

**The Veterans Specific Activity Questionnaire (VSAQ) - a new and efficient method of assessing
exercise capacity in patients with pulmonary arteriovenous malformations (PAVMs)**

^{1,2}Gawecki F BSc, ³ Myers J PhD, ^{4,5}Shovlin CL PhD FRCP

1. Imperial College School of Medicine, London UK, 2. NHLI Respiratory Sciences, Imperial College London, UK. 3. VA Palo Alto Health Care System, Cardiology, US, 4. NHLI Vascular Sciences, Imperial College London, UK. 5. Respiratory Medicine, Imperial College Healthcare NHS Trust, London, UK.

Corresponding author:

Claire L. Shovlin PhD FRCP, Professor of Practice (Clinical and Molecular Medicine), NHLI Vascular Sciences, Imperial Centre for Translational and Experimental Medicine, Imperial College London, Hammersmith Campus, Du Cane Road, London W12 0NN, UK.

DATA SUPPLEMENT

Supplementary Figure 1:

Original Veterans Specific Activity Questionnaire (VSAQ)

Supplementary Figure 2:

Symptoms reported when needing to stop

Supplementary Figure 3:

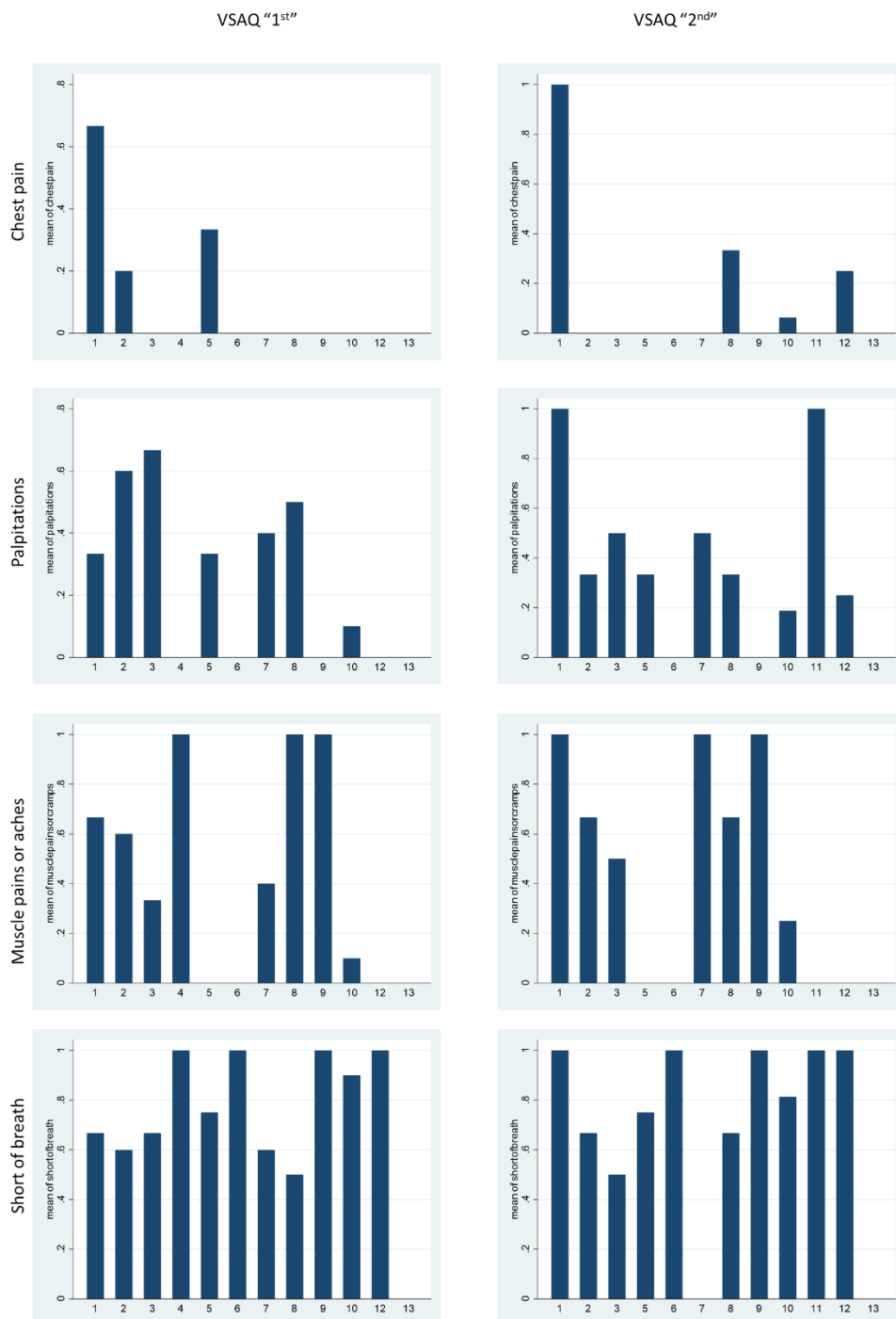
Normal quantile plot of predicted METs values obtained from using the 1st and 2nd VSAQ

Supplementary Figure 1: Original Veterans Specific Activity Questionnaire (VSAQ)

Here is a list of activities of increasing difficulty. Please underline the first one, that when performed for a period of time, would typically cause fatigue, shortness of breath, chest discomfort or otherwise cause you to want to stop.

METs	Activity
1	Eating, getting dressed or working at a desk
2	Taking a shower, shopping, cooking, walking down eight steps
3	Walking slowly on flat surface for 100-200 meters A moderate amount of work around the house such as vacuuming, sweeping the floors or carrying groceries
4	Light gardening work Painting or light carpentry
5	Walking briskly e.g. four miles per hour Social dancing, washing the car
6	Playing nine holes of golf carrying your own clubs. Heavy carpentry. Pushing a lawn mower
7	Perform heavy outdoors work e.g. digging Walking uphill, tennis singles, carrying 60 pounds
8	Move heavy furniture, jog slowly on a flat surface, carry 20 pounds up stairs
9	Cycling at a moderate pace, sawing wood
10	Brisk swimming, cycling uphill, walking briskly up hill, jog six miles per hour
11	Cross country skiing, carrying a heavy load up two flights of stairs, cycling briskly
12	Running briskly, continuously
13	Any competitive activity, including those which involve intermittent sprinting . Running or rowing competitively, cycling races

Supplementary Figure 2: Symptoms reported when needing to stop



Symptoms displayed across the 1-13 VSAQ scale in the first 44 patients assessed in the service. Patients were referred due to known or suspected PAVMs, hereditary haemorrhagic telangiectasia or related conditions. **A)** VSAQ according to the lowest activity (VSAQ “1st”). **B)** VSAQ according to the lowest scale point in any second activity grouping (VSAQ “2nd”). See Figure 2 for illustration of absolute VSAQ “1st” and “2nd” values per individual.

Supplementary Figure 3: Normal quantile plot of predicted METs values obtained from using the 1st and 2nd VSAQ

