
William D. Jordan, Jr., M.D.
John E. Skandalakis Chair in Surgery
Professor and Chief
Division of Vascular Surgery and Endovascular Therapy
Emory University
Atlanta, Georgia
November 13, 2018

DISCLOSURES

• CME Standards → NONE
• Clinical Investigator – paid to Emory
  → Gore, Medtronic, Case, Endologix, TriVascular, Bolton
• Consultant – paid to Emory
  → Gore, Medtronic, Cardinal Health
• Equity Shareholder
  → None

2017 SVS Survey

Is our workforce pipeline large enough?
608 vascular residents and fellows
3,157 board-certified vascular surgeons in practice
593 planned retirements (18.8%) within 5 years

Geographic Distribution of Vascular Surgeons

Estimate of best ratio
1.4 / 100,000
From Dr. Makaroun

FUTURE TRAINING OF VASCULAR SURGEONS

• What are the challenges in recruiting?
• What are the challenges in training?
• How would independent specialty status impact these challenges?

WHAT ARE THE CHALLENGES IN RECRUITING?

• Medical students are different today
  – Gender distribution
  – Even distribution male/female
  – Work/life balance different from yesteryear
• Work output/FTE is 16-20% less than older surgeons
• Student debt far exceeds prior graduates
  → Mean $180,000 debt when completing training
• Traditional 5+2 vs Integrated 0+5
WHAT DO TRAINEES PERCEIVE AS THE BIGGEST CHALLENGES FACING VASCULAR SURGERY?

1. Competing specialists
2. Physician burn-out

Are these concerns justified?

CHANGE IN WORKFORCE

- Cardiology: +85%
- Radiology: +47%
- Vascular: +18%
- Cardiothoracic: -5%

APDVS SURVEY

- 90% trainees seek attachment to academics/teaching
- Does not fill need of community hospitals

WHY DO MOST WANT LARGER PRACTICE?

- Anxiety about isolated practice environment?
  - Concern about abilities/experience
- Lifestyle of isolated practice environment
  - Work/life balance is concern
- Security in larger health system
  - Addressing regulatory matters of health care
  - Senior associates for mentoring/clinical questions

WHAT ARE THE CHALLENGES IN TRAINING?

- Traditional – 5+2
  - Arrive with less vascular experience
  - Fewer cases in GS training – now 30 case minimum
  - Suffer trainee “burnout”
- Integrated – 0+5
  - Arrive with less surgical experience
  - Must start with teaching surgical fundamentals
- RRC – Surgery (ACGME body) maintains priority for current training paradigms over new ones
  - Vascular training always considered in light of impact on other “learners”

Limited Training Positions in Vascular Surgery

(Positions offered through the NRMP)
Impact of the Integrated Program: Students

- Data from U.S. allopaths: Resident Ranking Specialty First/Available Positions by Specialty for 2014 Match. Vascular Surgery had the highest ratio of any specialty. Strong student interest!

From Dr. Makaroun

INTEGRATED VASCULAR POSITIONS – 10 YEARS

- NRMP 2000-2017

VASCULAR FELLOWSHIP MATCH

- 5+2 NRMP 2003-2017

HOW WOULD INDEPENDENT SPECIALTY STATUS IMPACT THESE CHALLENGES?

- May provide more distinction of vascular services compared to general surgery services in minds of hospital administrators
- May improve commitment to vascular recruiting
- Improve our distinction from other specialties among referrals – cardiology, general surgery, CT surgery, radiology

CONCLUSIONS

- Vascular disease will require larger workforce
- Current training pathways are not producing enough to meet all vascular needs
- Need more production to meet demands – Integrated provides shorter training (5 years)
- Traditional provides quicker solution (2 years)