



## 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 is 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.
    - ii. "Natl Res MED" – This statistic represents the median or middle value of procedure counts.
    - ii. "Natl Res MODE" – The mode is the most commonly occurring value.
    - ii. "Natl Res SUM" – This statistic represents the sum of all 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 2006-2007**  
**Residency Review Committee for Vascular Surgery**

[PART 1]      Number of Programs in the Nation: 86      Number of Residents in the Nation: 111

		Surgeon Fellow					Teaching Assistant					First Assistant					Secondary Procedures					
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	
RRC Area	RRC Procedure																					
Aneurysm-Repair	Infrarenal aorto-iliac ruptured	3.8	3	3	2	427	0.0	0	0	0	3	0.0	0	0	0	4	0.1	0	0	0	11	
	Infrarenal aorto-iliac elective	14.3	8	13	11	1,582	0.1	0	0	0	7	0.1	0	0	0	10	0.6	1	0	0	63	
	Suprarenal AAA	4.1	6	2	0	451	0.0	0	0	0	0	0.1	0	0	0	6	0.1	0	0	0	11	
	Thoracic aortic aneurysm	0.8	2	0	0	90	0.0	0	0	0	0	0.1	0	0	0	8	0.0	0	0	0	0	
	Thoracoabdominal aortic aneurysm	3.4	4	2	0	380	0.0	0	0	0	0	0.3	1	0	0	37	0.0	0	0	0	5	
	Femoral aneurysm	2.7	2	2	1	304	0.0	0	0	0	3	0.0	0	0	0	4	0.7	1	0	0	76	
	Popliteal aneurysm	2.2	2	2	2	247	0.0	0	0	0	0	0.0	0	0	0	0	0.1	0	0	0	12	
	Repair other aneurysm-defcat cred	0.8	1	1	0	90	0.0	0	0	0	0	0.0	0	0	0	4	0.1	0	0	0	14	
	All other aneurysms	0.1	0	0	0	8	0.0	0	0	0	0	0.0	0	0	0	1	0.0	0	0	0	3	
	Subtotal - Aneurysm Repair		32.2	15	29	26	3,579	0.1	1	0	0	13	0.7	2	0	0	74	1.8	2	1	0	195
Cerebrovascular	Carotid endarterectomy	42.2	21	36	30	4,688	0.1	1	0	0	14	0.3	1	0	0	35	0.6	1	0	0	66	
	Reoperative carotid surgery*	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.9	2	0	0	100	
	Excise carotid body tumor	0.6	1	0	0	66	0.0	0	0	0	0	0.0	0	0	0	3	0.0	0	0	0	0	
	Vertebral artery operation	0.3	1	0	0	29	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	2	
	Direct rep aortic arch branch	0.5	1	0	0	50	0.0	0	0	0	1	0.0	0	0	0	1	0.0	0	0	0	5	
	Cerv bypass aortic arch branch	3.6	3	3	2	405	0.0	0	0	0	1	0.0	0	0	0	2	0.6	1	0	0	71	
	Other major cerebrovas- defcat	0.8	1	0	0	89	0.0	0	0	0	1	0.0	0	0	0	1	0.1	0	0	0	8	
	Other cerebrovascular	0.3	1	0	0	33	0.0	0	0	0	1	0.0	0	0	0	0	0.1	0	0	0	6	
	Subtotal - Cerebrovascular		48.3	21	41	38	5,360	0.2	1	0	0	18	0.4	1	0	0	42	2.3	3	2	0	258
	Periph-Obstruct	Aorto-iliac/femoral bypass	9.6	6	8	4	1,064	0.0	0	0	0	4	0.1	0	0	0	8	1.5	3	1	0	169
Ilio-iliac/femoral bypass		3.3	3	2	1	366	0.0	0	0	0	4	0.0	0	0	0	0	0.8	1	0	0	89	
Femoral, profunda endarter		8.1	5	7	3	899	0.1	0	0	0	8	0.1	0	0	0	6	8.8	9	6	4	980	
Other endarterectomy		0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	
Femoral-popliteal bypass, vein		8.5	6	7	4	945	0.1	0	0	0	11	0.0	0	0	0	5	0.7	1	0	0	74	
Femoral-popliteal bypass, pros		8.6	6	8	5	953	0.1	1	0	0	12	0.0	0	0	0	3	1.4	2	1	0	157	
Infrapopliteal bypass, vein		15.8	10	14	10	1,759	0.1	1	0	0	16	0.1	0	0	0	14	0.6	1	0	0	62	
Infrapopliteal bypass, prosth		3.6	4	3	1	404	0.0	0	0	0	2	0.0	0	0	0	1	0.3	1	0	0	32	
Vein Cuff or AVF*		0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	1.1	2	0	0	119	
Revise lower extremity bypass		4.1	4	3	0	451	0.0	0	0	0	4	0.0	0	0	0	2	0.7	1	0	0	75	
Harvest arm vein*	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	1.7	3	1	0	190		

\*Secondary procedures only

**VASCULAR SURGERY: NATIONAL RESIDENT REPORT (Main Table)**  
**Reporting Period: Total Experience of Residents Completing Programs in 2006-2007**  
**Residency Review Committee for Vascular Surgery**

[PART 2]		Number of Programs in the Nation: 86					Number of Residents in the Nation: 111														
		Surgeon Fellow					Teaching Assistant					First Assistant					Secondary Procedures				
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM
RRC Area	RRC Procedure																				
Periph-Obstruct	Composite leg bypass graft*	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	1.5	2	1	0	170
	Re-do lower ext bypass*	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	2.7	4	2	0	305
	Embolectomy/thrombectomy art	7.6	5	7	5	840	0.2	1	0	0	18	0.1	1	0	0	10	6.5	6	5	4	724
	Graft thrombectomy	1.3	2	1	0	143	0.0	0	0	0	3	0.0	0	0	0	2	0.9	1	0	0	104
	Other major periph- defcat cred	0.5	1	0	0	50	0.0	0	0	0	0	0.0	0	0	0	1	0.4	1	0	0	42
	Other peripheral	0.6	1	0	0	67	0.0	0	0	0	0	0.0	0	0	0	1	0.3	1	0	0	36
	Subtotal - Periph Obstruct		71.5	26	68	57	7,941	0.7	2	0	0	82	0.5	2	0	0	53	30.0	21	27	28
Abdominal-Obstruct	Celiac/sma endarter, bypass	4.3	3	4	5	475	0.0	0	0	0	0	0.0	0	0	0	5	1.5	4	0	0	165
	Renal endarter, bypass	0.9	1	0	0	97	0.0	0	0	0	0	0.0	0	0	0	0	0.5	1	0	0	52
	Other abdominal	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Subtotal - Abdominal Obstruct	5.2	4	5	5	572	0.0	0	0	0	0	0.0	0	0	0	5	2.0	4	0	0	217
Upper Extremity	Arm bypass, endarter, rep	2.0	2	1	0	218	0.0	0	0	0	1	0.0	0	0	0	0	0.2	1	0	0	18
	Thoracic outlet decomp	2.3	3	2	0	258	0.0	0	0	0	0	0.1	1	0	0	15	0.1	0	0	0	11
	Other upper extremity	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Subtotal - Upper Extremity	4.3	4	4	1	476	0.0	0	0	0	1	0.1	1	0	0	15	0.3	1	0	0	29
Extra-Anatomic	Axillo-femoral bypass	3.5	3	3	1	389	0.0	0	0	0	3	0.0	0	0	0	0	0.7	1	0	0	75
	Axillo-popliteal-tibial bypass	0.3	1	0	0	29	0.0	0	0	0	0	0.0	0	0	0	1	0.0	0	0	0	4
	Femoral-femoral bypass	5.0	3	5	4	559	0.0	0	0	0	4	0.1	0	0	0	6	2.6	3	2	1	292
	Other extra-anatomic	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Subtotal - Extra-Anatomic	8.8	5	8	5	977	0.1	0	0	0	7	0.1	0	0	0	7	3.3	3	2	1	371
Venous	Portal-systemic shunt	0.1	0	0	0	14	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	2
	Operation for varicose veins	6.8	9	3	1	750	0.2	1	0	0	17	0.0	0	0	0	3	2.7	5	1	0	299
	Sclerotherapy, periph vein	0.3	1	0	0	31	0.0	0	0	0	0	0.0	0	0	0	2	0.2	1	0	0	17
	Embolectomy/thromb, venous	0.5	1	0	0	53	0.0	0	0	0	0	0.0	0	0	0	2	0.2	1	0	0	25
	Non-reconstruct ven ulcer op	0.8	3	0	0	87	0.0	0	0	0	0	0.0	0	0	0	0	0.1	0	0	0	10
	Venous reconstruction	1.0	1	0	0	109	0.0	0	0	0	0	0.0	0	0	0	1	0.1	0	0	0	9
	Repair a-v malformation	0.0	0	0	0	4	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Other venous operation	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Subtotal - Venous	9.4	11	6	2	1,048	0.2	1	0	0	17	0.1	0	0	0	8	3.3	5	1	0	362

\*Secondary procedures only

**VASCULAR SURGERY: NATIONAL RESIDENT REPORT (Main Table)**  
**Reporting Period: Total Experience of Residents Completing Programs in 2006-2007**  
**Residency Review Committee for Vascular Surgery**

[PART 3 ]      Number of Programs in the Nation: 86      Number of Residents in the Nation: 111

		Surgeon Fellow					Teaching Assistant					First Assistant					Secondary Procedures				
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM
RRC Area	RRC Procedure																				
Endovas-Therapeutic	Endovas rep aortic aneurysm	50.5	31	42	18	5,606	0.2	1	0	0	24	1.2	3	0	0	136	18.2	28	8	0	2,023
	Endovas rep other aneurysm	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Other endovascular graft	2.0	2	1	1	223	0.0	0	0	0	1	0.0	0	0	0	2	1.0	2	0	0	107
	Vena caval interrupt/filter	16.2	20	11	0	1,797	0.3	1	0	0	33	0.0	0	0	0	4	1.2	3	0	0	135
	Balloon angioplasty	50.5	32	43	28	5,601	0.1	1	0	0	12	0.6	2	0	0	64	44.0	37	32	8	4,886
	Transcatheter stent	37.4	29	28	28	4,155	0.2	1	0	0	18	0.4	1	0	0	43	38.9	32	33	7	4,313
	Thrombolysis	7.8	8	5	0	863	0.0	0	0	0	2	0.1	0	0	0	9	2.8	4	1	0	312
	Subtotal - Endovas Therap	164.4	71	157	161	18,245	0.8	2	0	0	90	2.3	6	0	0	258	106.1	72	90	119	11,776
Endovas-Diagnostic	Arteriography	81.4	44	74	25	9,033	0.3	2	0	0	33	1.3	4	0	0	148	246.6	158	238	16	27,372
	Venography	9.2	14	4	2	1,018	0.1	0	0	0	8	0.0	0	0	0	4	19.8	31	9	0	2,196
	Angioscopy	0.1	1	0	0	9	0.0	0	0	0	0	0.0	0	0	0	0	1.0	6	0	0	114
	Intravascular ultrasound	1.4	4	0	0	156	0.0	0	0	0	0	0.0	0	0	0	1	6.3	17	0	0	704
	Other catheter procedure	12.7	14	8	7	1,407	0.0	0	0	0	5	0.1	1	0	0	15	4.9	6	3	0	545
	Subtotal - Endovasc Diagn	104.7	53	104	107	11,623	0.4	2	0	0	46	1.5	4	0	0	168	278.7	173	261	106	30,931
Miscellaneous	Sympathectomy	0.3	1	0	0	33	0.0	0	0	0	0	0.0	0	0	0	1	0.1	0	0	0	6
	Lymphatic procedure	0.3	1	0	0	29	0.0	0	0	0	1	0.0	0	0	0	0	0.0	0	0	0	3
	Explore artery	3.0	4	2	0	335	0.0	0	0	0	3	0.0	0	0	0	3	23.2	31	6	0	2,575
	Expl post-op bleed-thromb-inf	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0
	Major vascular ligation	1.6	2	1	0	180	0.1	0	0	0	8	0.0	0	0	0	4	0.9	2	0	0	101
	Exc infect graft, peripheral	2.9	3	2	1	320	0.0	0	0	0	5	0.0	0	0	0	5	1.2	2	1	0	137
	Exc infect graft, abd-thorax	1.6	2	1	0	176	0.0	0	0	0	0	0.0	0	0	0	5	0.4	1	0	0	44
	Repair graft-enteric fistula	0.2	1	0	0	26	0.0	0	0	0	0	0.0	0	0	0	0	0.1	0	0	0	8
	Pseudoaneurysm injection	1.3	2	0	0	141	0.0	0	0	0	1	0.0	0	0	0	1	0.0	0	0	0	3
	Other vascular procedure	2.0	4	1	0	227	0.0	0	0	0	5	0.0	0	0	0	2	0.8	2	0	0	88
	Subtotal - Miscellaneous	13.2	10	11	9	1,467	0.2	1	0	0	23	0.2	1	0	0	21	26.7	32	9	0	2,965
Vascular Access	A-V fistula	15.2	15	12	0	1,689	0.7	2	0	0	79	0.1	0	0	0	8	0.4	1	0	0	47
	A-V graft	6.4	8	4	0	706	0.3	1	0	0	36	0.1	0	0	0	7	0.2	1	0	0	26
	Percutaneous-other access	2.7	10	0	0	304	0.0	0	0	0	4	0.0	0	0	0	1	0.9	3	0	0	100
	Revision, A-V access	6.1	8	4	0	679	0.1	0	0	0	10	0.1	0	0	0	9	2.1	4	1	0	238
	Subtotal - Vascular Access	30.4	29	23	0	3,378	1.2	4	0	0	129	0.2	1	0	0	25	3.7	7	1	0	411

\*Secondary procedures only

**VASCULAR SURGERY: NATIONAL RESIDENT REPORT (Main Table)**  
**Reporting Period: Total Experience of Residents Completing Programs in 2006-2007**  
**Residency Review Committee for Vascular Surgery**

[PART 4]		Number of Programs in the Nation: 86    Number of Residents in the Nation: 111																			
		Surgeon Fellow					Teaching Assistant					First Assistant					Secondary Procedures				
		Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM	Natl Res AVE	Natl Res STD	Natl Res MED	Natl Res MODE	Natl Res SUM
RRC Area	RRC Procedure																				
Amputations	Amputation, digit	2.3	3	1	0	251	0.3	1	0	0	28	0.0	0	0	0	1	0.8	1	0	0	88
	Amputation, transmetatarsal	2.2	3	1	0	249	0.3	1	0	0	36	0.0	0	0	0	0	0.5	1	0	0	55
	Amputation, below knee	5.1	6	4	1	570	0.7	3	0	0	82	0.0	0	0	0	3	0.3	1	0	0	29
	Amputation, above knee	4.6	5	3	0	512	0.5	2	0	0	58	0.0	0	0	0	5	0.4	1	0	0	40
	Amputation, upper extremity	0.1	0	0	0	7	0.0	0	0	0	2	0.0	0	0	0	0	0.0	0	0	0	2
	Amputation closure, revision	0.5	1	0	0	58	0.1	0	0	0	7	0.0	0	0	0	0	0.0	0	0	0	2
	Subtotal - Amputations	14.8	15	12	1	1,647	1.9	6	0	0	213	0.1	1	0	0	9	1.9	3	1	0	216
Trauma	Repair thoracic vessels	0.4	1	0	0	41	0.0	0	0	0	0	0.0	0	0	0	1	0.0	0	0	0	5
	Repair neck vessels	0.6	1	0	0	69	0.0	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	3
	Repair abdominal vessels	1.5	3	1	0	168	0.0	0	0	0	0	0.0	0	0	0	2	0.2	1	0	0	18
	Repair peripheral vessels	8.2	6	7	5	907	0.1	0	0	0	12	0.1	0	0	0	6	2.0	8	0	0	222
	Fasciotomy	1.2	1	1	0	128	0.1	0	0	0	10	0.0	0	0	0	0	2.8	3	2	0	309
	Subtotal - Trauma	11.8	9	10	5	1,313	0.2	1	0	0	22	0.1	0	0	0	9	5.0	9	3	1	557
Major Operations	TOTAL	519.2	144	526	360	57,626	6.0	13	1	0	661	6.3	14	1	0	694	465.0	252	473	594	51,616

\*Secondary procedures only

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

Reporting Period: Total Experience of Residents Completing Programs in 2006-2007

Residency Review Committee for Vascular Surgery

[PART 1] Number of Programs in the Nation: 86 Number of Residents in the Nation: 111																						
RRC Area	Surgeon Fellow											Secondary Procedures										
	Percentiles					Standard Deviations						Percentiles					Standard Deviations					
	10	30	50	70	90	-3	-2	-1	+1	+2	+3	10	30	50	70	90	-3	-2	-1	+1	+2	+3
Aneurysm-Repair	16	23	31	37	52	0	2	17	48	63	78	0	1	1	2	4	0	0	0	4	6	8
Cerebrovascular	31	36	42	52	76	0	6	27	70	91	112	0	1	2	2	5	0	0	0	5	8	11
Periph-Obstruct	45	57	68	82	106	0	19	45	98	124	150	8	18	27	38	58	0	0	9	51	72	92
Abdominal-Obstruct	1	3	5	6	11	0	0	1	9	13	17	0	0	1	2	6	0	0	0	6	10	15
Upper Extremity	1	2	4	6	8	0	0	1	8	11	15	0	0	0	0	1	0	0	0	1	2	2
Extra-Anatomic	4	6	9	11	14	0	0	4	13	18	22	0	1	3	4	7	0	0	0	7	10	13
Venous	2	3	6	11	17	0	0	0	21	32	44	0	0	1	3	10	0	0	0	8	13	18
Endovas-Therapeutic	89	116	156	179	261	0	23	94	235	306	377	25	57	90	127	206	0	0	34	178	249	321
Endovas-Diagnostic	44	72	100	120	180	0	0	51	158	211	265	62	150	250	369	530	0	0	105	452	625	798
Miscellaneous	4	8	12	16	26	0	0	4	23	32	42	1	5	17	39	73	0	0	0	58	90	122
Vascular Access	0	9	23	38	71	0	0	1	59	88	117	0	1	2	4	10	0	0	0	10	17	24
Amputations	2	6	12	18	30	0	0	0	29	44	59	0	1	1	3	5	0	0	0	4	7	10
Trauma	3	8	10	15	25	0	0	3	21	29	38	0	2	3	6	10	0	0	0	14	22	31
Major Operations	340	442	523	593	733	88	232	375	663	807	950	152	319	447	594	770	0	0	213	717	968	1,220