





**Vascular Spinoff Revenue In Tertiary Healthcare Systems: Substantially More Downstream Benefits From Vascular Surgeons: How To Make Hospital Administrators Appreciate The Value Of Vascular Surgeons And Reward Them Appropriately**

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No Disclosures


**SVS Compensation Study**  
**Know your value as a vascular surgeon**

- Participate in the study to get access to crowd-sourced, anonymous data specific to your specialty and practice situation:
  - Compensation
  - Practice
  - Productivity
- Free and unlimited access to the reports on the SVS trusted partner website (Phairify), so that you can leverage personalized market intelligence when negotiating your next contract.
  - Available immediately
  - US-Based Active and Early Active SVS Members
- Complete the anonymous, 15-minute compensation and productivity study on our trusted partner's website (Phairify).



<https://bitly.vascular.org/compstudy>

**Visibility**



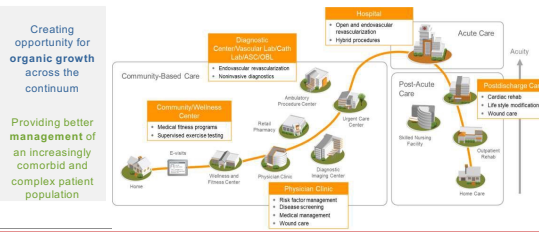


Sources: Sg2 IP & OP Vascular Service Line US Market Forecast (IP, Open Surgical Peripheral & Abdominal, Endovascular Peripheral & Abdominal, Medical, OP, Endovascular Peripheral) averaged across an estimated 675 hospitals performing vascular surgery (and/or). Average revenue, variable cost, and contribution margin per case per Sg2 proprietary all-payer database and Society of Vascular Surgery study. Johnson CE et al. *J Vasc Med Biol*. 2018;30(2):101-108; Taylor et al. *J Vasc Med Biol*. 2012;24(11):281-285.

**Vascular Surgeons Treat a Wide Spectrum of Diseases Across the Continuum of Care Increasing in Both Prevalence and Incidence**

Creating opportunity for organic growth across the continuum

Providing better management of an increasingly comorbid and complex patient population







**Vascular Surgery Provides Significant Value, Revenue and Margin Opportunity to a Hospital**

Previous research and current assessments suggest **gross contribution margin per vascular surgeon FTE is the highest** among the top 5 hospital-based surgical service lines.

	Cardiology	General Surgery	Orthopedics	Vascular	Neurosurgery
GM/FTE	\$1,069,645	\$1,314,346	\$463,276	\$1,612,276	\$249,294

Sg2 research utilizing service line analytics and typical annual Vascular surgery and service line volumes suggest Vascular programs can add more than \$9M in hospital contribution margin.

### Value of the Modern Vascular Surgeon to the Health Care System

A Report from the Society for Vascular Surgery Valuation Work Group

**SCOPE OF PRACTICE**

Modern Vascular Surgeons provide both medical and procedure-based care for:

- Peripheral Artery Disease
- Venous Disease
- Aneurysmal Disease
- Carotid Artery Disease
- Thoracic Outlet Syndrome
- Spine Exposures
- Wound Care
- Vascular Trauma
- Intraoperative Assistance
- Non-Invasive Vascular Lab

**FINANCIAL VALUE**

Vascular Surgeons produced **\$1.6 million/FTE\*** (based on the average of 8423 wRVUs/FTE)

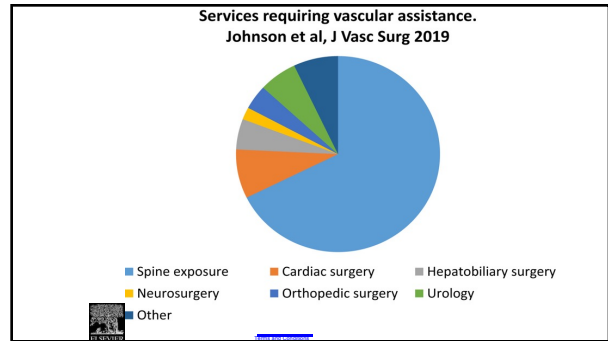
**SERVICES REQUIRING VASCULAR SURGERY ASSISTANCE\*\***

**AVERAGE CM \$1.6 M**

**the health care system**

**Powell et al. J Vasc Surg February 2021**

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### PRACTICE MANAGEMENT

From the Society for Vascular Surgery

#### An all-inclusive and transparent view of a vascular program's direct impact on its health system

Nyali Taylor, MD, Joseph V. Lombardi, MD, Sandra Toddles, MHA, James Alexander, MD, Jose Trani, MD, and Jeffrey Carpenter, MD, Camden, NJ

*Objective:* This study explores the fiduciary advantage of a Vascular Surgery program to an academic, tertiary care hospital.

*Methods:* This is a retrospective review of hospital (HealthQuest) and physician (IDX) billing databases from April 2009 to September 2010. We identified all patients interacting with Vascular Surgery (VS) to provide an overview of global finances. Patients introduced solely by VS were identified to minimize confounding of the downstream effect. Outcome measures obtained were revenue, average and total gross margin, relative value unit production, and service utilization.

*Results:* A total of 552 cases were identified demonstrating \$13.5 million in revenue. This translated into a gross margin of \$5 million. Examined per surgeon, VS was the most profitable, producing \$1.6 million. Lower extremity amputation had the highest average gross margin at 83.6-000. Notably, \$8 million in direct cost is among the highest in the health system. A total of 137 cases unique to VS generated \$5 million in total revenue. This patient subset made use of up to 29 physician specialty services. General Medicine and Radiology were the most frequently utilized.

*Conclusion:* The overall profitability of a comprehensive vascular program is tremendously positive. This study verifies that new vascular-specific referrals are a significant catalyst for revenue. (J Vasc Surg 2012;55:281-5.)

	Cardiology	General Surgery	Orthopedic Surgery	Vascular Surgery	Neurosurgery
<b>Hospital GM</b>	\$23,617,768	\$15,141,263	\$5,512,980	\$5,110,918	\$1,229,021
<b>RVU</b>	150,151	59,242	86,810	26,701	27,528
<b>Physician FTE</b>	22.08	11.52	11.90	3.17	4.93
<b>RVU/FTE</b>	6713	6136	7732	<b>8423</b>	6726
<b>GMRVU</b>	\$157	\$256	\$64	\$191	\$45
<b>GMP/FTE</b>	\$1,069,645	\$1,314,345	\$483,275	<b>\$1,612,276</b>	\$249,294

Overview of global gross margins by RVU and FTE for the top 5 service lines in 2009 (Source IDX)

### 2018 SVS Presidential Address

#### Penn Vascular & Endovascular Surgery

- \$35 Million in Revenue - \$9 Million per FTE
- \$9.5 Million in CM - \$2.5 Million per FTE
  - o Spinoff CM - \$1.7 Million per FTE
- 30% revenue generated assisting other services

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### Survey Data Indicate Several Services Are Dependent on a Fully Functioning Vascular Program: Off-Service Specialties

Data are based on the responses of 521 surgeons to a survey conducted by the Society for Vascular Surgeons.

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**What is Vascular Surgery's True Blast Effect or "X-Factor"?**

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## Calculating the X-Factor

PRACTICE MANAGEMENT

From the Society for Vascular Surgery [Check for updates](#)

**A forensic analysis of spin-off and downstream revenue in an academic vascular surgery practice: Unveiling the "vascular X-factor" in a tertiary health care system**

Devon E. Fromer, MD,<sup>1</sup> Phillip M. Batista, MD,<sup>2</sup> Katherine E. McMackin, MD,<sup>3</sup> Bruce L. Tjaden, MD,<sup>4</sup> Jeffrey P. Carpenter, MD,<sup>5</sup> Francesco Zorzi, MBA,<sup>6</sup> and Joseph V. Lombardi, MD, MBA,<sup>7</sup> Camden, NJ

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### Background

Subtitle

*Needed to Quantify revenues and profits of "New vascular surgery patients" and track Direct and Spin-off activity.*

*All patients were never seen at Cooper Before*

*Determining the Vascular X-Factor: multiplier for true estimate of Vascular spinoff Margins*

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### Methods

Procedure Groupings	Specialty Service Lines
<b>Aortic Surgery</b>	<b>Cardiology</b>
Endovascular Aortic Repair	Endocrinology
Open Aortic Repair	Gastroenterology
<b>Auxiliary Inpatient/Outpatient</b>	Geriatrics
Outpatient / Inpatient Evaluation and Management	Infectious Disease
Outpatient Vascular Non-Invasive Lab	Intensive Care
Outpatient Venous Ablations / Injections	Neurology
Minor Office & Miscellaneous Outpatient Procedures	Obstetrics and Gynecology
<b>Cerebrovascular</b>	Oncology
Endovascular Carotid Reconstruction	Ophthalmology
Carotid Endarterectomy	Pathology
Carotid Stenting	Physical Therapy
<b>Peripheral Vascular Disease</b>	Podiatry
Angiography for Occlusive Disease	Preventive Medicine
Arterial Percutaneous Transluminal Angioplasty & Stenting	Psychiatry
Atherectomy & Intra-arterial Ultrasound	Radiation Oncology
Open and Percutaneous Thrombectomy	Reproductive Endocrinology and Infertility
Open Reconstruction for Occlusive Disease	Transplant
<b>Vascular Access</b>	<b>Transcatheter Interventional Cardiology</b>
Arteriovenous Grafts / Fistulas	Urology
Catheter Placement	<b>Urology</b>
Dialysis Related Endovascular Intervention	Urology
<b>Venous Disease</b>	<b>Urology</b>
Central Venous Disease	Urology
DVT Treatment	Urology
Venous Reconstruction	Urology
Thoracic Outlet Syndrome	Urology


- Billing data 2017-2020 for new vascular surgery patients introduced to tertiary healthcare system.
- Billing was grouped according to Procedure Type and Specialty Service Lines
- Financial impact was stratified by direct vascular billing and spinoff revenue.

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### Net Revenue

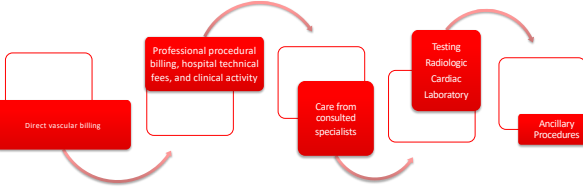
**Net revenue is aggregated at the encounter level and includes:**

- Direct patient payments,
- Insurance payments,
- Charity care subsidy payments from the state NJ.
- Indirect Medical Education (IME) Payments,
- Direct Graduate Medical Education (DGME) Payments
- Disproportionate Share Hospital (DSH) payments
- Other third-party settlements.

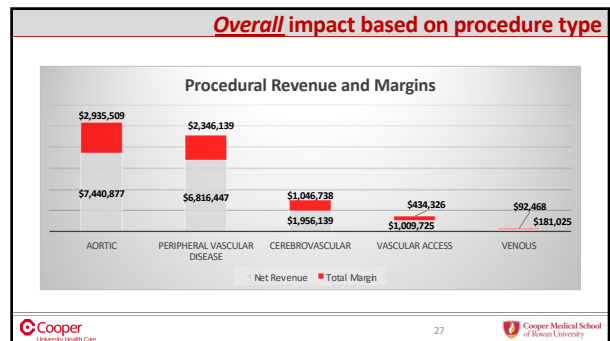
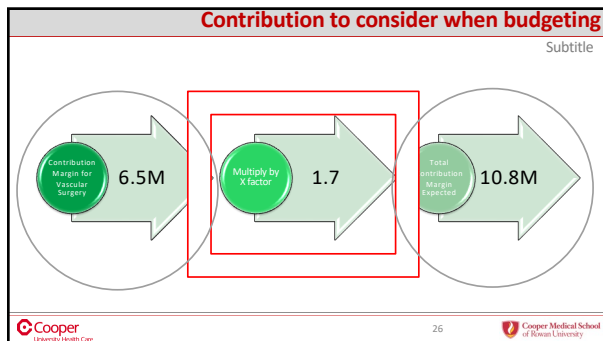
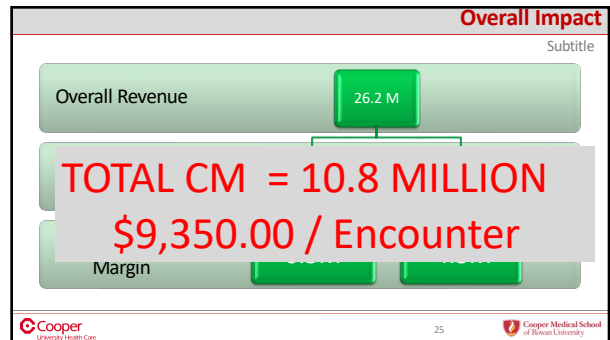
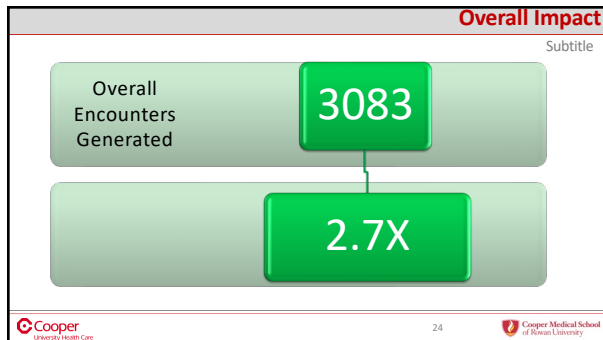
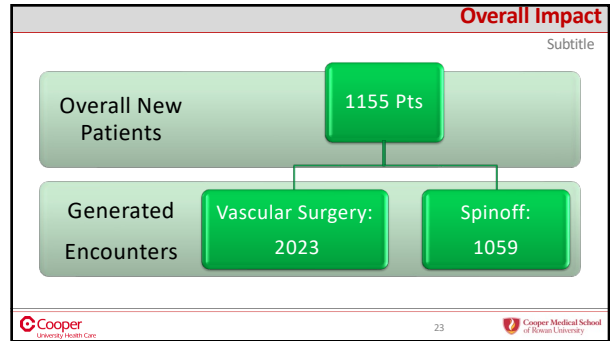
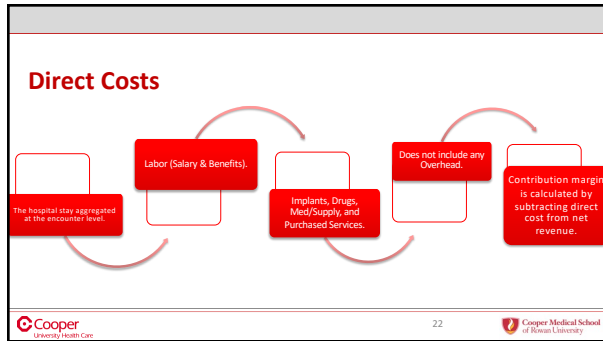


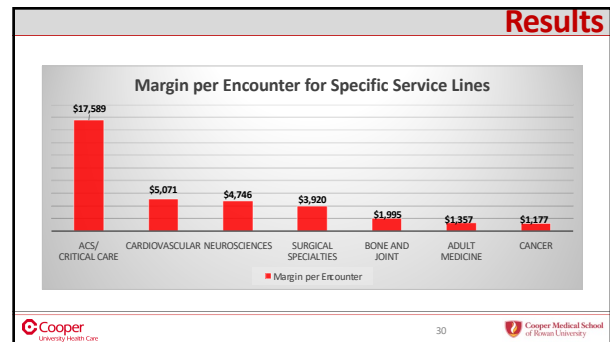
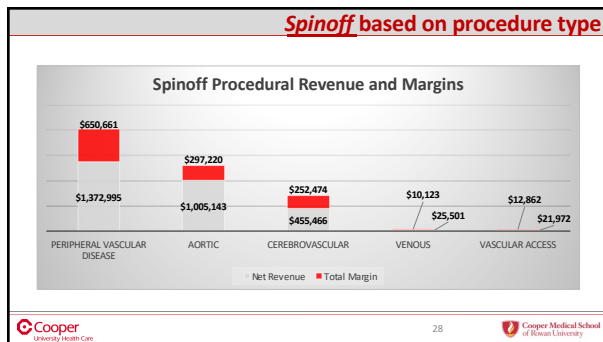
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### Revenue Streams



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### Conclusions

- Robust vascular program is a valuable asset to tertiary care health system
- Generates significant Margins from both vascular and non-vascular encounters
- Targeting growth in Aortic Surgery and PVD appears to have the largest fiscal return to the healthcare system

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# Thank you !

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