

Supplemental material for d’Arcy *et al*
**“Large-Scale Community Echocardiographic Screening Reveals a Major
Burden of Undiagnosed Valvular Heart Disease in Older People”**

Contents

1. Supplemental Table 1: Results of univariate and multivariate regression
2. Supplemental Table 2: Association between smoking status and coronary heart disease
3. Supplemental Figure 1: Recruitment flowchart for the first practice to complete recruitment

Supplemental Table 1. Results of univariate and multivariate regression.

	Univariate Regression		Multivariate Regression	
	OR (95% C.I.)	P-value	OR (95% C.I.)	P-value
Age - 5 years increase	1.42 (1.32,1.52)	<0.001	1.37 (1.27,1.47)	<0.001
Smoking Status				
Non-Smoker	Reference			
Ex-Smoker	0.93 (0.79,1.1)	0.404	0.85 (0.72,1.01)	0.072
Smoker	0.65 (0.47,0.9)	0.009	0.66 (0.47,0.93)	0.018
Socioeconomic class				
1 (least deprived)	Reference			
2	1.08 (0.88,1.32)	0.473	1.03 (0.84,1.27)	0.755
3	1.16 (0.93,1.44)	0.197	1.12 (0.89,1.41)	0.328
4	1.85 (1.32,2.58)	<0.001	2.12 (1.50,3.01)	<0.001
5 (most deprived)	1.67 (1.07,2.61)	0.024	1.76 (1.11,2.79)	0.017
History				
Hypertension	1.32 (1.13,1.55)	<0.001		
Hyperlipidaemia	1.20 (1.02,1.42)	0.029		
Atrial fibrillation	2.22 (1.45,3.4)	<0.001	1.85 (1.18,2.89)	0.007
Myocardial infarction	1.58 (1.1,2.28)	0.014		
Coronary angiography	1.61 (1.21,2.15)	<0.001		
Coronary artery bypass grafting	2.03 (1.09,3.78)	0.025		
Stroke/TIA	1.52 (1.08,2.13)	0.016		
Medications				
ACEi/ARB	1.33 (1.12,1.57)	0.001		
Anticoagulants	2.98 (1.65,5.38)	<0.001		
Asprin	1.26 (1.04,1.53)	0.02		
Beta blockers	1.32 (1.06,1.64)	0.014		
Diuretics	1.37 (1.11,1.69)	0.003		
Lipid lowering agents	1.22 (1.04,1.44)	0.018		
Nitrates	1.5 (1.04,2.15)	0.03		
Examination				
Heart rate - 10 bpm increase	0.85 (0.8,0.91)	<0.001	0.86 (0.80,0.92)	<0.001
Diastolic blood pressure - 10 mmHg increase			0.90 (0.82,0.99)	0.027
Systolic blood pressure – 10 mmHg increase	1.09 (1.04,1.13)	<0.001	1.12 (1.06,1.19)	<0.001
BMI - 1 kg/m ² increase	0.97 (0.96,0.99)	0.002	0.98 (0.96,0.99)	0.011

The outcome variable was a new diagnosis of valvular heart disease. Results are presented as odds ratios (OR) of the logistic regression with corresponding 95% confidence interval

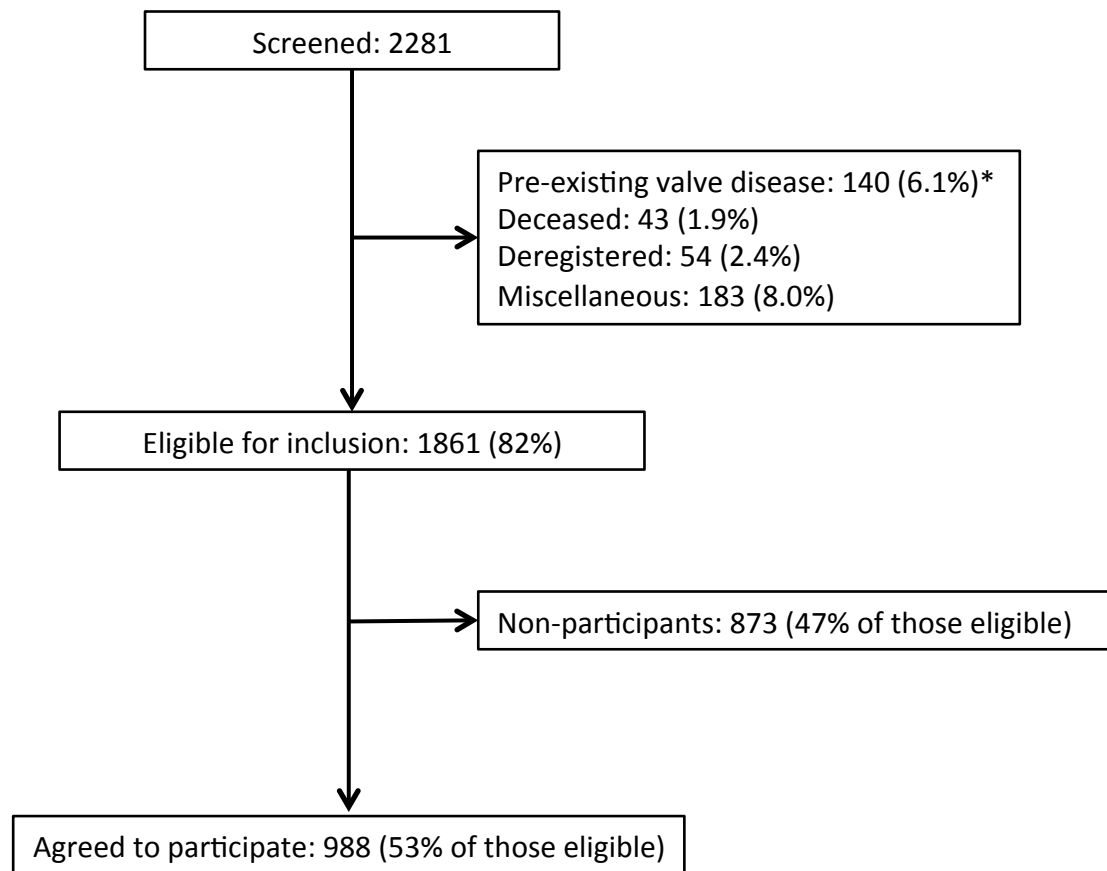
(CI). P-value tests whether each OR is different from 1 and is obtained from the χ^2 distribution with 1 degree of freedom. The threshold for inclusion in multivariate regression was $p < 0.10$ on univariate regression. ACEi = angiotensin converting enzyme inhibitor. ARB = angiotensin receptor blocker. BMI = body mass index. bpm = beats per minute. SEC = socioeconomic class. TIA = transient ischaemic attack.

Supplemental Table 2. Association between coronary heart disease and smoking status.

	Number (%) with coronary heart disease
Smoking status	
Non-smoker	108 (8.8%)
Ex-smoker	168 (15.4%)
Current smoker	19 (10.9%)

Coronary heart disease refers to any history of angina, myocardial infarction, percutaneous coronary intervention or coronary artery bypass surgery. The difference between groups was statistically significant (X^2 $p < 0.001$).

Supplemental Figure 1. Recruitment flow chart for the first practice to complete recruitment.



*All available data indicating a prior history of valvular heart disease (VHD) were used to estimate the overall population prevalence, as reported in the main manuscript. Amongst the 140 individuals with pre-existing VHD, 11 (0.4% of the total potential population) had undergone valve surgery (aortic valve replacement n=9, mitral valve replacement n=1, unspecified valve surgery n=1).