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Mid-Atlantic Vascular Study Group (MAVSG)

October 28, 2021

8:00 am – 10:30 am (ET)

Remote

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Meeting Attendance Credit

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Before we get started, please sign in.

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

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

****SPECIAL NOTE: We do give credit to residents/fellows that don't have a PATHWAYS user account !!!**

Sign in with your Full name, MD, Name of Institution

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Agenda – Mid-Atlantic VSG – October 28, 2021

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Time	Topic	CE Credit
8am	Welcome	No
8:05am	Regional Data Review – Dr. Faisal Aziz, MAVSG Medical Director Dr. Meghan Dermody, MAVSG Associate Medical Director Learning Objectives: • 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
9:05am	Regional QI Proposal – Dr. Faisal Aziz, MAVSG Medical Director Dr. Meghan Dermody, MAVSG Associate Medical Director Learning Objectives: • 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

Agenda (con't)

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Time	Topic	CE Credit
9:35am	National VQI Update – Betsy Wymer, DNP, RV, RN-BC, PSO Quality Director Learning Objectives: • Use the VQI regional reports to establish quality improvement goals for the vascular patients (outcomes) and for their center (process). • Identify high performing regional vascular centers to discuss variations in care and clinical practice patterns to improve outcomes and prompt quality improvement recommendations for vascular care patients. Sharing of best practices/pathways of care.	Yes
10:05am	AQC Update – Grace Wang, MD	No
10:10am	VQC Update – Tanya Flohr, MD	No
10:15am	RAC Update – Caitlin Hicks, MD	No
10:20am	Governing Council Update – Faisal Aziz, MD	No
10:25am	Case Presentations	No
10:30am	Open Discussion/Next Meeting/Meeting Evaluation	No

Disclosure

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No presenter has a disclosure or conflict of interest to report.

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Welcome and Introductions

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

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Fall Regional Reports

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Faisal Aziz, MD

VQI Regional Quality Report

Fall 2021

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

About the Report

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

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

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Fall Regional Reports

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Important Notes

- All results are based on data entered into the VQI as of June 30, 2021. Any subsequent changes or updates to data after that date will not be reflected in this report.
- Procedure timeframes and inclusion/exclusion criteria are given at the top of each report. Cases are also excluded if outcomes are missing or not enough data was entered to determine whether the case met inclusion/exclusion criteria.
- Regions must have at least 3 centers with included cases for regional results to be displayed in tables and line charts.
- Regions must have at least 3 centers with at least 10 included cases per center for regional results to be displayed in bar charts. It is therefore possible for a region's results to be displayed in tables and line charts, but not in bar charts.
- For risk-adjusted reports, regions must have at least 3 centers with at least 10 *complete* cases per center for regional results to be displayed in bar charts. It is therefore possible for a region's results to be displayed in tables and line charts, but not in bar charts.
- In all graphics, "*" indicates a p-value <.05.

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Fall 2021 Important Report Updates:

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- **Display of 10th/90th percentiles**

The 10th and 90th percentiles for center rates in your region and across VQI are now provided in the dashboard. These percentiles give users a broader picture of the distribution of center-level rates and may provide opportunities for more targeted monitoring of outcomes.

- **Region Volume Appendix**

A new Region Volume Appendix is now provided as part of your regional slide deck. This new appendix provides your region's case volumes for each report. In addition, the number of centers contributing data to each report is given.

- **Long-Term Follow-up**

Mandatory fields for long-term follow-up were released in PATHWAYS in September 2018 to provide a more accurate assessment of long-term follow-up rates. While no changes have been made to the long-term follow-up report, centers and regions should note that long-term follow-up rates for more recent procedure timeframes (e.g., July 2018-June 2019) are reflective of these mandatory fields.

Fall 2021 Important Report Updates:

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- **TCAR**

  Changed inclusion/exclusion criteria – Procedures with an approach other than Carotid Percutaneous or Carotid Open are now excluded from both ASYMP and SYMP reports.

- **OAAA**

  Low procedure volumes for OAAA have historically resulted in only a small number of regions having access to their regional OAAA results. To remedy this situation and provide more meaningful feedback to centers and regions alike, the procedure timeframe for assessment in OAAA reports has been extended from 1 year to 4 years. Accordingly, all assessments in these reports are now based on 4 years of data. Centers and regions should note the following additions to the line charts associated with these reports:

  - For center-specific reports, the center's aggregate 4-year rate is now displayed with a dashed yellow line.
  - For regional slide decks, the region's aggregate 4-year rate is now displayed with a dashed light-blue line.

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Dashboard

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Dashboard

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

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

Legend: Blue = "Top" 25th percentile **Coral = "Bottom" 25th percentile**

Note that procedure volume results are not highlighted.

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Procedure Group	Outcome	Your Center	Your Region	VQI Overall
All	Procedure Volume		[7 | 16 | 71 | 191 | 314]	[6 | 18 | 72 | 208 | 413]
	Procedure Volume, All Years		[15 | 36 | 169 | 715 | 1807]	[11 | 42 | 262 | 1280 | 3123]
Multiple	Long-Term Follow-up		74.3% [6 | 38 | 74 | 92 | 100]	67.6% [0 | 34 | 67 | 86 | 95]
	Discharge Medications		82.1% [74 | 79 | 86 | 95 | 100]	85.6% [74 | 81 | 89 | 97 | 100]
TFEM CAS ASYMP	Stroke/Death		3.6% [0 | 0 | 0 | 0 | 8]	1.8% [0 | 0 | 0 | 0 | 5]
TFEM CAS SYMP	Stroke/Death		4.7% [0 | 0 | 0 | 0 | 8]	5.9% [0 | 0 | 0 | 0 | 14]
TCAR ASYMP	Stroke/Death		1.3% [0 | 0 | 0 | 0 | 2]	1.4% [0 | 0 | 0 | 0 | 3]
TCAR SYMP	Stroke/Death		4.5% [0 | 0 | 0 | 0 | 18]	2.4% [0 | 0 | 0 | 0 | 8]
CEA ASYMP	Stroke/Death		0.6% [0 | 0 | 0 | 0 | 3]	1% [0 | 0 | 0 | 0 | 3]
	Postop LOS>1 Day		17.7% [0 | 8 | 17 | 29 | 43]	22.1% [0 | 11 | 21 | 33 | 50]
CEA SYMP	Stroke/Death		2.6% [0 | 0 | 0 | 0 | 8]	2.1% [0 | 0 | 0 | 0 | 8]
	Postop LOS>1 Day		43.7% [0 | 23 | 47 | 60 | 89]	40.8% [0 | 25 | 41 | 57 | 75]
EVAR	Postop LOS>2 Days		14% [0 | 0 | 11 | 19 | 25]	15.8% [0 | 7 | 14 | 20 | 31]
	Sac Diameter Reporting		58.7% [5 | 42 | 65 | 78 | 90]	56.1% [0 | 33 | 57 | 75 | 86]
	SVS Sac Size Guideline		77.1% [54 | 68 | 79 | 93 | 100]	74.3% [50 | 64 | 75 | 86 | 100]
TEVAR	Sac Diameter Reporting		56.6% [0 | 20 | 45 | 78 | 83]	55.7% [0 | 20 | 46 | 71 | 89]
OAAA	In-Hospital Mortality		6% [0 | 0 | 0 | 8 | 15]	4.4% [0 | 0 | 0 | 7 | 17]
	SVS Cell-Saver Guideline		96.6% [81 | 96 | 100 | 100 | 100]	92.4% [73 | 89 | 99 | 100 | 100]
	SVS Iliac Inflow Guideline		99% [99 | 100 | 100 | 100 | 100]	97.4% [92 | 98 | 100 | 100 | 100]
PVI CLAUD	ABI/Toe Pressure		81.4% [37 | 75 | 89 | 100 | 100]	75.4% [36 | 63 | 83 | 94 | 100]
INFRA CLTI	Major Complications		6.9% [0 | 2 | 6 | 12 | 42]	4.8% [0 | 0 | 3 | 7 | 11]
SUPRA CLTI	Major Complications		6.8% [0 | 0 | 0 | 6 | 33]	8% [0 | 0 | 0 | 11 | 25]
LEAMP	Postop Complications		NA (<3 centers)	10.6% [0 | 4 | 10 | 14 | 20]
HDA	Primary AVF vs. Graft		69.9% [48 | 60 | 69 | 96 | 100]	81.8% [61 | 73 | 83 | 92 | 100]
IVCF	Filter Retrieval Reporting		NA (<3 centers)	56% [13 | 36 | 58 | 74 | 92]

Legend: Blue = "Top" 25th percentile **Coral = "Bottom" 25th percentile**

Note that procedure volume results are not highlighted.

MAVSG Volume Appendix

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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.

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
Long-Term Follow-up	6665	42	34			
Discharge Medications	7046	63	51			
TFEM CAS ASYMP: Stroke/Death	84	26	2	76	24	1
TFEM CAS SYMP: Stroke/Death	85	27	2	76	24	1
TCAR ASYMP: Stroke/Death	392	37	18	380	35	18
TCAR SYMP: Stroke/Death	157	29	5	154	29	5
CEA ASYMP: Stroke/Death	843	38	25	809	37	25
CEA ASYMP: Postop LOS>1 Day	843	38	25	811	37	25
CEA SYMP: Stroke/Death	302	37	11	290	36	11
CEA SYMP: Postop LOS>1 Day	302	37	11	290	36	11
EVAR: Postop LOS>2 Days	537	27	18	500	26	16
EVAR: Sac Diameter Reporting	516	22	19			
EVAR: SVS Sac Size Guideline	494	27	17			
TEVAR: Sac Diameter Reporting	129	13	4			
OAAA: In-Hospital Mortality	268	17	10	244	17	9
OAAA: SVS Cell-Saver Guideline	292	17	10			
OAAA: SVS Iliac Inflow Guideline	315	17	11			
PVI CLAUD: ABI/Toe Pressure	1208	32	23			
INFRA CLTI: Major Complications	432	19	16			
SUPRA CLTI: Major Complications	59	11	1			
LEAMP: Postop Complications	71	2	2			
HDA: Primary AVF vs. Graft	246	10	6			
IVCF: Filter Retrieval Reporting	39	2	2			

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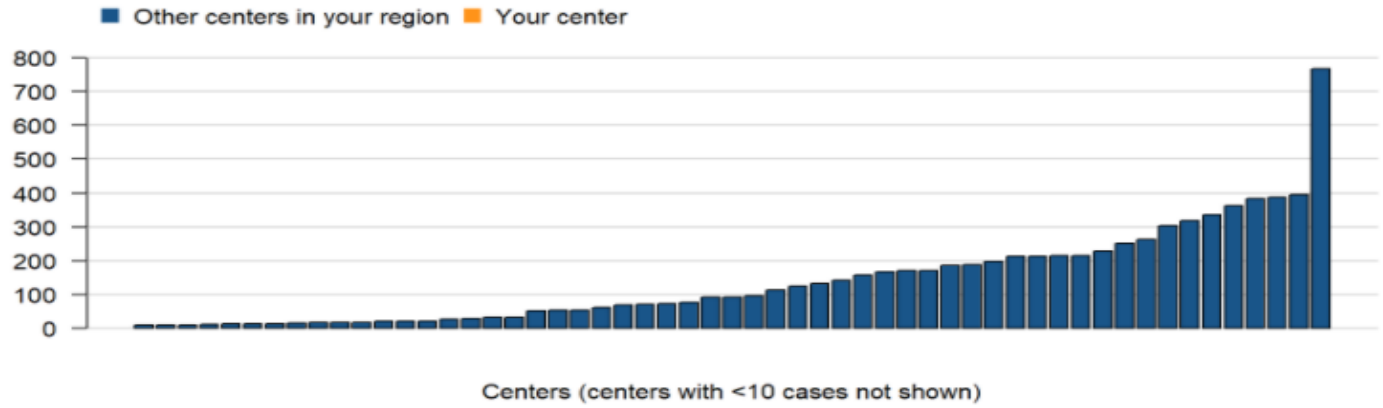
Procedure Volume

Procedures performed between July 1, 2020 and June 30, 2021

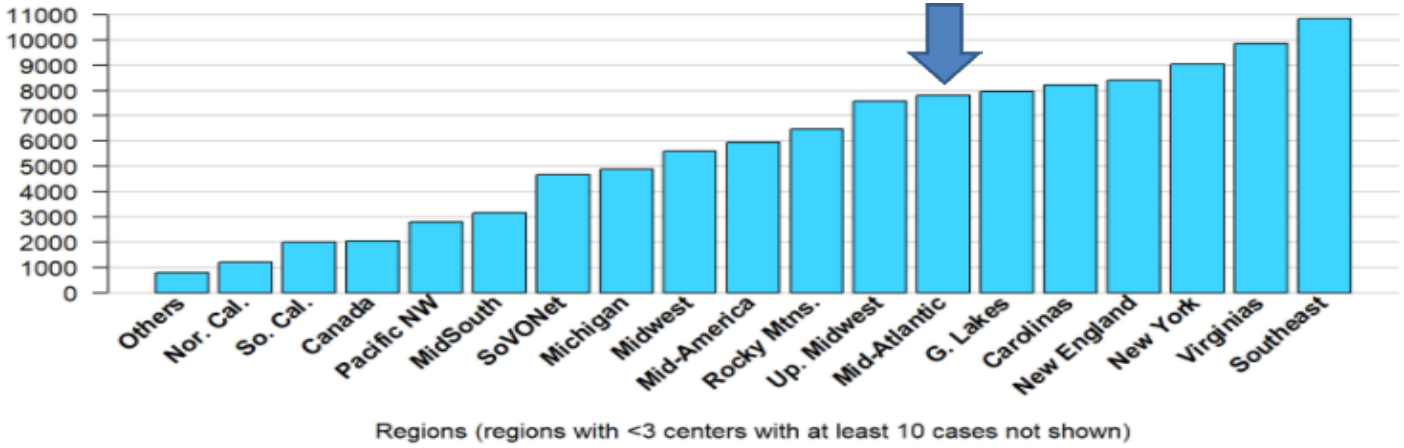
Number of cases entered into the VQI, by registry and overall

	Your Center (N)	Your Region (N)	VQI Overall (N)
CAS (TFEM CAS & TCAR)		868	13121
CEA		1295	17107
EVAR		582	7240
HDA		299	6639
INFRA		523	7065
IVCF		NA (<3 centers)	1525
LEAMP		NA (<3 centers)	3077
OAAA		75	1305
PVI		3616	41369
SUPRA		88	1870
TEVAR		302	2831
Varicose Veins		55	6196
Overall (July 2020-June 2021)		7810	109345
Overall (July 2019-June 2020)		7455	112761

Procedure Volume by Center in Your Region (July 2020-June 2021)



Procedure Volume Across VQI (July 2020-June 2021)



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

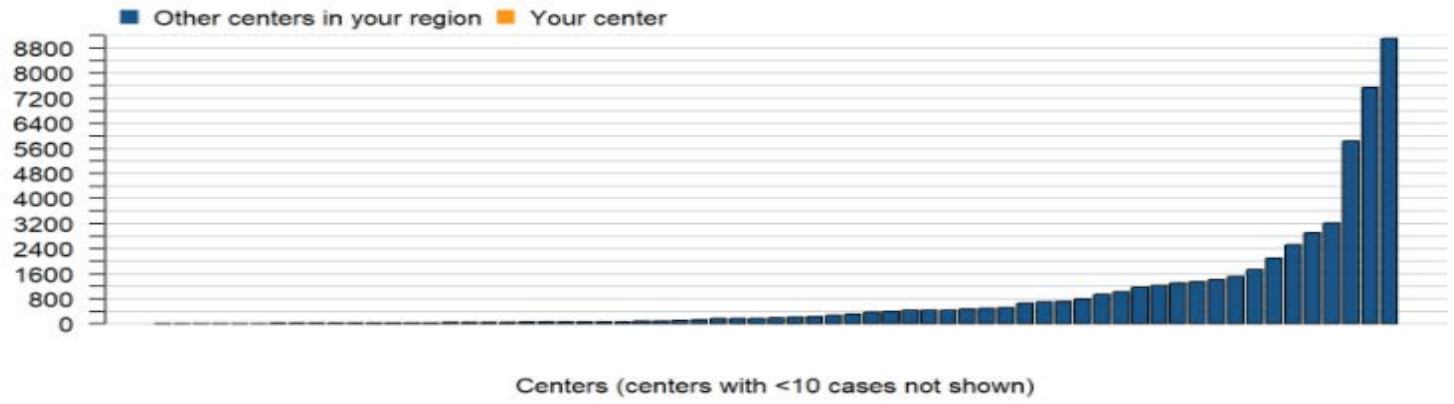
Procedure Volume, All Years

Includes all procedures with procedure date through June 30, 2021

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

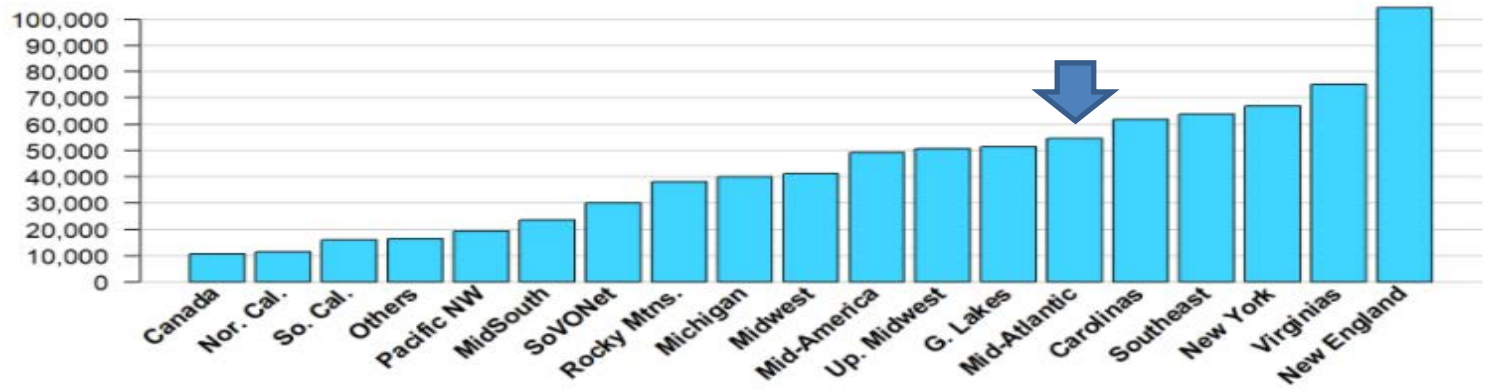
	Your Center (N)	Your Region (N)	VQI Overall (N)
CAS (TFEM CAS & TCAR)		4167	57614
CEA		11404	158265
EVAR		4963	63655
HDA		2147	62972
INFRA		4321	66699
IVCF		NA (<3 centers)	15864
LEAMP		NA (<3 centers)	21477
OAAA		837	14897
PVI		21634	274908
SUPRA		1298	21514
TEVAR		2133	20751
Varicose Veins		66	46683
Overall		54515	825299

Procedure Volume by Center in Your Region (Through June 2021)



Centers (centers with <10 cases not shown)

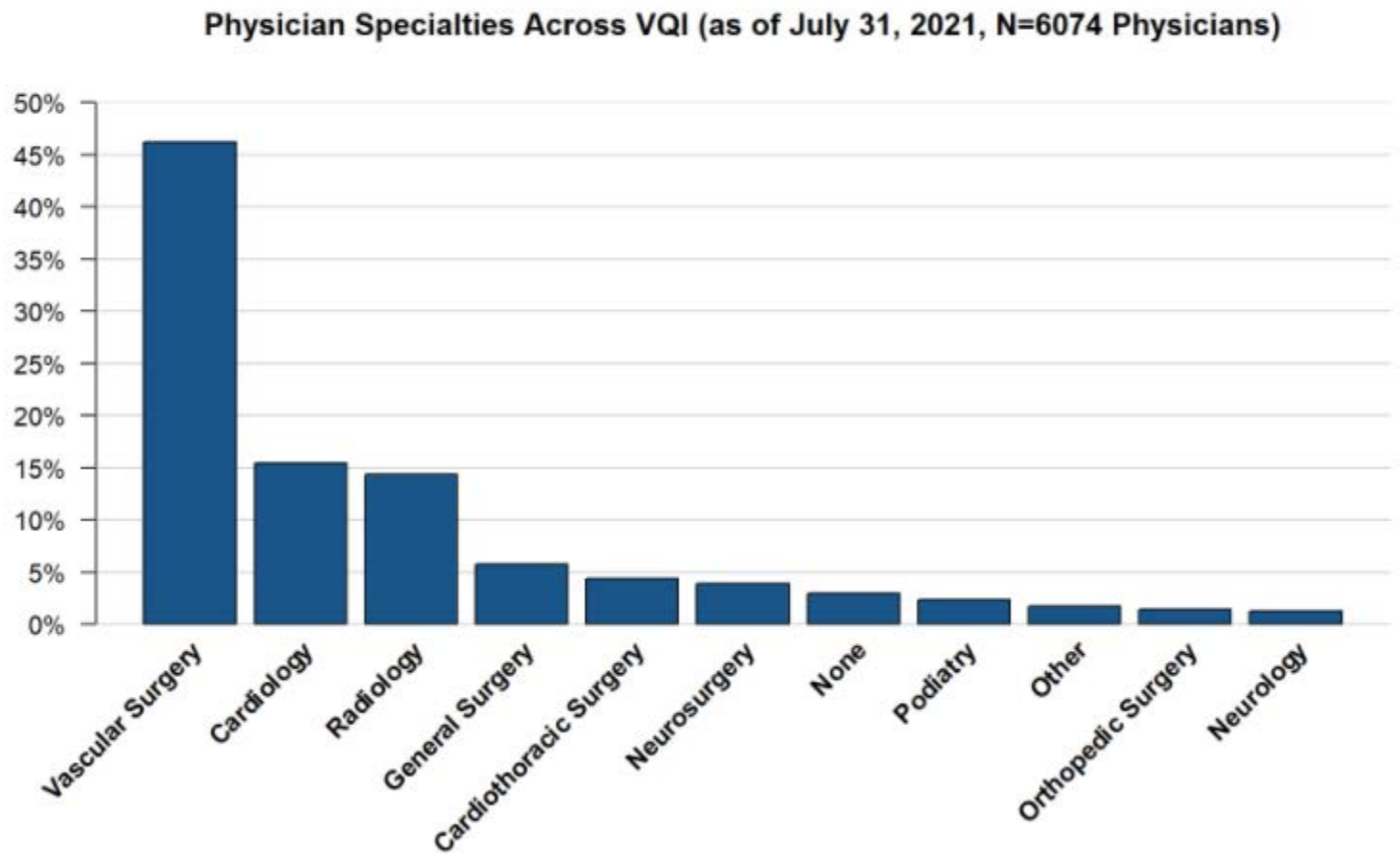
Procedure Volume Across VQI (Through June 2021)



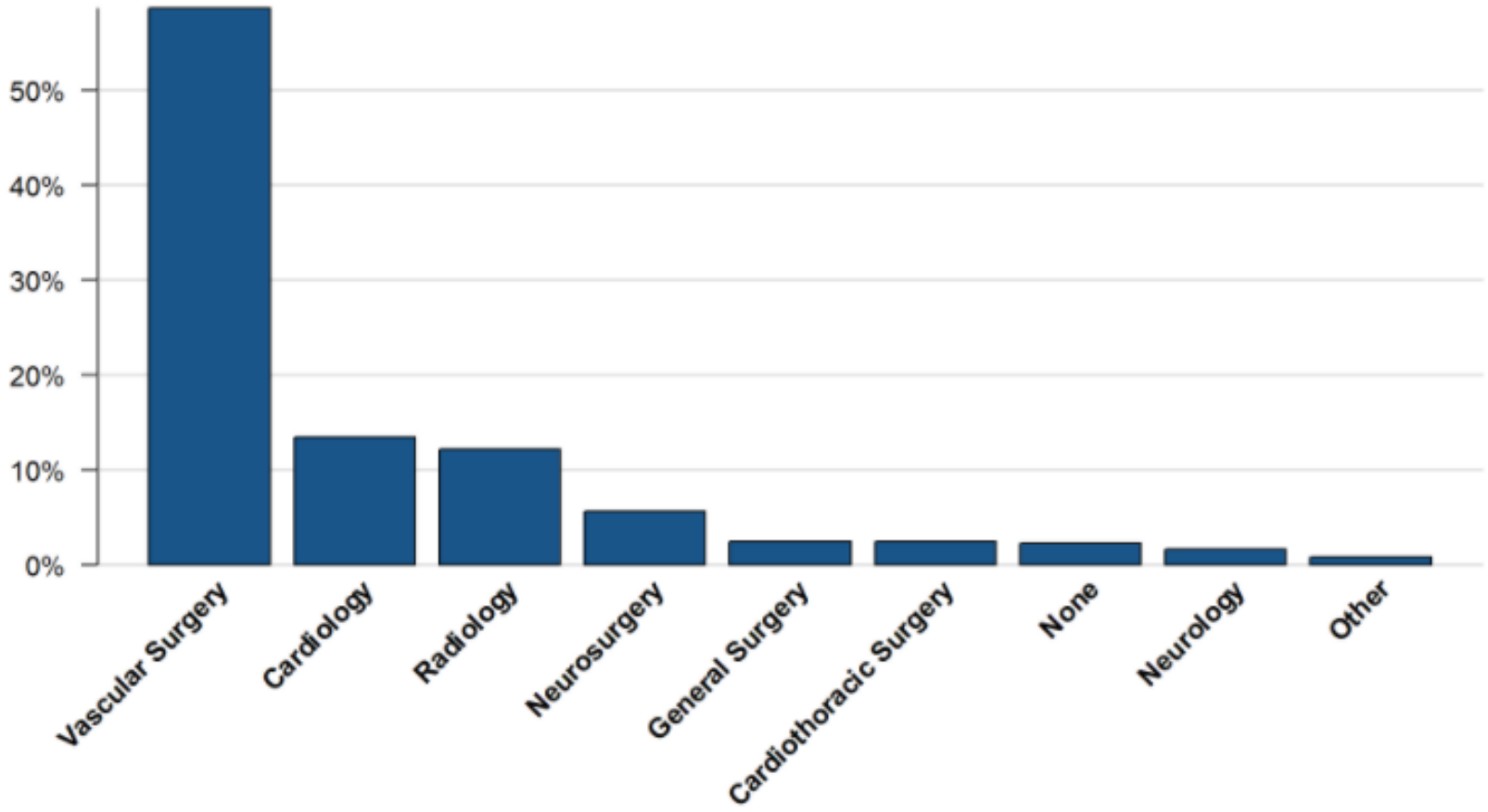
Regions (regions with <3 centers with at least 10 cases not shown)

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

Physician Specialties



Physician Specialties Across Your Region (as of July 31, 2021, N=474 Physicians)



Long-Term Follow-up

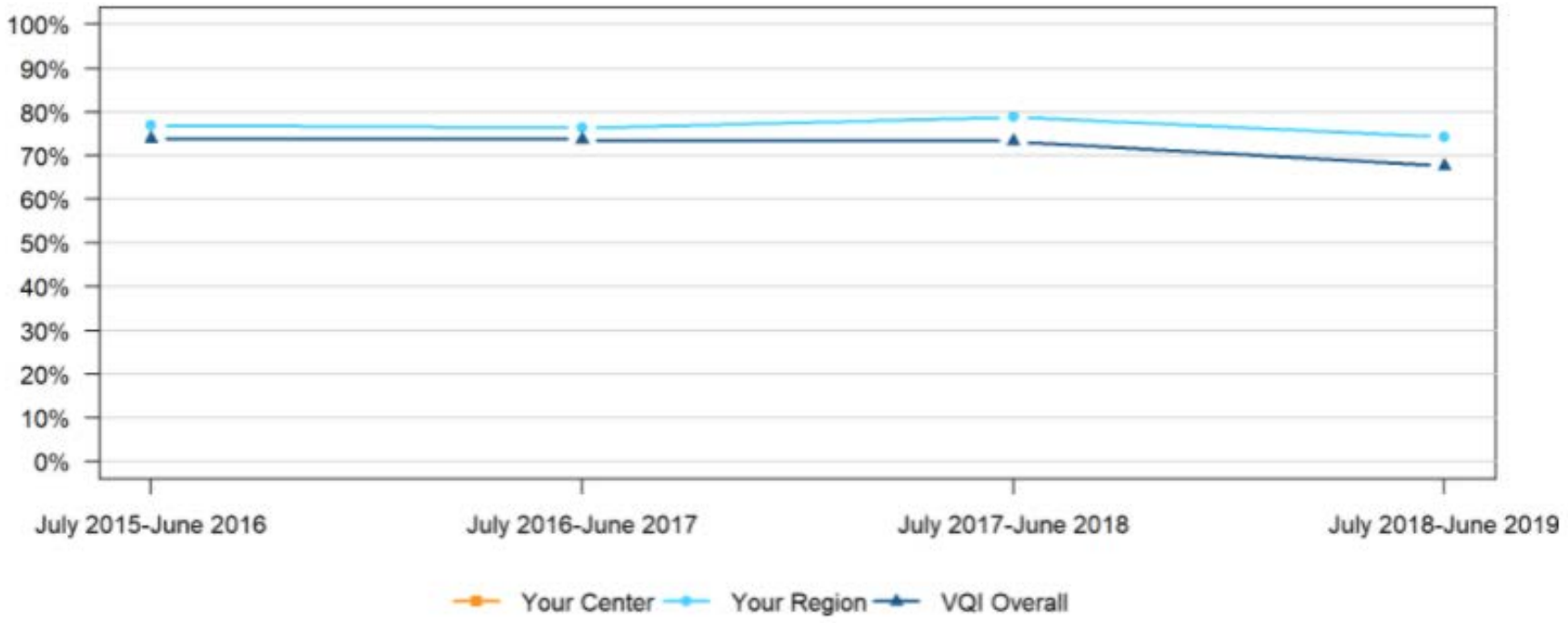
Procedures performed between July 1, 2018 and June 30, 2019

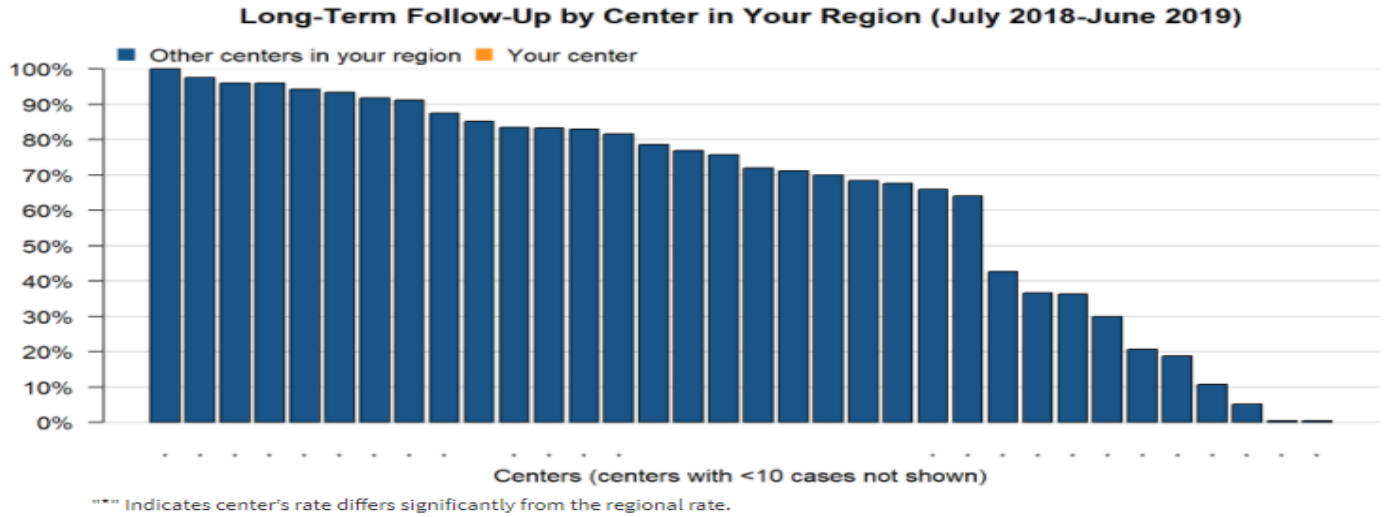
Includes CAS (TFEM CAS and TCAR), CEA, EVAR, HDA, INFRA, IVCF, LEAMP, OAAA, PVI, SUPRA, and TEVAR procedures only. Excludes cases not eligible for long-term follow-up.

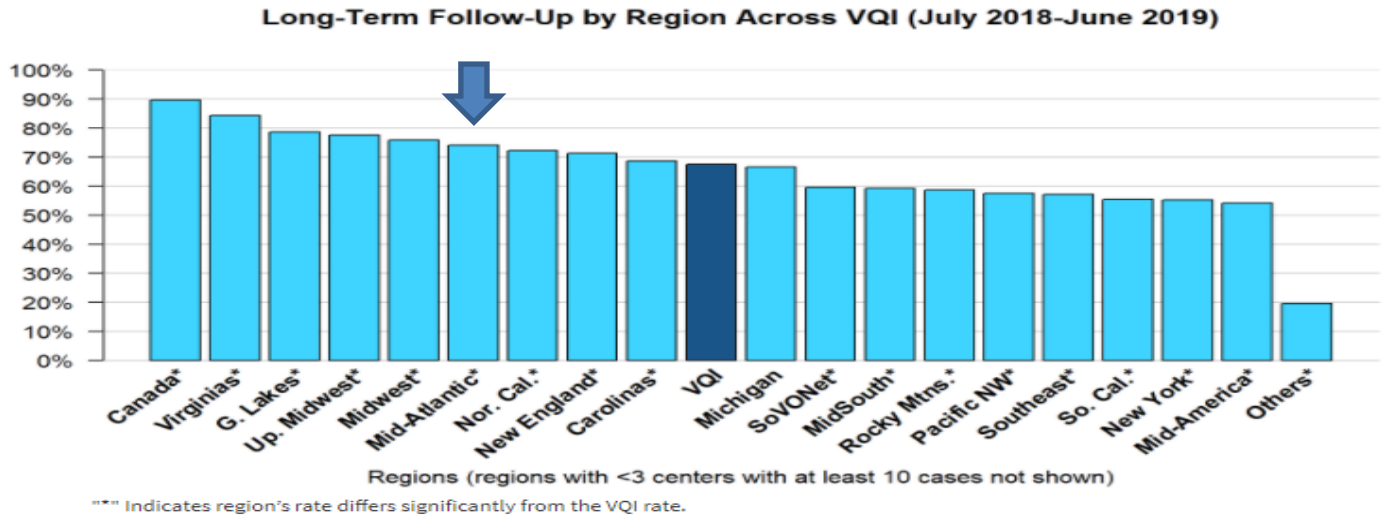
The table below gives the number of procedures meeting the inclusion criteria, and the percentage of those procedures with follow-up recorded between 9 and 21 months post-procedure.

	Your Center	Your Region	VQI Overall
CAS		624 (64%)	9602 (62%)
CEA		1399 (77%)	18987 (70%)
EVAR		570 (78%)	7432 (69%)
HDA		276 (83%)	8030 (64%)
INFRA		455 (78%)	7148 (72%)
IVCF		NA (<3 centers)	1922 (76%)
LEAMP		NA (<3 centers)	3272 (66%)
OAAA		82 (82%)	1286 (74%)
PVI		2705 (73%)	36370 (67%)
SUPRA		143 (74%)	2286 (70%)
TEVAR		266 (74%)	2852 (65%)
Overall (July 2018-June 2019)		6665 (74%)	99187 (68%)
Overall (July 2017-June 2018)		6060 (79%)	90835 (73%)

Long-Term Follow-Up by Year




Long-Term Follow-Up by Center in Your Region (July 2018-June 2019)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


Long-Term Follow-Up by Region Across VQI (July 2018-June 2019)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Canada*
Virginias*
G. Lakes*
Up. Midwest*
Midwest*
Mid-Atlantic*
Nor. Cal.*
New England*
Carolinas*
VQI
Michigan
SoVONet*
MidSouth*
Rocky Mtns.*
Pacific NW*
Southeast*
So. Cal.*
New York*
Mid-America*
Others*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

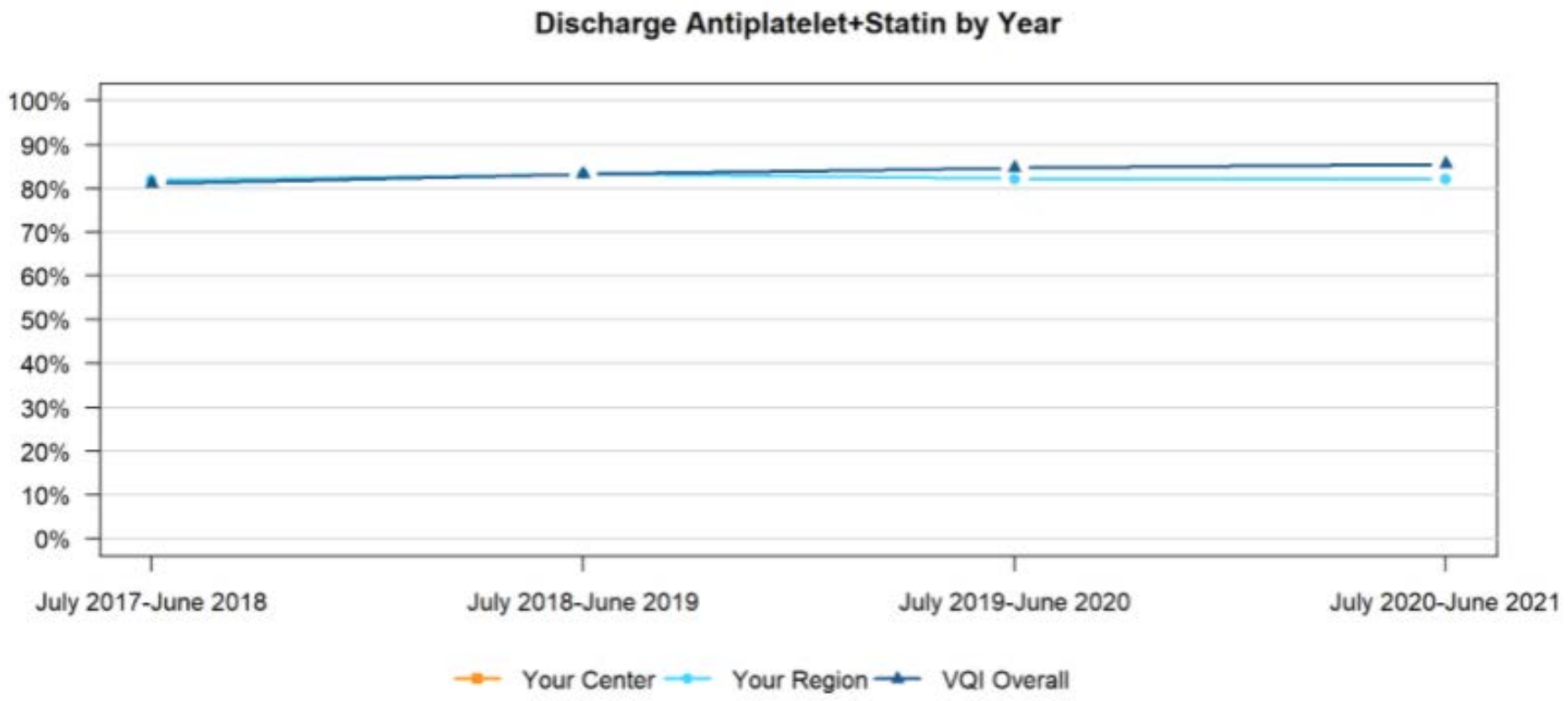
Discharge Medications

Procedures performed between July 1, 2020 and June 30, 2021

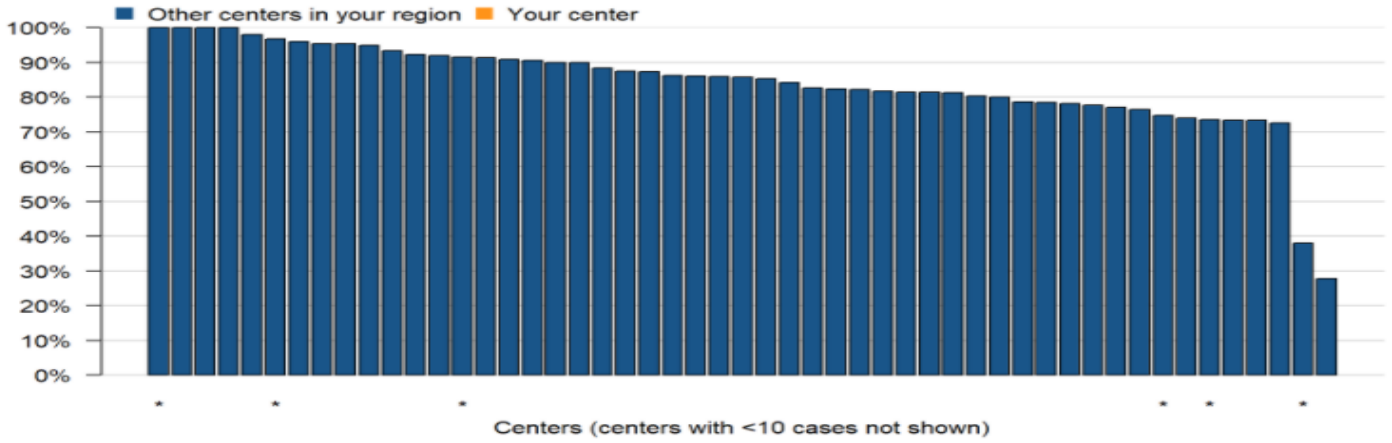
Includes CAS (TFEM CAS and TCAR), CEA, EVAR, INFRA, LEAMP, OAAA, PVI, SUPRA, and TEVAR procedures only. Antiplatelet is defined as ASA or P2Y12 inhibitor. Cases are excluded if (1) Discharge Statin = "No, for medical reason" OR (2) Both Discharge ASA = "No, for medical reason" AND Discharge P2Y12 inhibitor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

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

	Number of Procedures at Your Center	Antiplatelet+Statin	Antiplatelet Only	Statin Only	Neither
CAS					
CEA					
EVAR					
INFRA					
LEAMP					
OAAA					
PVI					
SUPRA					
TEVAR					
Your Center Overall					
Your Region Overall	7046	82%	12%	4%	3%
VQI Overall	89002	86%	9%	3%	2%

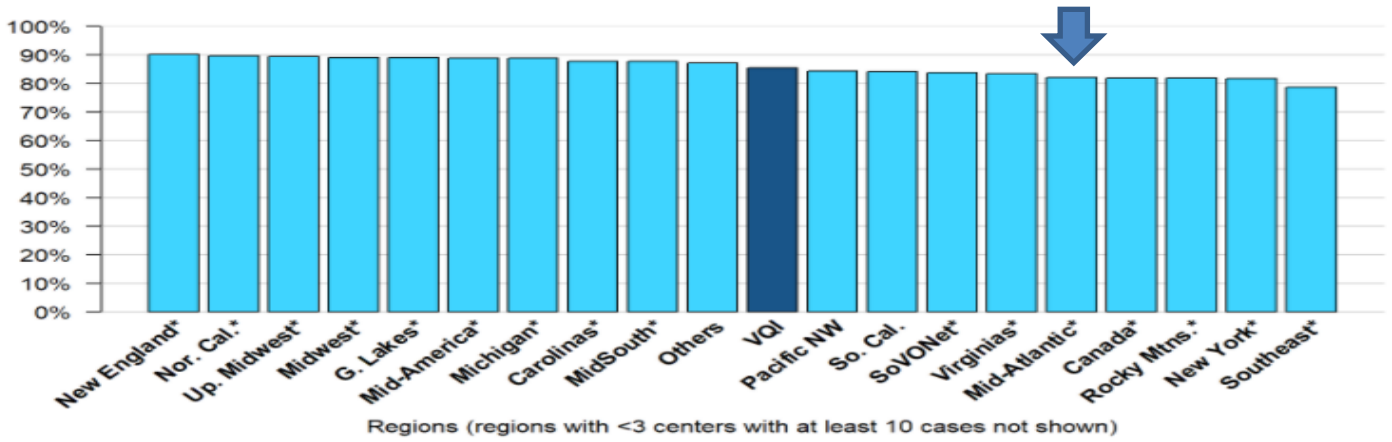

Discharge Antiplatelet+Statin by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall

Discharge Antiplatelet+Statin by Center in Your Region (July 2020-June 2021)



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

Discharge Antiplatelet+Statin by Region Across VQI (July 2020-June 2021)



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

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

TFEM CAS ASYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

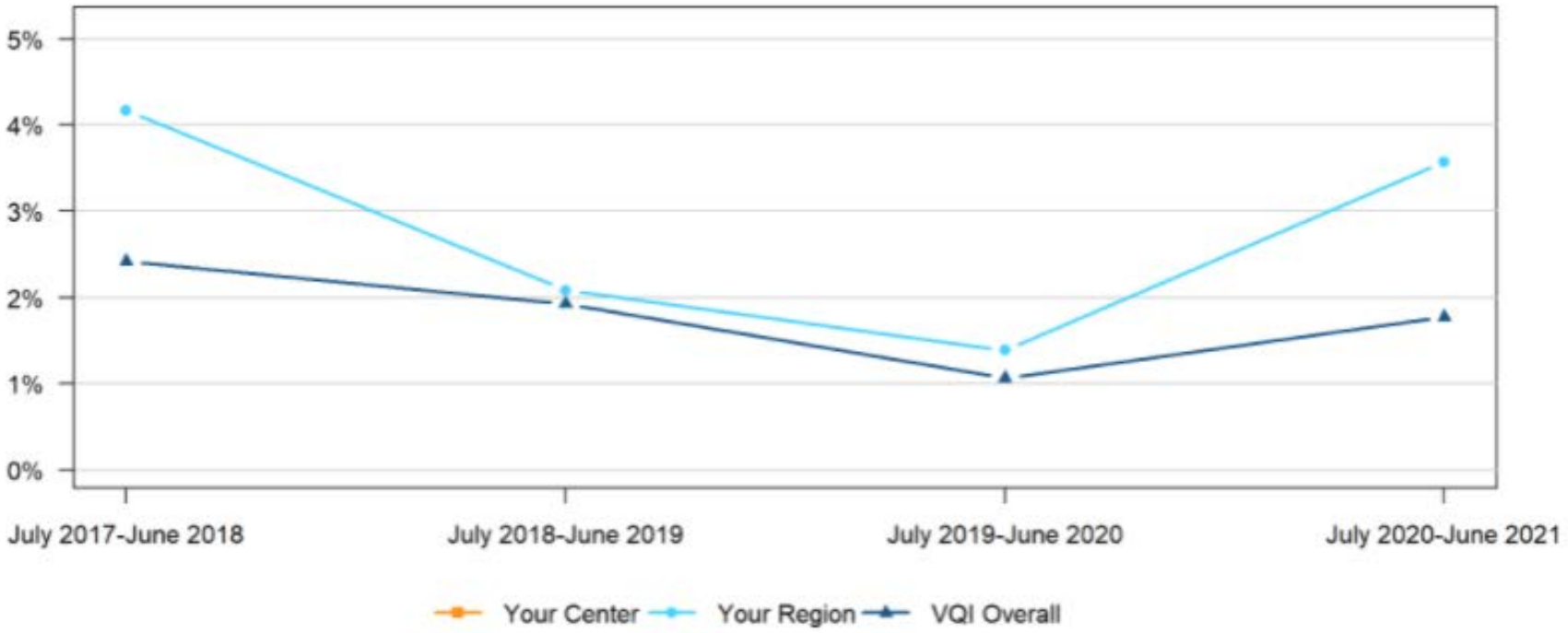
Includes asymptomatic admissions for Transfemoral Carotid Artery Stenting (TFEM CAS) only. Asymptomatic admissions are admissions where the patient had no ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or "Other" lesion types. Procedures with an approach other than Femoral are also excluded.

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

	Your Center	Your Region	VQI Overall
Number of TFEM CAS procedures meeting inclusion criteria		84	1751
Observed rate of stroke or death among procedures meeting inclusion criteria		3.6%	1.8%
Number of procedures with complete data*		76	1610
Observed rate of stroke or death among cases with complete data		3.9%	1.7%
Expected rate of stroke or death among cases with complete data		1.5%	NA
P-value for comparison of observed and expected rates		0.11	NA

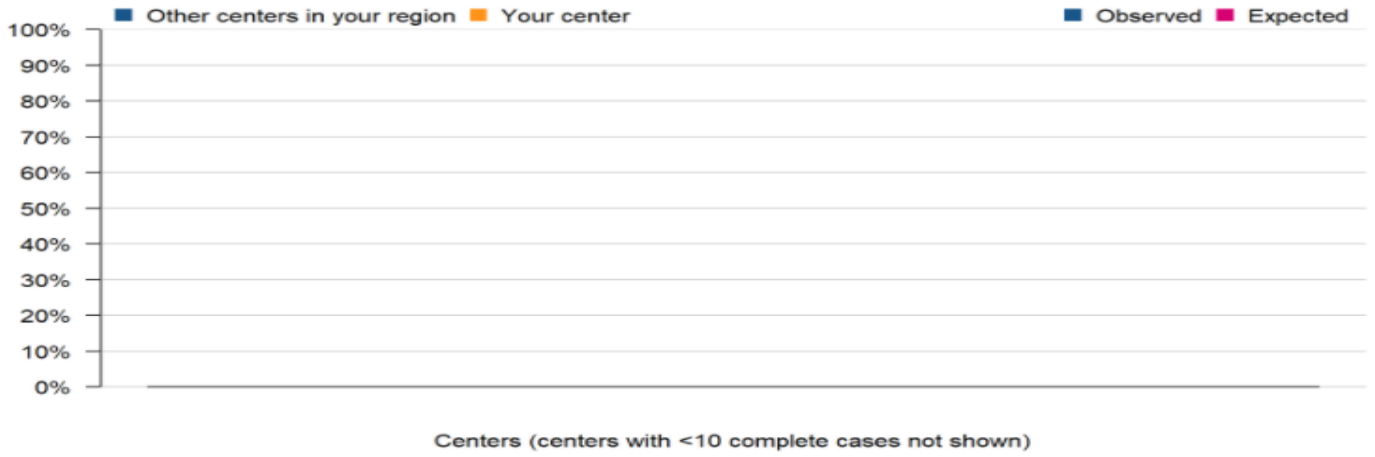
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after TFEM CAS for Asymptomatic Admissions by Year



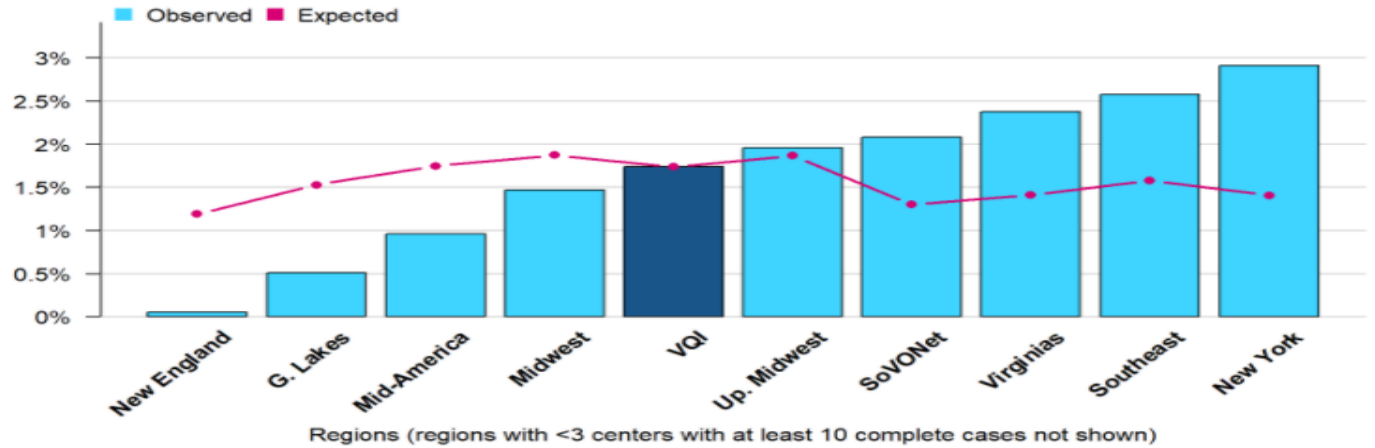
Rates shown are observed rates among cases meeting inclusion criteria.

Stroke or Death after TFEM CAS for Asymptomatic Admissions in Your Region (July 2020-June 2021)



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

Stroke or Death after TFEM CAS for Asymptomatic Admissions by Region Across VQI (July 2020-June 2021)



Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

TFEM CAS SYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

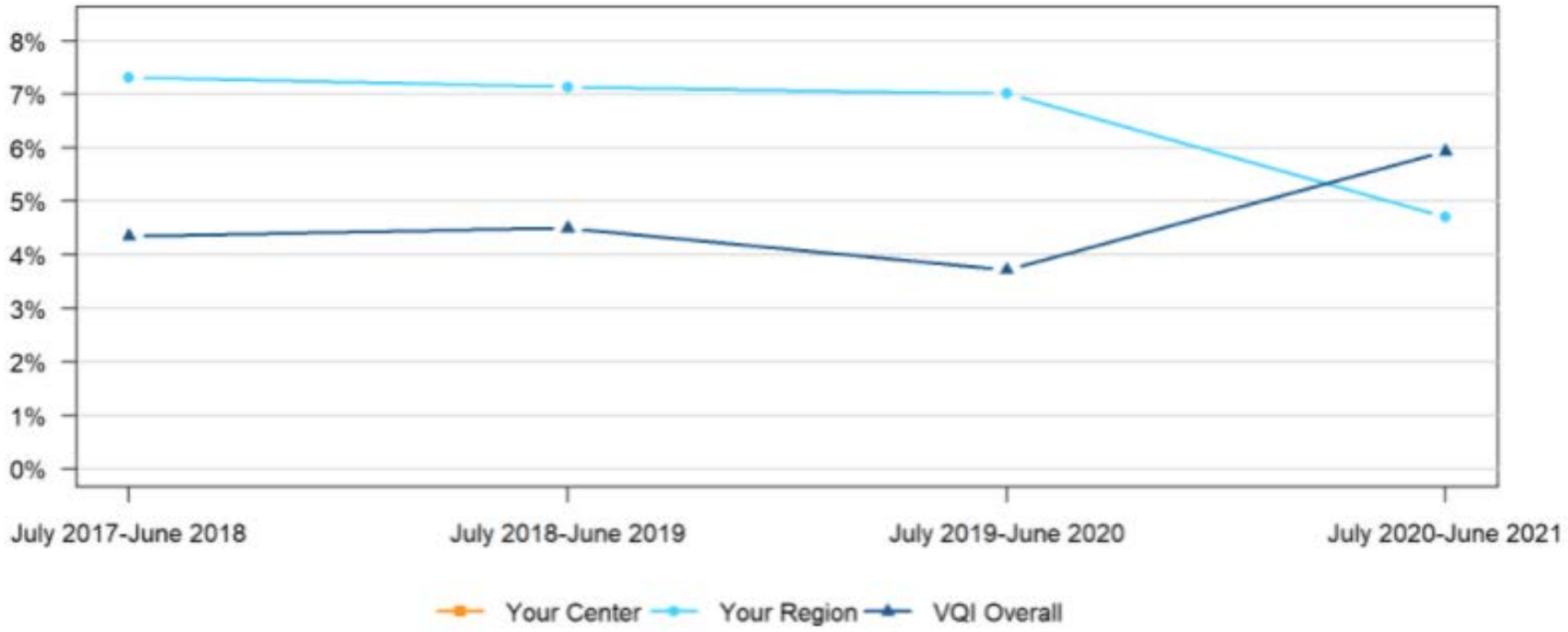
Includes symptomatic admissions for Transfemoral Carotid Artery Stenting (TFEM CAS) only. Symptomatic admissions are admissions where the patient had an ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or "Other" lesion types. Procedures with an approach other than Femoral are also excluded.

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

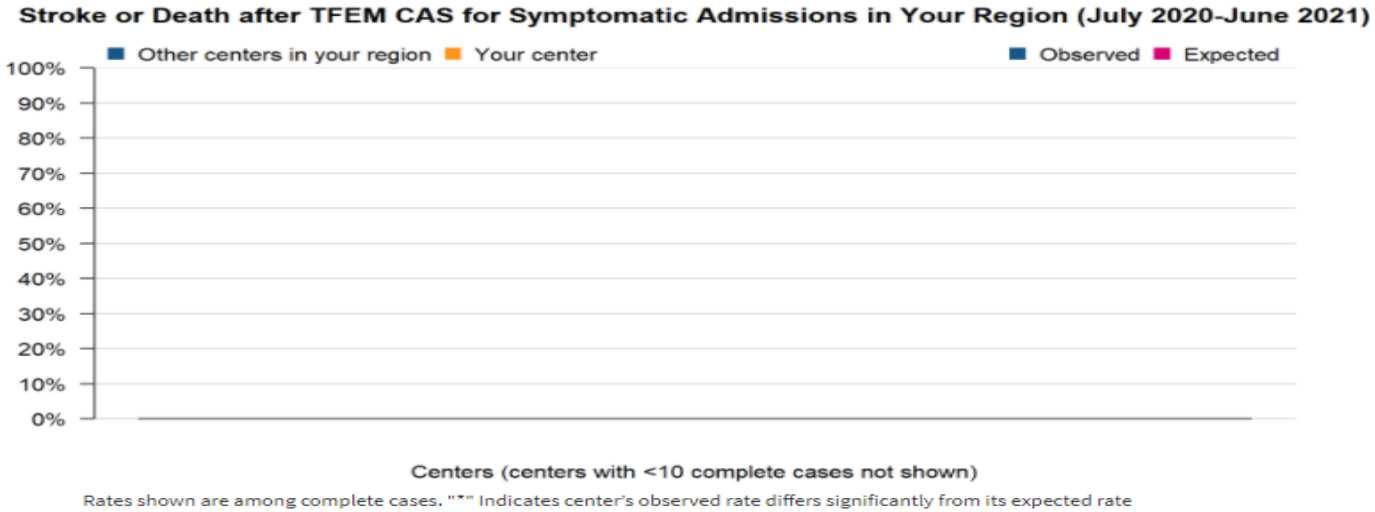
	Your Center	Your Region	VQI Overall
Number of TFEM CAS procedures meeting inclusion criteria		85	1717
Observed rate of stroke or death among procedures meeting inclusion criteria		4.7%	5.9%
Number of procedures with complete data*		76	1595
Observed rate of stroke or death among cases with complete data		5.3%	6.1%
Expected rate of stroke or death among cases with complete data		5.6%	NA
P-value for comparison of observed and expected rates		1	NA

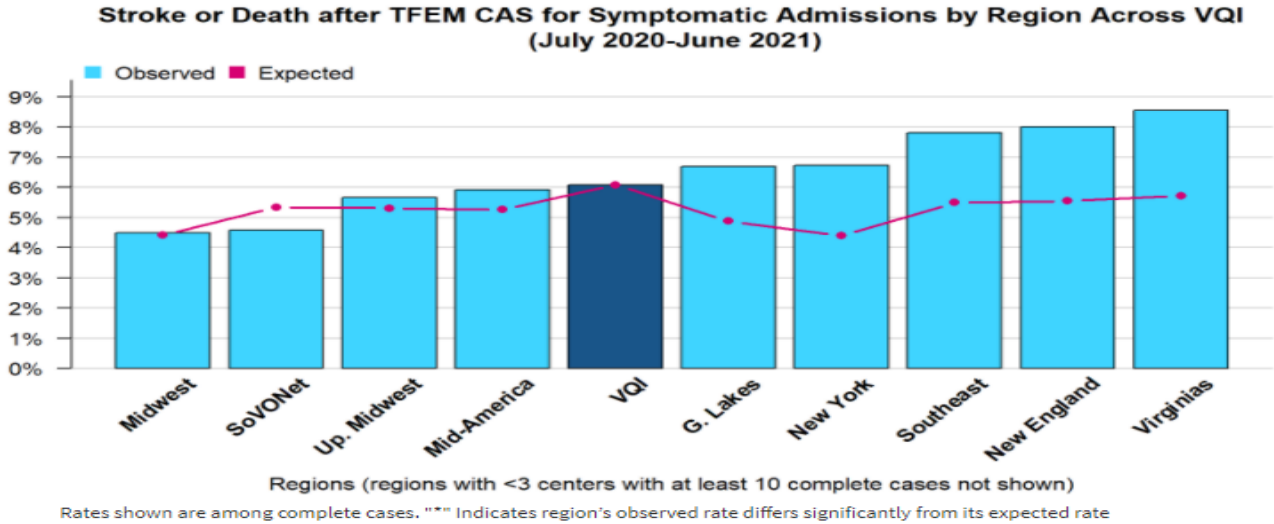
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after TFEM CAS for Symptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.


Stroke or Death after TFEM CAS for Symptomatic Admissions in Your Region (July 2020-June 2021)
Other centers in your region
Your center
Observed
Expected
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Centers (centers with <10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates center's observed rate differs significantly from its expected rate


Stroke or Death after TFEM CAS for Symptomatic Admissions by Region Across VQI (July 2020-June 2021)
Observed
Expected
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
Midwest
SoVONet
Up. Midwest
Mid-America
VQI
G. Lakes
New York
Southeast
New England
Virginias
Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

TCAR ASYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

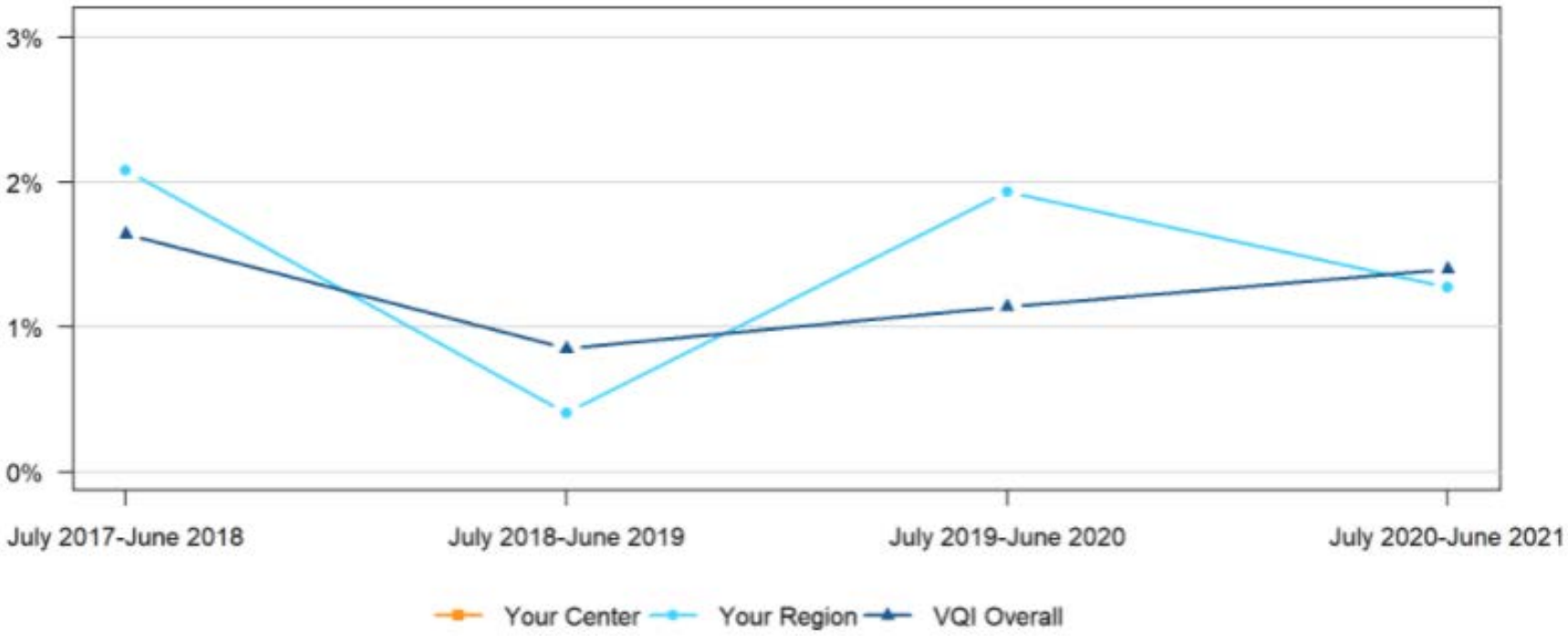
Includes asymptomatic admissions for TransCarotid Artery Revascularization (TCAR) only. Asymptomatic admissions are admissions where the patient had no ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or "Other" lesion types. Procedures with an approach other than Carotid Percutaneous or Carotid Open are also excluded.

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

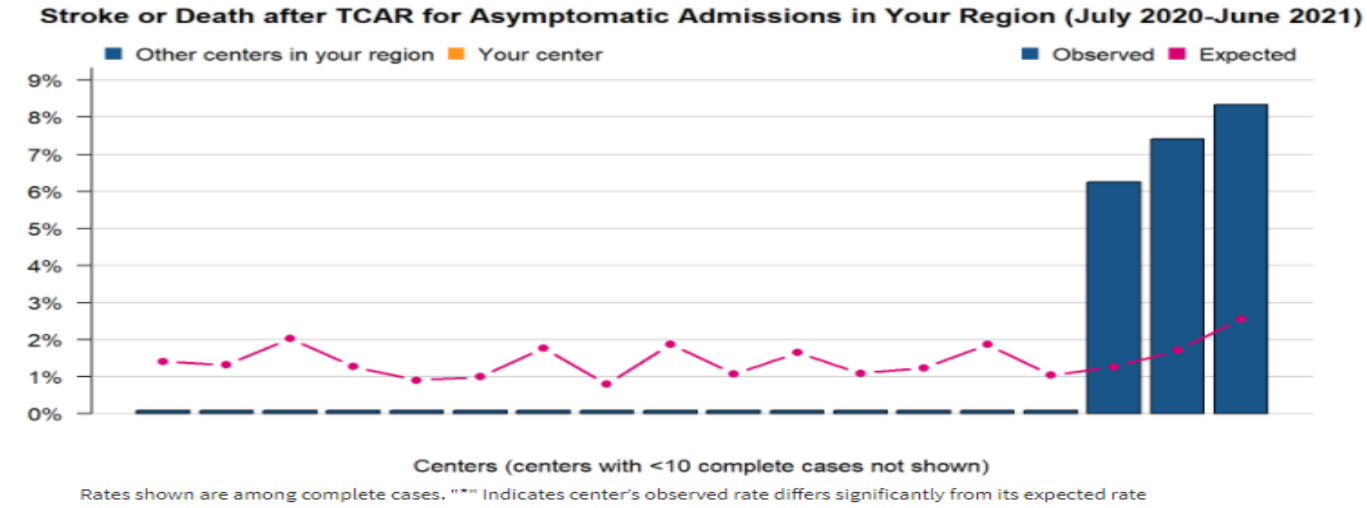
	Your Center	Your Region	VQI Overall
Number of TCAR procedures meeting inclusion criteria		392	4432
Observed rate of stroke or death among procedures meeting inclusion criteria		1.3%	1.4%
Number of procedures with complete data*		380	4239
Observed rate of stroke or death among cases with complete data		1.1%	1.4%
Expected rate of stroke or death among cases with complete data		1.4%	NA
P-value for comparison of observed and expected rates		0.82	NA

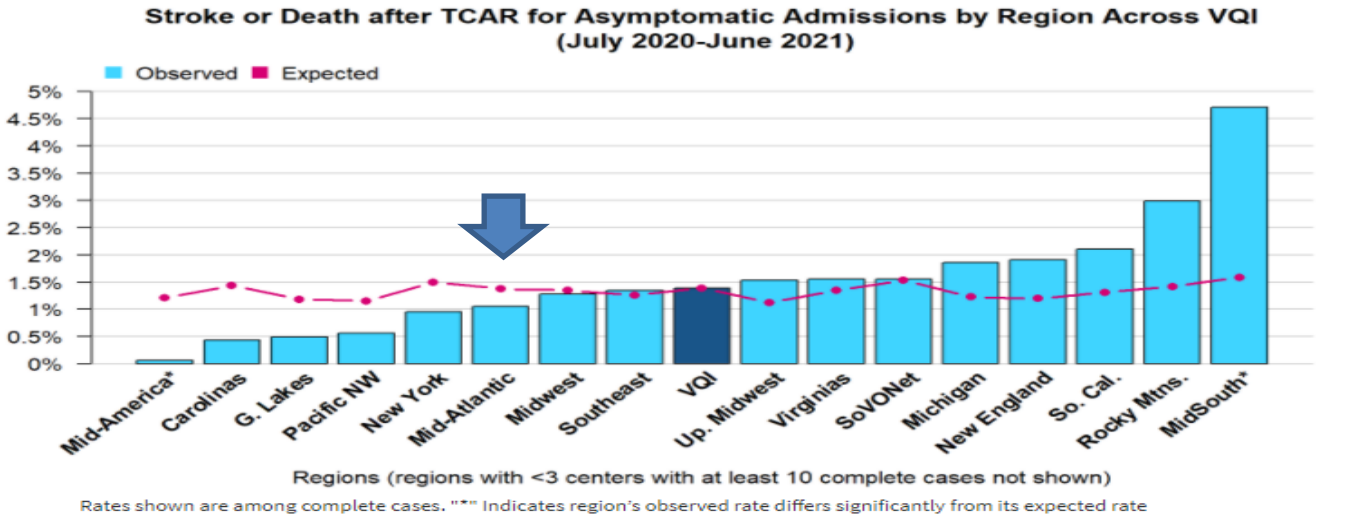
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after TCAR for Asymptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.


Stroke or Death after TCAR for Asymptomatic Admissions in Your Region (July 2020-June 2021)
Other centers in your region
Your center
Observed
Expected
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
Centers (centers with <10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates center's observed rate differs significantly from its expected rate


Stroke or Death after TCAR for Asymptomatic Admissions by Region Across VQI
(July 2020-June 2021)
Observed
Expected
5%
4.5%
4%
3.5%
3%
2.5%
2%
1.5%
1%
0.5%
0%
Mid-America*
Carolinas
G. Lakes
Pacific NW
New York
Mid-Atlantic
Midwest
Southeast
VQI
Up. Midwest
Virginias
SoVONet
Michigan
New England
So. Cal.
Rocky Mtns.
MidSouth*
Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

TCAR SYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

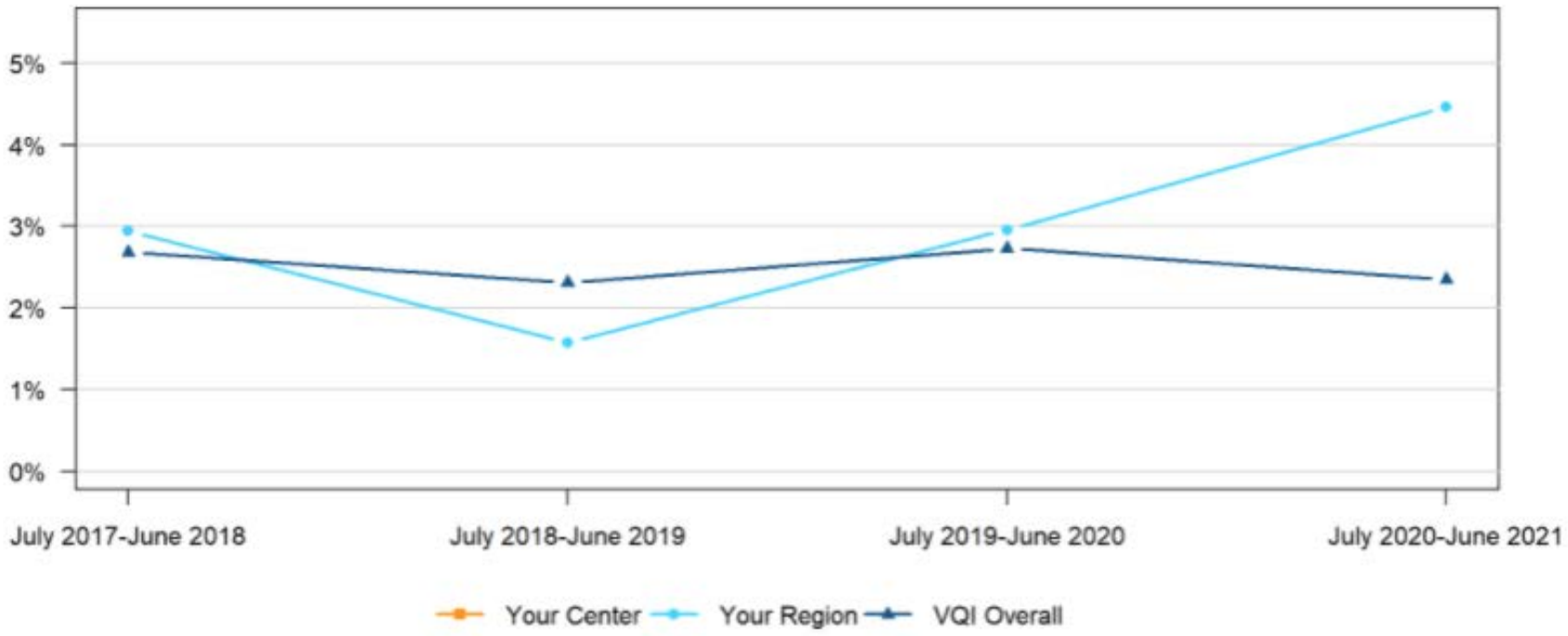
Includes symptomatic admissions for TransCarotid Artery Revascularization (TCAR) only. Symptomatic admissions are admissions where the patient had an ipsilateral or contralateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar TIA or stroke, prior ipsilateral CAS, CAS for intracranial treatment, or any procedure involving dissection, trauma, FMD, or "Other" lesion types. Procedures with an approach other than Carotid Percutaneous or Carotid Open are also excluded.

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

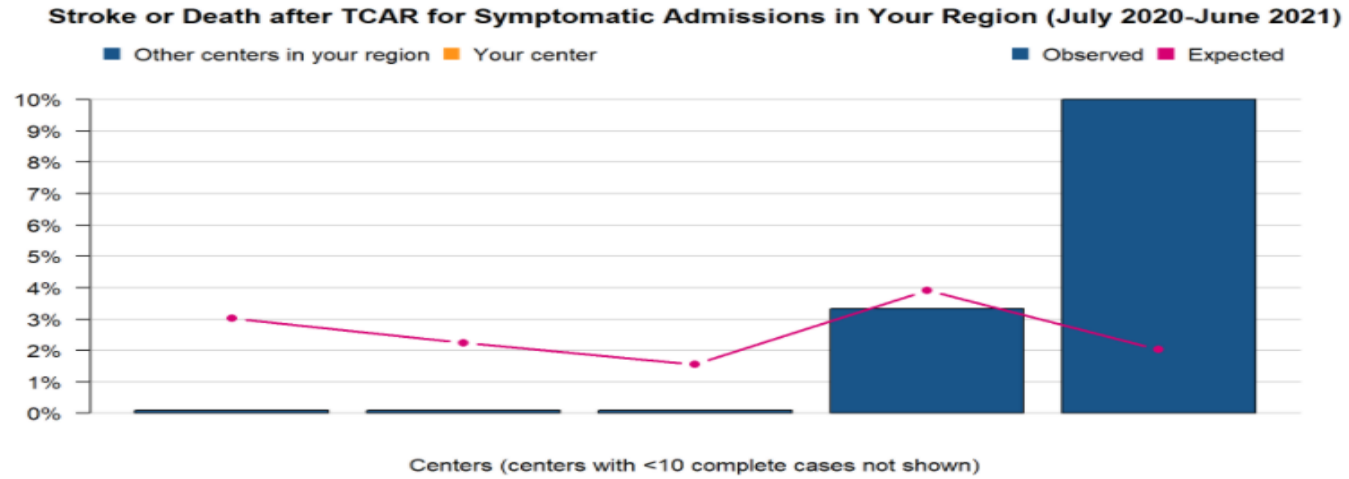
	Your Center	Your Region	VQI Overall
Number of TCAR procedures meeting inclusion criteria		157	2253
Observed rate of stroke or death among procedures meeting inclusion criteria		4.5%	2.4%
Number of procedures with complete data*		154	2164
Observed rate of stroke or death among cases with complete data		4.5%	2.3%
Expected rate of stroke or death among cases with complete data		2.6%	NA
P-value for comparison of observed and expected rates		0.12	NA

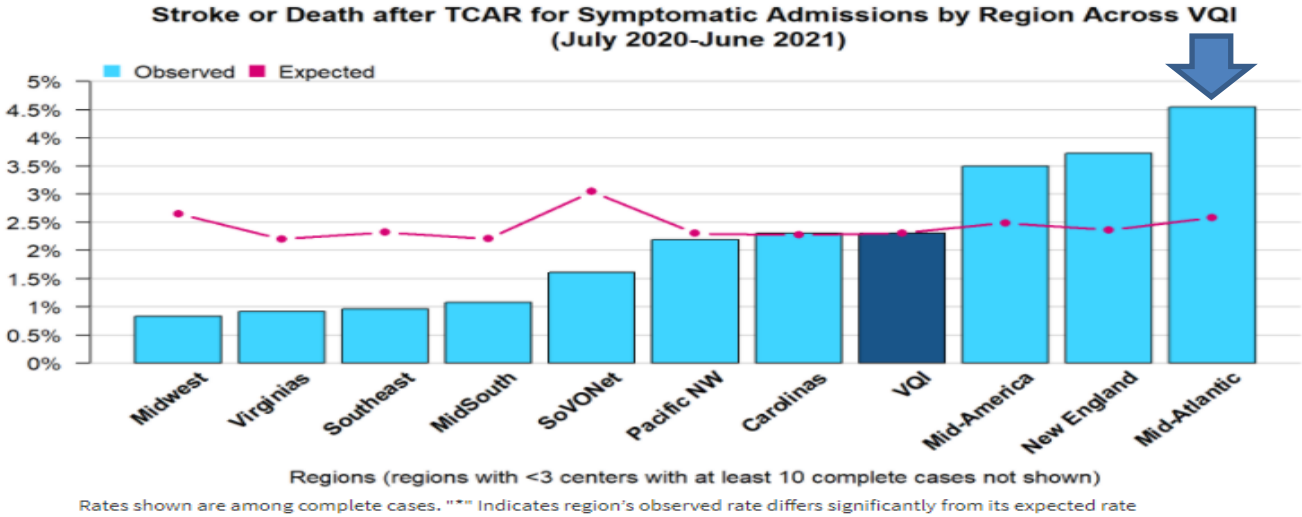
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after TCAR for Symptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.


Stroke or Death after TCAR for Symptomatic Admissions in Your Region (July 2020-June 2021)
Other centers in your region
Your center
Observed
Expected
10%
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
Centers (centers with <10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates center's observed rate differs significantly from its expected rate


Stroke or Death after TCAR for Symptomatic Admissions by Region Across VQI
(July 2020-June 2021)
Observed
Expected
5%
4.5%
4%
3.5%
3%
2.5%
2%
1.5%
1%
0.5%
0%
Midwest
Virginias
Southeast
MidSouth
SoVONet
Pacific NW
Carolinas
VQI
Mid-America
New England
Mid-Atlantic
Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

CEA ASYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

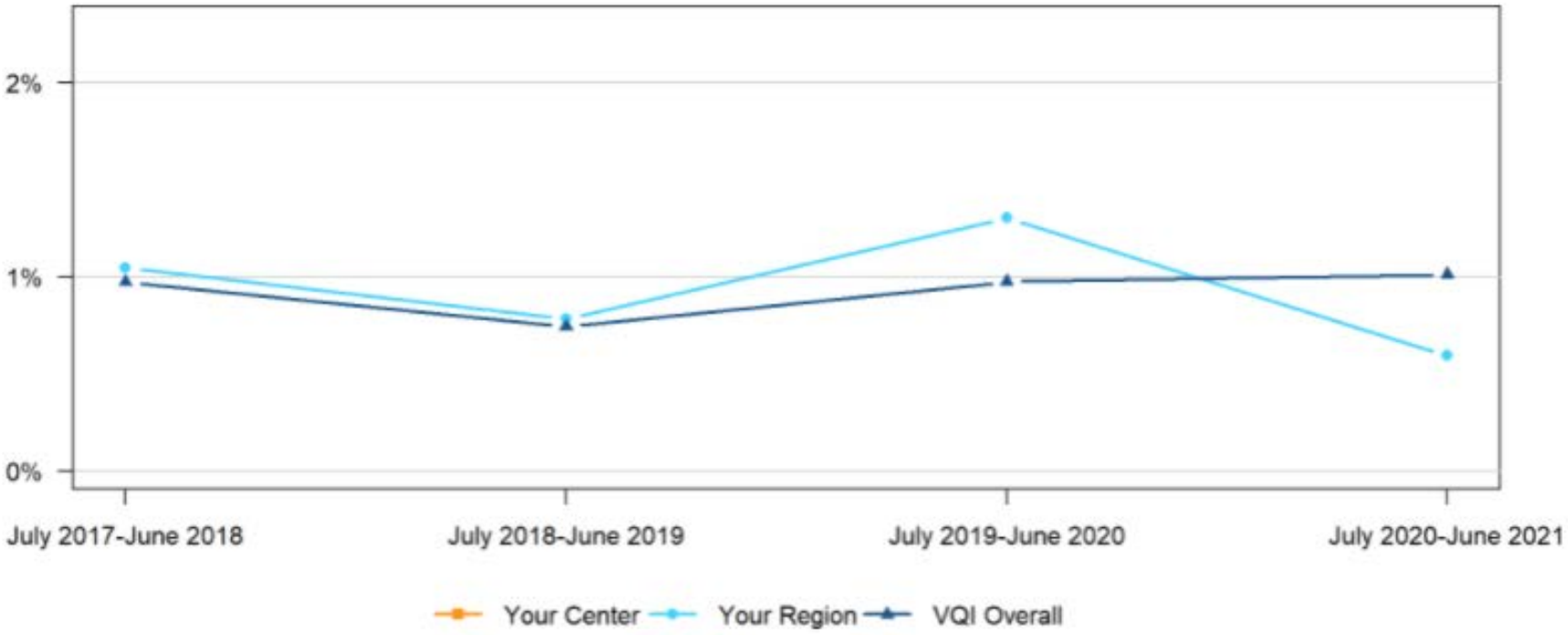
Includes asymptomatic admissions for Carotid Endarterectomy (CEA) only. Asymptomatic admissions are admissions where the patient had no ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or "Other" arterial procedure.

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

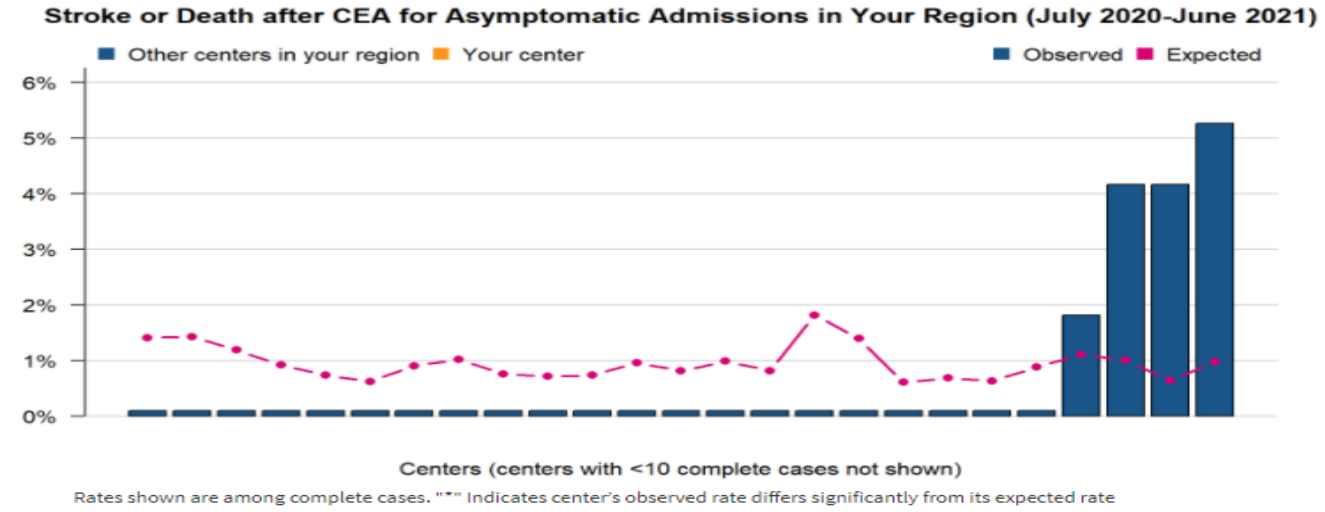
	Your Center	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria		843	9795
Observed rate of stroke or death among procedures meeting inclusion criteria		0.6%	1%
Number of procedures with complete data*		809	9313
Observed rate of stroke or death among cases with complete data		0.6%	1%
Expected rate of stroke or death among cases with complete data		0.9%	NA
P-value for comparison of observed and expected rates		0.46	NA

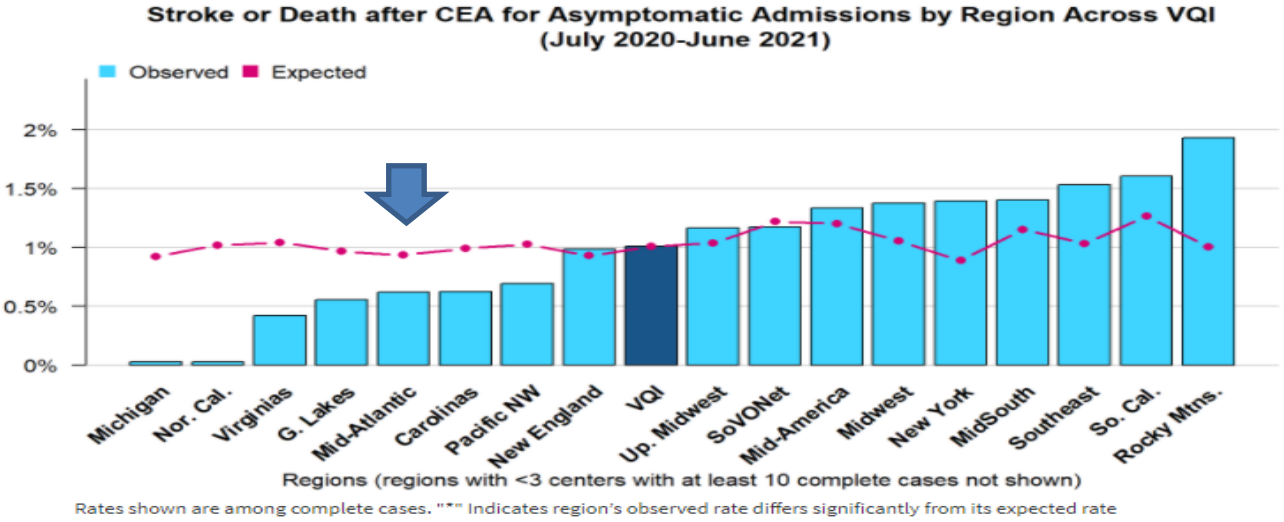
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after CEA for Asymptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.





SVS Society for Vascular Surgery
American Venous Forum
fivos
Society for Vascular Medicine
VASA
SVU

CEA SYMP: Stroke/Death

Procedures performed between July 1, 2020 and June 30, 2021

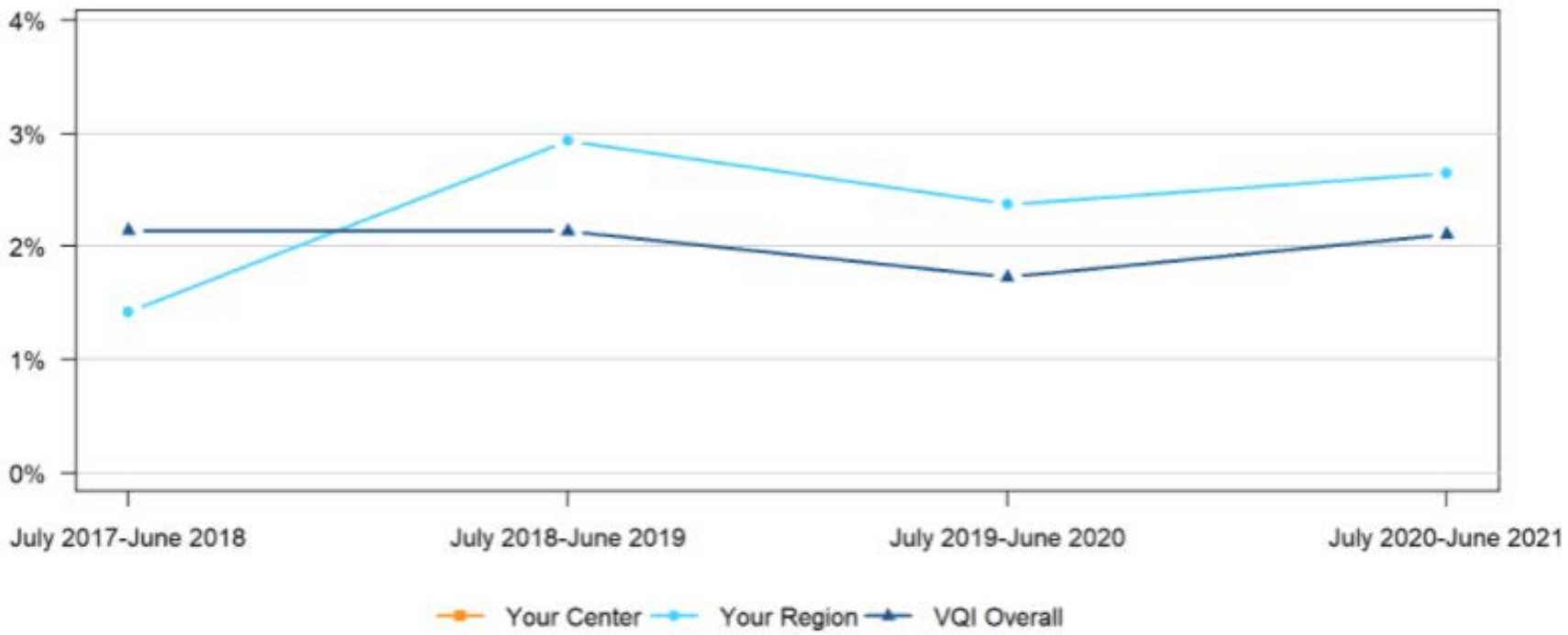
Includes symptomatic admissions for Carotid Endarterectomy (CEA) only. Symptomatic admissions are admissions where the patient had an ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral CEA or CAS, or any procedure with a concomitant CABG, proximal endovascular, distal endovascular, or "Other" arterial procedure.

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

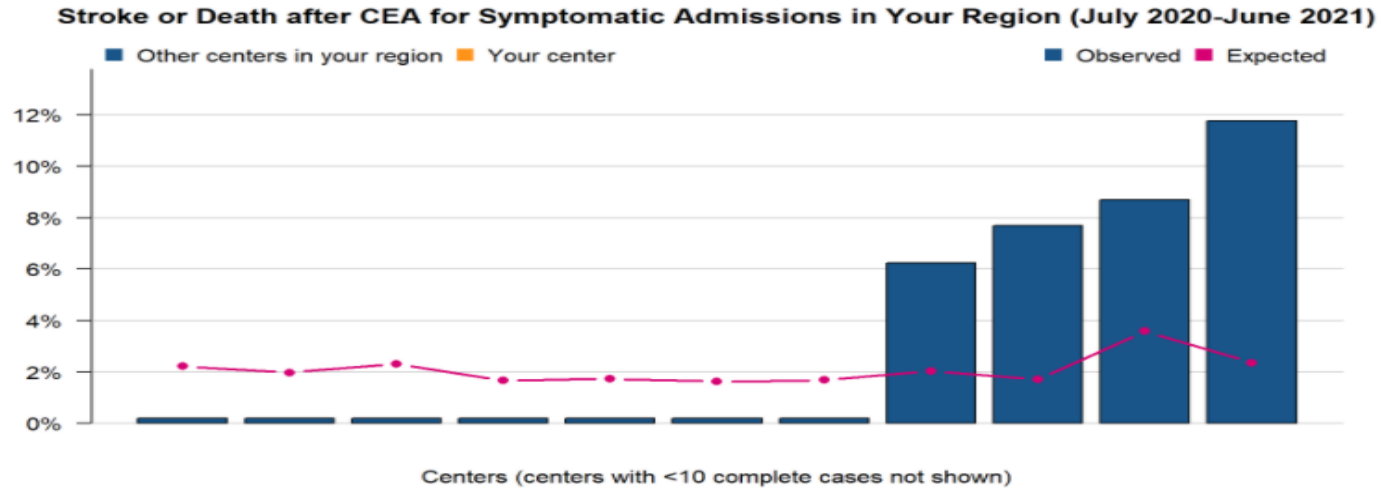
	Your Center	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria		302	4843
Observed rate of stroke or death among procedures meeting inclusion criteria		2.6%	2.1%
Number of procedures with complete data*		290	4660
Observed rate of stroke or death among cases with complete data		2.8%	2.1%
Expected rate of stroke or death among cases with complete data		2.1%	NA
P-value for comparison of observed and expected rates		0.41	NA

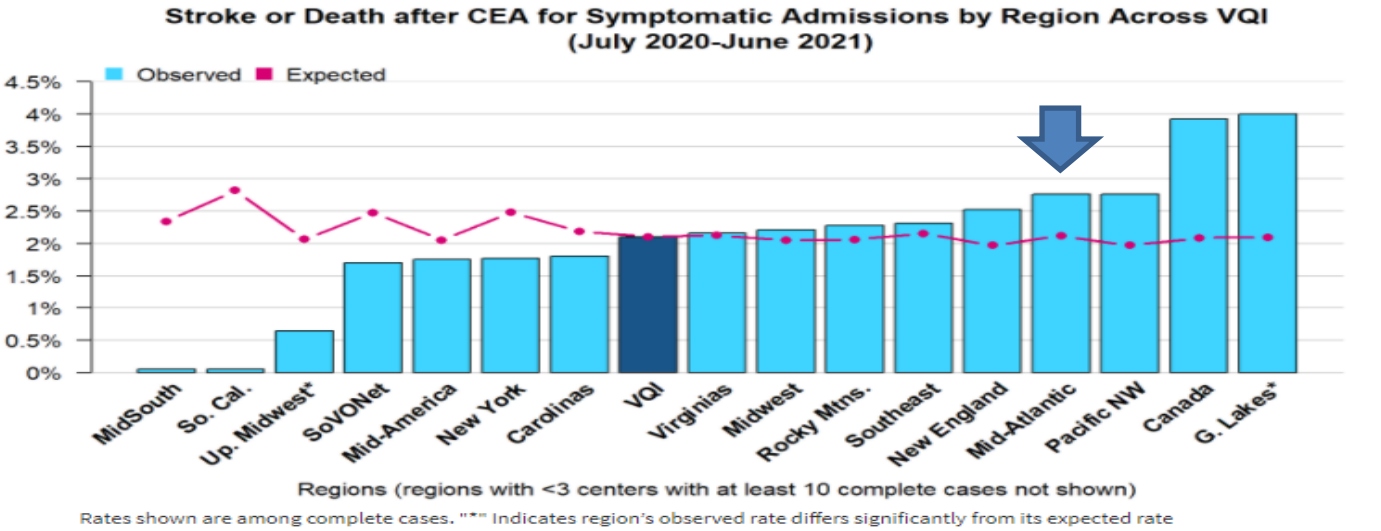
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Stroke or Death after CEA for Symptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.


Stroke or Death after CEA for Symptomatic Admissions in Your Region (July 2020-June 2021)
Other centers in your region
Your center
Observed
Expected
12%
10%
8%
6%
4%
2%
0%
Centers (centers with <10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates center's observed rate differs significantly from its expected rate


Stroke or Death after CEA for Symptomatic Admissions by Region Across VQI
(July 2020-June 2021)
Observed
Expected
4.5%
4%
3.5%
3%
2.5%
2%
1.5%
1%
0.5%
0%
MidSouth
So. Cal.
Up. Midwest*
SoVONet
Mid-America
New York
Carolinas
VQI
Virginias
Midwest
Rocky Mtns.
Southeast
New England
Mid-Atlantic
Pacific NW
Canada
G. Lakes*
Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

CEA ASYMP: Postop LOS>1 Day

Procedures performed between July 1, 2020 and June 30, 2021

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

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

	Your Center	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria		843	9798
Observed rate of LOS>1 day among procedures meeting inclusion criteria		17.7%	22.1%
Number of procedures with complete data*		811	9330
Observed rate of LOS>1 day among cases with complete data		17.6%	22%
Expected rate of LOS>1 day among cases with complete data		21.7%	NA
P-value for comparison of observed and expected rates		0	NA

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

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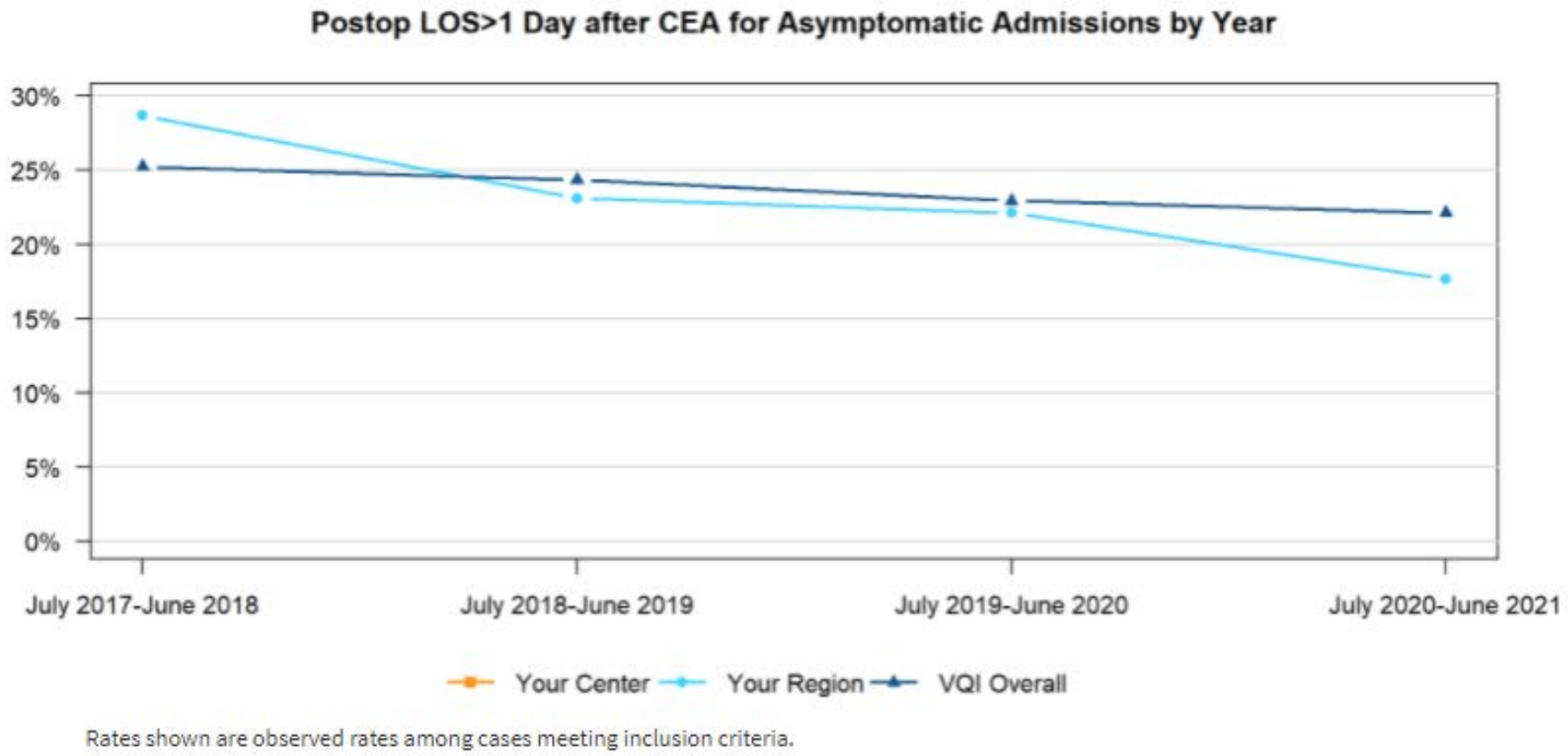
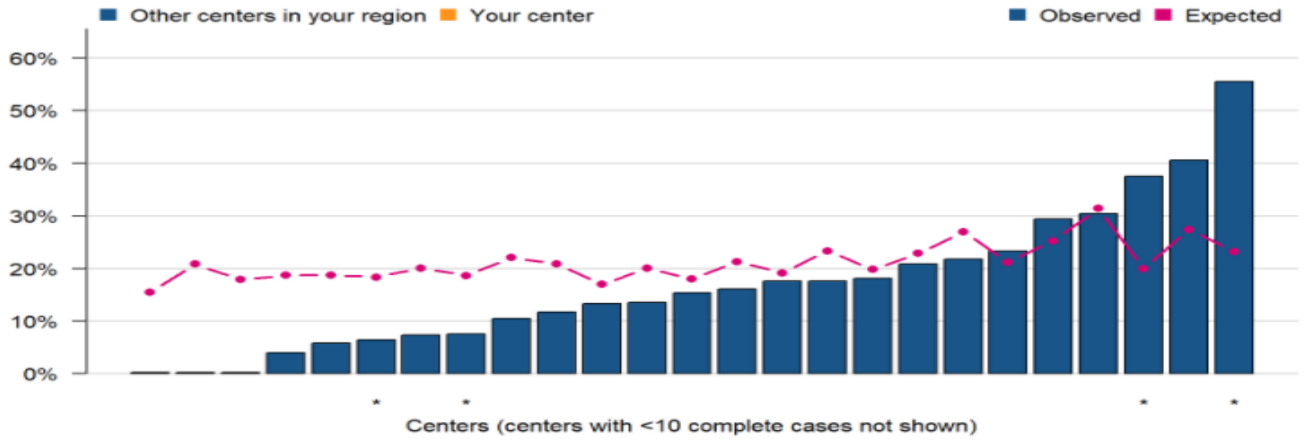


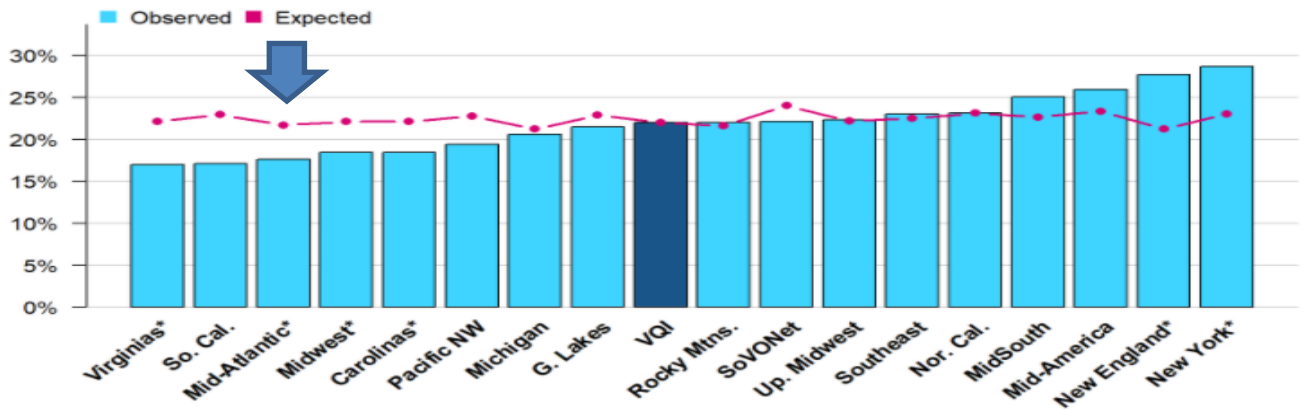
Rates shown are observed rates among cases meeting inclusion criteria.

Postop LOS>1 Day after CEA for Asymptomatic Admissions in Your Region (July 2020-June 2021)



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

Postop LOS>1 Day after CEA for Asymptomatic Admissions by Region Across VQI (July 2020-June 2021)



Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

CEA SYMP: Postop LOS>1 Day

Procedures performed between July 1, 2020 and June 30, 2021

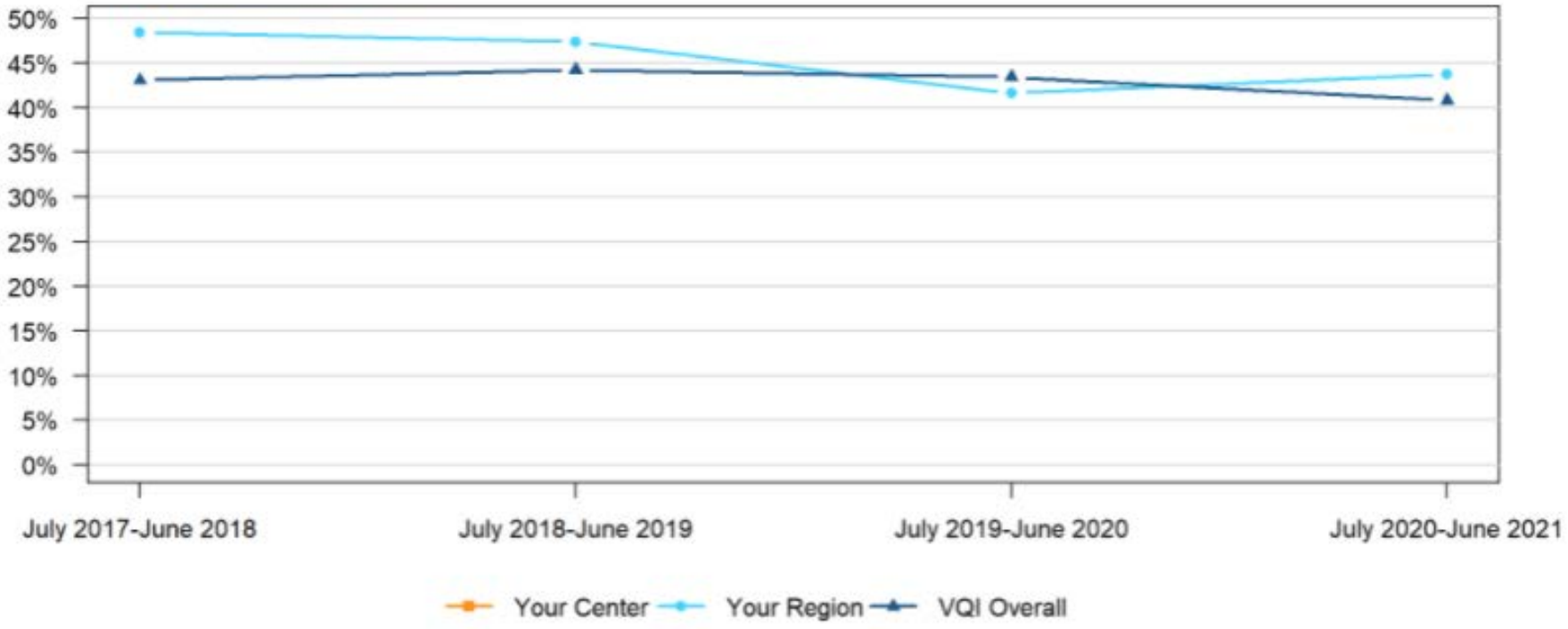
Includes symptomatic admissions for Carotid Endarterectomy (CEA) only. Symptomatic admissions are admissions where the patient had an ipsilateral retinal or cortical TIA or stroke within 180 days prior to surgery. Excludes any patient with prior vertebrobasilar or non-specific TIA or stroke, prior ipsilateral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

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

	Your Center	Your Region	VQI Overall
Number of CEA procedures meeting inclusion criteria		302	4844
Observed rate of LOS>1 day among procedures meeting inclusion criteria		43.7%	40.8%
Number of procedures with complete data*		290	4681
Observed rate of LOS>1 day among cases with complete data		44.8%	40.9%
Expected rate of LOS>1 day among cases with complete data		41.7%	NA
P-value for comparison of observed and expected rates		0.28	NA

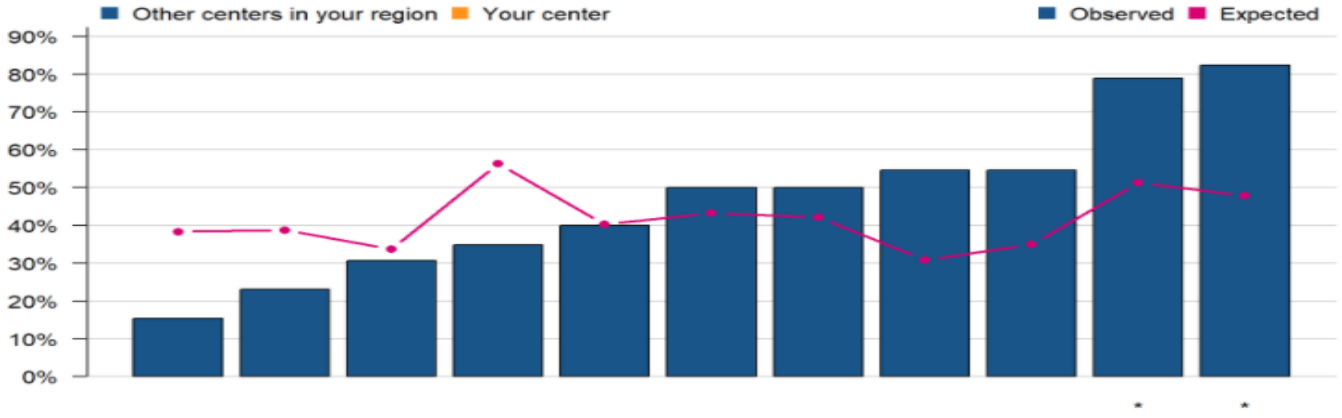
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Postop LOS>1 Day after CEA for Symptomatic Admissions by Year



Rates shown are observed rates among cases meeting inclusion criteria.

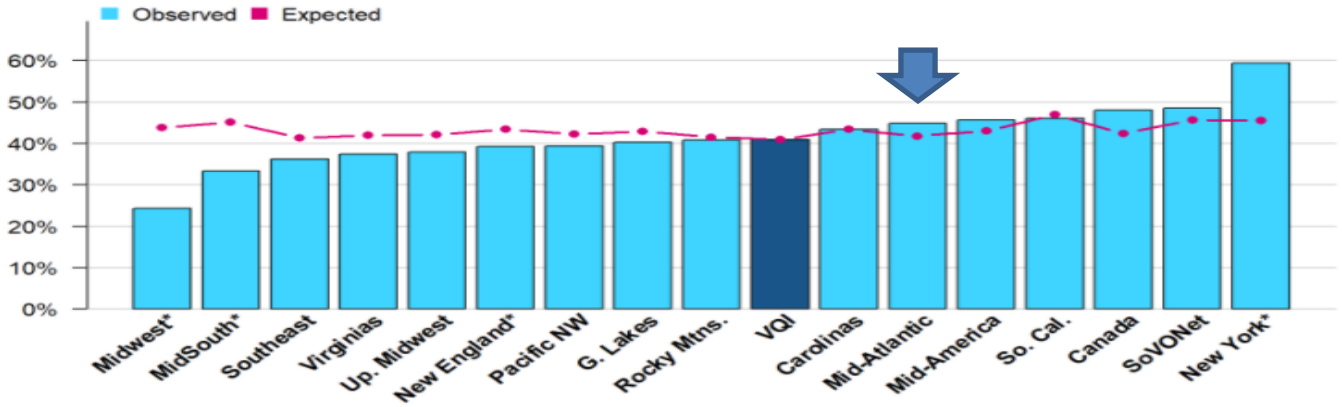
Postop LOS>1 Day after CEA for Symptomatic Admissions in Your Region (July 2020-June 2021)



Centers (centers with <10 complete cases not shown)

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

Postop LOS>1 Day after CEA for Symptomatic Admissions by Region Across VQI (July 2020-June 2021)



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

Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

EVAR: Postop LOS>2 Days

Procedures performed between July 1, 2020 and June 30, 2021

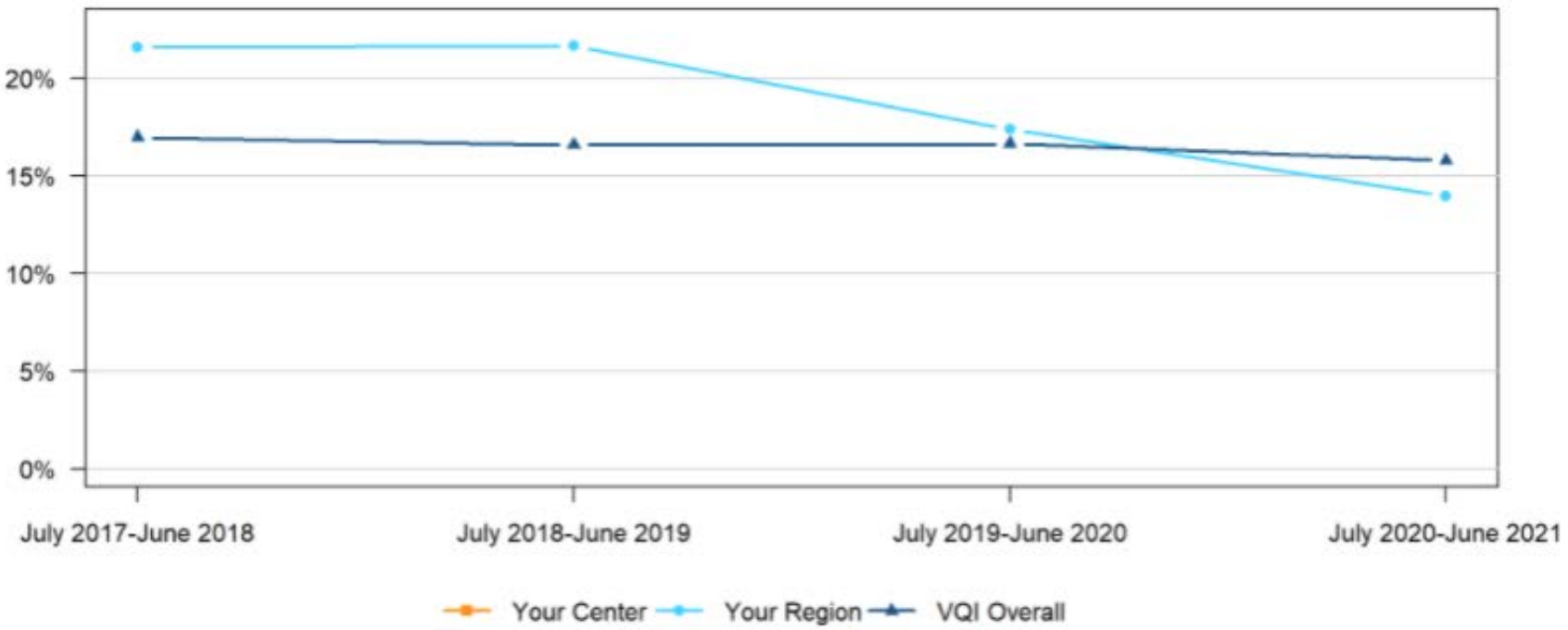
Includes Endovascular AAA Repair (EVAR) procedures only. Excludes any procedure with ruptured aneurysm. Procedures where in-hospital death occurred with postoperative LOS≤2 are also excluded. Postoperative LOS is based on the midnight rule used for hospital billing.

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

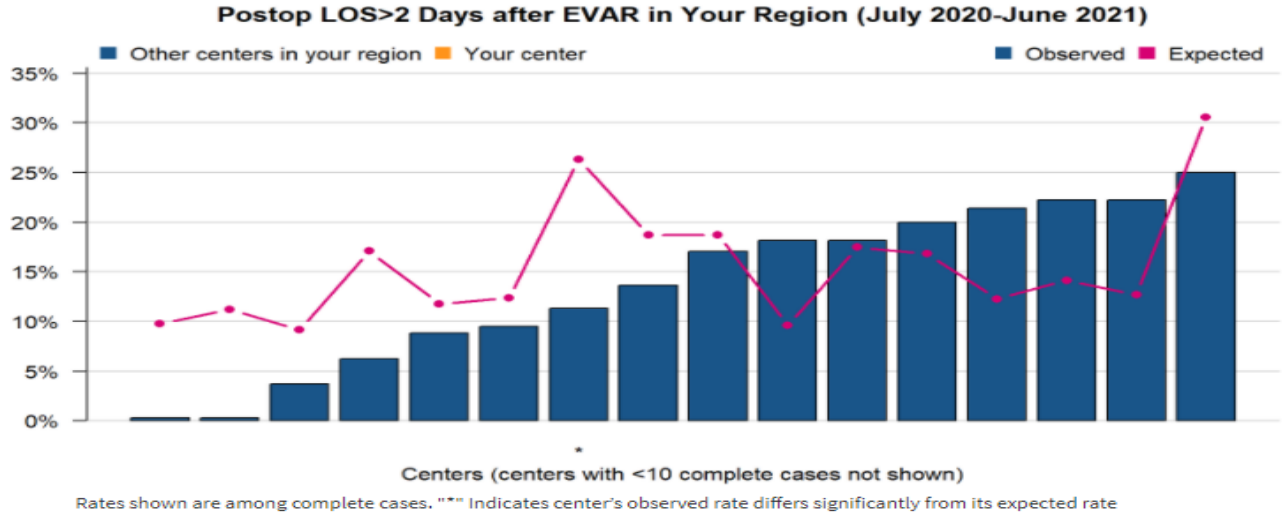
	Your Center	Your Region	VQI Overall
Number of EVAR procedures meeting inclusion criteria		537	6745
Observed rate of LOS>2 days among procedures meeting inclusion criteria		14%	15.8%
Number of procedures with complete data*		500	6187
Observed rate of LOS>2 days among cases with complete data		13.8%	15.7%
Expected rate of LOS>2 days among cases with complete data		16.4%	NA
P-value for comparison of observed and expected rates		0.12	NA

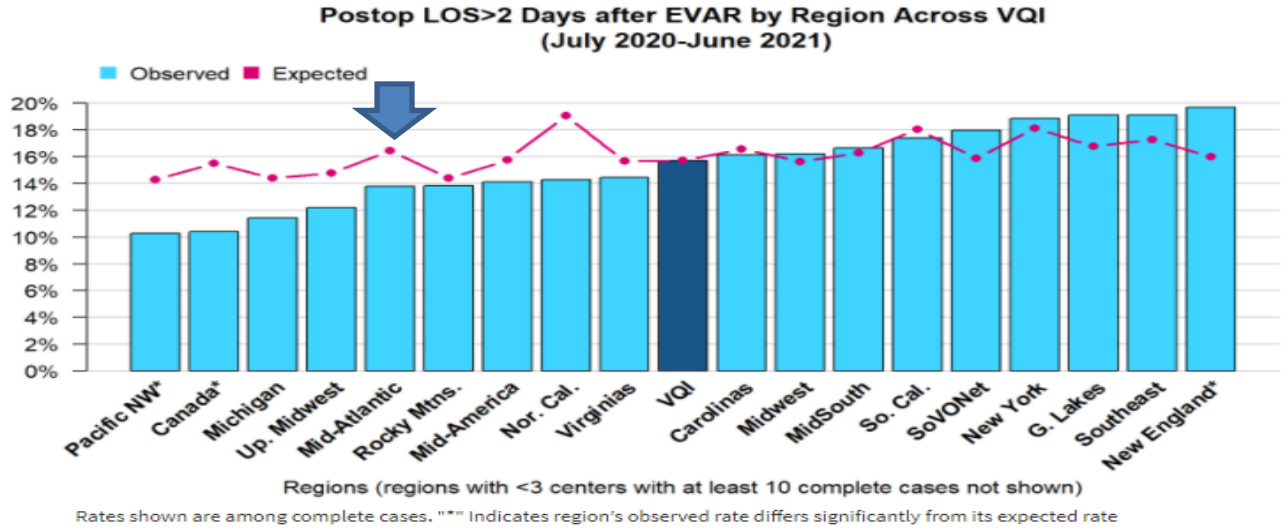
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

Postop LOS>2 Days after EVAR by Year



Rates shown are observed rates among cases meeting inclusion criteria.





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EVAR: Sac Diameter Reporting

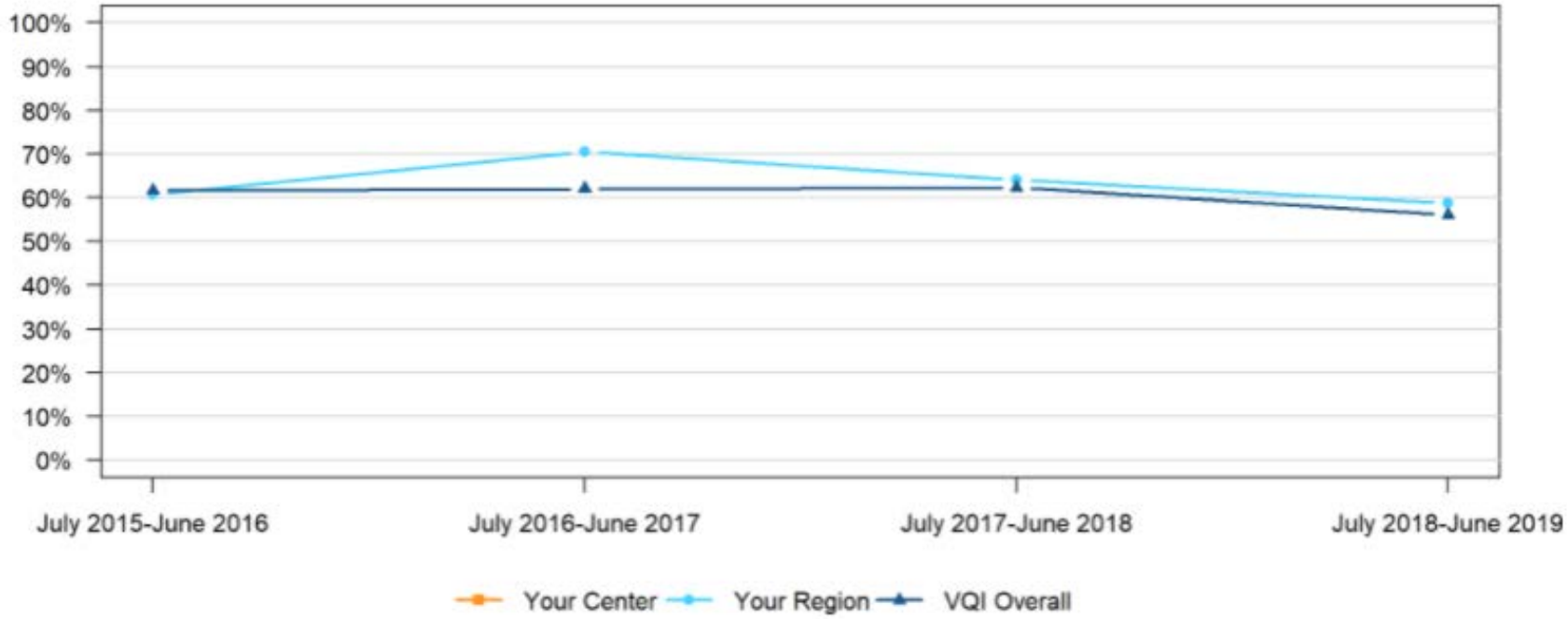
Procedures performed between July 1, 2018 and June 30, 2019

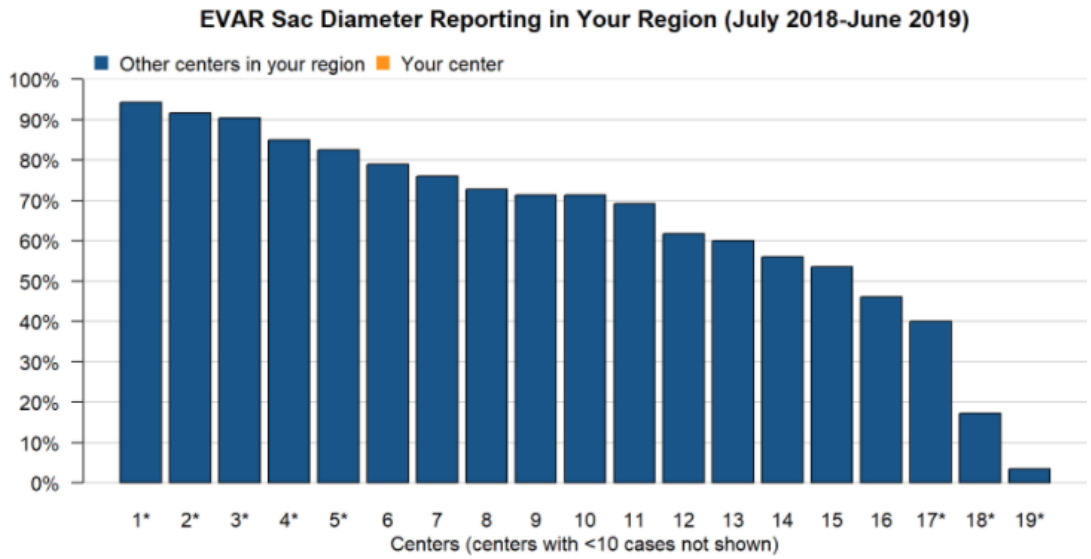
Includes Endovascular AAA Repair (EVAR) procedures only. Excludes patients who were converted to open or died within 21 months of surgery.

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

	Your Center	Your Region	VQI Overall
Number of EVAR procedures meeting inclusion criteria		516	6878
Percentage with sac diameter reported between 9 and 21 months post-procedure		58.7%	56.1%

EVAR Sac Diameter Reporting by Year

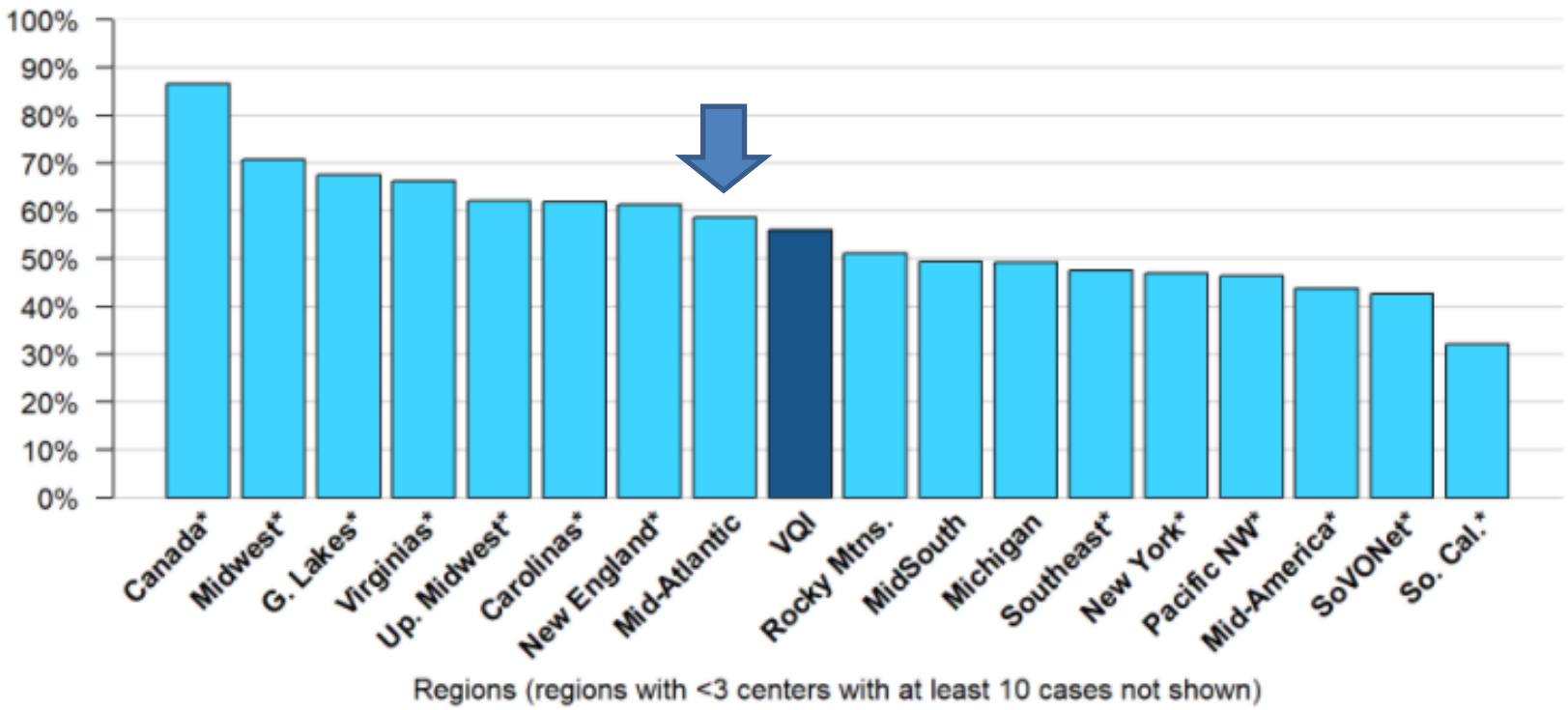




EVAR Sac Diameter Reporting Unblinding Legend for Your Region

Index	Medical Center Name
1	Geisinger Medical Center
2	St. Luke's Hospital - Bethlehem Campus
3	Geisinger Community Medical Center
4	Penn State Health Milton S. Hershey Medical Center
5	Guthrie Clinic
6	Geisinger Wyoming Valley Medical Center
7	University of Maryland Medical Center
8	Chester County Hospital
9	Pennsylvania Hospital
10	Beebe Medical Center
11	The Johns Hopkins Hospital
12	University of Pennsylvania
13	Doylestown Hospital
14	Medstar Washington Hospital Center
15	Penn Presbyterian Medical Center
16	Medstar Union Memorial Hospital
17	Abington Memorial Hospital
18	Hackensack University Medical Center
19	Christiana Care

EVAR Sac Diameter Reporting by Region Across VQI (July 2018-June 2019)



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

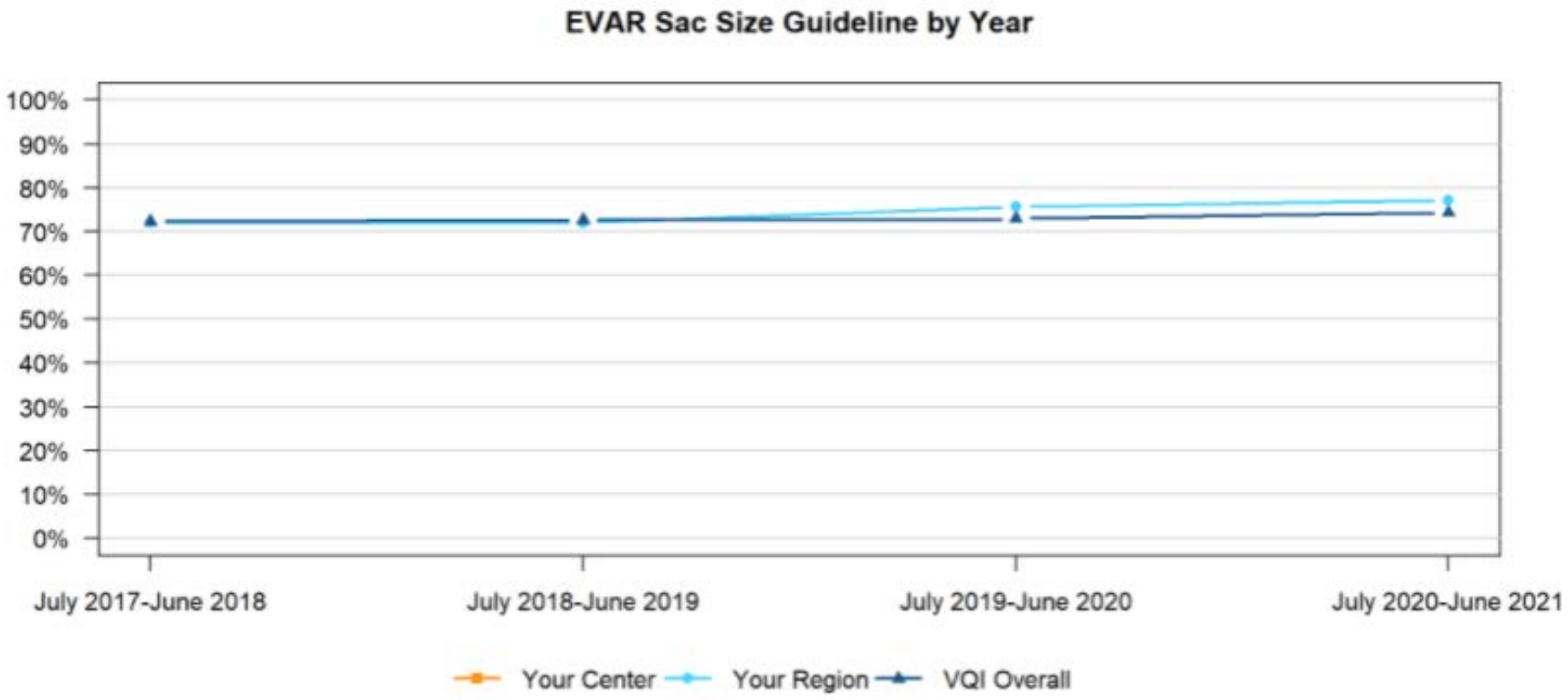
EVAR: SVS Sac Size Guideline

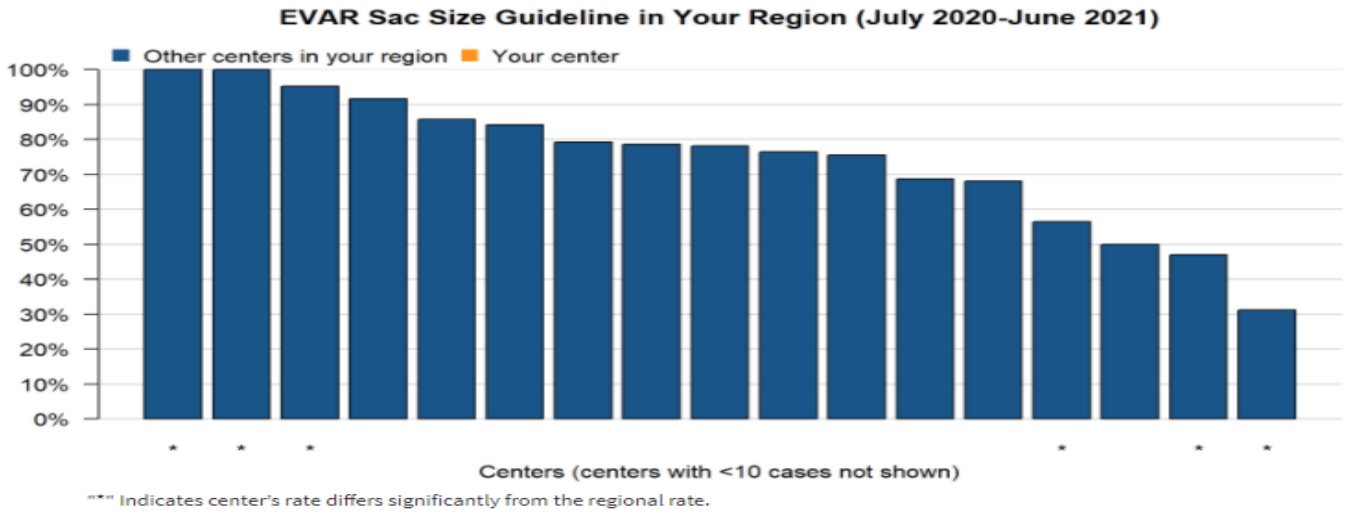
Procedures performed between July 1, 2020 and June 30, 2021

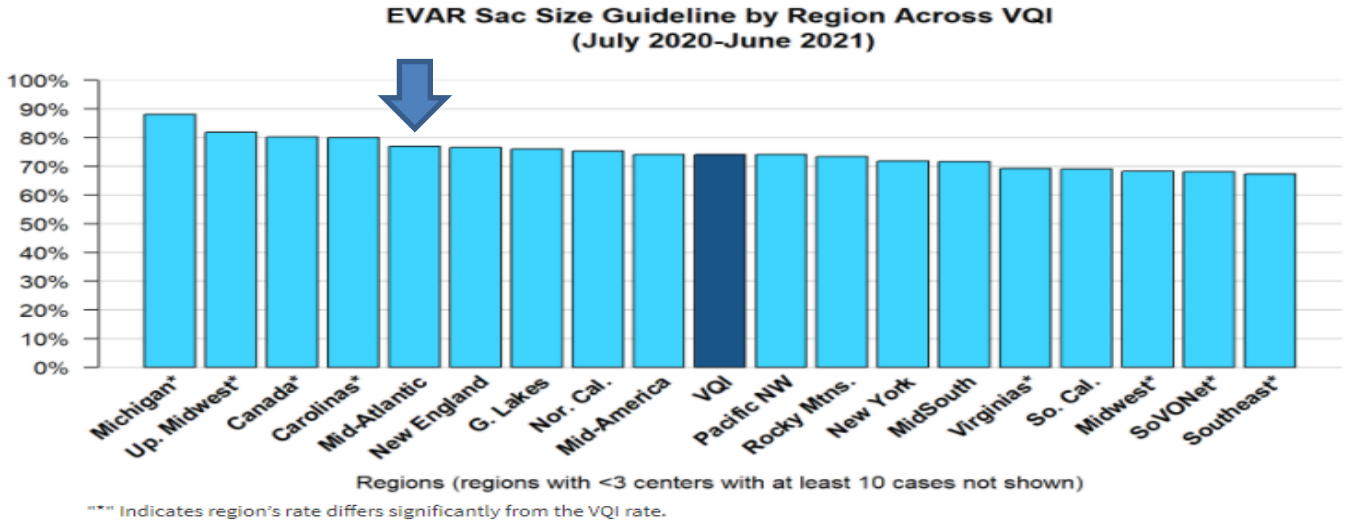
Includes Endovascular AAA Repair (EVAR) procedures only. Excludes any non-elective procedure. SVS sac size guideline is ≥5 cm for Women and ≥5.5cm for men. If the patient has any iliac aneurysm, the guideline is considered met regardless of AAA diameter.

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

	Your Center	Your Region	VQI Overall
Number of EVAR procedures meeting inclusion criteria		494	6031
Percentage meeting SVS sac size guideline		77.1%	74.3%


EVAR Sac Size Guideline by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall





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TEVAR: Sac Diameter Reporting

Procedures performed between July 1, 2018 and June 30, 2019

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

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

	Your Center	Your Region	VQI Overall
Number of TEVAR procedures meeting inclusion criteria		129	1590
Percentage with sac diameter reported between 9 and 21 months post-procedure		56.6%	55.7%

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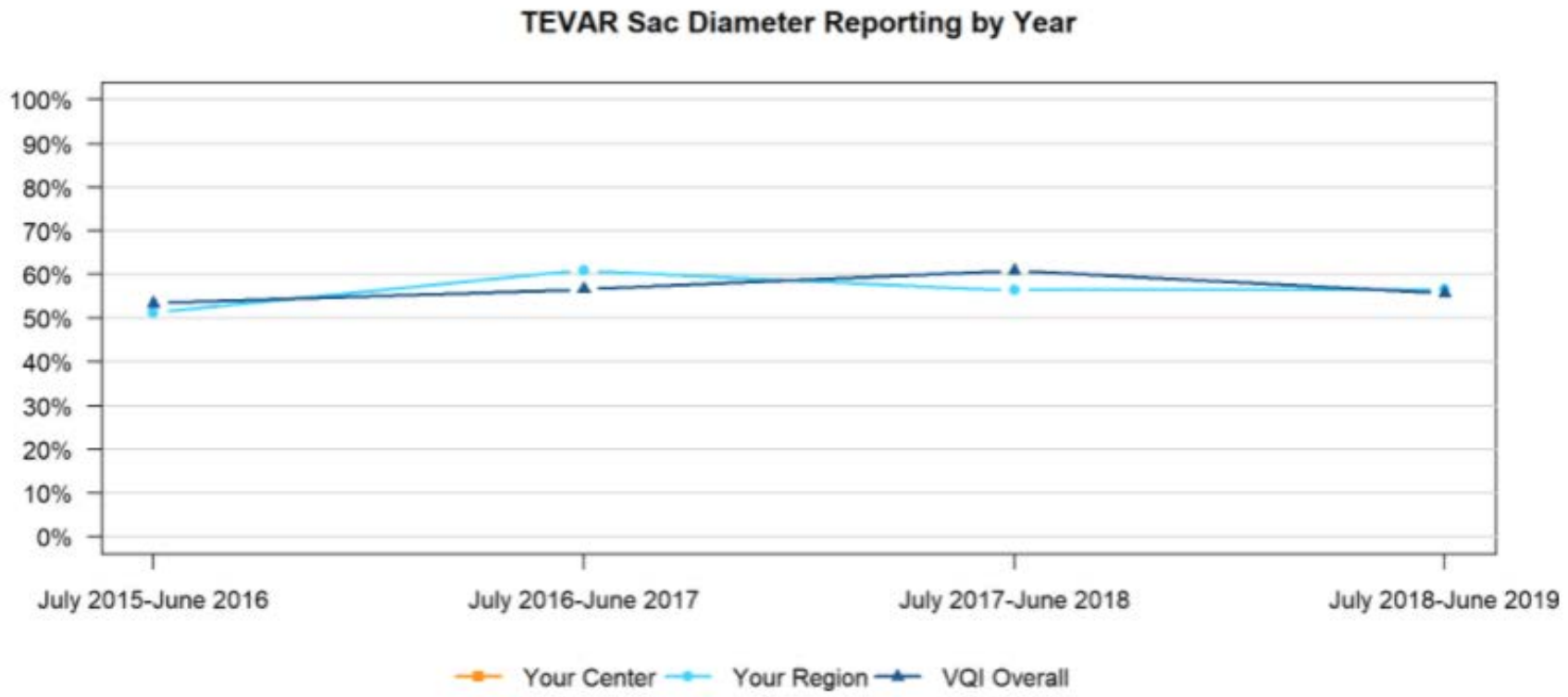
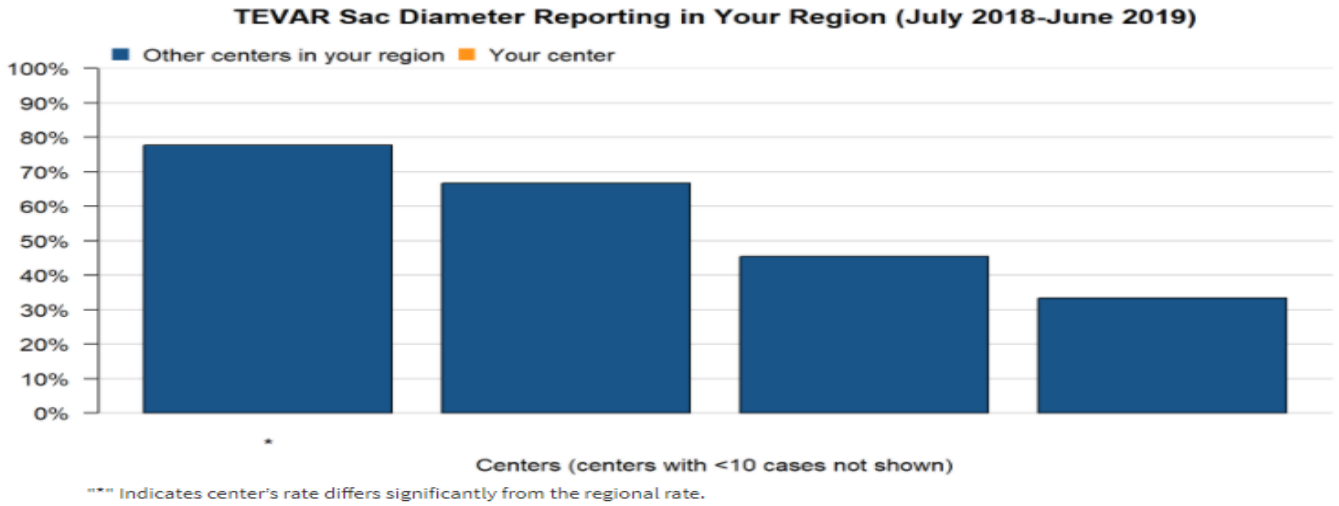
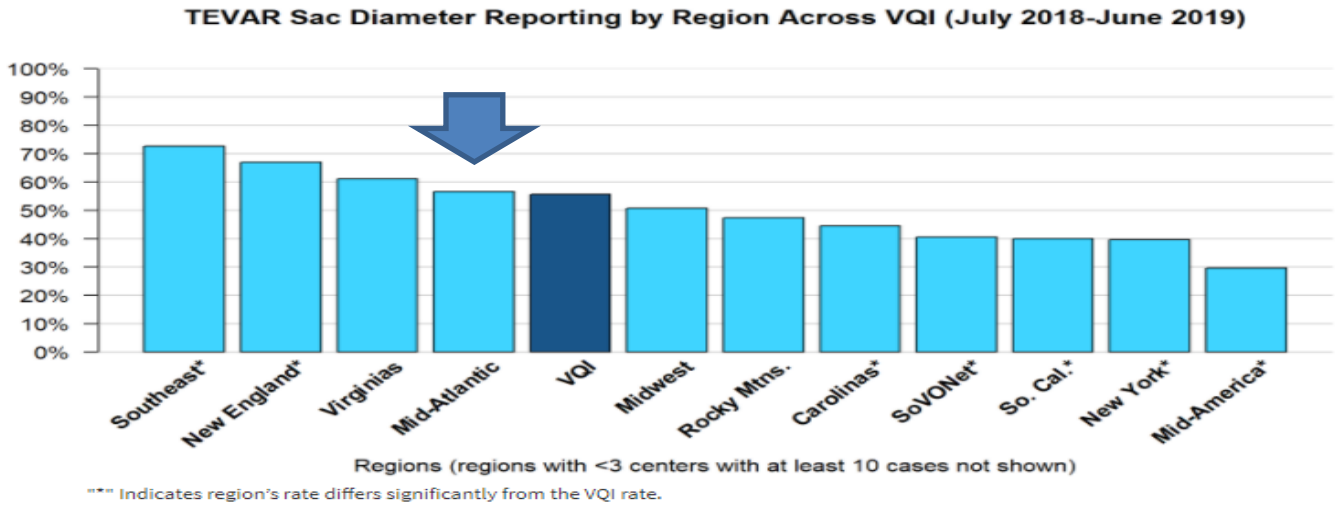

TEVAR Sac Diameter Reporting by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2015-June 2016
July 2016-June 2017
July 2017-June 2018
July 2018-June 2019
Your Center
Your Region
VQI Overall


TEVAR Sac Diameter Reporting in Your Region (July 2018-June 2019)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
*
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


TEVAR Sac Diameter Reporting by Region Across VQI (July 2018-June 2019)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Southeast*
New England*
Virginias
Mid-Atlantic
VQI
Midwest
Rocky Mtns.
Carolinas*
SoVONet*
So. Cal.*
New York*
Mid-America*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

OAAA: In-Hospital Mortality

Procedures performed between July 1, 2017 and June 30, 2021

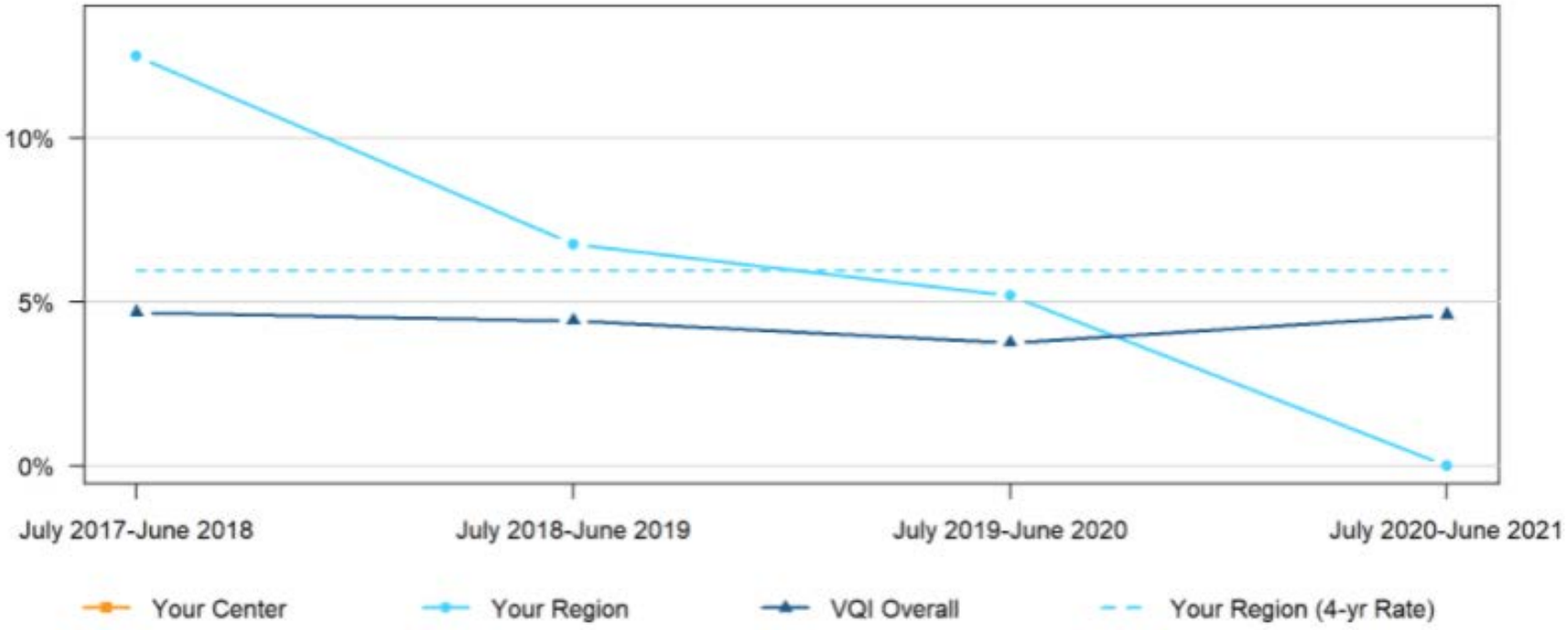
Includes Open AAA (OAAA) procedures only. Excludes any patient with a ruptured aneurysm.

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

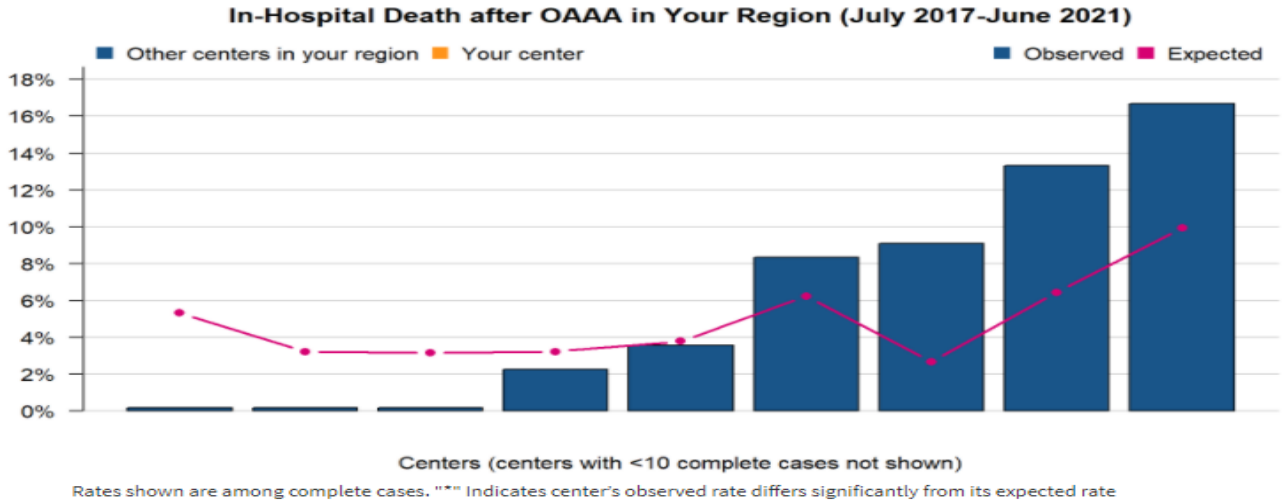
	Your Center	Your Region	VQI Overall
Number of OAAA procedures meeting inclusion criteria		268	4436
Observed rate of In-Hospital Mortality among procedures meeting inclusion criteria		6%	4.4%
Number of procedures with complete data*		244	4139
Observed rate of In-Hospital Mortality among cases with complete data		5.3%	4.2%
Expected rate of In-Hospital Mortality among cases with complete data		4.2%	NA
P-value for comparison of observed and expected rates		0.42	NA

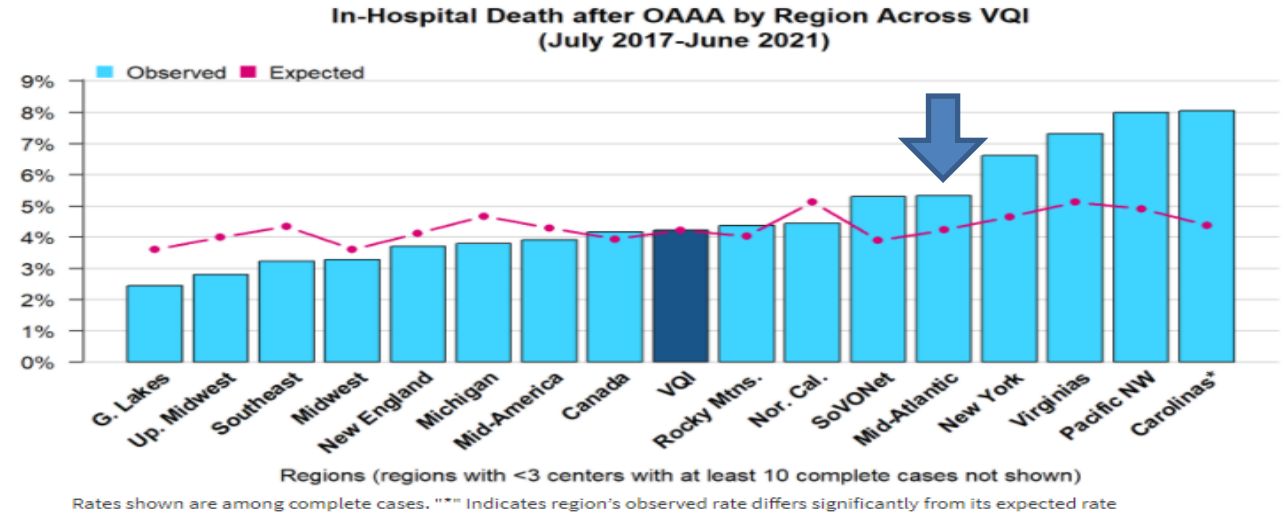
*"Expected rate" is the rate estimated by a statistical model that accounts for patient characteristics, including age, gender, race, BMI, comorbidities, medication and stroke and vascular history. "Cases with complete data" include patients who have data on all of those factors.

In-Hospital Death after OAAA by Year



Rates shown are observed rates among cases meeting inclusion criteria.


In-Hospital Death after OAAA in Your Region (July 2017-June 2021)
Other centers in your region
Your center
Observed
Expected
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
Centers (centers with <10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates center's observed rate differs significantly from its expected rate


In-Hospital Death after OAAA by Region Across VQI
(July 2017-June 2021)
Observed
Expected
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
G. Lakes
Up. Midwest
Southeast
Midwest
New England
Michigan
Mid-America
Canada
VQI
Rocky Mtns.
Nor. Cal.
SoVONet
Mid-Atlantic
New York
Virginias
Pacific NW
Carolinas*
Regions (regions with <3 centers with at least 10 complete cases not shown)
Rates shown are among complete cases. "*" Indicates region's observed rate differs significantly from its expected rate

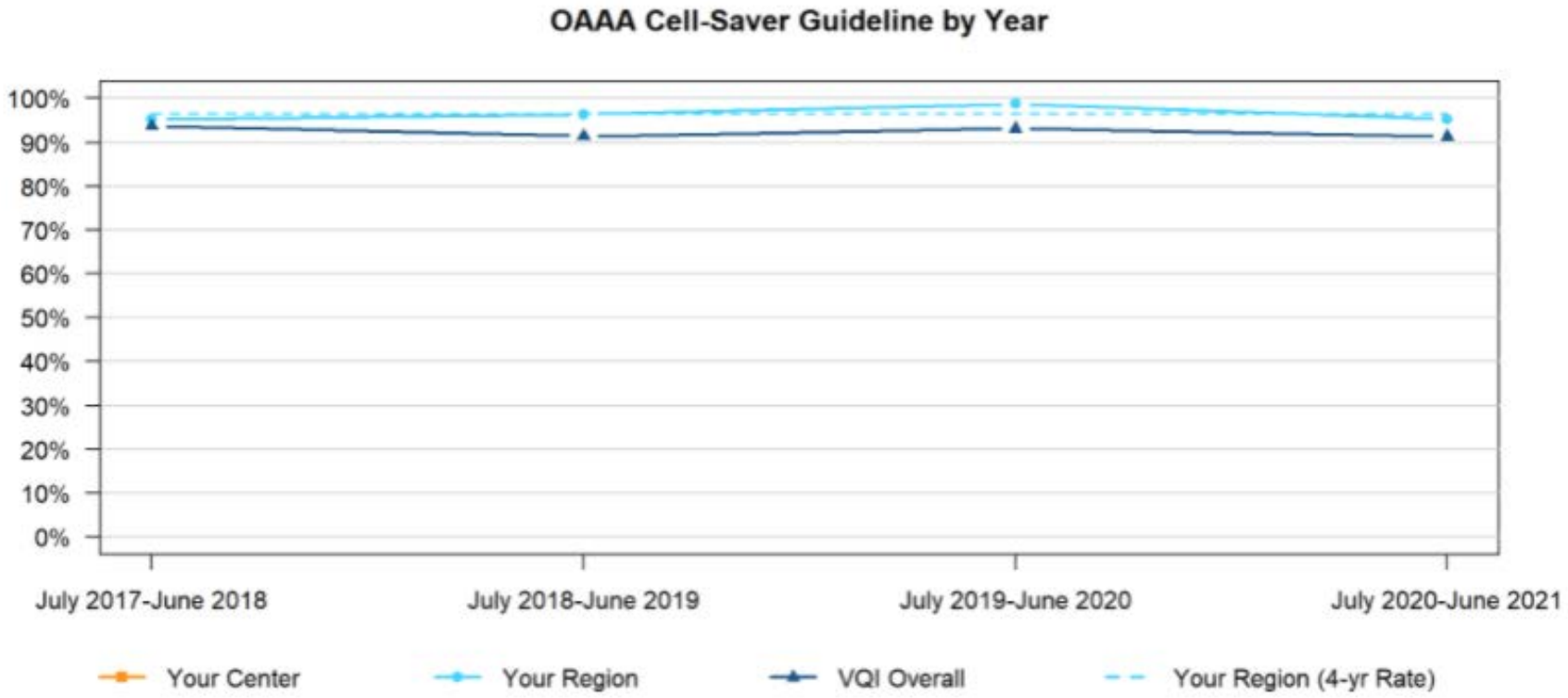
OAAA: SVS Cell-Saver Guideline

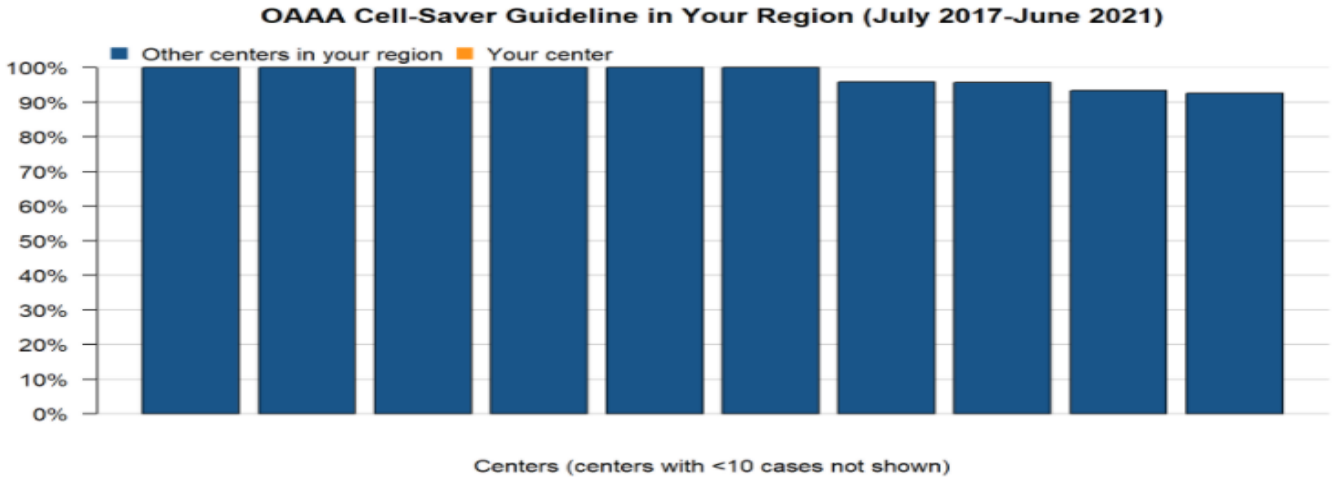
Procedures performed between July 1, 2017 and June 30, 2021

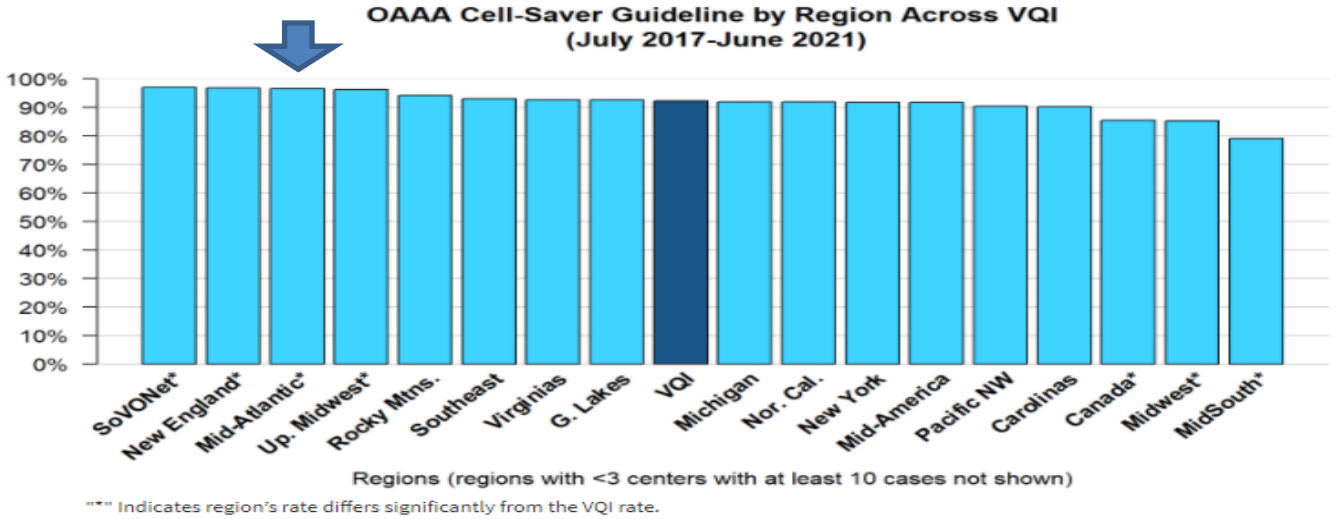
Includes Open AAA (OAAA) procedures only. Excludes any patient with EBL≤500 ml. SVS cell-saver guideline is met if cell salvage or ultrafiltration device was used.

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

	Your Center	Your Region	VQI Overall
Number of OAAA procedures meeting inclusion criteria		292	4545
Percentage meeting SVS cell-saver guideline		96.6%	92.4%


OAAA Cell-Saver Guideline by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall
Your Region (4-yr Rate)


OAAA Cell-Saver Guideline in Your Region (July 2017-June 2021)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


OAAA Cell-Saver Guideline by Region Across VQI
(July 2017-June 2021)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
SoVONet*
New England*
Mid-Atlantic*
Up. Midwest*
Rocky Mtns.
Southeast
Virginias
G. Lakes
VQI
Michigan
Nor. Cal.
New York
Mid-America
Pacific NW
Carolinas
Canada*
Midwest*
MidSouth*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

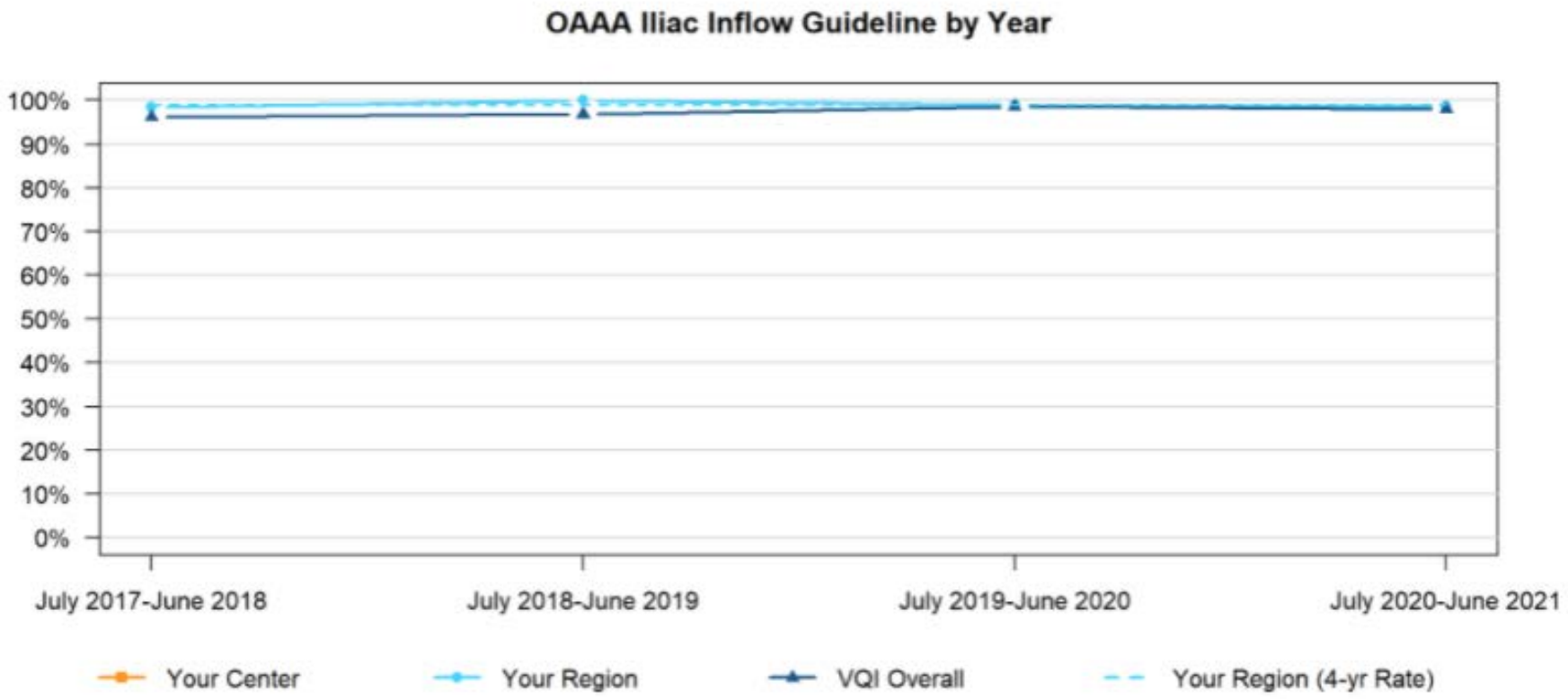
OAAA: SVS Iliac Inflow Guideline

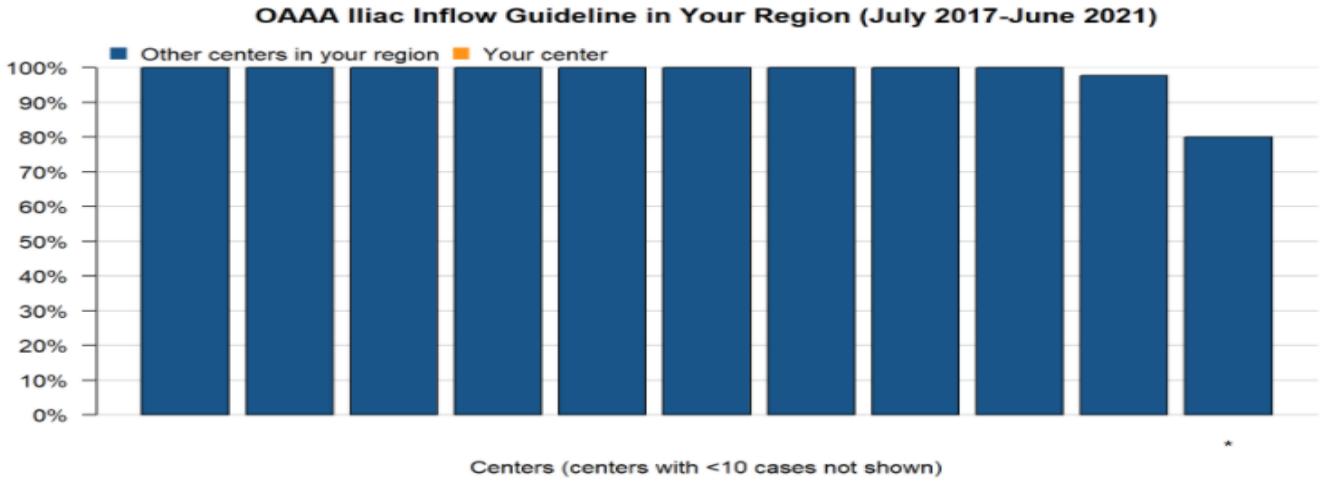
Procedures performed between July 1, 2017 and June 30, 2021

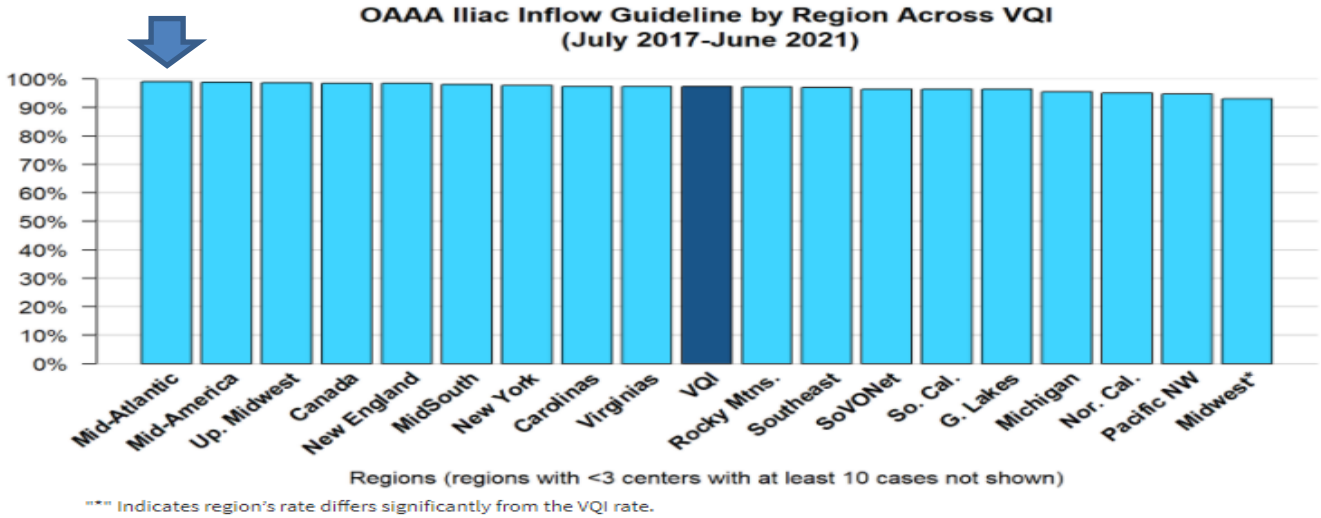
Includes Open AAA (OAAA) procedures only. SVS iliac inflow guideline is met if preservation of flow was maintained to at least one internal iliac artery.

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

	Your Center	Your Region	VQI Overall
Number of OAAA procedures meeting inclusion criteria		315	5087
Percentage meeting SVS iliac inflow guideline		99%	97.4%


OAAA Iliac Inflow Guideline by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall
Your Region (4-yr Rate)


OAAA Iliac Inflow Guideline in Your Region (July 2017-June 2021)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
*
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


OAAA Iliac Inflow Guideline by Region Across VQI
(July 2017-June 2021)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Mid-Atlantic
Mid-America
Up. Midwest
Canada
New England
MidSouth
New York
Carolinas
Virginias
VQI
Rocky Mtns.
Southeast
SoVONet
So. Cal.
G. Lakes
Michigan
Nor. Cal.
Pacific NW
Midwest*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

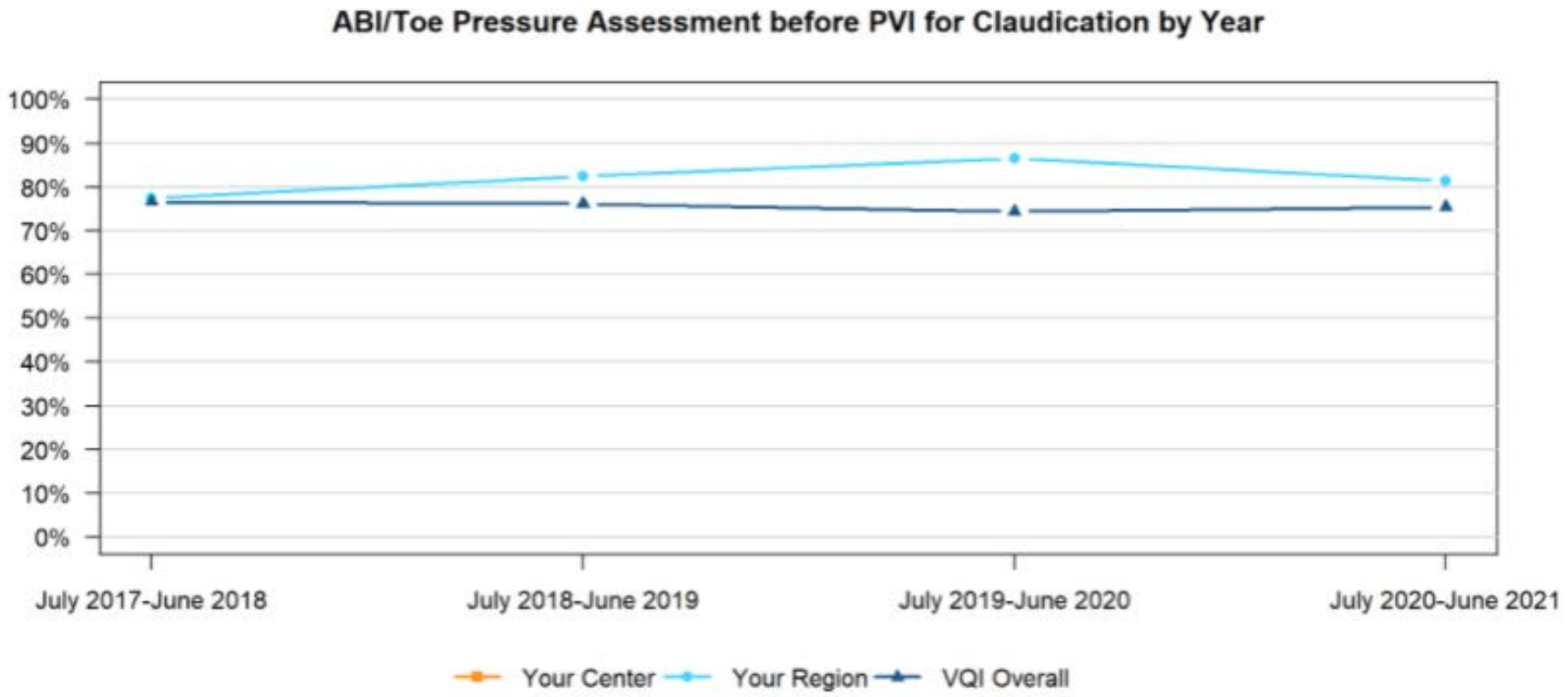
PVI CLAUD: ABI/Toe Pressure

Procedures performed between July 1, 2020 and June 30, 2021

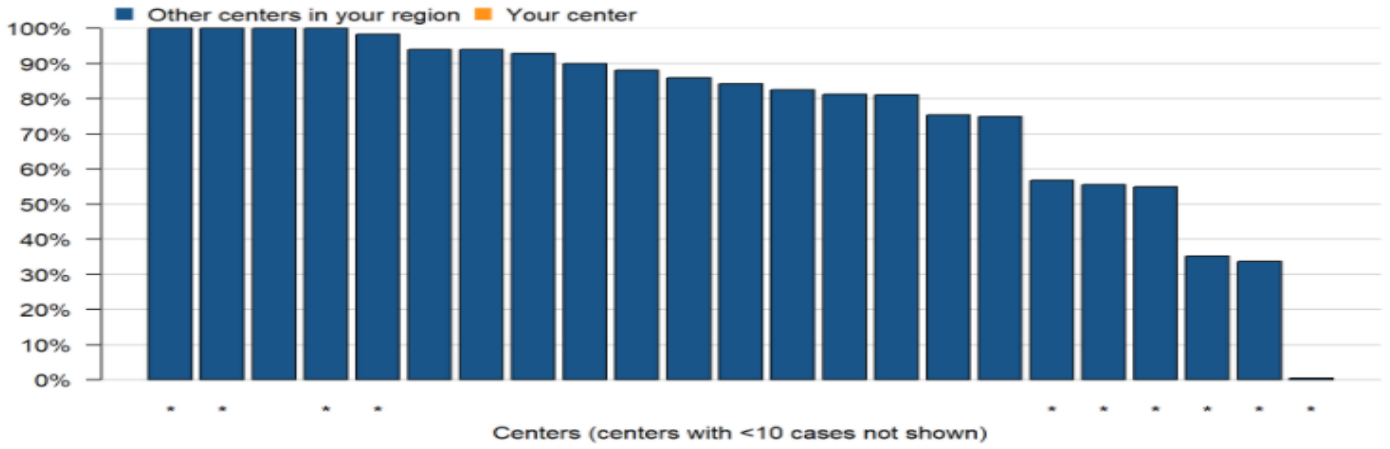
Includes Peripheral Vascular Intervention (PVI) procedures for mild, moderate, or severe claudication only. "ABI/Toe Pressure Assessment" indicates at least one ABI or toe pressure assessment was made prior to PVI for the side of the procedure, or on both sides for bilateral and aortic procedures.

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

	Your Center	Your Region	VQI Overall
Number of PVI procedures meeting inclusion criteria		1208	13720
Percentage with ABI/toe pressure assessment		81.4%	75.4%

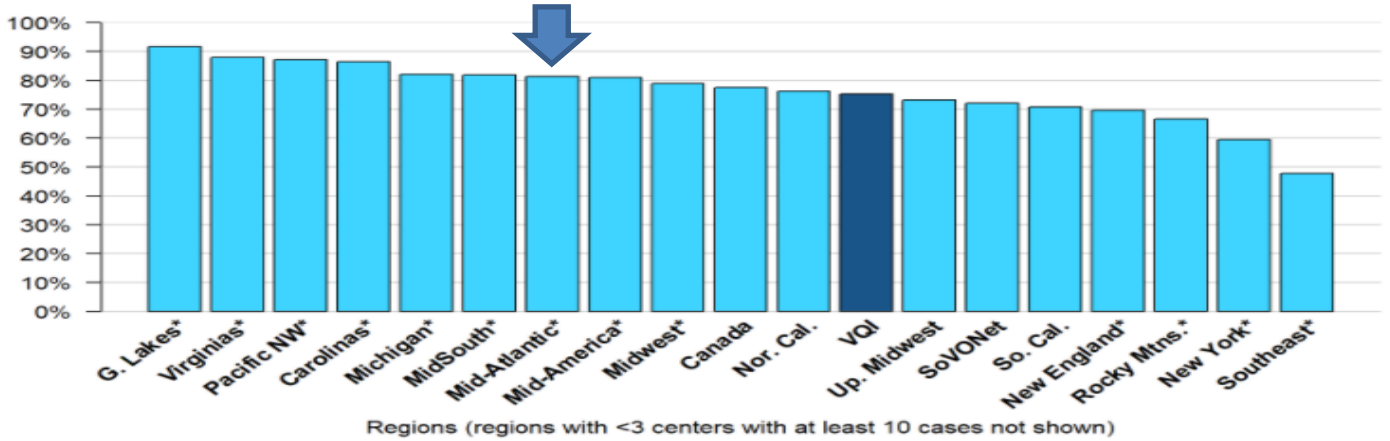

ABI/Toe Pressure Assessment before PVI for Claudication by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall

ABI/Toe Pressure Assessment before PVI for Claudication in Your Region (July 2020-June 2021)



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

ABI/Toe Pressure Assessment before PVI for Claudication by Region Across VQI (July 2020-June 2021)



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

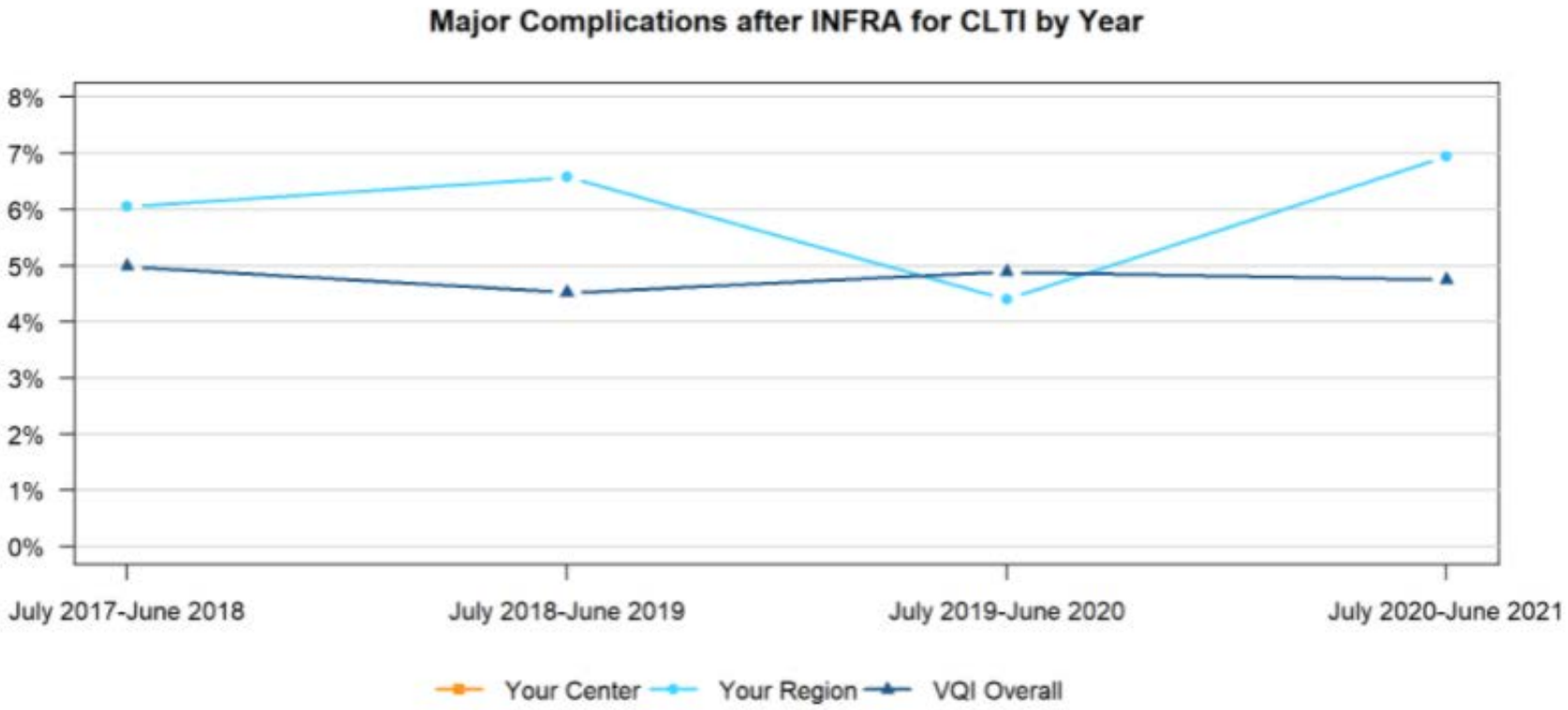
INFRA CLTI: Major Complications

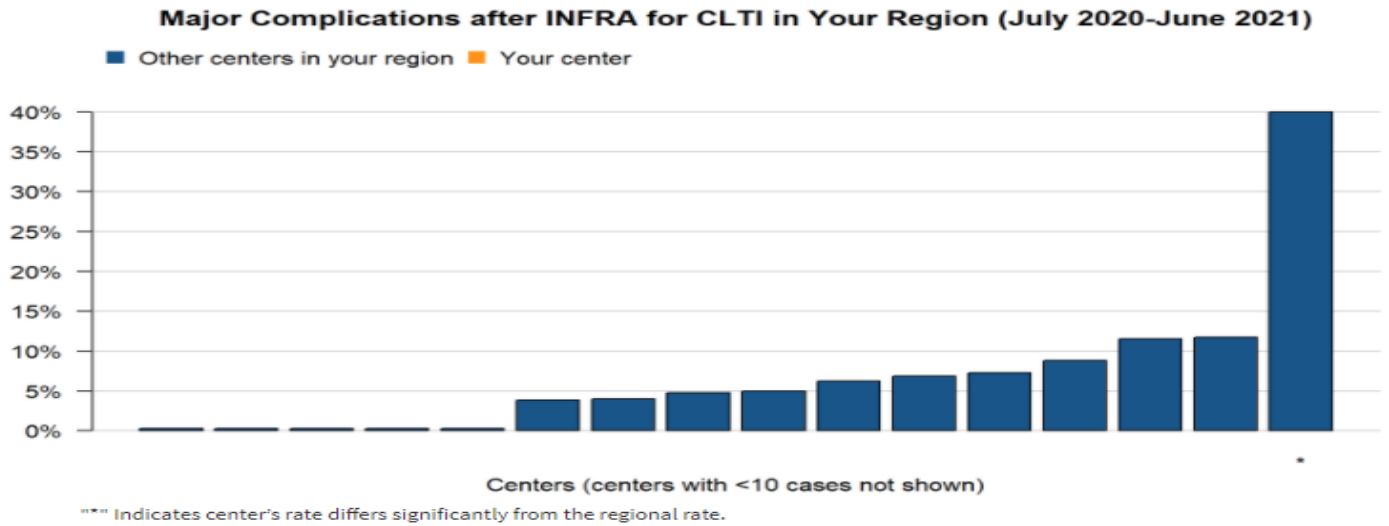
Procedures performed between July 1, 2020 and June 30, 2021

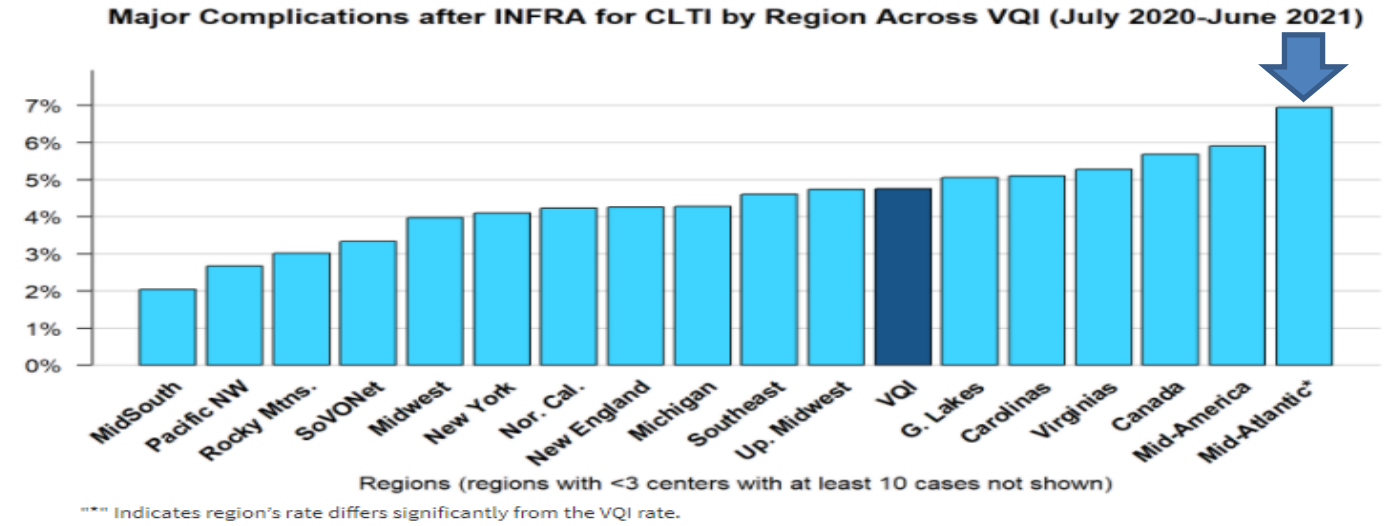
Includes Infrainguinal Bypass (INFRA) procedures for rest pain, tissue loss, or acute ischemia. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

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

	Your Center	Your Region	VQI Overall
Number of INFRA procedures meeting inclusion criteria		432	5410
Percentage with major complications		6.9%	4.8%


Major Complications after INFRA for CLTI by Year
8%
7%
6%
5%
4%
3%
2%
1%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall


Major Complications after INFRA for CLTI in Your Region (July 2020-June 2021)
Other centers in your region
Your center
40%
35%
30%
25%
20%
15%
10%
5%
0%
*
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


Major Complications after INFRA for CLTI by Region Across VQI (July 2020-June 2021)
7%
6%
5%
4%
3%
2%
1%
0%
MidSouth
Pacific NW
Rocky Mtns.
SoVONet
Midwest
New York
Nor. Cal.
New England
Michigan
Southeast
Up. Midwest
VQI
G. Lakes
Carolinas
Virginias
Canada
Mid-America
Mid-Atlantic*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

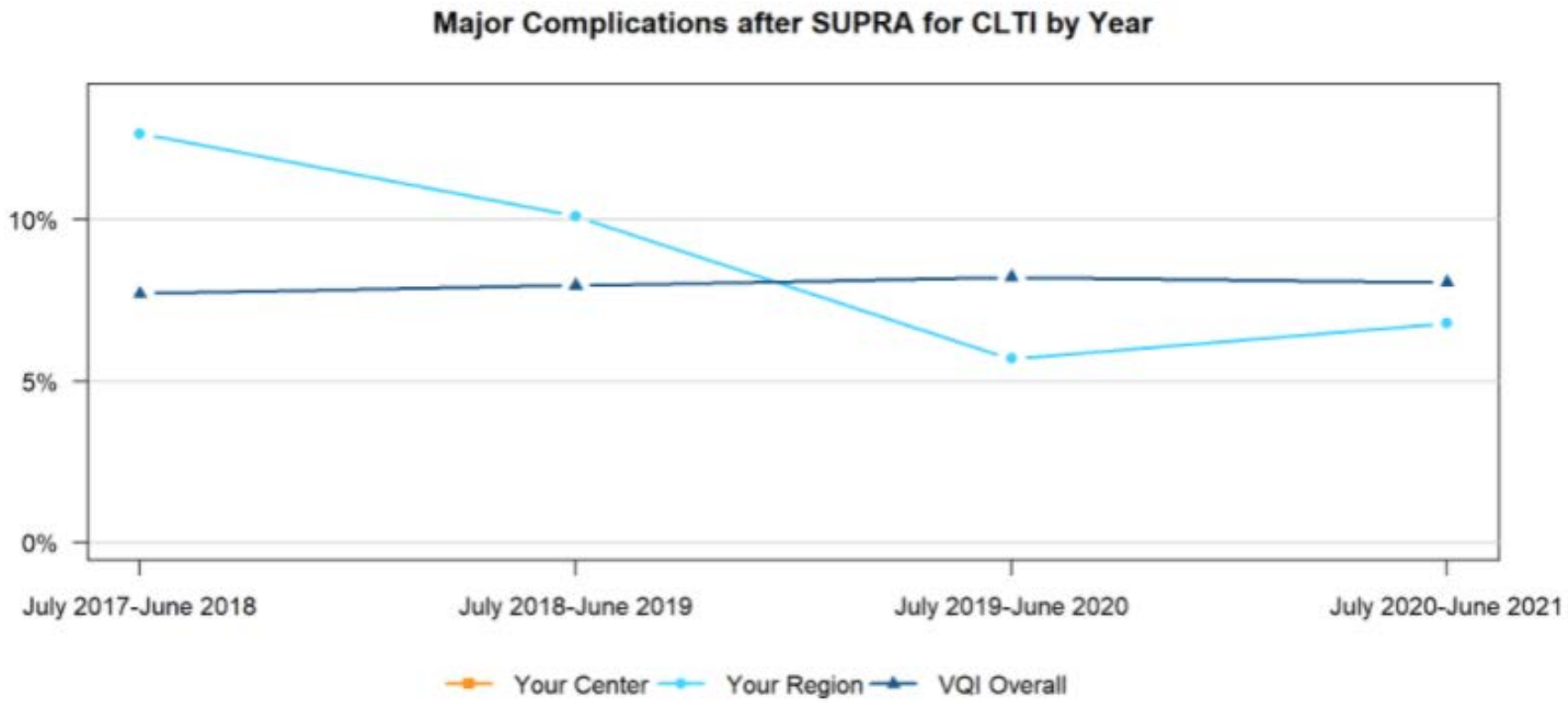
SUPRA CLTI: Major Complications

Procedures performed between July 1, 2020 and June 30, 2021

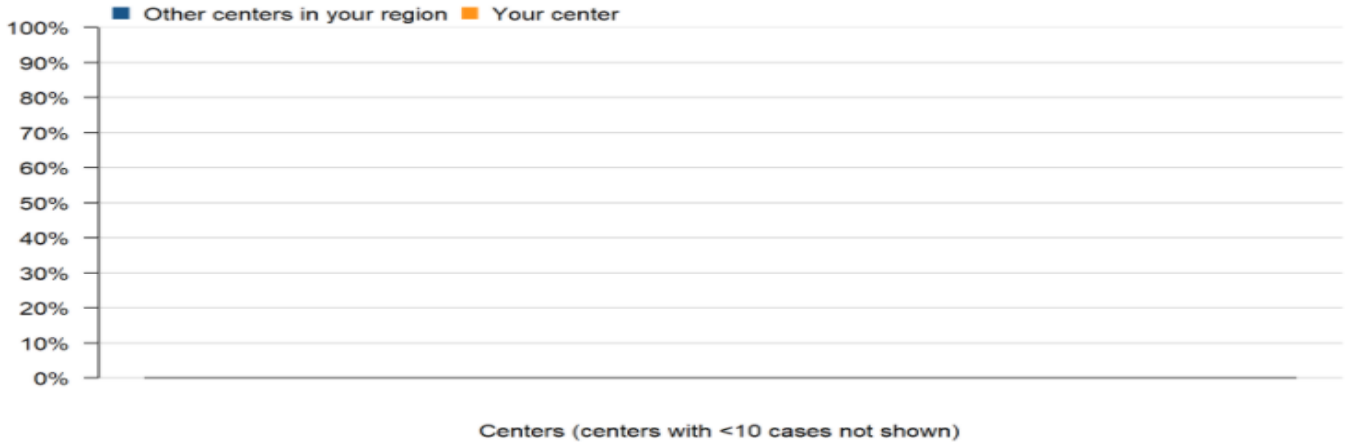
Includes Suprainguinal Bypass (SUPRA) procedures for rest pain, tissue loss, or acute ischemia. Major complications are defined as in-hospital death, ipsilateral BK or AK amputation, or graft occlusion.

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

	Your Center	Your Region	VQI Overall
Number of SUPRA procedures meeting inclusion criteria		59	1143
Percentage with major complications		6.8%	8%

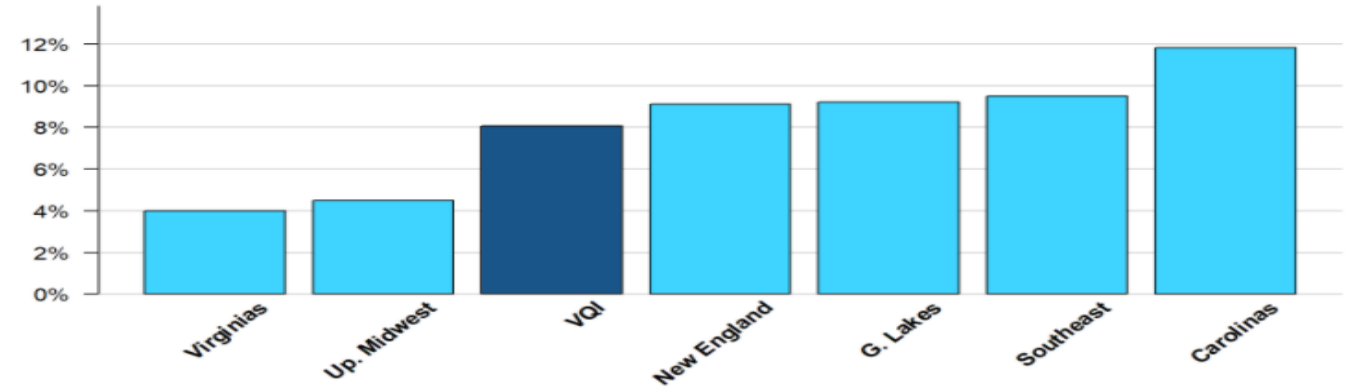

Major Complications after SUPRA for CLTI by Year
10%
5%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall

Major Complications after SUPRA for CLTI in Your Region (July 2020-June 2021)



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

Major Complications after SUPRA for CLTI by Region Across VQI (July 2020-June 2021)



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

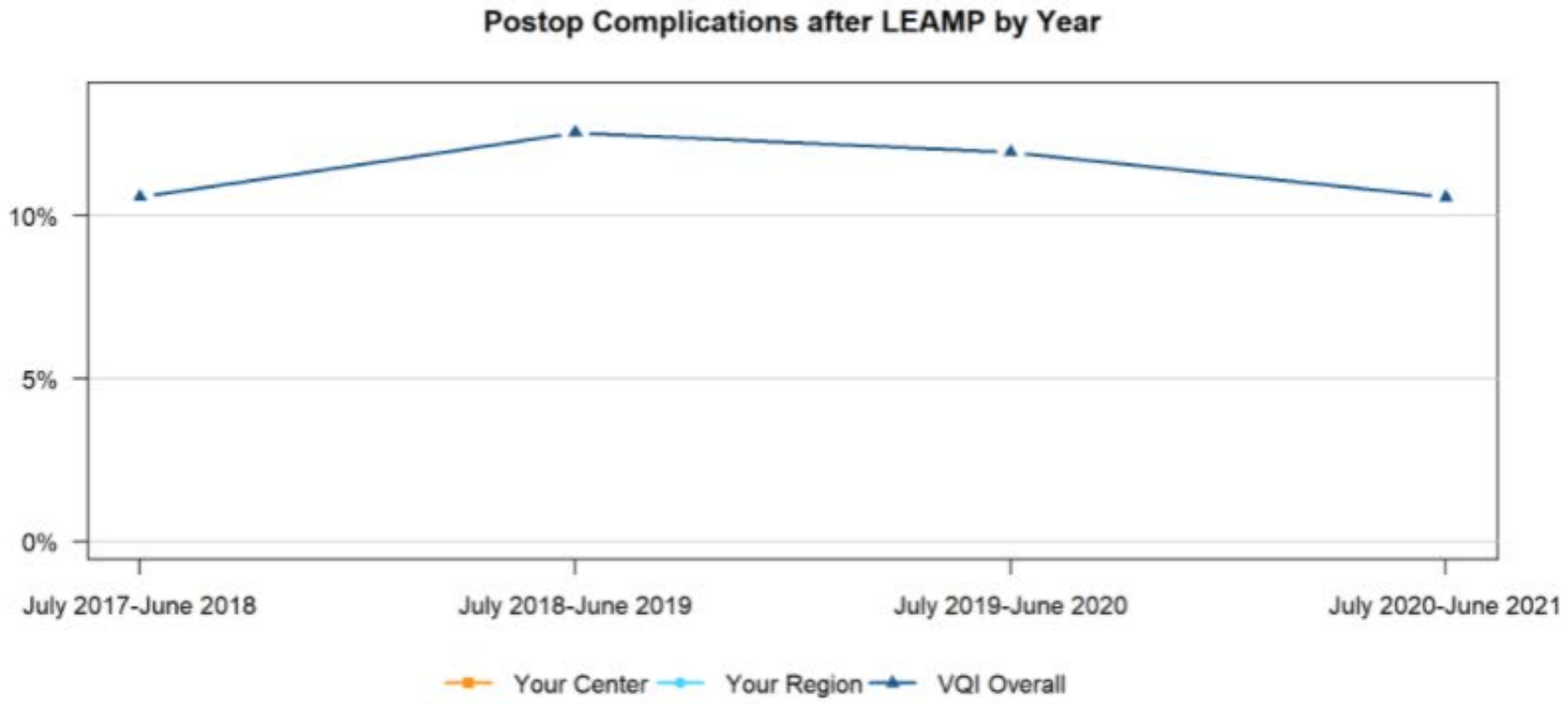
LEAMP: Postop Complications

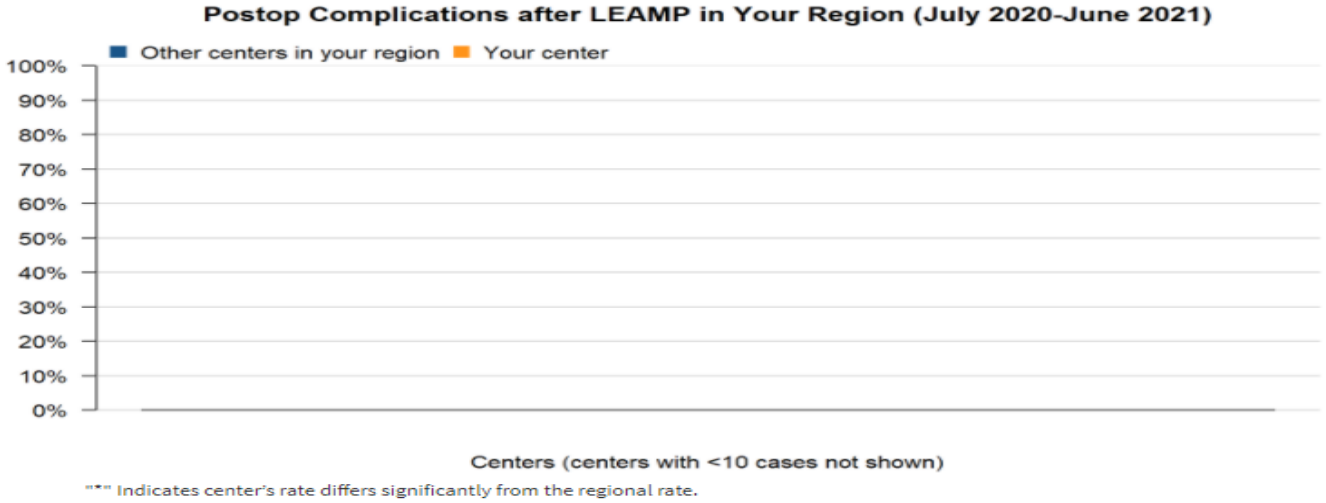
Procedures performed between July 1, 2020 and June 30, 2021

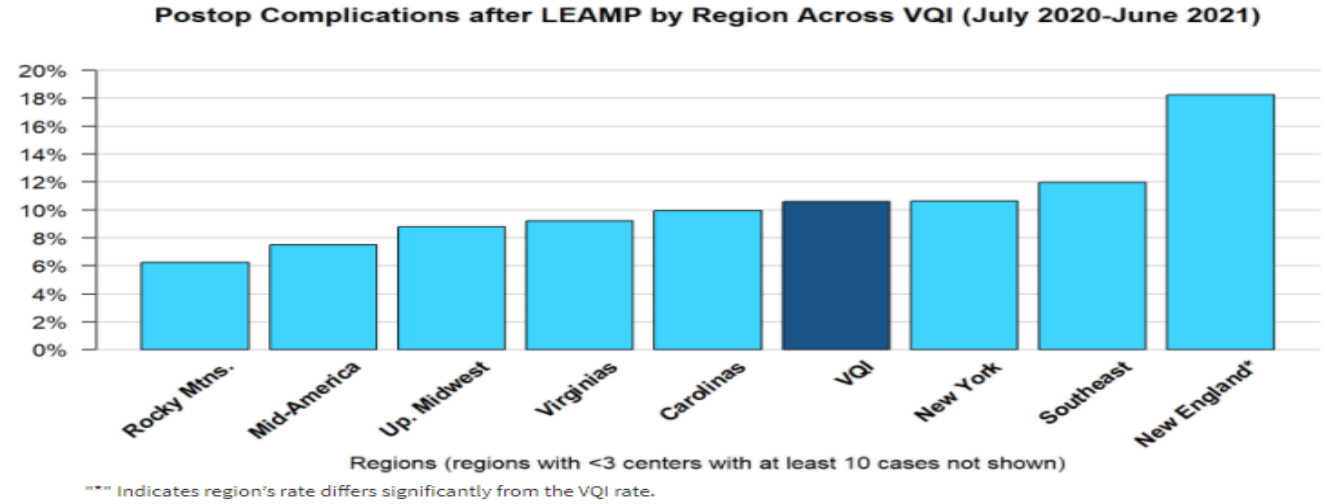
Includes Lower-Extremity Amputation (LEAMP) procedures only. Postoperative complications are defined as myocardial infarction, dysrhythmia, congestive heart failure, surgical site infection, renal complication, or respiratory complication.

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

	Your Center	Your Region	VQI Overall
Number of LEAMP procedures meeting inclusion criteria		NA (<3 centers)	3071
Percentage with postoperative complications			10.6%


Postop Complications after LEAMP by Year
10%
5%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall


Postop Complications after LEAMP in Your Region (July 2020-June 2021)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


Postop Complications after LEAMP by Region Across VQI (July 2020-June 2021)
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
Rocky Mtns.
Mid-America
Up. Midwest
Virginias
Carolinas
VQI
New York
Southeast
New England*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

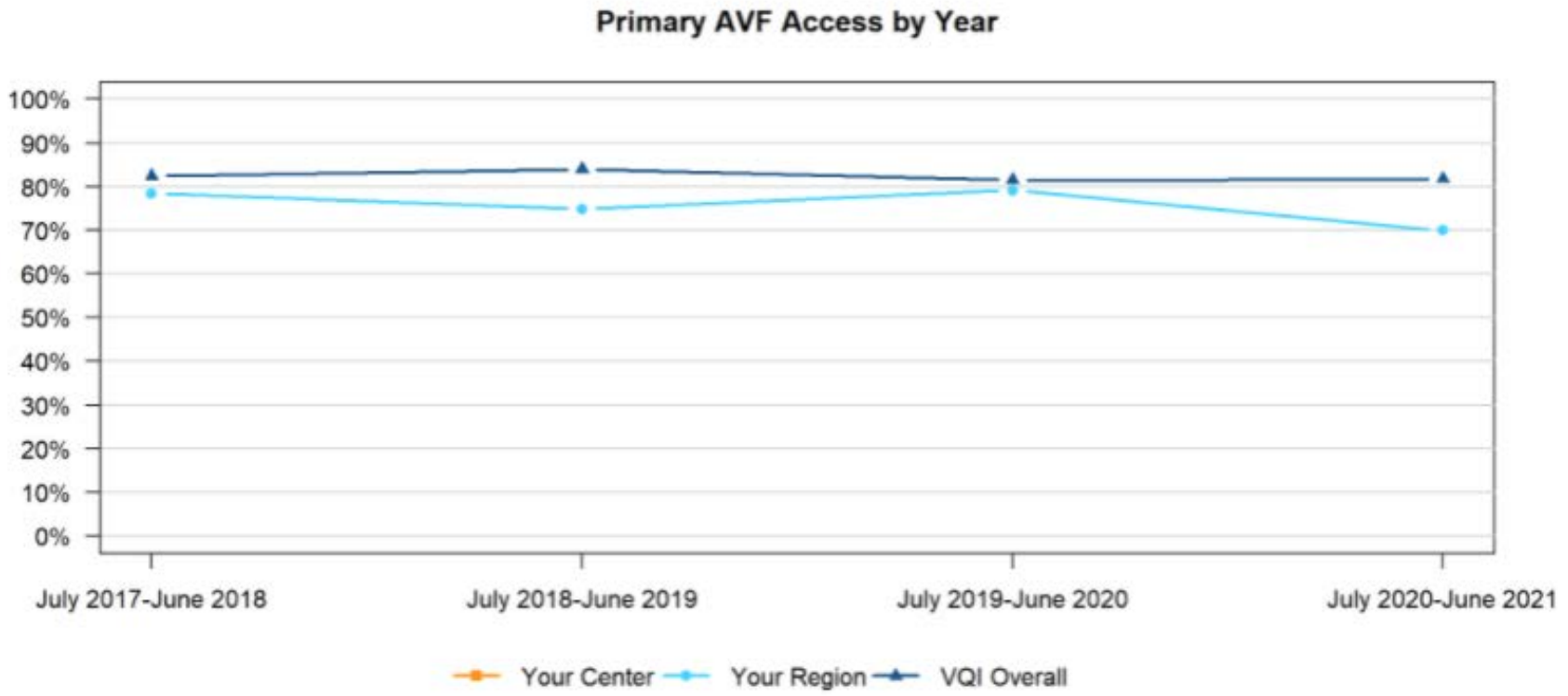
HDA: Primary AVF vs. Graft

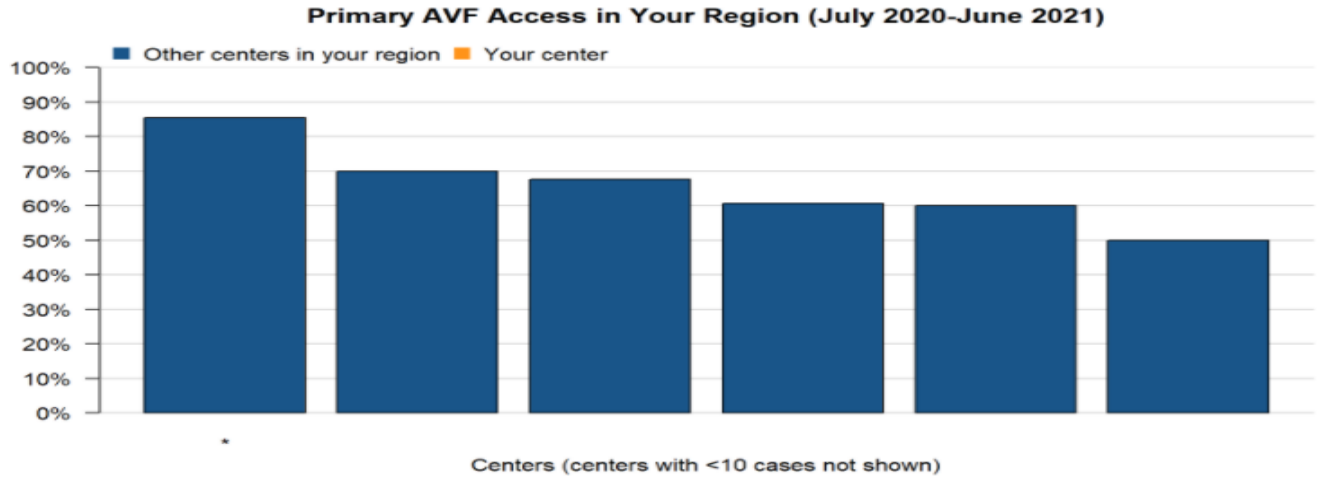
Procedures performed between July 1, 2020 and June 30, 2021

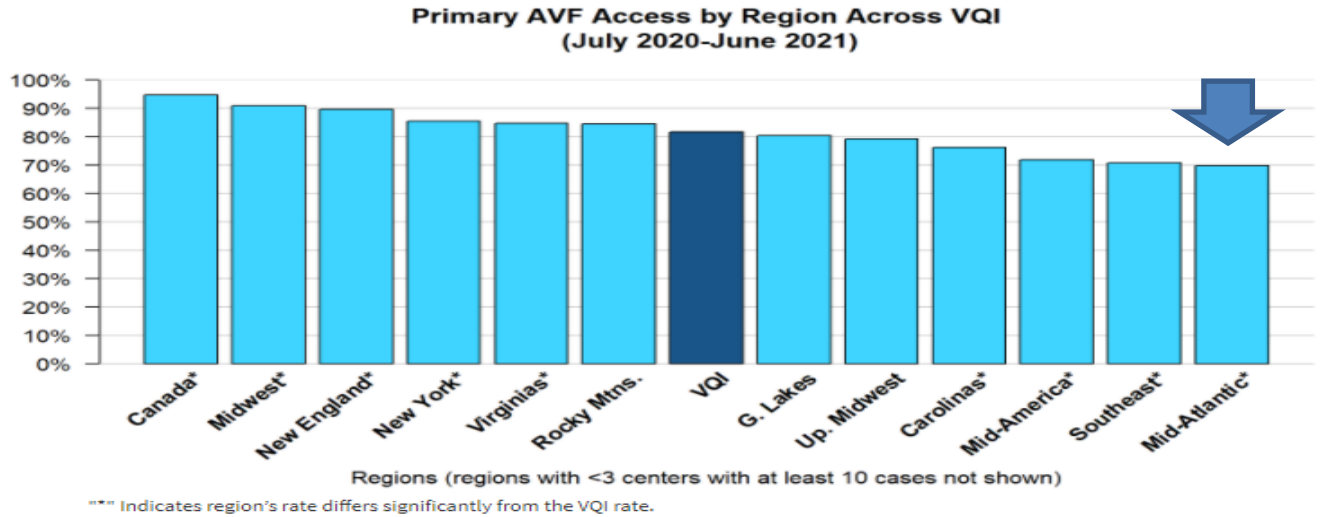
Includes Hemodialysis Access (HDA) procedures only. Excludes procedures where Access Type = Endo AVF or patients with a previous access procedure in the same arm.

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

	Your Center	Your Region	VQI Overall
Number of HDA procedures meeting inclusion criteria		246	5342
Percentage with primary AVF		69.9%	81.8%


Primary AVF Access by Year
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
July 2017-June 2018
July 2018-June 2019
July 2019-June 2020
July 2020-June 2021
Your Center
Your Region
VQI Overall


Primary AVF Access in Your Region (July 2020-June 2021)
Other centers in your region
Your center
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
*
Centers (centers with <10 cases not shown)
"*" Indicates center's rate differs significantly from the regional rate.


Primary AVF Access by Region Across VQI
(July 2020-June 2021)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Canada*
Midwest*
New England*
New York*
Virginias*
Rocky Mtns.
VQI
G. Lakes
Up. Midwest
Carolinas*
Mid-America*
Southeast*
Mid-Atlantic*
Regions (regions with <3 centers with at least 10 cases not shown)
"*" Indicates region's rate differs significantly from the VQI rate.

IVCF: Filter Retrieval Reporting

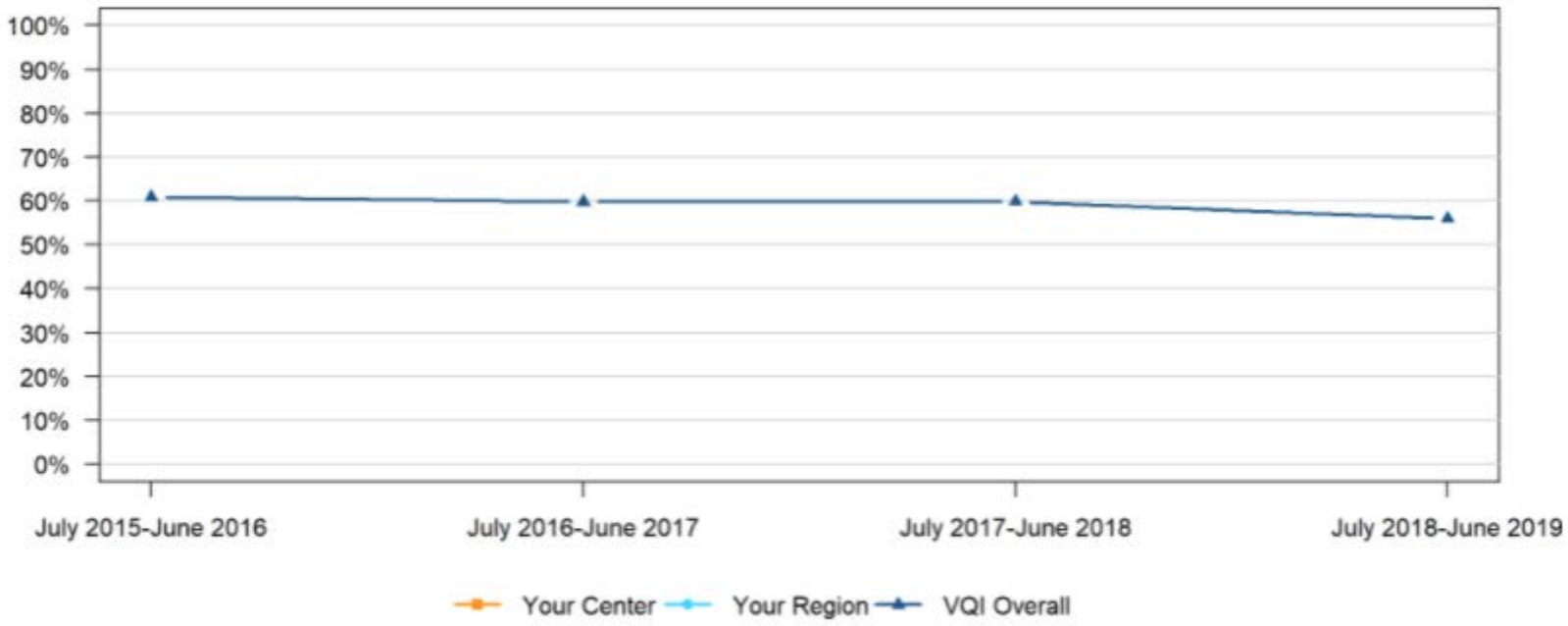
Procedures performed between July 1, 2018 and June 30, 2019

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

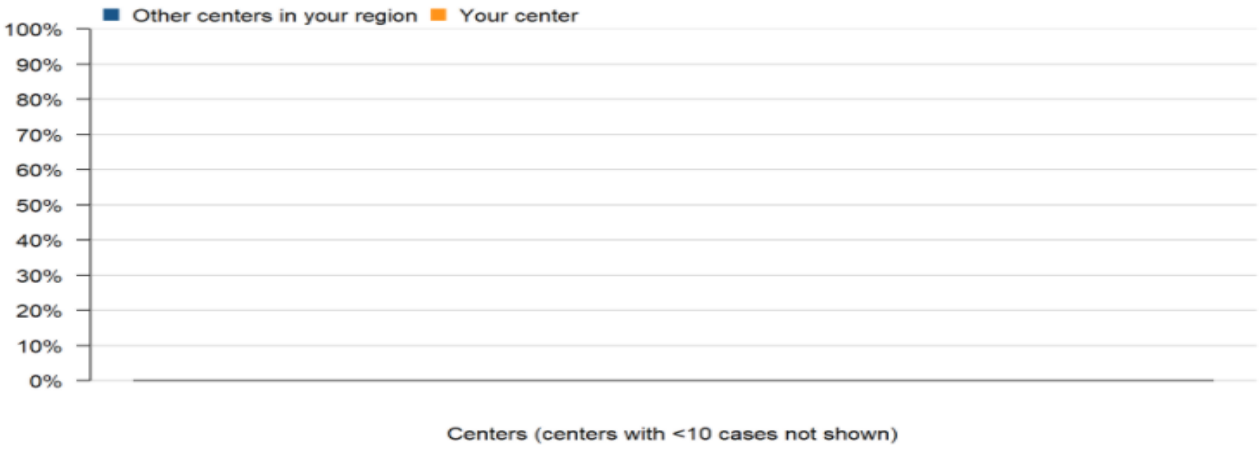
The table below gives the number of procedures meeting the inclusion criteria, and the percentage of those procedures in which the filter was reported as retrieved (or retrieval was attempted) at any time post-procedure. Because follow-up is critical for assessing filter retrieval, cases meeting the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

	Your Center	Your Region	VQI Overall
Number of IVCF procedures meeting inclusion criteria		NA (<3 centers)	1192
Number without follow-up records			204
Number with follow-up records			988
Percentage with Filter Retrieval, or Attempt at Retrieval			56%
Percentage not retrieved because No Follow-up Records Created			17.1%
Percentage not retrieved because Not Clinically Indicated			19%
Percentage not retrieved because Patient Declined			2.3%
Percentage not retrieved because Lost to Follow-Up			2.2%
Percentage not retrieved because Deemed Too Late for Removal			0.3%
Percentage not retrieved because Planned Later Removal			2.2%
Percentage not retrieved because No Reason Given			1.4%

IVC Filter Retrieval Reporting by Year

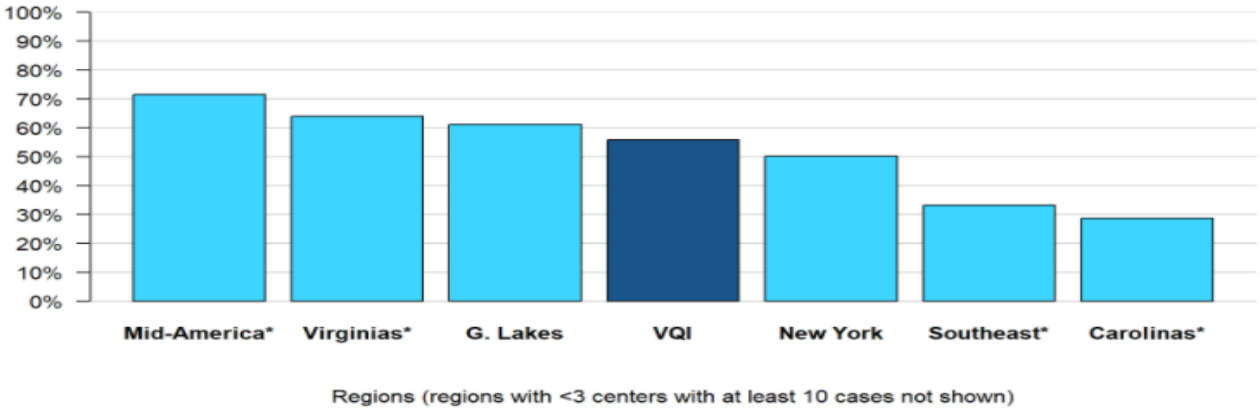


IVC Filter Retrieval Reporting in Your Region (July 2018-June 2019)



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

IVC Filter Retrieval Reporting by Region Across VQI (July 2018-June 2019)



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

Regional Improvement Projects

SVS | VQI
In collaboration with NCDR®

- Faisal Aziz, MD
- Grace Wang, MD
- Tanya Flohr, MD
- Caitlin Hicks, MD

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Society for Vascular Medicine
VASA
SVU

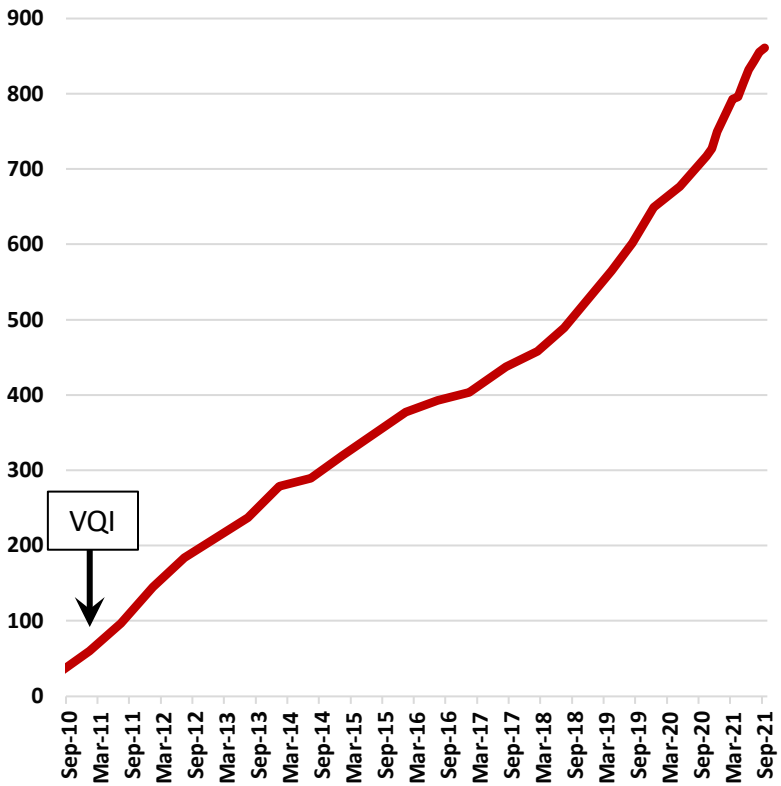
National VQI Update:
Betsy Wymer

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

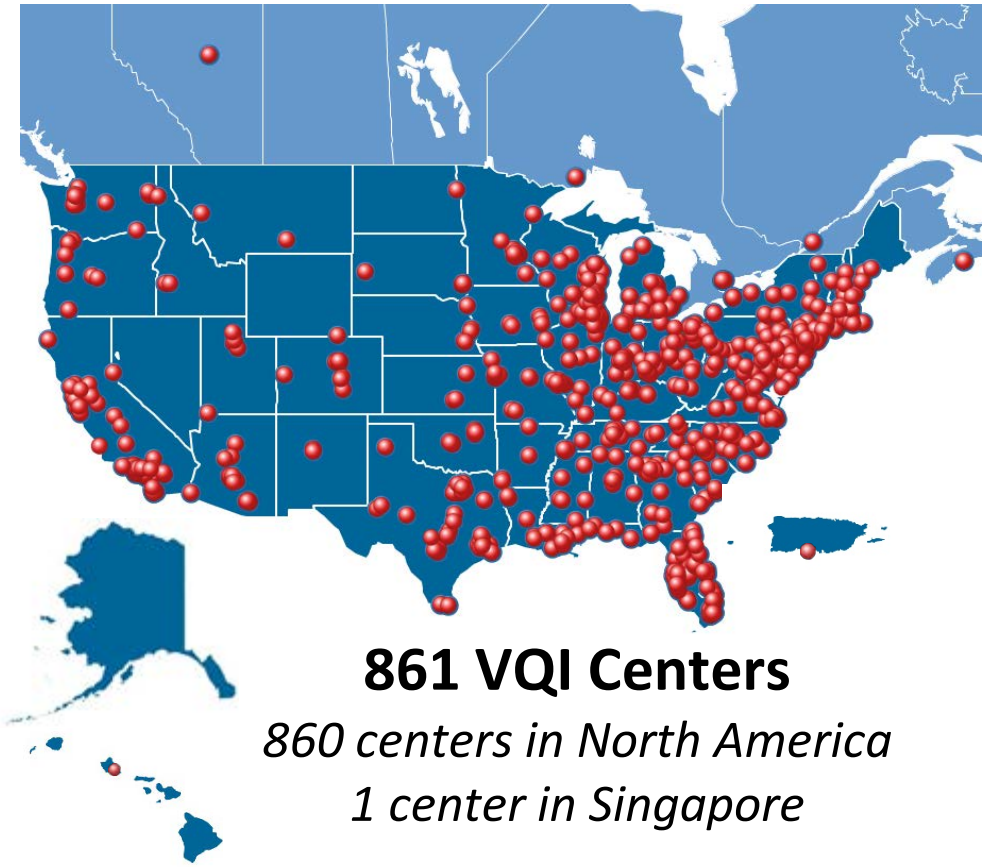
SVS | VQI

In collaboration with NCDR®

Number of Participating Centers



Location of VQI Participating Centers



861 VQI Centers

860 centers in North America

1 center in Singapore

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18 Regional Quality Groups

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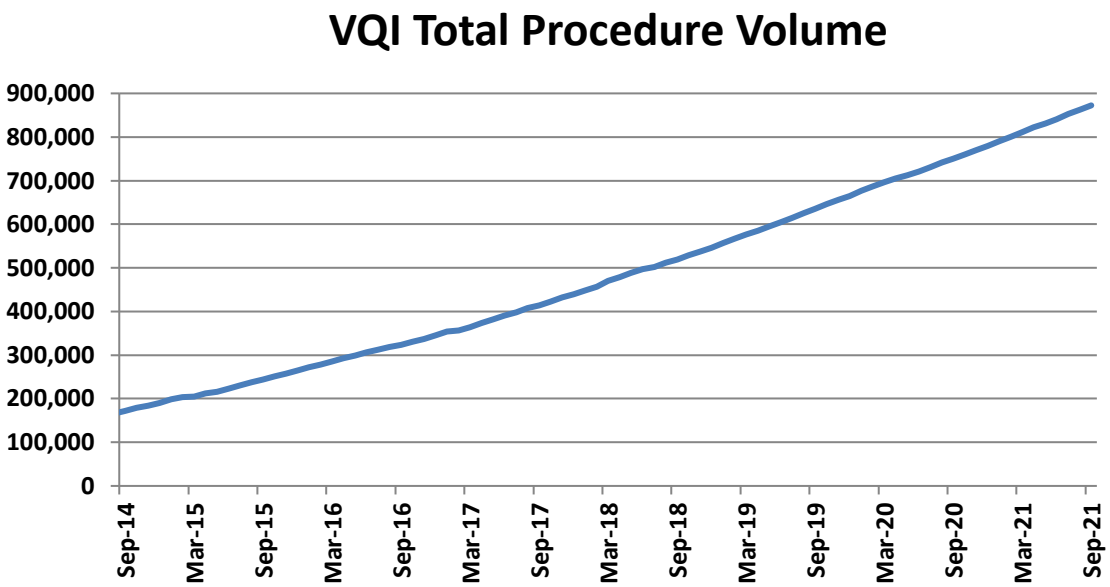
Total Procedures Captured (as of 10/1/2021)	873,059
Peripheral Vascular Intervention	293,316
Carotid Endarterectomy	163,871
Infra-Inguinal Bypass	70,071
Endovascular AAA Repair	67,405
Hemodialysis Access	66,675
Carotid Artery Stent	62,732
Varicose Vein	49,015
Supra-Inguinal Bypass	22,661
Thoracic and Complex EVAR	22,541
Lower Extremity Amputations	22,572
IVC Filter	16,407
Open AAA Repair	15,509
Vascular Medicine Consult	232
Venous Stent	52



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

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Trainee engagement

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- VQI wants to help medical students, residents and fellows learn about quality improvement

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Trainee engagement

SVS | VQI
In collaboration with NCDR®

Purpose:

To foster understanding of quality process and metrics among Vascular Surgery Residents, Fellow and Medical Students ('trainees') through mentorship in the Vascular Quality Initiative (VQI) in collaboration with the Association of Program Directors in Vascular Surgery (APDVS).

Proposal:

The SVS/PSO proposes a mentorship program for trainees to learn about surgical quality improvement and research with a focus on vascular disease. Selection of FITs would come from application to the Society for Vascular Surgery (SVS) Patient Safety Organization (PSO) VQI. FITs will be assigned a mentor(s) within one of eighteen VQI Regional Quality Groups as directed by the SVS PSO Governing Council and staff. Any active VQI member meeting requirements can volunteer to serve as a mentor in the program. Regional or Associate Medical Directors are strongly encouraged to take a leadership role in this initiative.
The program will eventually be offered to medical students.

Trainee Development Workgroup

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- Dr. Gary Lemmon – Chair
- Herb Aronow – SVM
- Dr. Faisal Aziz - PSO Governing Council
- Dr. Mina Boutros – SVS DEI
- Dr. Ashley Gutwein – IU Health 5th Year Resident
- Dr. Beau Hawkins – SCAI
- Dr. Jeff Indes – PSO Governing Council
- Dr. Brigitte Smith - APDVS
- Dr. Gabriella Velazquez - APDVS
- Dr. Ashley Vavra - PSO Governing Council
- Jim Wadzinski – PSO
- Betsy Wymer - PSO

PSO Diversity Equity and Inclusion (DEI) Committee

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- **VQI Representatives**
  - Dr. Leila Mureebe – Chair
  - Dr. Carla Moreiro – Vice-Chair
  - Dr. Samantha Minc
  - Dr. Patricia Fernandez
  - Dr. Mina Boutros
  - Dr. Rafael Malgor

DEI Committee Inclusion Criteria

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- Broad representation
  - Years in practice
  - Region
  - Gender
  - Race

SVS PSO DEI Committee:

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Purpose:

Recognizing the need for diversity of perspectives to help eliminate bias in the governance and leadership activities of the SVS PSO, the SVS PSO Diversity Committee will work with SVS PSO Councils and Committees to ensure representation of all VQI stakeholders.

Major Initial Initiative:

The initial task for the PSO DEI Committee is to develop a baseline understanding of the demographics of the physicians participating in the VQI. The Committee has developed the construct of a survey instrument, which will be launched in February 2022.

VQI@VAM

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In collaboration with NCDR®

The 2021 VQI Annual Meeting was a huge success!

This year, VQI@VAM was a hybrid meeting with all sessions live-streamed. The meeting had approximately 175 attendees participating either remotely or in person throughout the two days.

Thank you to each of our presenters. We appreciate the time and talents you contribute to making this meeting better every year. The information presented was excellent.

Once again, we had amazing poster presentations! Congratulations to Priya Padmanabhan, MHA; Rosha Nodine, BAAS from Baylor Scott & White Health System for winning the 'VQI member favorite poster' with their poster "VQI Summary Report Tool in EPIC".

This year, we added a new poster award called the 'PSO Director Award'. Congratulations to Donna Fleming, MSN, RN, from Cleveland Clinic for winning this new award with her poster "AAA Size Appropriateness Quality Project".

****Reminder – If you did a quality presentation using VQI data at any SVS sessions during VAM, you must email bwymer@svspso.org to receive credit for that presentation. Please provide your presentation, as well as your center name. All VQI@VAM presentations have already been given credit.**

VQI@VAM

We have achieved this remarkable milestone because of your participation and efforts. Thank you for all that you do to make the VQI a success.

COVID-19 Update

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In collaboration with NCDR®

Review of primary outcomes in VQI Registry Data since insertion of COVID variables (Sept '20 through Feb '21) yielded the following results:

- Overall, > 97% of variable inclusion rate for COVID status in all registries
- Only 1.2% of patients tested positive for COVID-19→ restrictive practices in place and/or patient hesitation/reluctance to seek treatment during pandemic
- Baseline overall mortality across registries of 1.4% rose to 1.6% during time interval while baseline mortality for elective patients who were asymptomatic and COVID (Test negative) remained unchanged
- Patients having a COVID (Test positive) yet Asymptomatic had mortality > twice that of -COVID test patients (OR 2.4)
- Presence of any COVID symptom (aggregate) had mortality of ~4.6 times that of an Asymptomatic and (Test negative) patient (OR 5)
- Mortality of Symptomatic and Intubated patient exceeded 33% across registries
- There was minimal difference in mortality across geographic regions
- Further evaluation will be done on secondary procedure outcomes such as MI, CHF, respiratory failure, graft failure etc.
- LTFU analysis of COVID variable data will require waiting until Sept 2023 for completeness.

PAD Patient Reported Outcomes (PROs)

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In collaboration with NCDR®

The SVS VQI recognizes that traditional outcomes such as patency and reintervention may not fully capture the quality of care or the experience of PAD patients. There is an important need to learn and measure the patient's perspective.

The My PAD pilot launched April 2021 and includes 20 SVS VQI centers participating in the Peripheral Vascular Intervention Registry. The pilot will test center workflow and seeks to improve PRO collection in the least burdensome manner by leveraging technology, such as smart phones and tablets.

PAD Patient Reported Outcomes (PROs)

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Highlights

- Outpatient peripheral vascular interventions (PVI) for claudication or chronic limb threatening ischemia
- Collect VascuQoL-6 and EuroQoL 5D-5L (estimated completion time 10-15 minutes)
- Collection at three time points: pre-procedure, one month and one year postoperatively
- PRO data entry options include paper forms, computer, tablet and smart phone
- Educational materials for direct from patient data entry
- PRO feedback to participating physicians

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Regional Meeting CME/CE Credit

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

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

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

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

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

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

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

Meeting Attendance Credit

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REMEMBER TO PSO:

- **PUT your FULL NAME in RingCentral to get credit for attendance and CME/CE credit (no exceptions will be made)**
- **SEND an email to ljohnson@svspso.org with names of group members that are sharing 1 device**
- **OFFICIALLY apply for CME/CE credit by clicking this link: https://dmu.co1.qualtrics.com/jfe/form/SV_dai1JIOT1eKX9wG**

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

NO EMAIL WILL BE SENT AS A REMINDER OR WITH THE CME/CE LINK

Quality Improvement Update

Fall 2021

Betsy Wymer, DNP, RN-BC

SVS | VQI
In collaboration with NCDR®

Welcome to our new SVS PSO Director of Quality!!!

Over the years, Betsy has developed innovative approaches to quality and education for various populations. She has twenty plus years of clinical expertise! As a doctorate prepared nurse, she will apply theory, quality, and research to support the VQI Mission!

Betsy comes to us from ACC/NCDR and we look forward to having her on the VQI team!

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Quality Improvement Resources:

SVS | VQI
In collaboration with NCDR®

- Quarterly Webinars
- Monthly “VQI News”/Newsletter
- QI Project Guide Supplement

[The Vascular Quality Initiative | Quality Improvement Tools (vqi.org)]

2021 Annual Meeting Poster Abstracts

SVS | VQI
In collaboration with NCDR®

Poster/QI PROJECT:	Primary Author
AAA Size Appropriateness Quality Project	Donna Fleming, RN
Decreasing Post-Operative Length of Stay after Lower Extremity Bypass	Tracy Campin, RN
Implementation of an Infection Prevention Bundle for Patients Undergoing Vascular Lower Extremity Bypass Surgical Procedures at Dartmouth-Hitchcock Medical Center: A Quality Improvement Project to Reduce Surgical Site Infections	Mark Abel, MD
EVAR LTFU at UW Medicine	Amanda Sigala, RN/Nam Tran, MD
Multi-center implementation of the Clinical Frailty Scale within the vascular surgery clinic workflow for VQI hashtag data collection	Julie Beckstrom, RN
VQI Summary Report Tool in EPIC	Priya Padmananbhan, RN Rosha Nodine, BAAS
Leveraging technologies to improve VQI Long term follow up compliance and data documentation: a centralized metadata approach.	Lillian Camino
Best Practices for Complex Endovascular Procedures	Amanda Sigala,RN/Ben Starnes, MD
Anticoagulation and Antiplatelet Treatment Plan Communication and Documentation Improvement Project	Aaron Barnes, MD

2021 Annual Meeting Poster Abstracts

SVS | VQI
In collaboration with NCDR®

Poster/QI PROJECT:	Primary Author
Froedtert Hospital Performance Improvement Project to Increase Antiplatelet and Statin Medications Prescribed at Discharge	Juliann Inkmann
VQI Checklist in the EMR: Impact on Statin and Antiplatelet Prescriptions at Discharge	Claire Motyl, BA
Using VQI and EMR chart alerts to increase compliance of statin and aspirin, a retrospective study	Jennifer Landis PA-C
Development of a Successful Process to Enhance the Transition between Data Managers	Donna Albergo, RN
Road to Recovery for Patients Undergoing Vascular Procedures at the Heart and Vascular Center	Sandy Fillion, MSN
Sustaining High Performance in Long Term Follow Up Care	Rouchelyn Fallorina, RN
Increasing data entry rates for VQI variables using SmartText: a pilot approach	Aravind Ponukumati
Implementation of a Long Term Follow Performance Improvement Project for the TEVAR and Complex EVAR Module	Zdenek Novak
Implementation of providing patients with surgical site care instructions and supply kits on day of discharge to decrease surgical site infections	Sue Nappo, RN
Impact of preoperative anemia in patients undergoing peripheral vascular intervention	Abdul Kader Natour, MD

Charters

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

One on one calls, if requested

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National QI project details

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In collaboration with NCDR®

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

- Visit the VQI Members Only Website for sample charters, webinars, and presentations on VQI Quality Improvement Projects. www.vqi.org

Participation Awards

Participation Awards Program

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- Participation Awards began in 2016 to encourage active participation in the registries program and recognize the importance of participation.
- Participating centers can earn up to three stars based on actions that lead to better patient care – more details available at https://www.vqi.org/quality-improvement/participation-awards/

Participation Award 2020 Update

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MAJOR CHANGE

- Long Term Follow-Up 2018 cases
  - COVID-19 affect
  - Remove LFTU from the 2020 Participation Award – **BUT…**
  - Acknowledge centers that maintained, improved LTFU with a certificate
    - Centers in top 25% for 2018 LTFU rates
    - Statistically significant increase in LTFU rate from 2017 to 2018

Participation Award 2020 Update

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Scoring 2020 (During COVID-19)

- **Three categories scored, each on a 0-6 point scale**:
  - LTFU – REMOVED. Separate recognition.
  - Meeting attendance (**weighted 50%)**
  - QI project involvement (**weighted 40%)**
  - Number of registry subscriptions (**weighted 10%**)

- **The final score is calculated as follows:**

Total points = 5 x Attendance score **+** 4 x QIP score **+** 1 x Registry score

2021 Participation Award:

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Effective immediately the Participation Committee unanimously voted to re-instate LTFU criteria in the 2021 Participation Awards

The following is a list of the four domains for the 2021 Participation Awards criteria:

Domain 1 – LTFU – 40% weighted

Domain 2 – Regional Meeting attendance – 30% weighted

Domain 3 – QI Project – 20% weighted

Domain 4 – Registry subscriptions – 10% weighted

The final score is calculated as follows:

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

Arterial Quality Council:

Grace Wang, MD

AQC Update:

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- **Development Priorities for end of 2021/ early 2022**
  - Infra/Supra revisions goal to complete by end of 2021
  - OAAA revision goal to complete by end of Q2 2022

- **New "Pathways" follow up reports**
  - CAS, EVAR available
  - CEA, TEVAR, PVI, HDA available late 2021 - early 2022
  - All other registries to follow

AQC Update:

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- **Clinical Appropriateness Performance Indicators (CAPI reports)**
  - Aligning with SVS Guidelines
- **Standard Operative Notes**
  - We have resumed talks with Epic and have restarted the initiative to create standard op notes, which will enable automated data abstract, based on the standardized notes. This functionality would be available to all Epic users.
- **Registry Specific Quality Improvement Initiatives**
- **Patient Reported Outcomes: My PAD PRO Pilot PVI**
- **Opioid variables: Infra-Inguinal – Available August**
- **Registry Education: recorded sessions!!**
  - **All available on VQI.org** https://www.vqi.org/resources/webinars-events/

Vascular Medicine Consult Registry

SVS | VQI
In collaboration with NCDR®

The Society for Vascular Surgery Patient Safety Organization® (SVS PSO) and the Society for Vascular Medicine (SVM), in collaboration with the American Heart Association® (AHA), are excited to introduce the SVS Vascular Quality Initiative's Vascular Medicine Consult (VMC) Registry.

This Registry will target the management of NEW Outpatient Consults who are being treated medically for:

Atherosclerotic carotid artery occlusive disease
Abdominal Aortic aneurysm
Peripheral lower extremity arterial disease due to atherosclerosis or true aneurysm

The Vascular Medicine Consult Registry provides a unique opportunity to look at the natural history of a disease and what factors impact the progression. The emphasis of this Registry will be medication details and dosages, risk factor and lifestyle modifications such as exercise and diet, and non-operative treatments and counseling. The value of this Registry centers on the comparative effectiveness of surgery vs. medically managing these vascular diseases.

Learn more: The Vascular Quality Initiative | Vascular Medicine Consult Registry (New) (vqi.org)

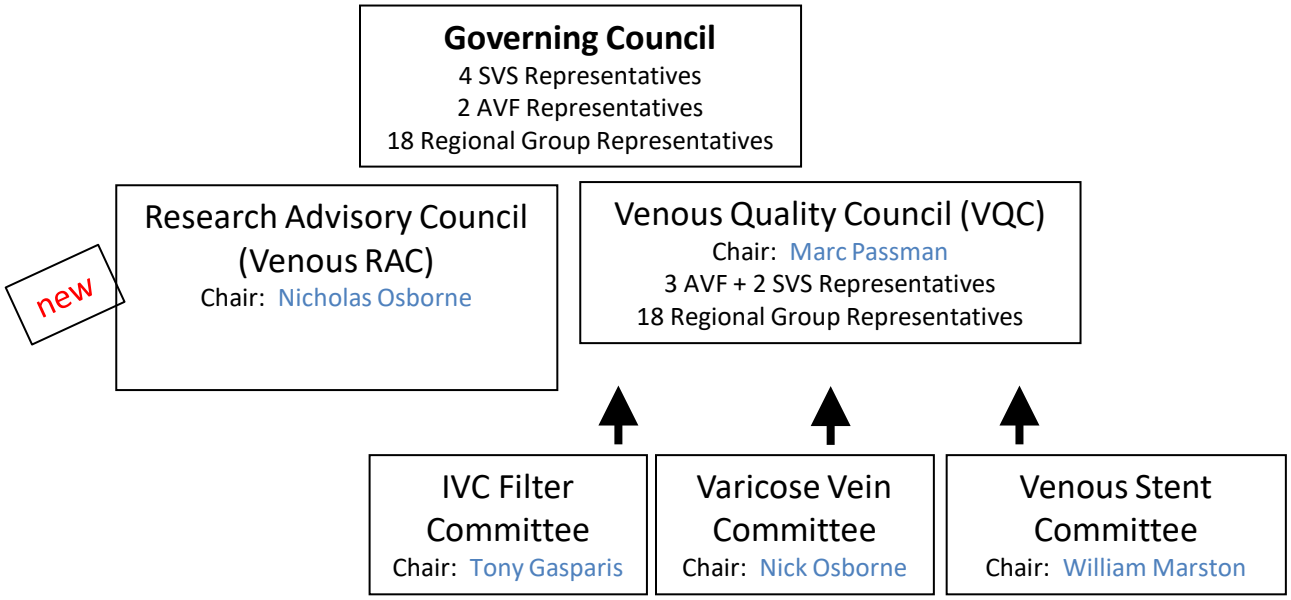
Venous Quality Council:

Tanya Flohr, MD

Venous SVS PSO Organization

SVS | VQI
In collaboration with NCDR®

SVS PSO Venous Arm



SVS Society for Vascular Surgery | American Venous Forum | fivos | Society for Vascular Medicine | VASA | SVU

VQC Update: Marc Passman, MD (Chair)

SVS | VQI
In collaboration with NCDR®

Three Year Goals for VQC:

- Dedicated podium time for VQI at AVF
- Update Varicose Vein and IVC quarterly interoperative dashboards
- Create Venous Stent dashboard
- Work on LTFU dashboards for all 3 venous procedures
- Continue work C2 disease and appropriateness of care
- Continue work with United Healthcare
- Create COPI (Center Opportunity for Process Improvement) reports
- Create CAPI (Clinical Appropriateness Performance Indicators) reports

Venous Stent Inclusion/Exclusion Criteria

SVS | VQI
In collaboration with NCDR®

Inclusion Criteria:

Percutaneous (closed) and/or cut-down (open) procedures to treat patients with symptomatic venous obstructions due to chronic thrombosis and/or some venous compression disorders. Vessels included: Inferior Vena Cava, Common iliac vein, External iliac vein, Common Femoral Vein, Deep Femoral Vein, Femoral Vein, Popliteal Vein.

- Acute obstruction of the Vein;
- Chronic thrombotic obstruction= Chronic Stenosis/Obstruction of the Vein;
- Non-thrombotic stenosis/compression such as May Thurner (iliac vein compression syndrome)

Exclusion Criteria:

- Venous Stent of the Internal Iliac (hypogastric), Great Saphenous Vein, Superior vena cava, Renal Veins, Subclavian vein, Jugular vein, Innominate vein and any upper extremity veins
- Vein Diameters that are not treatable per stent sizing recommendations
- Venous Inflow or Outflow issues precluding stent placement

Arterial Research Advisory Council:

Caitlin Hicks, MD

New RAC Education!!

SVS | VQI
In collaboration with NCDR®

Dr. Leila Mureebe,

SVS PSO Associate Medical Director

- Creating videos on how to submit a RAC Proposal for “success”
- Creating useful tools and tips to train new investigators

Proposal Process:

SVS | VQI
In collaboration with NCDR®

1. **Review list of projects:**

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

2. **Submit proposal online:**

http://abstracts123.com/svs1/meetinglogin

3. **Deadlines for submissions:**

The Vascular Quality Initiative | National Arterial and Venous RAC Schedules (vqi.org)

VISION: (Medicare Match Data)

SVS | VQI
In collaboration with NCDR®

VISION: Vascular Implant Surveillance and Interventional Outcomes Network.

- It is a partnership between the Society for Vascular Surgery Patient Safety Organization's Vascular Quality Initiative (SVS PSO) and Medical Device Epidemiology Network (MDEpiNet). The goal is to improve the quality, safety and effectiveness of vascular care.

- VISION developed algorithms, which allows certain VQI registry patients to be matched to Medicare claims data. Claims linkage allows very complete follow up on CMS patients (greater than 65 years of age, dialysis, etc).

- VISION's primary goal is to facilitate low-cost, high-value and real-world evidence research through the creation of a national repository of linked clinical-claims analytic data sets. The secondary objectives are to measure the safety and effectiveness of vascular devices.

VISION: SRS Reports!

SVS | VQI
In collaboration with NCDR®

- The Vascular Quality Initiative is pleased to provide participating members with center-specific **S**urvival, **R**eintervention, and **S**urveillance Reports (**SRS**)

- SRS reports are produced by the VQI as part of the Vascular Implant Surveillance and Interventional Outcomes Network (VISION) Project, a partnership between the VQI and the Medical Device Epidemiology Network (MDEpiNet). The reports are based on VQI-Medicare linked data. Each report shows each center's long-term performance when compared to the VQI for Medicare patients undergoing the following procedures:
  - **endovascular abdominal aortic aneurysm repairs (EVAR)**
  - **elective abdominal aortic aneurysm repair (EVAR + Open AAA)**
  - **carotid endarterectomy for asymptomatic stenosis**
  - **carotid artery stent procedures (TCAR and transfemoral procedures) for asymptomatic stenosis**

- FAQS on the methods and definitions used to generate these reports can be found on the VQI Website (VQI.org). The goal of the SRS reports is to help VQI members assess their performance on these important metrics compared to the rest of the VQI and to improve the quality of vascular care at their center.

SVS Society for Vascular Surgery | American Venous Forum | fivos | Society for Vascular Medicine | VASA | SVU

GC Update: Faisal Aziz, MD

- **April 2021 meeting updates:**
  - COVID collaboration with VASCC
  - Improved reporting (PSO reports/MedStreaming)
  - US News and World Report Collaboration
  - Data Integration (EPIC/Cerner)
  - Relationships (Societies/FDA/CMS/Industry)
  - SVS PSO Diversity Committee

Medstreaming + M2S are now Fivos

About Our Name

Fivos is an alternate name for the ancient Greek deity, **Apollo: God of light, truth, medicine and healing**. Celebrates our roots in imaging, our focus on healing, and our commitment to defragmenting insights across healthcare.

Visit: https://fivoshealth.com/ for more information

Meeting Attendance Credit

SVS | VQI
In collaboration with NCDR®

REMEMBER TO PSO:

- **PUT your FULL NAME in RingCentral to get credit for attendance and CME/CE credit (no exceptions will be made)**
- **SEND an email to ljohnson@svspso.org with names of group members that are sharing 1 device**

OFFICIALLY apply for CME/CE credit by clicking this link:
https://dmu.co1.qualtrics.com/jfe/form/SV_dai1JIOT1eKX9wG

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

Final Thoughts

SVS | VQI
In collaboration with NCDR®

- Spring Meeting
  - Hybrid v Remote v In-person
  - Coincide with spring regional vascular meeting?
  - Doodle poll

Thank you

AUGUST 2021

fivos

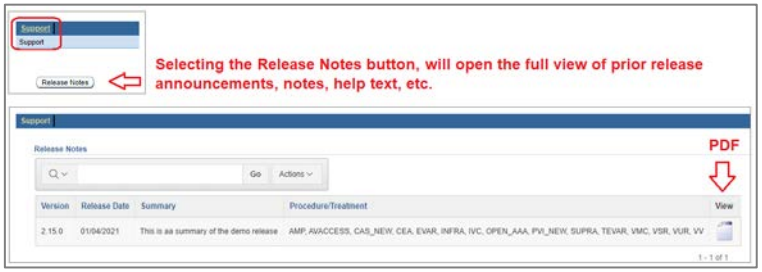
Updates for 2021 Fall VQI Regional Meeting

Technology Updates for VQI

Released in Q1 2021

"Release Notes" in the PATHWAYS Support tab

- Released on **1/13/2021**
- This feature will allow PATHWAYS users to search for and review release notes and announcements that have been released after 1/13/2021. The new "Release Notes" button will be located on the "Support" tab, in the upper left corner.
- Release Notes will be presented in an interactive report so users may search or filter the report as needed.
- The last column in the report will display a "View" icon. Click on the icon to view the release document.
- Release announcements will continue to be sent via email and will then also be posted here for historical reference with the most recent notes listed first by default.



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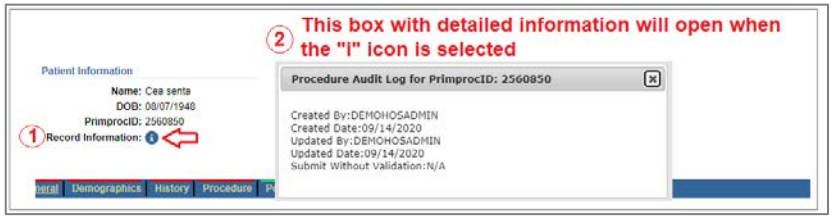
Released in Q1 2021

Record Information feature

- Released on **1/13/2021**
- A new feature was introduced to the procedure and follow-up pages in PATHWAYS that provides access to record information for each form created. Upon opening a procedure/treatment or follow-up form, “Record Information” will be accessed by clicking on a new info icon which will appear with the “Patient Information” listed at the top of Procedure/treatment records and in the “Note” section above the “Existing Information” section of Follow-up records. Record Information will be available for all PATHWAYS procedure and follow-up records with the exception of the Thoracic and Complex EVAR registry, which will be updated in the future to include this new feature.
- Clicking the info icon will open a pop-up to display the following details:



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Released in Q1 2021

Enhancements to Users and Permissions report

- Released on **1/13/2021**
- PATHWAYS Hospital Managers who manage users at multiple centers within a health system are now able to view all users across all of the centers they have access to in their “Users and Permissions Report.” It doesn’t matter which of those centers they are currently logged into on PATHWAYS when they generate the report. This saves time by allowing easy comparison of permissions for different users and centers.
- The Users’ Status filter now includes the options of All Users, Active Users, or Inactive Users to provide filtering by user status.
- A new “2 Factor Authentication” column was added to the report. The values in the “2 Factor Authentication” (2FA) column will be “Enabled” or “Disabled” based on whether the user account has enabled 2FA for security. There is an associated “PATHWAYS 2 Factor Authentication” guide on the “Resources” tab for more information about this security feature.
- A new report description now displays at the top of the “Users and Permissions Report”:
    - *The Users and Permissions Report displays user accounts and permissions associated with Centers you manage. The report will allow you to view account details, privileges, analytics and report access details.*
- *Utilizing the options for User's Status allows you to filter the report by "all, active only, or inactive only" user accounts.*

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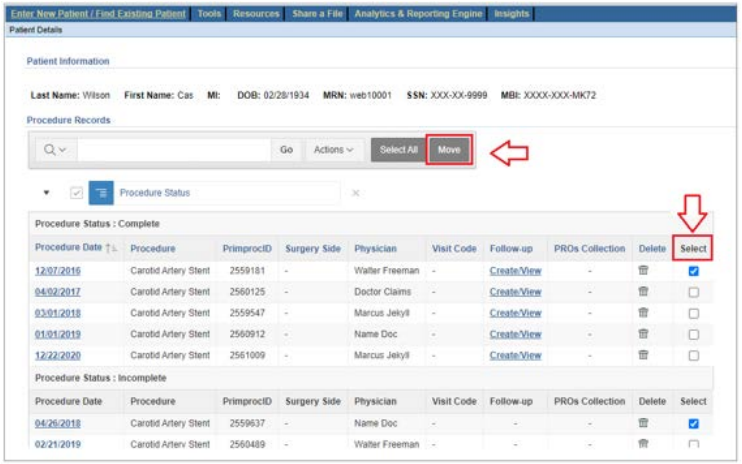
Released in Q1 2021

Move Records feature

- Released on **2/3/2021**
- New functionality to move existing procedure records from one patient record to another was introduced, along with a new “Move Records” privilege in the Data Management Tools section. This will help in cases where duplicate patients are created and the records need to be consolidated to a single patient record, or a procedure was entered under the wrong patient and needs to be moved to the correct patient.
- On the “ Data Management” tab, under “Patient Details”, the patient’s procedure record summary, will include a new column of checkboxes at the end of each procedure record row



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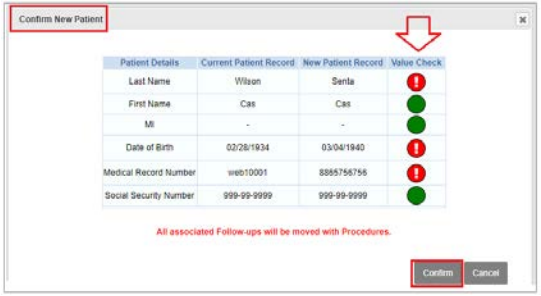
- On the “ Data Management” tab, under “Patient Details”, the patient’s procedure record summary, will include a new column of checkboxes at the end of each procedure record row

- A confirmation window will open which compares the patient details between the current patient record and the new patient record selected for verification before completing the move.



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Released in Q1 2021

“Insights” Follow-up Outcomes Report for EVAR

- Released on **2/3/2021**
- A new “Follow-up Outcomes Report,” developed by the SVS PSO, is presented in a separate tab labeled “Insights” in PATHWAYS. The report provides key follow up metrics for VQI® sites with center data as well as regional and all VQI benchmarking. The report will be available initially only for the Endovascular AAA Repair (EVAR) registry. We will provide similar reports for other registries in the future.
- The report has drill down capabilities to better understand the data entered by the site at the procedure level.
- Permission to access the EVAR Follow-up report was enabled for all existing EVAR Hospital Managers at the time of release. Hospital Managers may grant access to others by updating the report permissions on the 2nd page of their user accounts (where the Analytics permissions are also managed).
- A new column for “Insights” permissions is available in the “Users and Permissions Report” tool in PATHWAYS.

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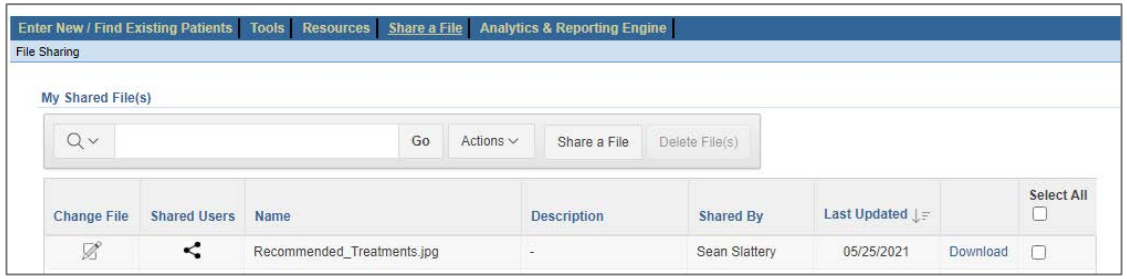
Released in Q1 2021

"Share a File" enhancements

- Released on **2/3/2021**
- We converted the "Share a File" tables, "My Shared File(s)" and "File(s) Shared with Me", to PATHWAYS interactive reports. This enhancement provides added capabilities to sort, filter, and search for shared files.
- Users can click on the "Actions" button and select "Help" for more information about these and other interactive reporting functions.
- Additionally, we converted the former "delete" icon on each row to a checkbox, so that multiple files can be selected and deleted at once. There is no change to the process for sharing files or the files that have been shared. Note: not all users have shared files.



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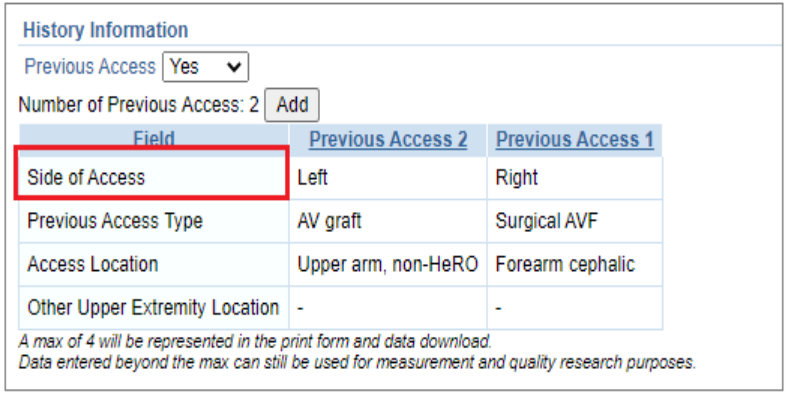
Released in Q1 2021

HDA Analytics update

- Released on **3/10/2021**
- We introduced a new reporting variable in the Analytics & Reporting Engine that aggregates the Side of Access variables collected on the HDA History tab. It can be used for reporting as a variable, filtering, and creating User Calculated Variables (UCVs). The new "Side of Access" variable options include:
  - Right = Side of Access is Right for all previous access sites recorded.
  - Left = Side of Access is Left for all previous access sites recorded.
  - Bilateral = Side of Access is one of Left or Right for previous access sites recorded.
  - Missing Value or N/A = Side of Access is missing for any previous access site recorded.


History Information

Previous Access: Yes

Number of Previous Access: 2 Add

Field	Previous Access 2	Previous Access 1
Side of Access	Left	Right
Previous Access Type	AV graft	Surgical AVF
Access Location	Upper arm, non-HeRO	Forearm cephalic
Other Upper Extremity Location	-	-

A max of 4 will be represented in the print form and data download.
Data entered beyond the max can still be used for measurement and quality research purposes.

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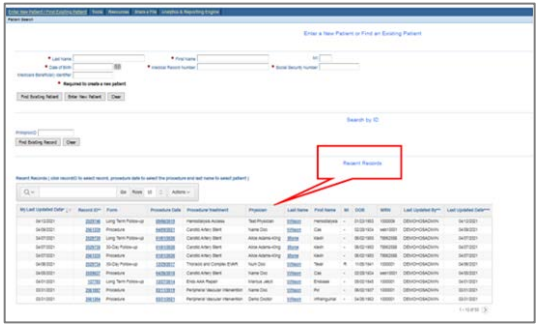
Released in Q2 2021

“Recent Records” list

- Released on **4/14/2021**
- The new Recent Records list appears on the Enter a New Patient or Find an Existing Patient details page (see example image below). The Recent Records list provides quick and easy access to a list of the last 50 records the user edited.
- The “Recent Records” list default setting is displayed in groups of 10 and is sorted in descending date by the “My Last Updated Date” column.
- Users may quickly access any of the patient records in the Recent Records list by clicking on either the Record ID, Procedure Date, or Patient Last Name.



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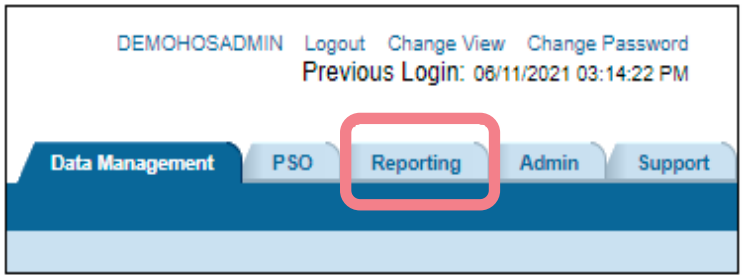
Released in Q2 2021

Reporting tab

- Released on **6/15/2021**
- In preparation for future reporting enhancements, PATHWAYS will include a new "Reporting" tab located in the top-right with the existing tab options.



- The Analytics & Reporting Engine may be accessed from the new Reporting tab or via the existing Analytics & Reporting Engine link on the Data Management tab. In either case, the current Analytics & Reporting Engine tool will be presented from within the Reporting tab along with new reports that become available in the future.

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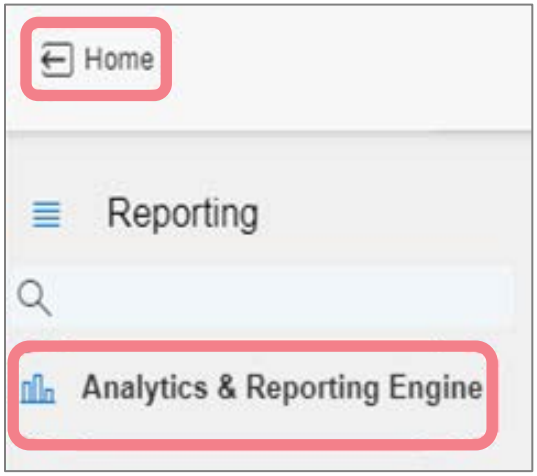
Released in Q2 2021

Reporting tab, cont.

- The Reporting tab will include the following features:
  - The "Home” button in the top left corner returns to the “Patient Search'' page.
  - The left side panel will host a menu of navigational tools and available reports and includes the link to the Analytics & Reporting Engine.
  - Users can log out from PATHWAYS on this page by selecting the log out function from the drop down menu accessed by clicking the username in the upper right corner.



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Projects in Progress

Coming soon

- Minor revision to CEA, CAS, and VMC to add stenosis and contralateral events
- Add Opioid variables to INFRA
- Follow-up Outcomes reports for CAS, CEA and EVAR using new reporting technology
- New Device Assistant feature to streamline device search and selection
- Minor revision to TEVAR to update dependencies for Entry Flow and Dissection Date/Type
- Minor revision across registries to change Gender to Sex, add COVID Vaccination variables, and add medical resident variables
- Minor revision to IVC Filter manufacturer options

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Projects in Progress

What's next?

- Major revision to INFRA and SUPRA registries
- Major revision to Open AAA registry
- Enhancements to data download functionality

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Registry Projects

SVS Post-Market Surveillance Projects

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

- Sites must follow their institutional guidelines.

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TEVAR Dissection Surveillance Project

Open for Enrollment

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

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TEVAR Dissection Surveillance Project

Open for Enrollment

- 40 of the 180 required patients enrolled (13 potential cases in process)
  - Retrospective enrollment allowed- All eligible cases from December 31, 2018 (protocol FDA approval date)
  - 14 30-Day visits completed, 4 1-year follow-up visits completed
- 30 of 40 sites enrolled (8 more in contracting)
  - This project is conducted within the SVS PSO and only non-identifiable data (removal of patient, center and physician information) will be provided to Cook or the FDA. Only standard of care practice is being evaluated. For such PSO activities, patient informed consent and Institutional Review Board review are not required.

> For more information, please contact: tevarproject@fivoshealth.com <

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TEVAR Dissection Surveillance Project

5 Year Project Gore and Metronic Arm

- Initiated in October 2014, the TEVAR Dissection Surveillance Project Arm evaluates the W.L. Gore and Medtronic devices for treatment of Type B thoracic dissections.

- Meeting FDA requirement
  - 194 chronic and 200 acute patients with device technical success

- Currently in 5-year follow-up phase

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VQI Partnership with Symmetric

SVS VQI announced its partnership with Symmetric Health Solutions, for the purpose of elevating the consistency and integrity of medical device data utilized by vascular health professionals.

The partnership with Symmetric Health Solutions, an industry-leading software company for healthcare supply chain data, will enable SVS VQI to eliminate inaccuracies and variances in medical device reporting, which carry clinical consequences. It will also strengthen SVS VQI's commitment to interoperability, by ensuring data is clean and consistent across all health system IT interfaces.

Symmetric Health Solutions' technology leverages advanced machine learning algorithms to surmount the data challenges that AccessGUDID users face. These include, but are not limited to:

- No UDI on the device label
- Different UDI-DIs for the same product
- Difficulty matching a captured UDI-DI with the UDI-DI record in AccessGUDID
- UDI-DI not found in AccessGUDID or missing catalog information
- Variances in AccessGUDID data from missing information, poor formatting, etc.
- Company name issues resulting from mergers and acquisitions
- Inability to use GMDN terms as a way of grouping similar devices resulting from manufacturers incorrect assignments
- Lack of automated feedback loops with FDA or manufacturer to resolve data quality issues

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PATHWAYS Support

PATHWAYS Support

Claims Validation

The annual claims validation process is intended to ensure that all eligible cases have been captured in the registry and is a requirement of participation in the VQI.

The 2019 Claims Validation process was launched in July 2020.

- Almost 70% of selected centers have completed validation or are in progress.
- The deadline to finish is 10/31/21.
- PATHWAYS Support is here to help you. Please reach out if your center was selected to participate in the audit and would like assistance.

The launch of **2020 Claims Validation is coming soon**. Stay tuned!

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PATHWAYS Support

What's New?

Please check out recent enhancements designed to improve your PATHWAYS experience. Let us know what you think!

- **Move Record** – Move procedure data to the correct patient when duplicate/miskeyed patient records have been identified.
- **Audit Info** – View record details including creator and created date, last user to update and date updated, and form validation submission status.
- **Recent Records** – Quickly return to your recently accessed procedure and follow up records.
- **Release Notes** - Go to the Support Tab to access historical release announcements to review recent updates.
- **Reporting Tab** – This new tab will be home to future new data analysis reporting including the current analytics engine.

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PATHWAYS Support

Coming Soon...

The Support Team will be implementing training opportunities for new and existing PATHWAYS users to learn about PATHWAYS functionality.

More details to come!

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