWAYS Super User
- Designate a secondary "Hospital Manager" at your site for cross coverage
- Maintenance of Center Characteristics
- Respond to data audits & other registry related inquiries

This HM checklist outlines steps to guide you to become familiar with PATHWAYS.

Getting Started:

- Login to PATHWAYS to get started!

Claims Validation

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

The **2022** Claims Validation process will be launched in **April 2023**

- Centers will be notified via email with a request to provide the contact information for the individual responsible for completing the audit.
- Participating centers will be invited to a webinar providing an overview of the steps required for successful completion.

PATHWAYS Support is here to help you!

Please reach out if your center is selected to participate and you need assistance.



Coming Soon...

The **Support** Team is currently developing brief training videos to assist with specific functionality and tasks. By sharing some pointers with you, we hope to save you time and highlight PATHWAYS functionality and tools that you may not be familiar with.

The **Technology** Team has several features in progress to enhance PATHWAYS functionality including:

- Infra & Supra Follow-up Outcomes reports.
- Expanding data integration capabilities with Cedaron to include more VQI registries.
- Visualization of recently updated help text on the online/electronic form.
- Enhancing the Support tab to accommodate links to external resources.



THANK YOU

The Fivos team appreciates your support and looks forward to your continued feedback about the PATHWAYS platform and support services.

Please send your suggestions to
PATHWAYSsupport@fivoshealth.com

- Friday, October 27, 2023
- Mayo Clinic Florida
- Time 11:30 am – 2 pm ET
(including lunch)



- Industry Supporters
 - Cook Medical
 - W.L. Gore
- CME/CE Accrediting Entity – Des Moines University
- Regional Membership Team

*Thank
you*



REMEMBER TO PSO:

- **P**UT your FULL NAME in Zoom for remote attendees. Record of meeting attendance is required for CME/CE credit (no exceptions will be made)
- **S**END an email to ljohnson@svspso.org with names of group members that are sharing 1 device
- **O**FFICIALLY apply for CME/CE credit by clicking the URL or QR code provided here:
https://dmu.co1.qualtrics.com/jfe/form/SV_0031yjozTi1pebc



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