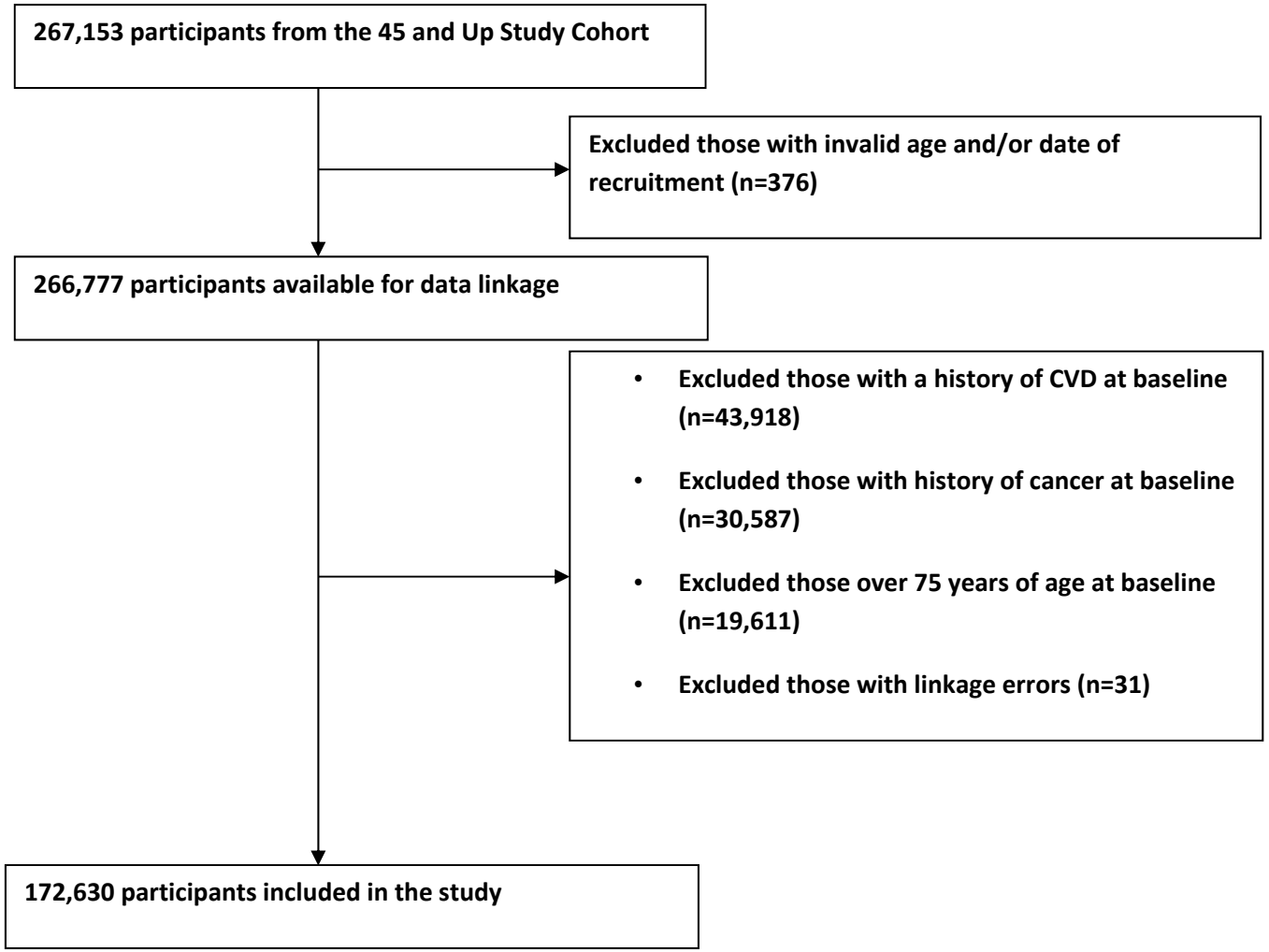
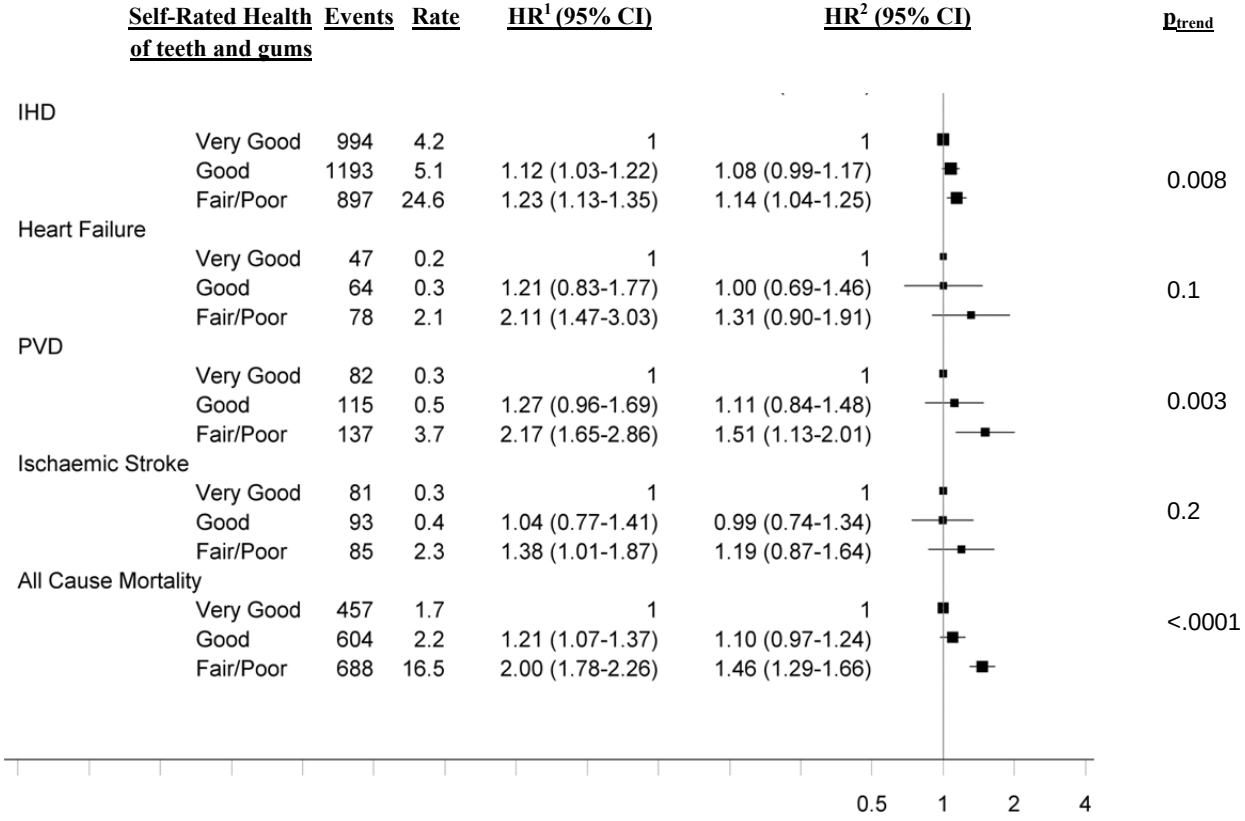
Supplementary Figure 1. Study Flow Diagram



Supplementary Figure 2. Sensitivity analysis combining response categories of self-rated oral health of "Fair" and "Poor": Hazard Ratios (95% CI) for incident hospitalisation for CVD and all-cause mortality



HR: Hazard ratio; Events: Number of events; Rate: Crude rate per 1000 person years; CVD: Cardiovascular disease; IHD: Ischaemic heart disease; PVD: Peripheral vascular disease.
HR^1: adjusted for age and sex. HR^2: additionally adjusted for tobacco smoking, alcohol consumption, Australian born status, region of residence, education, private health insurance, physical activity and body mass index.
HR^2 are plotted on a log scale and are represented with squares with areas inversely proportional to the logarithm of events, providing an indication of the magnitude of statistical information available; 95% CIs are indicated by horizontal lines.

Supplementary Table 1. ICD-10AM codes used to identify major CVD diagnosis in the 6 years prior to entering the study

Diagnoses	ICD-10AM Diagnosis codes
selected Hypertensive diseases	I11-I13
Ischaemic heart disease	I20-I25
Pulmonary heart disease and diseases of pulmonary circulation	I26-I28
selected other forms of heart disease	I34-36, I42, I44, I46-I51
selected Cerebrovascular disease	I61-I67,I69
selected Diseases of arteries, arterioles and capillaries	I70-I77
selected Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified	I80
selected Episodic and paroxysmal disorders	G45,G46

The aim was to capture major atherosclerotic and arteriovenous thromboembolic and related CVD, from the diagnosis codes for all circulatory diseases (I00-I99, G45, G46). Excluded conditions are those that are primarily affecting the lymphatic system or are caused by other factors, such as: cardiovascular disease caused by infections; non-thrombotic diseases of veins, lymphatic vessels and lymph nodes; and other/unspecified disorders of the circulatory system. Essential hypertension was also excluded on the grounds that it is a risk factor rather than a disease outcome.

Supplementary Table 2. Australian Classification of Health Interventions codes for CVD related intervention procedures used to identify major CVD diagnosis in the 6 years prior to entering the study

Procedures	Australian Classification of Health Interventions codes
Percutaneous coronary interventions	35304-00, 35305-00, 35304-01, 35305-01, 38300-00, 38303-00 (block:670) 35310-00, 35310-01, 35310-02, 35310-03, 35310-04, 35310-05, 38306-00, 38306-01, 38306-02, 38306-03, 38306-05 (block: 671)
Coronary artery bypass grafting	38497-00 to 38497-07, 38500-00 to 38500-04, 38503-00 to 38503-04, 90201-00 to 90201-03, 38500-05, 38503-05 (blocks: 672–679)
Heart transplant	90205-00, 90205-01 (block: 660)
Cardiac defibrillator implants	38524-00, 38521-01, 38521-02, 38521-03, 38393-00 (block:653)
Valve replacement, repair or reconstruction	**Aortic valve (Blocks 621, 622, 623, 624)** 38456-10, 38483-00, 38270-01, 38480-00, 38481-00, 38488-00, 38488-01, 38489-00, 38489-01, 38456-15, 38653-04, 38475-02, 38477-02. **Mitral valve (Blocks 625, 626, 627, 628, 629, 630)** 38487-00, 38485-01, 38270-02, 38480-01, 38481-01, 38475-00, 38477-00, 38488-02, 38488-03, 38489-02, 38485-00, 38456-16, 38653-05. **Tricuspid valve (Blocks 631, 632, 633, 634, 635)** 38456-11, 38480-02, 38481-02, 38475-01, 38477-01, 38488-04, 38488-05, 38489-03, 38456-17, 38653-06. **Pulmonary valve (Blocks 636, 637, 638)** 38456-01, 38270-03, 38488-06, 38488-07, 38489-04, 38489-05, 38456-18, 38653-07.
Pacemaker insertion	38281-00, 38281-01, 38281-02, 38281-03, 38281-04, 38281-05, 38281-06, 38281-07, 38281-08, 38281-09, 38281-10, 38281-11, 38281-12, 38281-13, 38353-00 (blocks: 650, 651, 652)
Carotid endarterectomy	33500–00 (block: 700)

In the hospitalisation dataset, CVD related diagnostic procedure codes alone do not amount to diagnosis of CVD (unless accompanied by relevant ICD diagnosis codes) and were not used to identify previous CVD. Please see *Joshy G et.al. Public Health Res Pract 2015;25(3):e2531532* for a full justification of this.

Supplementary Table 3. Distribution of tooth loss by population characteristics

		Number of natural teeth left			
		None	**1-9**	**10-19**	**20+**
Age (years)	45-64	3.3	5.0	16.0	75.7
	65-79	12.5	13.6	25.2	48.7
Sex	Female	5.8	6.9	16.2	71.1
	Male	4.5	6.7	20.2	68.7
Region of residence	Inner Regional	5.8	7.2	18.7	68.4
	Major Cities	4.0	6.0	16.5	73.6
	More remote	7.0	7.9	19.6	65.5
Education	< Secondary school	15.0	17.3	26.1	41.5
	Secondary school	7.5	9.5	22.3	60.7
	Trade/Apprenticeship	4.3	5.8	17.8	72.1
	Certificate/Diploma	4.1	5.8	18.0	72.1
	Tertiary Education	1.6	2.4	11.4	84.5
Annual household income	<$20k	12.5	15.8	25.6	46.2
	$20K-<40K	6.5	8.7	21.9	62.9
	$40K-<70K	3.0	4.7	17.8	74.4
	>=$70K	1.5	2.0	11.4	85.2
Private health insurance	Yes	3.4	4.6	15.7	76.4
	No	9.3	11.6	22.6	56.5
Tobacco smoking	Current smoker	9.6	13.3	25.8	51.3
	Past smoker	6.1	7.8	19.9	66.2
	Never smoker	4.1	5.3	15.6	75.0
Alcoholic drinks/week	0	7.7	9.6	19.5	63.2
	1-14	4.0	5.3	16.5	74.3
	15 or more	4.2	6.1	19.4	70.4
Physical activity tertile	1 (lowest)	5.4	7.3	18.7	68.6
	2	5.0	6.5	17.2	71.3
	3 (highest)	4.8	6.2	17.5	71.5
Doctor diagnosed diabetes	No	4.9	6.4	17.4	71.2
	Yes	9.6	12.5	24.4	53.5
Current treatment for hypertension	No	4.6	6.0	17.0	72.3
	Yes	7.8	10.1	21.5	60.6
Current treatment for hypercholesterolaemia	No	4.9	6.5	17.5	71.1
	Yes	7.6	9.2	20.6	62.6
Aspirin treated	No	4.9	6.5	17.5	71.0
	Yes	8.8	10.3	22.3	58.6
Australian Born	No	5.2	7.2	18.0	69.6
	Yes	5.3	6.7	17.9	70.2
MOS-PF ≥ 75	No	10.0	13.1	24.8	52.1
	Yes	4.1	5.3	16.4	74.2

Data are row percentages.

Supplementary Table 4. Distribution of self-rated oral health by population characteristics

		Self-rated health of teeth and gums			
		Poor	**Fair**	**Good**	**Very Good**
Age (years)	45-64	5.6	17.6	37.3	39.4
	65-79	7.0	21.6	39.1	32.3
Sex	Female	5.5	17.7	37.7	39.2
	Male	6.5	19.4	37.7	36.4
Region of residence	Inner Regional	5.8	18.9	38.2	37.1
	Major Cities	5.7	17.5	36.8	40.0
	More remote	6.7	19.6	38.5	35.2
Education	< Secondary school	13.9	26.1	36.2	23.7
	Secondary school	6.3	20.5	40.0	33.2
	Trade/Apprenticeship	6.8	18.8	38.1	36.4
	Certificate/Diploma	5.6	18.5	38.8	37.2
	Tertiary Education	3.0	14.0	34.9	48.2
Annual household income	<$20k	14.7	26.7	35.6	23.1
	$20K-<40K	6.9	21.8	39.7	31.5
	$40K-<70K	4.4	17.9	39.7	38.1
	>=$70K	2.3	13.0	35.7	49.0
Private health insurance	Yes	3.0	15.3	38.4	43.3
	No	12.1	25.3	36.1	26.5
Tobacco smoking	Current smoker	18.0	26.6	33.1	22.2
	Past smoker	6.7	20.6	37.9	34.9
	Never smoker	3.7	16.0	38.2	42.1
Alcoholic drinks/week	0	8.2	20.9	37.5	33.4
	1-14	4.3	16.8	37.9	41.0
	15 or more	6.4	19.3	37.3	37.0
Physical activity tertile	1 (lowest)	7.0	20.8	39.2	33.1
	2	5.1	17.9	38.5	38.4
	3 (highest)	5.5	16.8	35.8	41.9
Doctor diagnosed diabetes	No	5.6	18.1	37.7	38.7
	Yes	10.5	23.8	37.9	27.9
Current treatment for hypertension	No	5.6	17.9	37.4	39.1
	Yes	7.2	20.7	39.0	33.2
Current treatment for hypercholesterolaemia	No	5.7	18.1	37.6	38.6
	Yes	7.3	20.8	38.5	33.4
Aspirin treated	No	5.8	18.3	37.6	38.3
	Yes	6.8	20.1	38.4	34.8
Australian Born	No	8.2	20.6	37.3	34.0
	Yes	5.2	17.7	37.8	39.3
MOS-PF ≥ 75	No	14.6	27.5	36.1	21.8
	Yes	4.3	16.6	37.7	41.3

Data are row percentages.

Supplementary Table 5: Sensitivity analysis combining response categories of number of natural teeth left of "none" and "1-9": Hazard Ratios (95% CI) for incident hospitalisation for CVD and all-cause mortality

	Teeth left	HR (95% CI)	p_{trend}		Teeth left	HR (95% CI)	p_{trend}
IHD				IHD			
	20	1			20	1	
	10-19	1.05 (0.96-1.15)	0.002		10-19	1.06 (0.96-1.15)	**0.007**
	1-9	**1.20 (1.06-1.35)**			0-9	**1.15 (1.04-1.28)**	
	None	1.10 (0.95-1.26)					
Heart Failure				Heart Failure			
	20	1			20	1	
	10-19	**1.50 (1.04-2.18)**	**0.0005**		10-19	**1.51 (1.05-2.19)**	**0.0002**
	1-9	**2.04 (1.35-3.09)**			0-9	**2.01 (1.39-2.90)**	
	None	**1.97 (1.27-3.07)**					
PVD				PVD			
	20	1			20	1	
	10-19	1.67 (1.27-2.19)	**<0.0001**		10-19	1.66 (1.26-2.18)	**<0.0001**
	1-9	1.73 (1.23-2.44)			0-9	2.06 (1.55-2.74)	
	None	2.53 (1.81-3.52)					
Ischaemic Stroke				Ischaemic Stroke			
	20	1			20	1	
	10-19	1.11 (0.72-1.73)	0.8		10-19	1.20 (0.90-1.61)	0.8
	1-9	0.90 (0.59-1.40)			0-9	1.00 (0.70-1.41)	
	None	1.20 (0.90-1.62)					
Mortality				Mortality			
	20	1			20	1	
	10-19	**1.28 (1.14-1.45)**	**<0.0001**		10-19	**1.27 (1.13-1.43)**	**<0.0001**
	1-9	**1.71 (1.48-1.97)**			0-9	**1.64 (1.45-1.86)**	
	None	**1.65 (1.41-1.92)**					

HR: adjusted for age and sex, tobacco smoking, alcohol consumption, Australian born status, region of residence, education, health insurance, physical activity and body mass index

Supplementary Table 6. Hazard Ratio for Incident Hospitalisation for IHD by Number of Natural Teeth Left (≥10 vs <10 teeth left), by finer age categories

Age group	Events (≥10 vs <10 teeth left)	HR[1]	HR[2]
45-54	561/46	1.09 (1.06-1.13)	1.10 (1.06-1.13)
55-64	1063/225	1.07 (1.05-1.09)	1.07 (1.05-1.09)
65-75	896/341	1.05 (1.02-1.07)	1.05 (1.03-1.07)

HR: Hazard ratio; Events: Number of events; IHD: Ischaemic heart disease; BMI: body mass index; PA: physical activity. HR[1]: adjusted for age and sex. HR[2]: additionally adjusted for tobacco smoking, alcohol consumption, Australian born status, region of residence, education, private health insurance, physical activity and body mass index, where appropriate.