



## Accreditation Council for Graduate Medical Education

### Vascular Surgery Case Logs

#### National Data Report

Prepared by: Department of Applications and Data Analysis

- I. National Resident Statistics Report
  - A. The main table provides a national picture of educational experiences. The report is ideal for establishing and assessing national policy related to resident practical experiences. Data are broken out by role (surgeon, assistant, etc).
  - B. Descriptive statistics have been carefully chosen to provide the most useful information for judging performance at the program level.
    - i. "Natl Res AVE" - The average describes the mean number of procedures performed per resident in the nation.
    - ii. "Natl Res STD" - The standard deviation indicates how tightly the scores are clustered around the mean in a set of data.
    - iii. "Natl Res MED" - This statistic represents the median or middle value of procedure counts.
- II. National Benchmark Report for Program Statistics

The table displays selected percentile and standard deviation benchmarks of program averages. For example, a score at the 10th percentile indicates that 10% of residents achieved less than the value while the remaining 90% achieved more than the value.

The information on the following pages has been created using specialty specific categories. These data should not be used for comparison across specialties as the definition of the categories will vary among the specialties. In addition, care should be exercised when comparing data from year to year as the definition of certain categories may be revised from time to time.

**VASCULAR SURGERY : NATIONAL RESIDENT REPORT (Main Table)**  
**Reporting Period: Total Experience of Residents Completing Programs in 2018-2019**  
**Residency Review Committee for Surgery**  
**Report Date: September 10, 2019**

[PAGE 1 ]

Number of Programs in the Nation: 93    Number of Residents in the Nation: 120

		Surgeon Fellow			Teaching Assistant			First Assistant			Secondary Procedures		
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED
RRC Area	RRC Procedure												
Aneurysm-Repair	Open Rep Infrarenal A-I Aneur, Rupt	2.6	3	2	0.0	0	0	0.0	0	0	0.1	0	0
	Open Rep Infrarenal A-I Aneur, Elect	8.2	6	7	0.1	0	0	0.3	1	0	0.5	1	0
	Endovas Rep Abd Aort/Iliac Aneur	43.6	16	41	0.2	1	0	0.5	2	0	7.4	8	4
	Endovas Rep of Iliac Artery	2.4	2	2	0.0	0	0	0.0	0	0	0.8	1	0
	Rep Suprarenal Aortic Aneurysm	2.6	4	1	0.0	0	0	0.0	0	0	0.1	0	0
	Rep Thoracic Aortic Aneurysm	0.7	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Endovas Rep Thora Aortic Aneurysm	17.1	10	17	0.0	0	0	0.2	1	0	2.9	4	2
	Rep Thoracoabd Aortic Aneurysm	2.8	3	2	0.0	0	0	0.1	0	0	0.0	0	0
	Rep Femoral Aneurysm	4.5	4	4	0.0	0	0	0.0	0	0	0.7	1	0
	Rep Popliteal Aneurysm	1.9	2	1	0.0	0	0	0.0	0	0	0.1	0	0
	Rep Other Aneurysm - Def Cat Credit	0.9	1	1	0.0	0	0	0.0	0	0	0.1	0	0
	Subtotal - Aneurysm Repair		87.2	28	87	0.3	1	0	1.3	4	0	12.8	12
Cerebrovascular	Carotid Endarterectomy	43.9	20	39	0.2	1	0	0.1	0	0	0.6	1	0
	Reop Carotid Surg (Sec Proc Only)	0.0	0	0	0.0	0	0	0.0	0	0	0.7	1	0
	Transcath Place Carotid Artery Stent	12.4	11	9	0.0	0	0	0.2	1	0	0.3	1	0
	Excise Carotid Body Tumor	0.8	1	1	0.0	0	0	0.0	0	0	0.0	0	0
	Vert Bypass or Reimplant/transpos	0.3	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Direct Rep Aortic Arch Branches	0.4	1	0	0.0	0	0	0.0	0	0	0.2	1	0
	Translum Balloon Angio - Brachioceph	0.9	3	0	0.0	0	0	0.0	0	0	0.2	1	0
	Transcat Place of Intrav Stent, Noncor.	3.0	5	1	0.0	0	0	0.0	0	0	0.4	1	0
	Cervical Bypass Aortic Arch Branches	6.7	4	6	0.0	0	0	0.1	0	0	2.4	4	1
	Embolect/thrombec by Neck/Thor Incis	0.4	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Other Major Cerebrovas - Def Cat Cred	0.9	1	1	0.0	0	0	0.0	0	0	0.1	0	0
	Subtotal - Cerebrovascular		69.6	26	64	0.3	1	0	0.4	1	0	5.1	6

Statistics for each role (surgeon fellow, teaching assistant, and first assistant) include only procedures for primary credit. Secondary procedures are shown separately and include all roles.

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[PAGE 2 ]

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		Surgeon Fellow			Teaching Assistant			First Assistant			Secondary Procedures		
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED
RRC Area	RRC Procedure												
Periph-Obstruct	Aorto-Ilio/femoral endarterectomy	6.1	7	4	0.0	0	0	0.0	0	0	2.4	4	1
	Aorto-ilio/femoral bypass, prosthetic	8.0	5	7	0.1	0	0	0.1	0	0	0.8	2	0
	Aorto-ilio/femoral bypass, vein	0.9	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Translum balloon angio aorta or iliac	24.0	11	22	0.0	0	0	0.1	0	0	23.4	21	18
	Translum atherectomy aorta or iliac	0.5	1	0	0.0	0	0	0.0	0	0	0.2	1	0
	Transcath place intravasc stent aorta	8.9	11	6	0.0	0	0	0.2	1	0	3.4	6	1
	Ilio-Iliac/femoral endarterectomy	3.6	4	3	0.0	0	0	0.0	0	0	1.7	3	0
	Excise infected graft, abdomen or chest	1.2	1	1	0.0	0	0	0.0	0	0	0.5	1	0
	Rep graft-enteric/aorto-enteric fistula	0.1	0	0	0.0	0	0	0.0	0	0	0.1	0	0
	Femoral, Profunda Endarterectomy	16.4	10	16	0.1	1	0	0.1	0	0	15.8	17	9
	Femoral-Popliteal Bypass, Vein	9.5	5	8	0.0	0	0	0.0	0	0	0.9	1	0
	Femoral-Popliteal Bypass, Prosth	7.2	5	6	0.0	0	0	0.1	0	0	1.5	2	1
	Translum balloon angio femoral-popl	43.0	23	38	0.2	1	0	0.2	1	0	18.8	14	16
	Translum atherectomy femoral-popliteal	7.7	9	4	0.0	0	0	0.0	0	0	2.0	3	1
	Endarterectomy, superf femoral, popul	3.1	5	2	0.0	0	0	0.0	0	0	4.3	7	1
	Infrapopliteal Bypass, Vein	14.7	10	13	0.1	0	0	0.1	0	0	0.8	1	0
	Infrapopliteal Bypass, Prosthetic	4.0	3	3	0.0	0	0	0.0	0	0	0.6	1	0
	Translum ballon angio, tibioperoneal	19.9	13	17	0.0	0	0	0.1	0	0	9.6	12	6
	Translum atherectomy, tibioperoneal	4.0	7	2	0.0	0	0	0.0	0	0	0.9	2	0
	Transcath place of intravas stent non-cor	1.5	4	0	0.0	0	0	0.0	0	0	1.1	3	0
	Excise infected graft, peripheral	3.9	4	2	0.0	0	0	0.0	0	0	1.3	2	1
	Revise Arterial Bypass	3.9	4	3	0.0	0	0	0.0	0	0	1.1	2	0
	Art embolectomy/thrombect by leg inc	8.3	6	7	0.0	0	0	0.0	0	0	6.8	7	5
	Graft Thrombectomy	1.2	2	1	0.0	0	0	0.0	0	0	0.8	1	0
	Adjunct vein cuff or AVF (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	0.8	2	0
	Harvest Arm Vein (Sec Proc Only)	0.0	0	0	0.0	0	0	0.0	0	0	1.3	3	0
	Composite Leg Bypass Graft (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	0.9	2	0
Re-Do Lower Extrem Bypass (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	2.7	5	1	
Subtotal - Periph Obstruct		201.6	57	196	0.7	2	0	1.0	3	0	104.3	76	81

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[PAGE 3 ]

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RRC Area	RRC Procedure												
Abdominal-Obstruct	Celiac/Sma Endarterect, Bypass	3.4	3	3	0.0	0	0	0.0	0	0	1.1	3	0
	Renal Endarterectomy, Bypass	0.6	1	0	0.0	0	0	0.0	0	0	0.9	3	0
	Embolectomy/thrombect, ren	1.4	1	1	0.0	0	0	0.0	0	0	0.2	0	0
	Translum balloon angio, renal	1.1	1	1	0.0	0	0	0.0	0	0	0.4	1	0
	Translum atherectomy, renal	0.6	2	0	0.0	0	0	0.0	0	0	0.2	1	0
	Transcat place of stent, ren art	7.1	7	5	0.0	0	0	0.0	0	0	5.4	13	1
	Subtotal - Abdominal Obstruct	14.2	9	13	0.0	0	0	0.1	0	0	8.2	16	2
	Upper Extremity	Open brachial artery exposure	0.6	1	0	0.0	0	0	0.0	0	0	4.2	8
Arm Bypass,Endarterectomy,Rep		4.5	4	4	0.0	0	0	0.0	0	0	0.5	1	0
Transcat place of intra stent noncoro		1.5	2	1	0.0	0	0	0.1	1	0	0.6	1	0
Thoracic Outlet Decomp Proc		5.4	8	4	0.0	0	0	0.1	0	0	0.3	1	0
Embolect/thrombect, by arm inc		3.7	3	4	0.0	0	0	0.0	0	0	1.6	2	1
Subtotal - Upper Extremity		15.8	11	14	0.1	0	0	0.1	1	0	7.1	10	4
Extra-Anatomic	Axillo-Femoral Bypass	4.6	4	4	0.0	0	0	0.0	0	0	0.6	1	0
	Axillo-Popliteal-Tibial Bypass	0.2	1	0	0.0	0	0	0.0	0	0	0.0	0	0
	Femoral-Femoral Bypass	5.1	4	4	0.0	0	0	0.0	0	0	1.8	3	1
	Subtotal - Extra-Anatomic	9.9	7	8	0.0	0	0	0.1	0	0	2.4	3	2
Thromb/Mech Thromb	Translum mech thrombect	5.2	7	4	0.0	0	0	0.1	0	0	2.7	4	1
	Thrombolysis, transart, transcat	7.4	8	5	0.0	0	0	0.0	0	0	1.5	2	1
	Exchange of thrombolysis cath	3.2	5	2	0.0	0	0	0.0	0	0	1.0	2	0
	Subtotal - Thrombol/Mech Thrombect	15.9	14	13	0.0	0	0	0.1	0	0	5.2	7	3

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[PAGE 4 ]

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		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED
RRC Area	RRC Procedure												
Misc Endovasc Thera	Endo place iliac art occ dev(Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	2.3	4	1
	Transcath retr of intravasc foreign	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Transcath art occl or embolization	4.2	4	3	0.0	0	0	0.1	0	0	4.5	5	3
	Subtotal - Misc Endovas Therap	4.2	4	3	0.0	0	0	0.1	0	0	6.8	7	5
Trauma	Repair Thoracic Vessels	0.7	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Repair Neck Vessels	0.8	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Repair Abdominal Vessels	3.4	7	1	0.0	0	0	0.0	0	0	0.4	2	0
	Repair Peripheral Vessels	7.5	7	6	0.1	0	0	0.0	0	0	2.0	4	1
	Fasciotomy	2.8	2	2	0.0	0	0	0.0	0	0	6.0	6	4
	Subtotal - Trauma	15.1	13	12	0.2	0	0	0.0	0	0	8.6	9	6
Venous	Portal-Systemic Shunt	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Operation For Varicose Veins	5.3	7	3	0.0	0	0	0.0	0	0	4.8	7	2
	Sclerotherapy, Periph Vein	0.9	3	0	0.0	0	0	0.0	0	0	0.4	2	0
	Embolectomy/Thrombectomy, venous	0.4	1	0	0.0	0	0	0.0	0	0	0.3	1	0
	Endoluminal ablation	8.1	8	6	0.1	0	0	0.1	1	0	0.9	2	0
	Operations For Venous Ulceration	0.2	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Venous Reconstruction	1.7	2	1	0.0	0	0	0.0	0	0	0.2	1	0
	Translum balloon angio, venous	13.3	15	9	0.1	0	0	0.0	0	0	4.6	7	2
	Translum mech thrombect, venous	2.7	3	1	0.0	0	0	0.0	0	0	1.0	2	0
	Thrombolysis, transven, transcat	2.9	3	2	0.0	0	0	0.0	0	0	0.6	1	0
	Interruption of IVC	12.7	11	10	0.1	0	0	0.0	0	0	1.1	2	0
	Repair A-V Malformation	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Subtotal - Venous	48.4	29	44	0.3	1	0	0.2	1	0	14.1	15	9

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[PAGE 5 ]

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		Surgeon Fellow			Teaching Assistant			First Assistant			Secondary Procedures		
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED
RRC Area	RRC Procedure												
Endovas-Diag	Arteriography	94.8	65	80	0.3	1	0	0.6	3	0	266.0	213	211
	Venography	12.8	17	7	0.1	0	0	0.2	1	0	16.7	24	8
	Angioscopy	0.0	0	0	0.0	0	0	0.0	0	0	0.4	2	0
	Subtotal - Endo Diagnostic	107.6	69	95	0.4	1	0	0.7	4	0	283.1	224	240
Misc Vascular	Exploration of artery	3.3	4	3	0.0	0	0	0.0	0	0	8.0	12	3
	Postop exp bleed, Thromb Infect	3.2	7	1	0.0	0	0	0.0	0	0	1.1	3	0
	Major Vascular Ligation	5.8	6	4	0.1	0	0	0.0	0	0	1.8	4	0
	Inject pseudoaneurysm	0.8	2	0	0.0	0	0	0.0	0	0	0.1	0	0
	Spine Exposure	5.5	14	1	0.0	0	0	0.1	1	0	1.8	9	0
	Sympathectomy	0.1	0	0	0.0	0	0	0.0	0	0	0.1	0	0
	Lymphatic Procedure	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Other misc vascular proc	0.6	1	0	0.0	0	0	0.0	0	0	0.3	1	0
	Subtotal - Misc Vascular	19.4	17	15	0.1	0	0	0.1	1	0	13.3	19	8
Vascular Access	A-V Fistula	35.2	27	29	0.3	1	0	0.0	0	0	0.7	2	0
	A-V Graft	14.0	14	10	0.1	0	0	0.1	0	0	0.6	1	0
	Percutaneous-Other Access	4.2	14	0	0.0	0	0	0.0	0	0	1.6	5	0
	Revision, A-V Access	22.3	22	16	0.1	0	0	0.1	0	0	4.6	11	1
	Subtotal - Vascular Access	75.8	58	64	0.5	1	0	0.2	1	0	7.5	14	3

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[PAGE 6 ]

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		Surgeon Fellow			Teaching Assistant			First Assistant			Secondary Procedures		
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res AVE	Natl Res STD	Natl Res MED
RRC Area	RRC Procedure												
Amputations	Amputation, Digit	5.5	8	2	0.2	1	0	0.0	0	0	1.5	3	0
	Amputation, Transmetatarsal	5.7	7	3	0.2	1	0	0.0	0	0	1.0	2	0
	Amputation, Below Knee	15.2	11	13	0.4	1	0	0.1	0	0	0.5	1	0
	Amputation, Above Knee	12.4	8	11	0.5	2	0	0.0	0	0	0.8	1	0
	Amputation, Upper Extremity	0.2	1	0	0.0	0	0	0.0	0	0	0.0	0	0
	Amputation Closure, Revision	1.6	2	1	0.0	0	0	0.0	0	0	0.1	0	0
	Subtotal - Amputations		40.5	26	36	1.4	4	0	0.1	1	0	3.8	5
Imaging / Diagnostic Studies	Carotid duplex ultrasound	29.9	48	0	0.0	0	0	0.8	9	0	0.0	0	0
	Peripheral arterial physiologic testing	37.3	69	0	0.0	0	0	0.9	9	0	0.0	0	0
	Peripheral arterial duplex ultrasound	38.5	64	0	0.0	0	0	0.3	3	0	0.0	0	0
	Venous duplex ultrasound	39.6	66	0	0.0	0	0	1.5	16	0	0.0	0	0
	Visceral vascular ultrasound	18.6	36	0	0.0	0	0	0.9	9	0	0.0	0	0
	Transcranial doppler	1.6	6	0	0.0	0	0	0.1	1	0	0.0	0	0
	Subtotal - Imaging/Diag		165.6	246	0	0.0	0	0	4.5	46	0	0.0	0

Statistics for each role (surgeon fellow, teaching assistant, and first assistant) include only procedures for primary credit. Secondary procedures are shown separately and include all roles.

# VASCULAR SURGERY : NATIONAL PROGRAM STATISTICS REPORT (Benchmarks Table)

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Residency Review Committee for Surgery

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[PAGE 7 ]      Number of Programs in the Nation: 93    Number of Residents in the Nation: 120										
	Surgeon Fellow					Secondary Procedures				
	Prog Percentiles					Prog Percentiles				
	10	30	50	70	90	10	30	50	70	90
RRC Area										
Aneurysm-Repair	51	72	87	107	132	2	4	9	15	34
Cerebrovascular	45	53	65	82	107	0	1	3	6	11
Periph-Obstruct	140	165	197	227	290	30	57	85	132	197
Abdominal-Obstruct	6	9	13	16	25	0	1	3	6	23
Upper Extremity	6	11	14	18	28	1	2	4	7	16
Extra-Anatomic	4	7	8	12	16	0	1	2	3	5
Thromb/Mech Thromb	4	8	13	20	30	0	1	3	5	14
Misc Endovasc Thera	0	2	3	5	8	1	2	5	8	15
Trauma	6	9	13	19	30	1	3	6	12	24
Venous	15	35	43	60	78	1	5	10	19	32
Endovas-Diag	36	72	92	119	179	28	129	256	388	606
Misc Vascular	4	9	15	25	37	0	2	8	14	41
Vascular Access	19	37	63	92	152	0	1	3	6	16
Amputations	15	26	37	51	73	0	1	2	5	10
Imaging / Diagnostic Studies	0	0	0	309	546	0	0	0	0	0

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