

# Chronic Venous Disease

## Burden of Disease

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Venous Care Partnership

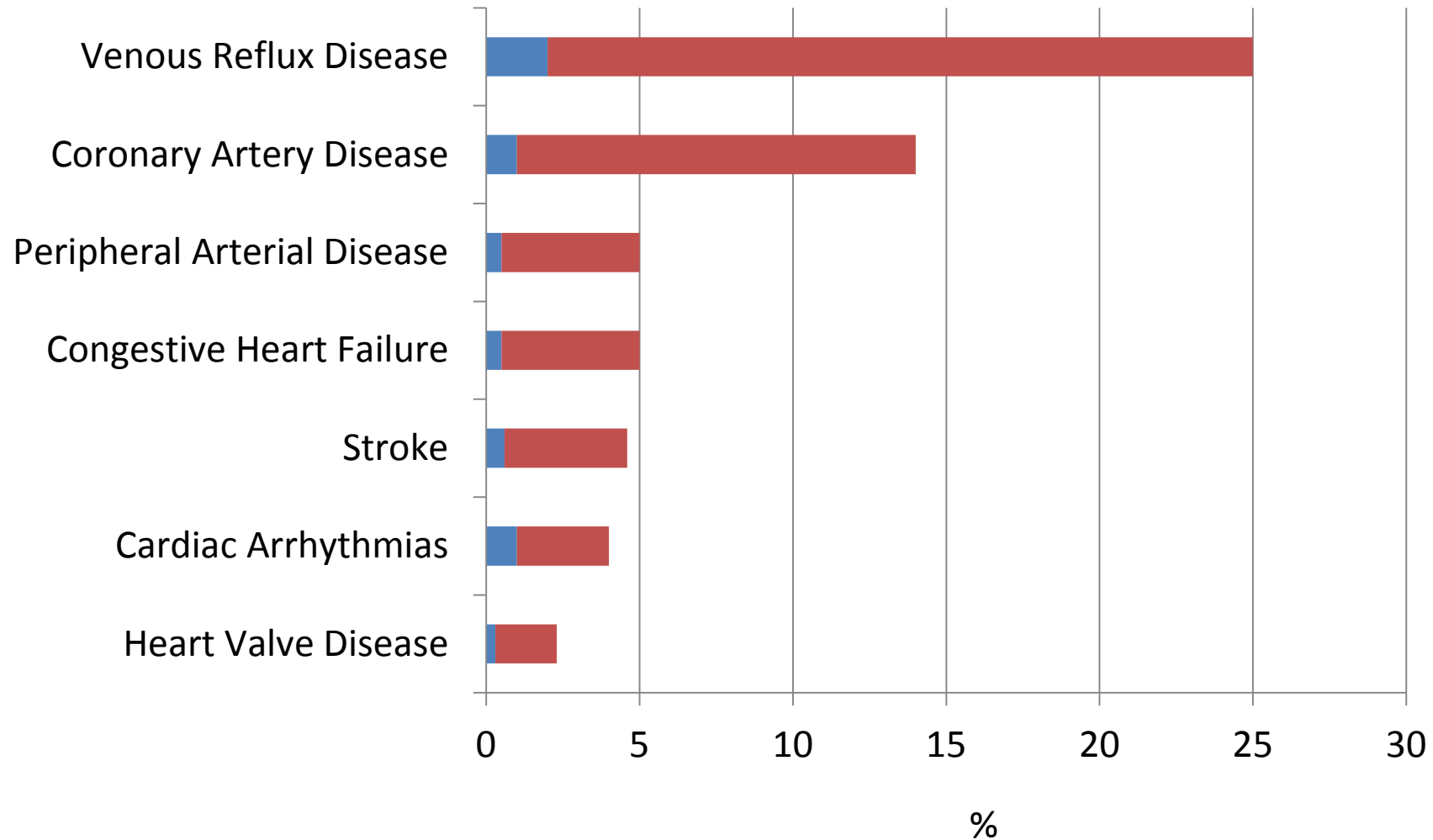
# Chronic venous disease (CVD) is common

- Venous disease is more common than arterial disease
- Estimated 25 million people in the United States affected with varicose veins and 6 million with advanced disease
- Approximately 1.5 million new cases per year
- Cost of U.S. venous ulcer care is estimated at \$1 billion annually

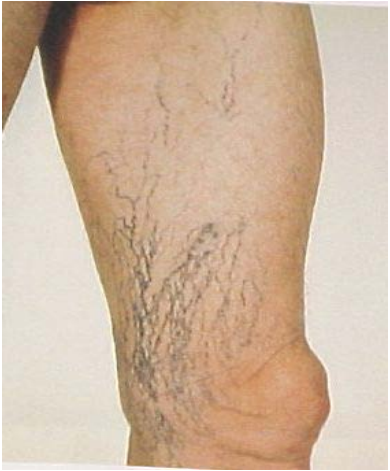
<u>Age</u>	<u>Female</u>	<u>Male</u>
20 -29	8%	1%
40 -49	41%	24%
60 -69	72%	43%

Jantet G. RELIEF study *Angiology* 2002;53:245-256  
Eberhardt R. *Circulation* 2014;130:333-46  
Pannier F, Rabe E. *J Vasc Surg.* March 2011;53(1):254-5.  
Brand F. *Am J Prev Med* 1988;4:96-101

# Prevalence of Venous Insufficiency



# The presentation of CVD is variable



C1



C2



C3



C4



C4



C5



C6

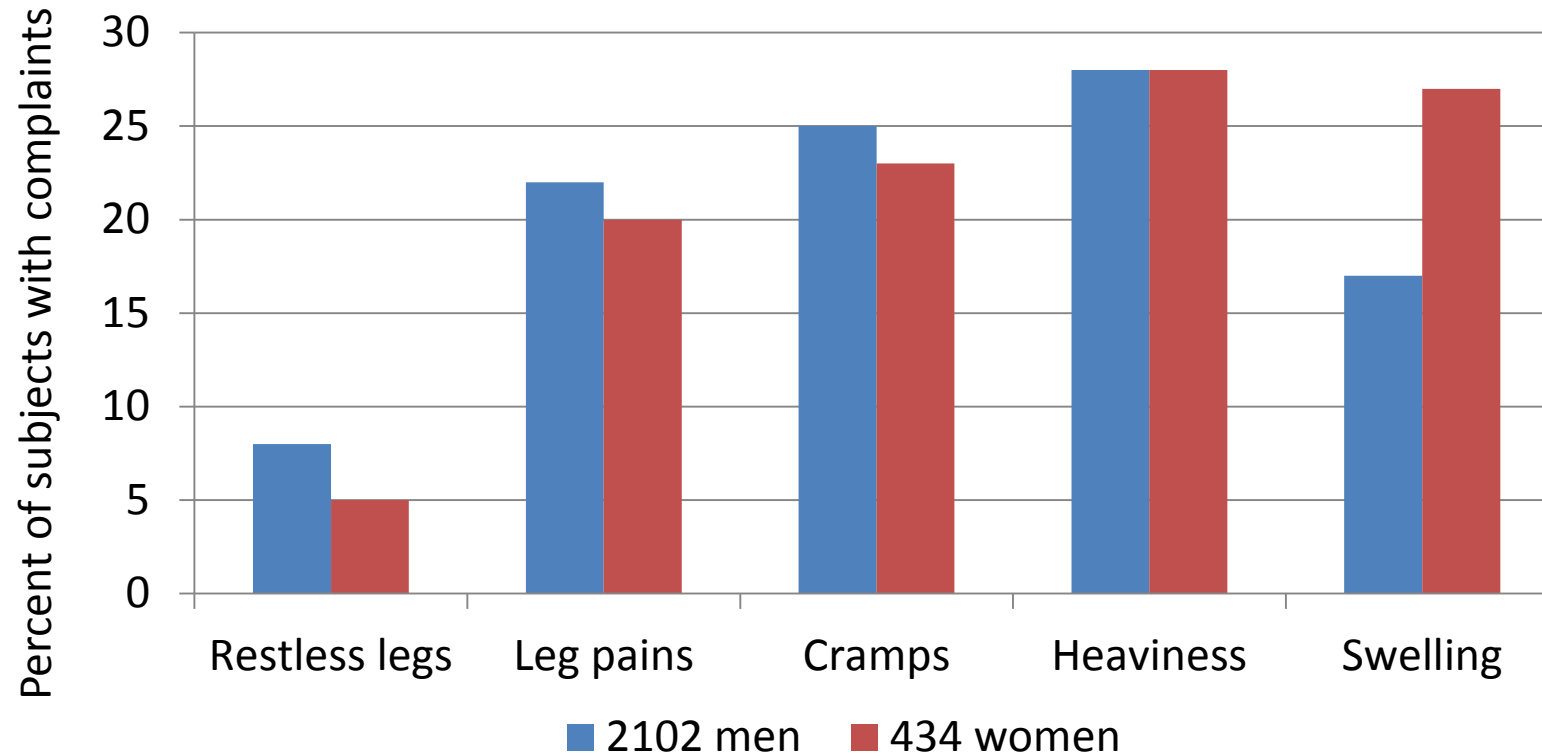


C6

# CVD causes significant morbidity

- Venous disease is progressive: over **28%** of patients with C2 at baseline developed C3-6 6.6 years later; age and BMI were risk factors
- Of 387 patients with DVT, **47%** developed post-thrombotic syndrome
- **3-11%** have eczema and skin changes
- **1%** of the adult population has healed or active venous ulcers
- Venous leg ulceration (VLU) comprises **80% to 90%** of all ulcers
- Disability due to VLU causes an estimate loss of **2 million workdays** per year with 12% taking early retirement.

# Symptoms of CVD





# Venous wounds are difficult to heal

- The average patient with venous ulcers has **3** of them, and the average surface area of any one of them is among the largest of the chronic ulcers at **34cm<sup>2</sup>**.
- The VLU will have been present, on average for **5 months** by the time the patient presents to a wound center, where
- The ulcer will take an average of **2.9 additional months** to heal.
- The average venous ulcer that heals will have been present nearly **8 months** by the time that it heals.
- However, **21%** of VLUs **never heal** during the time they are followed.
- The patients stay in service at an outpatient wound center an average of **7 months**, but 35% are simultaneously being seen by a home health agency.
- **31%** of healed VLU patients are seen again for recurrence of their ulcers.

# CVD impairs quality of life

- Survey of 73 patients with chronic leg ulcers:
  - 65% suffered severe pain from their ulceration
  - 81% mobility affected by ulcer
  - 100% patients said it affected their work capacity
  - 67% said financial situation affected by ulcer
  - 68% said affected their emotions: fear, anger, depression, negative self image
- In 100 patients with varicose veins, 29% had previously undiagnosed depression
- In patients with PTS, general and vein specific QOL decreased with increasing clinical severity

# W-QoL in Among VLU Patients

(USWR QCDR quality measure)

Questions from the Wound Related Quality of Life	% Yes
My wound hurt	68%
The wound affects my sleep	51%
The treatment is a burden to me	62%
The wound has made me unhappy	72.5%
I have felt frustrated because the wound is taking so long to heal	76.8%
I have been worried about my wound	89.9%
I have been afraid of the wound getting worse or new wounds appearing	82.6%
I have been afraid of hitting the wound on something	71%
The wounds limits my leisure activities	58%

# What we will discuss today:

- Evidence supporting treatment for venous reflux across the spectrum of venous disease (American College of Phlebology)
- Evidence supporting intervention in patients with previous deep-vein thrombosis and ongoing outflow obstruction (Soc. of Int. Radiology)
- Disparities in treatment of CVD (Am. College of Cardiology)
- Gaps in the evidence and needed research in CVD (Am Heart Assn.)
- Initiatives to promote collection of evidence that would support improve care for the Medicare population with CVD (VIVA Physicians)