



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.

VASCULAR SURGERY : NATIONAL RESIDENT REPORT (Main Table)
Reporting Period: Total Experience of Residents Completing Programs in 2015-2016
Residency Review Committee for Surgery
Report Date: September 16, 2016

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Number of Programs in the Nation: 88 Number of Residents in the Nation: 116

		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	2.8	2	3	0.0	0	0	0.0	0	0	0.1	0	0	
	Open Rep Infrarenal A-I Aneur, Elect	8.9	5	8	0.1	0	0	0.1	0	0	0.4	1	0	
	Endovas Rep Abd Aort/Iliac Aneur	45.0	19	41	0.2	1	0	0.2	1	0	14.1	17	7	
	Endovas Rep of Iliac Artery	1.8	2	1	0.0	0	0	0.0	0	0	0.6	1	0	
	Rep Suprarenal Aortic Aneurysm	2.0	3	1	0.0	0	0	0.0	0	0	0.1	0	0	
	Rep Thoracic Aortic Aneurysm	0.4	1	0	0.0	0	0	0.0	0	0	0.1	0	0	
	Endovas Rep Thora Aortic Aneurysm	14.9	9	14	0.1	0	0	0.1	0	0	3.6	6	2	
	Rep Thoracoabd Aortic Aneurysm	3.4	4	2	0.1	1	0	0.0	0	0	0.1	0	0	
	Rep Femoral Aneurysm	4.4	3	3	0.0	0	0	0.0	0	0	0.7	1	0	
	Rep Popliteal Aneurysm	2.3	2	2	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		86.9	28	82	0.5	1	0	0.5	1	0	19.8	20	13
Cerebrovascular	Carotid Endarterectomy	49.2	20	44	0.3	1	0	0.1	0	0	0.7	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	7.6	7	5	0.0	0	0	0.1	1	0	0.3	1	0	
	Excise Carotid Body Tumor	0.6	1	0	0.0	0	0	0.0	0	0	0.0	0	0	
	Vert Bypass or Reimplant/transpos	0.2	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
	Direct Rep Aortic Arch Branches	0.6	1	0	0.0	0	0	0.0	0	0	0.1	1	0	
	Translum Balloon Angio - Brachioceph	1.3	2	1	0.0	0	0	0.0	0	0	0.3	1	0	
	Translum Atherectomy - Brachiocephalic	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
	Transcat Place of Intrav Stent, Noncor.	1.4	2	1	0.0	0	0	0.0	0	0	0.2	1	0	
	Cervical Bypass Aortic Arch Branches	5.7	4	5	0.0	0	0	0.0	0	0	1.6	2	1	
	Embolect/thrombec by Neck/Thor Incis	0.2	0	0	0.0	0	0	0.0	0	0	0.0	0	0	
	Other Major Cerebrovas - Def Cat Cred	0.8	1	0	0.0	0	0	0.0	0	0	0.1	0	0	
	Subtotal - Cerebrovascular		67.5	24	62	0.3	1	0	0.3	1	0	4.1	3	3

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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Number of Programs in the Nation: 88 Number of Residents in the Nation: 116

		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	4.1	5	3	0.1	0	0	0.0	0	0	1.4	3	0
	Aorto-ilio/femoral bypass, prosthetic	8.5	6	8	0.1	0	0	0.0	0	0	0.7	1	0
	Aorto-ilio/femoral bypass, vein	0.6	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Translum balloon angio aorta or iliac	21.7	11	20	0.1	0	0	0.0	0	0	21.9	18	16
	Translum atherectomy aorta or iliac	0.3	1	0	0.0	0	0	0.0	0	0	0.3	1	0
	Transcath place intravasc stent aorta	6.1	10	3	0.0	0	0	0.1	0	0	2.7	6	1
	Ilio-Iliac/femoral endarterectomy	3.5	4	2	0.0	0	0	0.0	0	0	0.9	1	0
	Excise infected graft, abdomen or chest	1.3	2	1	0.0	0	0	0.0	0	0	0.5	1	0
	Rep graft-enteric/aorto-enteric fistula	0.2	0	0	0.0	0	0	0.0	0	0	0.1	0	0
	Femoral, Profunda Endarterectomy	13.6	8	12	0.2	1	0	0.0	0	0	14.7	13	13
	Femoral-Popliteal Bypass, Vein	10.3	7	9	0.1	0	0	0.0	0	0	1.2	2	1
	Femoral-Popliteal Bypass, Prosth	7.8	6	8	0.1	0	0	0.0	0	0	1.3	2	1
	Translum balloon angio femoral-popl	37.3	23	31	0.2	1	0	0.0	0	0	18.1	16	15
	Translum atherectomy femoral-popliteal	5.7	9	3	0.0	0	0	0.0	0	0	1.7	3	1
	Endarterectomy, superf femoral, popul	2.7	3	2	0.0	0	0	0.0	0	0	2.8	3	2
	Infrapopliteal Bypass, Vein	16.3	10	15	0.1	1	0	0.1	0	0	1.0	2	0
	Infrapopliteal Bypass, Prosthetic	3.5	3	2	0.0	0	0	0.0	0	0	0.3	1	0
	Translum ballon angio, tibioperoneal	14.7	14	11	0.1	0	0	0.0	0	0	6.8	8	4
	Translum atherectomy, tibioperoneal	2.7	4	1	0.0	0	0	0.0	0	0	1.1	3	0
	Transcath place of intravas stent non-cor	3.3	6	2	0.0	0	0	0.0	0	0	3.0	6	1
	Excise infected graft, peripheral	3.5	3	2	0.1	0	0	0.0	0	0	1.1	2	0
	Revise Arterial Bypass	4.2	3	3	0.0	0	0	0.0	0	0	1.3	2	1
	Art embolectomy/thrombect by leg inc	8.9	6	8	0.1	0	0	0.0	0	0	6.9	6	5
	Graft Thrombectomy	1.5	2	1	0.0	0	0	0.0	0	0	0.9	2	0
	Adjunct vein cuff or AVF (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	1.0	2	0
	Harvest Arm Vein (Sec Proc Only)	0.0	0	0	0.0	0	0	0.0	0	0	1.4	2	1
	Composite Leg Bypass Graft (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	1.0	2	0
Re-Do Lower Extrem Bypass (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	2.5	4	1	
Subtotal - Periph Obstruct		182.2	58	179	1.3	3	0	0.5	1	0	96.5	57	89

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RRC Area	RRC Procedure												
Abdominal-Obstruct	Celiac/Sma Endarterect, Bypass	3.6	3	3	0.0	0	0	0.0	0	0	1.4	5	0
	Renal Endarterectomy, Bypass	0.7	1	0	0.0	0	0	0.0	0	0	0.9	2	0
	Embolectomy/thrombect, ren	1.2	1	1	0.0	0	0	0.0	0	0	0.2	0	0
	Translum balloon angio, renal	4.0	4	3	0.0	0	0	0.0	0	0	2.8	5	1
	Translum atherectomy, renal	0.1	0	0	0.0	0	0	0.0	0	0	0.1	0	0
	Transcat place of stent, ren art	6.3	6	5	0.0	0	0	0.0	0	0	4.1	7	2
	Subtotal - Abdominal Obstruct	15.9	9	16	0.0	0	0	0.0	0	0	9.4	12	5
Upper Extremity	Open brachial artery exposure	0.3	1	0	0.0	0	0	0.0	0	0	2.1	5	1
	Arm Bypass,Endarterectomy,Rep	3.5	4	3	0.0	0	0	0.0	0	0	0.5	3	0
	Transcat place of intra stent noncoro	1.8	2	1	0.0	0	0	0.0	0	0	0.5	1	0
	Thoracic Outlet Decomp Proc	5.5	8	3	0.0	0	0	0.1	0	0	0.4	2	0
	Embolect/thrombect, by arm inc	3.2	3	3	0.0	0	0	0.0	0	0	1.3	2	1
	Subtotal - Upper Extremity	14.4	9	13	0.1	0	0	0.1	0	0	4.8	7	3
Extra-Anatomic	Axillo-Femoral Bypass	4.4	4	4	0.0	0	0	0.0	0	0	0.7	1	0
	Axillo-Popliteal-Tibial Bypass	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Femoral-Femoral Bypass	6.0	3	5	0.1	0	0	0.0	0	0	2.7	3	2
	Subtotal - Extra-Anatomic	10.4	6	9	0.1	0	0	0.0	0	0	3.3	3	3
Thromb/Mech Thromb	Translum mech thrombect	5.0	7	3	0.0	0	0	0.0	0	0	2.2	3	1
	Thrombolysis, transart, transcat	6.2	6	5	0.0	0	0	0.0	0	0	1.8	3	1
	Exchange of thrombolysis cath	3.4	5	2	0.0	0	0	0.0	0	0	1.1	2	0
	Subtotal - Thrombol/Mech Thrombect	14.6	12	12	0.0	0	0	0.1	0	0	5.0	6	3

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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	1.6	3	1
	Transcath thera, infusion non thromb	0.1	0	0	0.0	0	0	0.0	0	0	0.2	1	0
	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	4.4	5	3	0.0	0	0	0.0	0	0	3.6	4	2
	Subtotal - Misc Endovas Therap	4.5	5	3	0.0	0	0	0.0	0	0	5.4	5	4
Trauma	Repair Thoracic Vessels	0.4	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Repair Neck Vessels	0.6	1	0	0.0	0	0	0.0	0	0	0.1	0	0
	Repair Abdominal Vessels	3.1	4	2	0.0	0	0	0.0	0	0	0.2	1	0
	Repair Peripheral Vessels	7.7	6	6	0.0	0	0	0.0	0	0	1.6	3	1
	Fasciotomy	2.3	2	2	0.1	0	0	0.0	0	0	4.8	5	3
	Subtotal - Trauma	14.2	9	13	0.2	0	0	0.0	0	0	6.8	7	5
Total Major	Total Major	410.6	106	402	2.5	6	0	1.5	3	0	155.2	89	142
Venous	Portal-Systemic Shunt	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Operation For Varicose Veins	4.9	6	3	0.1	0	0	0.0	0	0	4.9	7	2
	Sclerotherapy, Periph Vein	1.3	4	0	0.0	0	0	0.0	0	0	0.5	2	0
	Embolectomy/Thrombectomy, venous	0.6	1	0	0.0	0	0	0.0	0	0	0.4	1	0
	Endoluminal ablation	11.0	12	7	0.1	1	0	0.0	0	0	1.1	3	0
	Operations For Venous Ulceration	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Venous Reconstruction	1.8	3	1	0.0	0	0	0.0	0	0	0.2	1	0
	Translum balloon angio, venous	22.7	24	18	0.1	0	0	0.1	1	0	8.7	12	4
	Translum mech thrombect, venous	2.3	4	1	0.0	0	0	0.0	0	0	0.8	2	0
	Thrombolysis, transven, transcat	2.3	3	1	0.0	0	0	0.0	0	0	0.6	1	0
	Exch of thromb cath (Sec Only)	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Interruption of IVC	14.7	13	12	0.2	1	0	0.0	0	0	1.9	3	1
	Repair A-V Malformation	0.1	0	0	0.0	0	0	0.0	0	0	0.0	0	0
	Subtotal - Venous		61.8	39	50	0.5	1	0	0.2	1	0	19.1	19

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[PAGE 5]		Number of Programs in the Nation: 88 Number of Residents in the Nation: 116											
		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	84.9	46	76	0.6	2	0	0.2	1	0	271.3	245	199
	Venography	14.5	21	9	0.2	1	0	0.1	1	0	20.4	28	11
	Angioscopy	0.0	0	0	0.0	0	0	0.0	0	0	0.6	2	0
	Intravascular Ultrasound	0.9	2	0	0.0	0	0	0.0	0	0	7.4	18	1
	Subtotal - Endo Diagnostic	100.4	53	96	0.8	3	0	0.3	1	0	299.6	260	231
Misc Vascular	Exploration of artery	3.4	4	2	0.0	0	0	0.0	0	0	14.5	22	4
	Postop exp bleed, Thromb Infect	2.3	3	1	0.0	0	0	0.0	0	0	0.5	1	0
	Major Vascular Ligation	4.1	4	3	0.1	0	0	0.0	0	0	1.1	2	0
	Inject pseudoaneurysm	1.1	2	0	0.0	0	0	0.0	0	0	0.0	0	0
	Spine Exposure	3.5	6	0	0.0	0	0	0.0	0	0	0.9	3	0
	Sympathectomy	0.1	0	0	0.0	0	0	0.0	0	0	0.0	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	0.6	2	0
	Subtotal - Misc Vascular	15.1	11	12	0.2	0	0	0.0	0	0	17.5	25	7
Vascular Access	A-V Fistula	31.2	23	28	0.6	2	0	0.0	0	0	0.8	3	0
	A-V Graft	10.9	10	8	0.2	1	0	0.0	0	0	0.7	2	0
	Percutaneous-Other Access	2.7	7	0	0.1	1	0	0.0	0	0	1.2	3	0
	Revision, A-V Access	17.5	19	12	0.2	1	0	0.1	1	0	2.5	4	1
	Subtotal - Vascular Access	62.3	47	55	1.1	3	0	0.1	1	0	5.1	8	2

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RRC Area	RRC Procedure												
Amputations	Amputation, Digit	4.4	7	2	0.3	1	0	0.0	0	0	1.4	3	0
	Amputation, Transmetatarsal	4.1	6	2	0.3	1	0	0.0	0	0	0.8	2	0
	Amputation, Below Knee	11.4	8	10	1.0	2	0	0.0	0	0	0.3	1	0
	Amputation, Above Knee	9.1	6	9	0.8	2	0	0.0	0	0	0.6	1	0
	Amputation, Upper Extremity	0.1	1	0	0.0	0	0	0.0	0	0	0.0	0	0
	Amputation Closure, Revision	1.3	2	0	0.1	0	0	0.0	0	0	0.0	0	0
	Subtotal - Amputations		30.4	21	27	2.4	5	0	0.0	0	0	3.2	4
Total Minor	Total Minor	270.0	118	253	4.8	10	1	0.7	2	0	344.6	282	263
Total Operations	TOTAL	680.6	180	661	7.4	14	1	2.2	5	0	499.8	345	411
Imaging / Diagnostic Studies	Carotid duplex ultrasound	31.4	50	0	0.0	0	0	0.0	0	0	0.0	0	0
	Peripheral arterial physiologic testing	34.1	59	0	0.0	0	0	0.0	0	0	0.0	0	0
	Peripheral arterial duplex ultrasound	37.2	62	0	0.0	0	0	0.0	0	0	0.0	0	0
	Venous duplex ultrasound	48.0	79	0	0.0	0	0	0.0	0	0	0.0	0	0
	Visceral vascular ultrasound	15.4	26	0	0.0	0	0	0.0	0	0	0.0	0	0
	Transcranial doppler	1.2	9	0	0.0	0	0	0.0	0	0	0.0	0	0
	Subtotal - Imaging/Diag		167.3	238	0	0.1	1	0	0.0	0	0	0.0	0

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VASCULAR SURGERY : NATIONAL PROGRAM STATISTICS REPORT (Benchmarks Table)
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RRC Area	Surgeon Fellow					Secondary Procedures				
	Prog Percentiles					Prog Percentiles				
	10	30	50	70	90	10	30	50	70	90
Aneurysm-Repair	52	71	83	100	128	2	8	15	24	51
Cerebrovascular	44	55	64	78	106	1	2	3	5	10
Periph-Obstruct	116	157	182	203	260	32	67	94	132	181
Abdominal-Obstruct	6	10	16	19	27	0	3	5	11	24
Upper Extremity	6	9	13	15	24	0	1	3	6	12
Extra-Anatomic	4	8	9	12	17	0	1	3	4	7
Thromb/Mech Thromb	2	8	12	19	28	0	2	3	6	14
Misc Endovasc Thera	0	1	3	5	11	1	3	4	7	13
Trauma	4	9	13	18	27	1	3	5	8	19
Total Major	303	347	412	458	575	48	105	151	206	280
Venous	25	40	49	71	118	2	9	12	20	44
Endovas-Diag	44	67	96	121	172	41	132	242	404	665
Misc Vascular	6	9	13	17	34	0	3	8	21	65
Vascular Access	8	29	49	78	131	0	1	2	6	14
Amputations	6	19	27	36	56	0	1	2	4	8
Total Minor	138	195	248	316	406	61	153	287	473	750
Total Operations	474	596	660	776	891	128	304	432	633	990
Imaging / Diagnostic Studies	0	0	0	300	522	0	0	0	0	0

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