

Vascular Surgery's Identity And Role Is Usually In A Subservient Position Within A Heart And Vascular Unit:

*What Should Be Done To Correct This Inequity In The Interest Of Better Patient Care?*

Timur P. Sarac, MD

Professor of Surgery  
University of Virginia UVA Health Systems  
Charlottesville, Virginia

Emeritus Professor, Chief & Director of the Aortic Center  
The Ohio State University

## Disclosure

- M Stent patents, AAA stent patents, endoleak patents.
- Shape Memory Medical Trial Proctor
- Editor "Gateways in Vascular Surgery"
- Treasurer American Board of Vascular Surgery
- Highly Opinionated

## Definitions are Loose

*No formal definition, so below is generalized*

- Heart and Vascular **Institute**
  - A combined clinical and education department within an organization - Vascular Surgery, CT Surgery, and Cardiology all in one department as opposed to being under surgery or medicine.
  - Chair is not surgery or medicine, but institute. No matrix reporting.
- Heart and Vascular **Center**
  - A hospital service line, where Vascular Surgery, Cardiac Surgery are combined in a hospital service line, but not professional revenue nor hierarchy. They still report to Dept Surgery and Medicine
  - Is matrix based where teams report to multiple leaders.
  - Mainly hospital based, used for physical location and marketing.

## History

- Heart Centers started at large hospitals in the 1970s to coalesce heart care for better patient care (ex CT-ICU, CT Anesthesia etc).
- Combining Cardiac and Vascular Surgery and Cardiology into centers are hospital-based service lines, are not new.
  - Every hospital has one, and no one claims to be 1<sup>st</sup>.
- The first truly integrated "Institute" which is disease-based made waves in 2007.
  - Toby Cosgrove, MD, the CEO of Cleveland Clinic at that time, dismantled all traditional departments and re-organized them into 27 new Disease-based Institutes.
  - Several others followed, with recently Mass General Brigham following.
- Most fall into centers, not institutes.

## Benefits

	<u>Institute</u> Department Based	<u>Center</u> Hospital Based	
Patient Centered on a disease – Blood Vessels	✓	✓	
- Multidisciplinary care	✓	✓	
- Better patient care	✓	✓	
- Easier patient access	✓	✓	
- Proximity of Operating Rooms	✓	✓	
-Hybrid Operating Rooms and Cath Lab	✓	✓	
Financial Economy of Scale	✓		HVC has duplicative administration
Financial Independence	✓		
"Groupiness"	✓	+/-	

## The Rest of the Story - Downside of HVCs

Unequal/Skewed Resource Distributions

- Vascular Surgery is Outnumbered
  - Cardiology – 34,644 (AHA)
  - Cardiac Surgery – 4,000 (STS)
  - Vascular Surgery - <3300 (AMA – Makaroun Presidential address)
- Hospital resources are distributed based on contribution margins.
  - Directorships come from here, where part of salary is paid by the hospital/
  - For example, PAs/NPs are 5:1 at OSU, 10:1 at Yale
- Unchecked Marketing
  - OSU Vascular 25k/yr; Cardiology 100k and CT Surgery 100k
  - HVC websites ignore Vascular Surgery

### Hospital Website Examples

- Johns Hopkins Hospital
  - click on Heart and Vascular Institute
  - It lists Vascular Medicine, not Vascular Surgery.
- The same was true at Yale and Ohio State until I got a hold of them.


**About the Heart & Vascular Institute**

For generations, people with serious heart problems have turned to Johns Hopkins physicians for help. Recognized worldwide, the Johns Hopkins Heart and Vascular Institute provides comprehensive care of the highest quality, ensuring that patients receive the most advanced treatments known to medicine.


In the Health Care Trust at The Johns Hopkins Hospital, specialists in every branch of cardiac care—cardiology, cardiac surgery, vascular medicine, and radiology—work collaboratively in a hospital setting designed to foster innovative treatments and accelerate the science of medicine.

At the Johns Hopkins Heart and Vascular Institute, cardiac specialists swiftly translate laboratory discoveries into new treatments, with the ultimate goal of saving more lives.

**Leadership at the Johns Hopkins Center for Vascular Medicine**



**Elizabeth Ratzliff, MD**  
Director, Johns Hopkins Center for Vascular Medicine  
Professor of Clinical Medicine



**Maya Salameth, MD**  
Assistant Professor of Medicine

### Why Has This Happened?

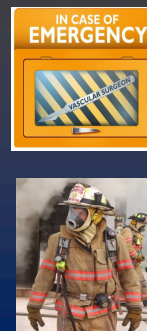
- Resources are passed to traditional departments of surgery, who distribute funds based on general surgery chair goals.
- Many HVC administrator positions controlled by Cardiology who admit more Cardiology patients.

### Why Has This Happened? Our Contribution Margins are Disproportionately Low

	Contribution Margin	Reference
Open Valve Procedure	\$21,967	Health Serv. Res 2011;46(6):1928–1945 Robinson
Coronary PTA+stent	\$21,173	Am J Man care 2011;17: e241-8. Robinson
TAVR	\$11,220	J Thorac Cardiovasc Surg. 2017 Jun 21;154(6):1872–1880. McCarthy
Lumbar Spine	\$22,690	Am J Man care 2011;17: e241-8. Robinson
FEVAR	\$10,500	JVS 2020;71(1):189-96. Starnes
Open AAA	\$21,200	JVS 2020;71(1):189-96. Starnes
EVAR	\$8569	Surg 2005;137(3):285-92. Upchurch
CEA	\$5886	JVS 2014;60:528-31. Lombardi
Peripheral	\$5705	JVS 2014;60:528-31. Lombardi
Individual Vascular Surgeon Average	\$1.6 million	JVS 2012 ;55(1):281-5. Lombardi

### The Other-side of the Story - Value

- We don't get recognized or paid for all we do (neither does IR).
  - “Downstream” revenue ignored
  - They don't consider fire fighters – “saving lives and litigation”
- The SVS commissioned Sg2 report hasn't made waves.
  - There is a lack of follow through on issues



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

“.....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 .....suggest Vascular programs can add more than \$9M in hospital contribution margin.

### What Should Be Done to Correct This?

- Improve contribution margins to reflect preoperative and post operative care - CMS level work
- Become our own Departments so we can directly negotiate with the hospital instead having a Surgery chair.
- Take OBLs to another level. Orthopedics based hospitals.
- Massive **growth** in numbers. There are 5+ jobs for every graduate and growing. Overwhelm administrators.
- BAIL OUT– remove Vascular Surgery from HVCs and Institutes and call it Vascular Institute/Center.
- Start a new Society to address it.
  - Society for Independent Vascular Surgery (SIVS)

Thank you!

